




Let's Advance.

Get the skills you need for the job you want.

 Take a minute to learn about AMPed NH

Advanced manufacturing is one of New Hampshire's largest economic industries but there is a growing need for skilled workers. AMPed's high-tech training programs offer you the opportunity to get the coolest job you've ever had.



CONVENIENT

Community Colleges across the Granite State are offering customized training for stable jobs that matter, right in your own backyard.



AFFORDABLE

Achieve your training goals at a pace you can afford. CCSNH offers the most affordable college tuition in New Hampshire.



SMART

It's not just the technology that's smart. Advanced Manufacturing workers are paid about 20% more for the skills they possess than workers in other industries.



Our programs are designed with expertise from **leading employers**.

Choose the advanced manufacturing industry sector that interests you.



ROBOTICS & AUTOMATION





**ELECTRONICS &
ELECTROMECHANICS**



**ADVANCED MACHINE
TECHNOLOGIES**



**ADVANCED WELDING
TECHNOLOGIES**





**ADVANCED COMPOSITES
TECHNOLOGIES**



ENGINEERING & PROGRAMMING



Community College System of New Hampshire

CCSNH and its advanced manufacturing partners are redefining industry education. Courses and training programs are available across the state designed to get you from the lab to the production floor with efficiency.



People are talking about the value of the AMPed NH Program.

Student Testimonials

Expert Testimonials

"The community colleges show a clear understanding of the

"Freudenberg-

workforce needs for advanced manufacturing and the technology sector in New Hampshire, and are moving smartly and quickly to address those needs.”

*New Hampshire
Manchester). We
best and bright
technicians and
manufacturing*



Fred Kocher

Trustee & former President, NH High Technology Council

Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the colleges you're interested in, and a representative will get back to you.

Lakes Region
Great Bay
Manchester
Nashua
NHTI
River Valley
White Mountains



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AMPedNH Connect

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2015/21/7 8:29am

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ICYMI... <http://goo.gl/IIf4t0>

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Let's Advance.

About AMPed NH

AMPed – Advanced Manufacturing Partnerships in Education – is a New Hampshire initiative created to educate and train eager, motivated people for high-wage, high-skill jobs in the advanced manufacturing industry.

Smart Manufacturing. Smart Moves.

By enhancing the programming within the seven institutions within the Community College System of New Hampshire, traditional and non-traditional students can embark on a clear career path from a certificate, degree, and/or industry-recognized certifications to stable, exciting, better-paying jobs.

Enhancing the Economy

By training thousands of Granite State residents for these advanced manufacturing jobs, AMPed NH is enhancing the stability of – and enhancing growth within – the New Hampshire economy. This in turn will attract additional manufacturers to the state, further cementing New

Hampshire's vital manufacturing industry. This effort was made possible by the TAACCT Grant.

The TAACCCT Grant

Thanks to the Trade Adjustment Assistance Community College and Career Training Grant (TAACCCT) through the US Department of Labor, the [Community College System of NH \(CCSNH\)](#) can further enhance the state's advanced manufacturing sector by providing necessary degree, certificate and training programs to New Hampshire residents.

ADVANCED MANUFACTURING JOBS WITH NH COMPANIES

With access to nearly \$20 million in funding, students will have a clear career path that begins with entry-level jobs and continues to more advanced positions requiring specialized skills. All of these advanced manufacturing jobs are at New Hampshire companies that have worked collaboratively with the CCSNH to customize the educational and training process so that individuals evolve from program students to skilled workers who have an understanding of the company hiring them, its goals, and what it takes to succeed.

"The community colleges show a clear understanding of the workforce needs for advanced manufacturing and the technology sector in New Hampshire, and are moving smartly and quickly to address those needs."



Fred Kocher

Trustee & former President, NH High Technology Council

Did you know?

The average weekly earnings for all private sector workers in New Hampshire for March 2013 was \$804.77. The average weekly earnings for manufacturing workers in New Hampshire for March 2013 was \$1,044.50. — NH Employment Security

Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

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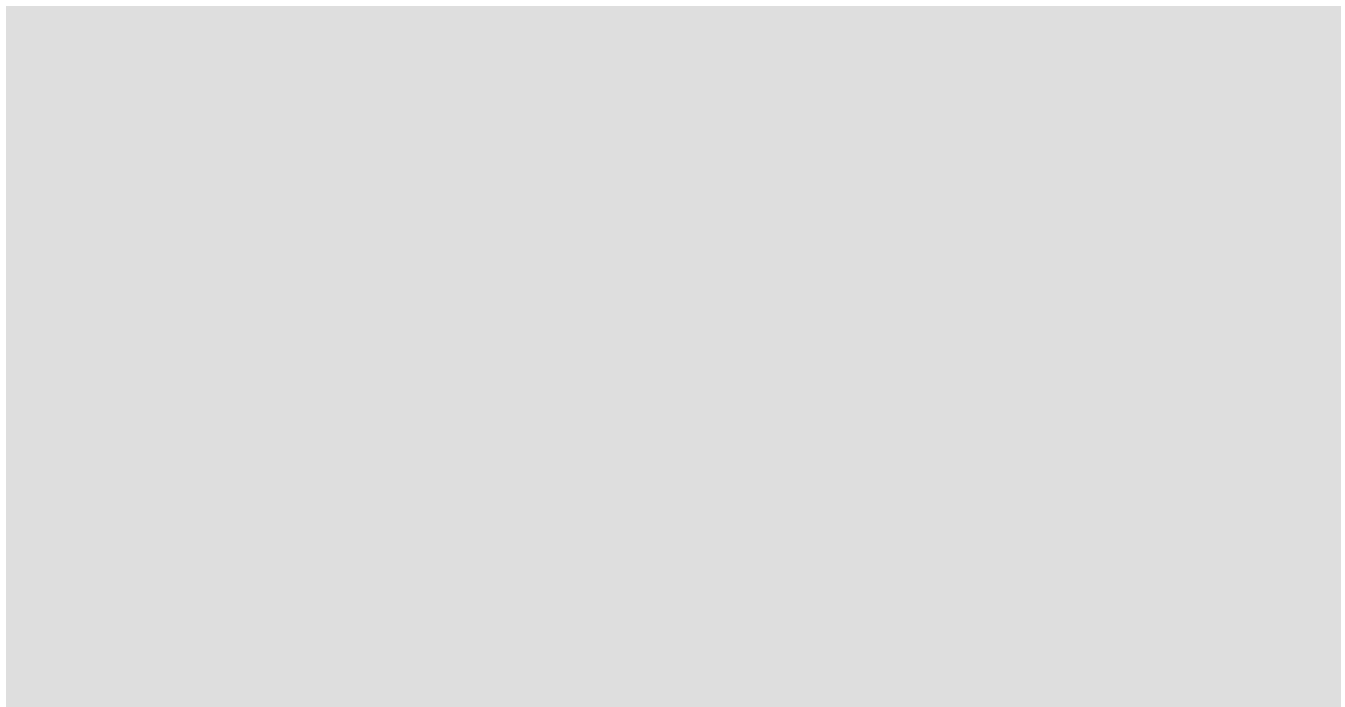




Let's Advance.

NH Manufacturing

Today's advanced manufacturing, also referred to as smart manufacturing, embraces technology to create essential equipment, tools and devices that are literally changing the world.







Advanced manufacturing has been for generations a cornerstone of the economy in the Granite State, itself once a national leader in the production of textiles, machinery and wood products, including paper.

After a debilitating hit approximately three decades ago claimed thousands of jobs, intrepid entrepreneurs transformed the industry, putting a new focus on higher-paying and higher tech and higher-demand markets like computers and electronics, aerospace, defense and medical.

Today, the industry is once again a hotbed for manufacturers and job seekers alike.

The dated notion of manufacturing being greasy, repetitive, low-skilled factory work with little room for advancement has been replaced by the reality that workers in this industry are highly skilled in math, science and technology, and they're as capable working with their minds as they are with their hands.

To work in NH manufacturing is to work in disciplines including computer-aided drafting and design, electronic and mechanical engineering, precision welding, computer numerical controlled precision machining, advanced composites manufacturing, robotics and automation and much more.

Combine these skills with state-of-the-art production technologies and equipment and efficient, clean processes, and you have what is now referred to as smart manufacturing.

And the opportunity for growth is great; due to smart manufacturing's status as the state's largest economic contributor, growth in high-tech manufacturing has become a priority for lawmakers and business experts here and across the nation.

With manufacturers in NH and New England reporting a shortage of specifically trained, highly skilled workers, opportunities abound for exciting, stable jobs in a field with high growth and income potential.



“The community colleges show a clear understanding of the workforce needs for advanced manufacturing and the technology sector in New Hampshire, and are moving smartly and quickly to address those needs.”

“Freudenberg- and five sites in Bristol (2), No We face compe best and bright maintenance te



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Let's Advance.

Programs Overview

The seven member institutions in the Community College System of New Hampshire each offer training, degree and/or certificate programs focusing on a specific discipline within the advanced manufacturing industry.

Choose your advanced manufacturing concentration

The manufacturing industry has long been an integral part of New Hampshire's fabric, but the industry has evolved with the benefits of technology. There are many exciting, challenging jobs available doing work that really does matter. You won't be limited in what you want to learn and what you want to achieve; rather, you'll be encouraged to explore all the career possibilities available to you.

[Advanced Composites Technologies](#)

Electronics & Electromechanics

Engineering & Programming

Robotics & Automation

Advanced Machine Technologies

Advanced Welding Technologies

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[Great Bay Community College](#)

Lakes Region Community College

Manchester Community College

Nashua Community College

NHTI - Concord's Community College

River Valley Community College

White Mountains Community College

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Manufacturing is one of New Hampshire's largest economic industries and many of the most successful companies are reporting a need for highly skilled professionals.

The companies listed here have supported AMPed's mission in a variety of ways, including but not limited to expressed support for the programs and demand for a highly skilled workforce, participation on curriculum advisory boards, donation of money and equipment, enrollment of employees in AMPed programs, hiring of CCSNH alumni and students, and more. CCSNH makes no hiring or pay guarantees on behalf of any industry partner.

Need industry specific training?

New Hampshire's Community Colleges offer on-site, quality employee training programs custom-designed and delivered to your specifications. We use subject matter experts with industry experience, who know how to deliver the results you desire. Important note: Many of

these programs may qualify for up to 50% cost-sharing through the NH Job Training Fund.

Request More Information About Becoming a Partner.

We're here to answer all your questions.



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AMPedNH is the hub for information and events related to the AMPed NH program, and the advanced manufacturing sector in New Hampshire. Bookmark this page and check back often for relevant news, video and valuable insight.

NEWS

Graduates with jobs

June 12, 2015

NEWS

NH MANUFACTURING WEEK TOURS: You've GOT to see this! FREE ways to absolutely blow your mind

Oct. 1, 2014

NEWS

Listen to our interview on WKXL-NH for all you need to know about manufacturing demand in NH, updated technologies and how you can get a free tour of our labs

Sept. 25, 2014

NEWS

From The Eagle Times: NH community colleges invite public into labs for NH Manufacturing Week

Sept. 22, 2014

NEWS

Lakes Region Community College welcomes industry experts as newest instructors

Sept. 21, 2014

NEWS

Jon Lam is 18 and 'way ahead of the game' thanks to White Mountains Community College welding program

Sept. 20, 2014

NEWS

From NH Business Review: All seven community colleges will open advanced manufacturing lab doors to public Oct. 1

Sept. 18, 2014

NEWS

With full-year scholarship, this NHTI student is going from licensed nurse's assistant to robotics engineer - and getting the best of both worlds

Sept. 17, 2014

NEWS

September is a great time to connect with possible future employers

Sept. 14, 2014

NEWS

Great Bay Community College's advanced composites training center, educator win prestigious economic development awards

Sept. 12, 2014

NEWS

Why one WorkReadyNH grad and NHTI scholarship winner says career builders shouldn't turn down a golf invitation - plus other professional insights

Sept. 8, 2014

NEWS

Profile: NHTI alumni AND their local manufacturing employer say community college partnerships 'the way to go'

Sept. 4, 2014

NEWS

Contest registration open: Eighth-graders invited to answer 'what's so cool about manufacturing' by making videos

Sept. 2, 2014

NEWS

Concord Monitor: Community colleges launching statewide job portal to link employers, job seekers

Aug. 29, 2014

NEWS

'Opportunity Knocks' on WGIR features AMPedNH's growth and how ANYONE can get on the path to a great career

Aug. 24, 2014

NEWS

Ratzenberger of 'Cheers' fame, a staunch advocate for advanced manufacturing, is guest speaker for Great Bay Community College fund-raiser

Aug. 19, 2014

NEWS

What do teachers do on summer break? They go to class for high-tech training. See what's in store for Project Lead the Way

Aug. 18, 2014

NEWS

Stackable WorkReadyNH and advanced manufacturing certificates can put your resume at the top of the stack

Aug. 14, 2014

NEWS

AMPed NH Advisor: Easy, fun ways to promote your projects and successes

Aug. 10, 2014

NEWS

What happens when you let two morning radio hosts into your advanced manufacturing lab? Check out the video!

Aug. 6, 2014

NEWS

WZID's Tracy Caruso and Neal White get in on fun in Manchester Community College's mechatronics and robotics lab

Aug. 5, 2014

NEWS

Senator Shaheen praises job training partnerships at River Valley Community College, named 'sole trainer' for Sturm, Ruger in NH

Aug. 4, 2014

NEWS

UPDATED: Looking for ways to connect with potential employers? We've got more than 2 dozen right here, and they want to talk to you!

Aug. 1, 2014

NEWS

Still time to sign up for White Mountains Community

College's welding program in Littleton! With our mobile lab, we bring the class to you!

July 28, 2014

NEWS

Sturm, Ruger & Co. names River Valley Community College's CNC boot camp 'sole trainer' for new employees of NH location; hundreds could be trained

July 26, 2014

NEWS

Thingamajigs @ MCC advanced manufacturing summer camp for kids! (With photo album!)

July 22, 2014

NEWS

Age fear and your job search: How WorkReadyNH makes it a nonfactor

July 20, 2014

NEWS

Great Bay Community College's Advanced Technology & Academic Center celebrates 1st anniversary with announcement of major expansion

July 17, 2014

NEWS

Belly-flop-free zone: Our PAINLESS guide to diving into your advanced manufacturing courses

July 10, 2014

NEWS

NH's community colleges throw students a paddle - we have skill boosters, test prep sessions and more to help YOU

July 7, 2014

NEWS

Gearing up for NH Manufacturing Week - Statewide high-tech student tours offer first-hand looks at advanced manufacturing. Sign up and you WILL be surprised.

June 24, 2014

NEWS

Great Bay Community College welcomes Advanced Composites Manufacturing Instructor

June 21, 2014

NEWS

Make waves and - more importantly - a great impression this summer using AMPed NH's student online services

June 20, 2014

NEWS

Melting pot: Students with vastly different backgrounds come together to heat up work readiness skills

June 18, 2014

NEWS

WMCC expands advanced welding training options for fall

June 17, 2014

NEWS

Psst! Manchester Community College's advanced manufacturing summer camps are so much fun, kids won't know they're learning!

June 15, 2014

NEWS

Look beyond the summer job: See how AMPed NH paired students with employers - and the careers of their lives

June 12, 2014

NEWS

AMPed NH update featured in NH High Tech Council newsletter - new hires, new programs and more

June 10, 2014

NEWS

AMPed NH's high-tech workforce development initiative featured in White House report

June 7, 2014

NEWS

Berlin Daily Sun: With 100% welding student hiring rate, WMCC ups the ante, adds associate degree

June 4, 2014

NEWS

Graduation season: Looking back on AMPed NH accomplishments and ahead to promising careers for graduates

May 23, 2014

NEWS

3-D carbon fiber weaving loom arrives at Great Bay CC! Classes begin in October

May 19, 2014

NEWS

AMPed NH awarded full-year grant extension

May 16, 2014

NEWS

Competing for high-demand careers? Our ePortfolios help students blow the competition out of the water

May 15, 2014

NEWS

Portsmouth Herald: Seacoast aerospace manufacturing initiative takes off

May 12, 2014

NEWS

From Foster's Daily Democrat: Great Bay Community

College's manufacturing training yields 100% student hires

May 12, 2014

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AMPed NH gets boost from U.S. Small Business Administration alliance

May 9, 2014

NEWS

WorkReadyNH - Success by the numbers

May 5, 2014

NEWS

We make it easy to experience the White Mountains Community College advanced welding lab - check out our virtual tour!

April 22, 2014

NEWS

With perfect student-hire record in welding certificate programs, WMCC announces Advanced Welding Associate's Degree

April 20, 2014

NEWS

Student success story: Rising welding star Benjamin Day credits 'true professionals' at White Mountains Community College

April 18, 2014

NEWS

MCC educates NH's educators - what IS advanced manufacturing, and why should we steer students to these careers?

April 16, 2014

NEWS

Great success! Every single Great Bay Community College CNC boot camp graduate hired in field

April 14, 2014

NEWS

Employers: Struggling to find the right match in a pool of skilled job candidates? WorkReadyNH's job profiling tools can help.

April 12, 2014

NEWS

Savvy tips and tools for getting noticed by potential advanced manufacturing employers

April 10, 2014

NEWS

Doing it all: Celebrating Lakes Region Community College students advancing their skills while working in advanced manufacturing

April 8, 2014

NEWS

NHTI launches summer Manufacturing Boot Camp - accelerated training

April 6, 2014

NEWS

Women in manufacturing - How far they've come and why we need more

March 25, 2014

NEWS

Women's History Month: This awesome video honors women in manufacturing

March 22, 2014

NEWS

AMPed NH on WTPL's The Pulse talk show

March 19, 2014

NEWS

NH students rock robotics, engineering and more at Girls Technology Day at NHTI

March 19, 2014

NEWS

We can do it! How WorkReadyNH helps women find their confidence and achieve career goals

March 17, 2014

NEWS

Networking boost: How AMPedNH Connect promotes women in manufacturing - and the industry itself

March 15, 2014

NEWS

Featured in Union Leader and Portsmouth Herald: CNC 'boot camp' offers opportunities for rapid growth

March 11, 2014

NEWS

From Union Leader: Trips to colleges' advanced manufacturing labs open Boy Scouts' eyes to career possibilities

March 9, 2014

NEWS

Work or play? It's both! NHTI Professor Joe Cunningham having a blast as a judge for the FIRST Robotics district competition at UNH

March 7, 2014

NEWS

From Foster's Daily Democrat: Boy Scouts turn to community colleges in bid to add national manufacturing merit badge

March 7, 2014

NEWS

AMPed NH named Best of Business in 2014 for advanced manufacturing outreach

March 5, 2014

NEWS

NHTI to host Girls Technology Day

March 4, 2014

NEWS

Boy Scouts turn to AMPed NH, community colleges in bid to add manufacturing merit badge to national offerings

Feb. 28, 2014

NEWS

SBA regional leadership praises community college advanced manufacturing labs

Feb. 27, 2014

NEWS

AMPedNH Advisor's Corner: Mid-semester tips for success in advanced manufacturing education programs

Feb. 25, 2014

NEWS

AMPed NH Training Graphic - How we do it

Feb. 24, 2014

NEWS

Innovative CNC training boot camps helping NH employers build workforce

Feb. 20, 2014

NEWS

Work-readiness training at no cost to you. Find out how we can help employers as well as students.

Feb. 18, 2014

NEWS

We <3 Manufacturing - Five BIG ways AMPed NH makes hiring easier for employers

Feb. 14, 2014

NEWS

Keene Sentinel Economic Outlook: Economy-boosting education programs include River Valley CC's Machine Tool Boot Camp

Jan. 31, 2014

NEWS

Alumni Spotlight: Single mom Kerri Uyeno finishes training, achieves career dream in six months

Jan. 30, 2014

NEWS

Congresswoman Kuster cites AMPed NH programs in bid to

bring President Obama's AMP 2.0 meetings to NH

Jan. 30, 2014

NEWS

Alumni Spotlight: Former geologist hired straight out of composites program says ATAC gave him 'leg up,' has plans to grow with high-tech industry

Jan. 29, 2014

NEWS

WorkReadyNH offers new professional beginnings, even to 'old pros'

Jan. 25, 2014

NEWS

Freudenberg NOK announces high-tech job openings in NH

Jan. 21, 2014

NEWS

Student Spotlight: For Matt Marcil, manufacturing engineering is business and pleasure

Jan. 20, 2014

NEWS

Student Spotlight: Chris Byron wanted more, and he found it in a 'great career' in advanced manufacturing

Jan.19, 2014

NEWS

Alumni Spotlight: Francis Thogo's advanced manufacturing career path winds all the way from Kenya, and he's still going

Jan. 18, 2014

NEWS

River Valley Community College Machine Tool Boot Camp a recruiting ground for high-tech manufacturers

Jan. 17, 2014

NEWS

Student Spotlight: Alex Sargent's got two CNC certificates and a great job. So why's he back at college?

Jan. 15, 2014

NEWS

Baron Machine: 'Can't begin to describe how excited we are' about potential in LRCC programs

Jan. 7, 2014

NEWS

Open houses planned this month at Great Bay Community College

Jan. 6, 2014

NEWS

Happy holidays indeed; AMPed NH students received jobs, interviews and more

Jan. 5, 2014

NEWS

Hop aboard! It's a cutting-edge welding technology lab – and it's on wheels

Jan. 2, 2014

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Lakes Region Community College welcomes two new advanced manufacturing instructors

Jan. 1, 2014

NEWS

Machine Tool Boot Camp: How you can get ready for an advanced manufacturing career - fast

Dec. 30, 2013

NEWS

How spreading the word about tuition-free workforce training via WorkReadyNH helps you!

Dec. 26, 2013

NEWS

'Twas the Night after Class - An advanced manufacturing student networking story

Dec. 24, 2013

NEWS

Rewarding CNC teaching jobs available with AMPed NH

Dec. 23, 2013

NEWS

Six FUN ways to promote advanced manufacturing careers - for FREE

Dec. 20, 2013

NEWS

ATAC's first advanced composites students receive interviews, high-tech job offers; how you can, too

Dec. 18, 2013

NEWS

How more NH students are saving thousands - think \$26,000 - on their education

Dec. 9, 2013

NEWS

Lakes Region Community College to hold 1st LRCC SPEEKS event - TED-talk style

Dec. 6, 2013

NEWS

What are your community colleges doing to solve high-tech workforce skills gap? A lot, say state & industry partners!

Dec. 6, 2013

NEWS

LRCC's Keith Fletcher aims to expand advanced manufacturing programs

Nov. 27, 2013

NEWS

NHESGR Guest Blog: 5 reasons military veterans should choose a career path in advanced manufacturing

Nov. 26, 2013

NEWS

Applied Career Fundamentals for Advanced Manufacturing Certificate - 1st class tuition free for a limited time

Nov 26, 2013

NEWS

AMPed NH outreach campaign for ATAC advanced manufacturing programs wins award

Nov. 25, 2013

NEWS

Military veterans get training that works for them at WorkReadyNH

Nov. 25, 2013

NEWS

November 2013 AMPed NH Advisor: Here, getting support for your advanced manufacturing studies is easy as pie

Nov. 25, 2013

NEWS

Fix higher education by funding community colleges

Nov. 24, 2013

NEWS

Innovate in the Granite State: Story collection features AMPed NH programs, successes

Nov. 19, 2013

NEWS

Manufacturing Matters Monthly: Exploding water heaters? Not if Watts Water Technologies has anything to do with it!

Nov. 12, 2013

NEWS

AMPed NH spotlight on military veterans: Meet Heather Wells - WMCC student, Marine Corps veteran and National Guard member

Nov. 11, 2013

NEWS

AMPed NH spotlight on military veterans: CCSNH offers support, career pathways in advanced manufacturing

Nov. 11, 2013

NEWS

AMPed NH spotlight on military veterans: Meet Jeff Musheno - NHTI lab assistant and Vietnam War veteran

Nov. 9, 2013

NEWS

AMPed NH, WorkReadyNH offer job seekers new beginnings

Nov. 9, 2013

NEWS

Partnerships between students, colleges & employers focus of 21st Century Roundtable

Nov. 9, 2013

NEWS

WorkReadyNH Update: Community outreach day forms symbiotic relationship

Oct. 30, 2013

NEWS

AMPed NH Adviser: Trick or Treat! Opportunity knocks

Oct. 30, 2013

NEWS

NH community colleges offer free advanced manufacturing course

Oct. 28, 2013

NEWS

AMPed NH offers tuition-free courses in effort to build available high-tech workforce

Oct. 27, 2013

NEWS

Serious about workforce development: AMPed NH offers tuition-free advanced manufacturing courses

Oct. 25, 2013

NEWS

NH Manufacturing Week a blast at Community Colleges

Oct. 25, 2013

NEWS

Seacoast Manufacturers Exchange all about synergy

Oct. 25, 2013

NEWS

PHOTO ALBUM: AMPed NH @ NH Manufacturing Week

Oct. 23, 2013

NEWS

Great CNC instructor opportunity with Great Bay Community College

Oct. 23, 2013

NEWS

AMPed NH tackles stigma with Manufacturing Week open houses

Oct. 4, 2013

NEWS

Manufacturing Matters Monthly: NHBB turns to community college for help in building workforce

Oct. 3, 2013

NEWS

AMPed NH featured in NH Next: Which Path is Right for You?

Sept. 30, 2013

NEWS

High-tech composite components manufacturer to use AMPed NH model at site in France

Sept. 29, 2013

NEWS

Researcher: United States, New Hampshire short on highly skilled labor

Sept. 25, 2013

NEWS

CCSNH Newsletter - AMPed NH prepares to welcome public into high-tech labs

Sept. 25, 2013

NEWS

White Mountains Community College named 5th best in nation

Sept. 25, 2013

NEWS

As manufacturing creates jobs, community colleges open doors for high-tech training lab tours

Sept. 22, 2013

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Manufacturing Revival Radio Interview - How AMPed NH is redefining industry education

Sept. 20, 2013

NEWS

Community colleges on advanced manufacturing: Come see it for yourself!

Sept. 20, 2013

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AMPed NH, NH Works tour high-tech manufacturer Omni Components

Sept. 19, 2013

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Grant allows advanced welding lab AND mobile lab at White

Mountains Community College

Sept. 18, 2013

NEWS

Robots, 3-D Printing, virtual welding: Check out NH Community Colleges during NH Manufacturing Week

Sept. 14, 2013

NEWS

NH community colleges' AMPed NH initiative is making manufacturing cool

Sept. 13, 2013

NEWS

U.S. Manufacturer Going Above and Beyond with Superior Energy Performance

July 25, 2013

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ContiTech Thermopol gives credit to N.H. for expansion

July 21, 2013

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New aerospace facility offers hope in Rochester

July 18, 2013

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Mid-Market Firms Prosper From Advanced Manufacturing Techniques

July 17, 2013

NEWS

Advanced Manufacturing Techniques Drive Growth, Profitability For Middle Market Manufacturers

July 17, 2013

NEWS

Our view: Seacoast is forging a new high-tech future

July 14, 2013

NEWS

Governor welcomes new college to Rochester

July 12, 2013

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Getting the word out about manufacturing

July 12, 2013

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A Great Day for Great Bay

July 12, 2013

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State extends WorkReadyNH program

July 9, 2013

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WorkReadyNH helps people develop skills needed to get a job

June 25, 2013

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Tech programs worth saving

June 24, 2013

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Education at Issue Community Colleges focus on hands-on training

June 16, 2013

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Ask Bill Clinton: How Important Is Manufacturing to U.S. Job Growth?

June 13th, 2013

NEWS

A Revolution in the Making

June 10, 2013

NEWS

New Robotics Degree at NHTI

June 7, 2013

NEWS

Shaheen: Getting students excited about science, technology, engineering and math early on, pays off

June 4, 2013

NEWS

Sen. Shaheen announces push for young women to focus on engineering

June 3, 2013

NEWS

New Rochester center expands pool of advanced technology workers

June 2, 2013

NEWS

New Rochester center expands pool of advanced technology workers

June 2, 2013

NEWS

Path to a new career

May 30, 2013

NEWS

New composites training facility to open in New Hampshire

May 28, 2013

NEWS

Lakes Region Manufacturing Week, Part II

March 15, 2013

NEWS

Eptam Plastics works with CCSNH to make a difference

February 28, 2013

NEWS

Why is New Hampshire's aerospace industry soaring?

February 22, 2013

NEWS

A Strategy to Foster Advanced Manufacturing Networks in the United States

December 2012

NEWS

Regional manufacturing leaders support LRCC curriculum

November 1, 2012

NEWS

Building up work force

October 30, 2012

NEWS

Freudenberg North America Hiring More Employees, Building Partnerships in New Hampshire

July 13, 2012

NEWS

CCRC Working Paper No. 47

July 2012

NEWS

Help Wanted - As manufacturing rebounds and becomes more technical, skilled workers are in demand

March 18, 2012

NEWS

Smart Manufacturing and High Technology: New Hampshire's Leading Economic Sector

March 2011

EVENT

MANUFACTURING WEEK TOURS AND DEMOS - REGISTRATION INFO

Oct. 1, 2014

Details +

Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

Lakes Region
Great Bay
Manchester
Nashua
NHTI
River Valley
White Mountains



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AMPedNH Connect

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2015/21/7 8:29am

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Let's Advance.

Student Support Services

AMPed provides you with cutting edge supports like 24/7 eTutoring, ePortfolios and professional networking at AMPedNH Connect to make your experience meaningful.





Plato

PLATO is a self-paced online library of tutorials that promote student success in Math, Science, Reading, Writing and Grammar courses. Through tutorials, practice exercises, and mastery tests students learn at their own pace, and get immediate results regarding their proficiency. Plato is an excellent resource to prepare students for success in their coursework and reinforce difficult concepts.



Smarthinking

Smarthinking is a LIVE online tutoring service that is available at no cost to CCSNH students. Smarthinking provides 24/7 tutoring in a variety of subjects including math, science, reading, and writing.



TurnRight/AMPedNH Connect

AMPEDNH Connect is an online community connecting advanced manufacturing employers with Community College System of NH advanced manufacturing students. It's a way to meet, advise, and find students for future employment. Students will receive first-hand information about the world of manufacturing which will help them prepare for a job upon graduation.

(Powered by the TurnRight Platform) ampednhconnect.com

Blackboard

Blackboard

Blackboard is the learning management system used by each of the seven NH Community

Colleges to offer 100% online courses and provide academic technology for both online and classroom based learning. The Advanced Manufacturing Student Online Suite (S.O.S.) is on Blackboard, and accessible to matriculated students by logging in at <https://ccsnh.blackboard.com/webapps/login/>.

ePortfolios

CCSNH advanced manufacturing degree and certificate students will create and maintain a digital representation of their skills, knowledge, and experience using Foliotek eportfolio. They will select “artifacts” (drawings, images of models, videos of their lab work, group projects, and more) that showcase their strengths to potential employers.

S.O.S

The Advanced Manufacturing Student Online Suite (S.O.S.) is a one-stop-portal to connect CCSNH advanced manufacturing students with student support services offered by their home college, as well as numerous additional support services developed through the AMPedNH project specifically for students enrolled in advanced manufacturing programs.

Did you know?

Did you know that at AMPedNH Connect there are over 50 advanced manufacturing education and industry professionals waiting to meet you?

Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

Lakes Region

Great Bay
Manchester
Nashua
NHTI
River Valley
White Mountains



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YOUR ADVANCED MANUFACTURING CAREER STARTS HERE!

New Hampshire's advanced manufacturing industry has entered a period of considerable transformation, which means more high-wage, high-skilled careers are available. Advanced Manufacturing Partnerships in Education (AMPed NH) can help you **get the skills YOU need for the job you want.**

Your AMPed NH Job Finder will help you find the career path that best suits you. Just answer a few questions, and you're on your way. It really is that easy.

Find your dream job!

■ *Indicates a required field*

Age range (optional)

M F .

[Log in](#) to post comments

If you were on
company holiday

Start survey

Don't worry; we won't give your information away! [Learn more »](#)

Thanks to the Trade Adjustment Assistance Community College and Career Training Grant (TAACCCT) through the US Department of Labor, the Community College System of NH (CCSNH) can enhance the state's advanced manufacturing sector by providing necessary degree, certificate and training programs.





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Connect with AMPed NH online.





Let's Advance.

Robotics & Automation

Manufacturing's victorious comeback is due in part to new advanced processes using robotics and automation. Now in demand are highly skilled technicians and engineers with diverse competencies including communications, mathematics and physical science.

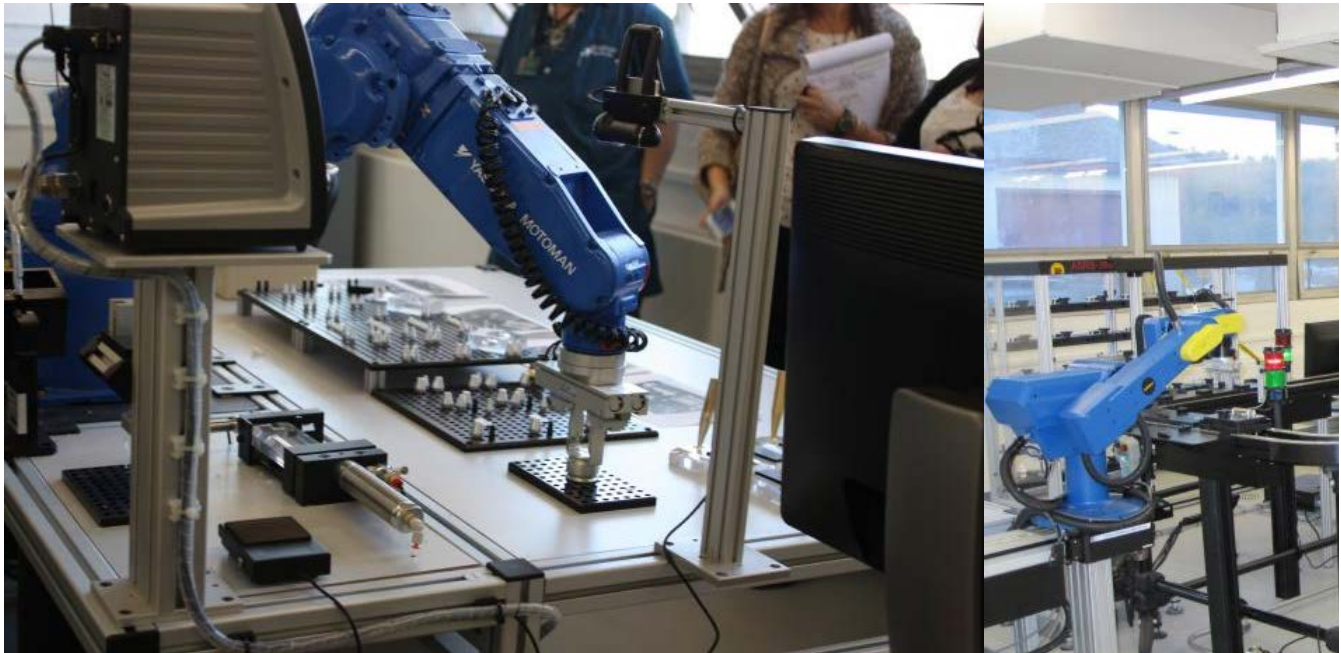
The following colleges offer programs related to this industry:

[Manchester Community College](#)

[NHTI - Concord's Community College](#)

Overview

The development of such everyday products like sliding glass doors, vending machines and garage door openers simply combined a mechanical system with electrical components. Today robotics includes a fusion of mechanical engineering, controls systems, software and computers to develop photo copiers, robots, and the Segway.



Robotics & Automation is a progressive, vital sector of the advanced manufacturing industry where highly skilled professionals incorporate the principles of mechanics, electronics and computers to create more efficient and reliable systems, and innovative products. It is essentially a design process that integrates mechanical engineering, electrical engineering, computer engineering and control engineering.

Industry technicians need an array of skills to keep up with the technological innovations of the manufacturing industry. Professionals in this industry need to use their minds and their hands to provide comprehensive solutions for engineering applications. These integrated skills can be applied to a variety of jobs in the following areas:

- *Research*
- *Design*
- *Development and testing of automation, intelligent systems, smart devices or industrial systems control*



**ELECTRONICS &
ELECTROMECHANICS**



**ADVANCED MACHINE
TECHNOLOGIES**



**ADVANCED WELDING
TECHNOLOGIES**



**ADVANCED COMPOSITES
TECHNOLOGIES**



**ENGINEERING &
PROGRAMMING**



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Lakes Region
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Manchester
Nashua

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Let's Advance.

Electronics & Electromechanics

The efficiency of energy systems, and energy consumption as a whole, are of great importance to many manufacturing companies for a variety of reasons.

The following colleges offer programs related to this industry:

[Lakes Region Community College](#)

[Manchester Community College](#)

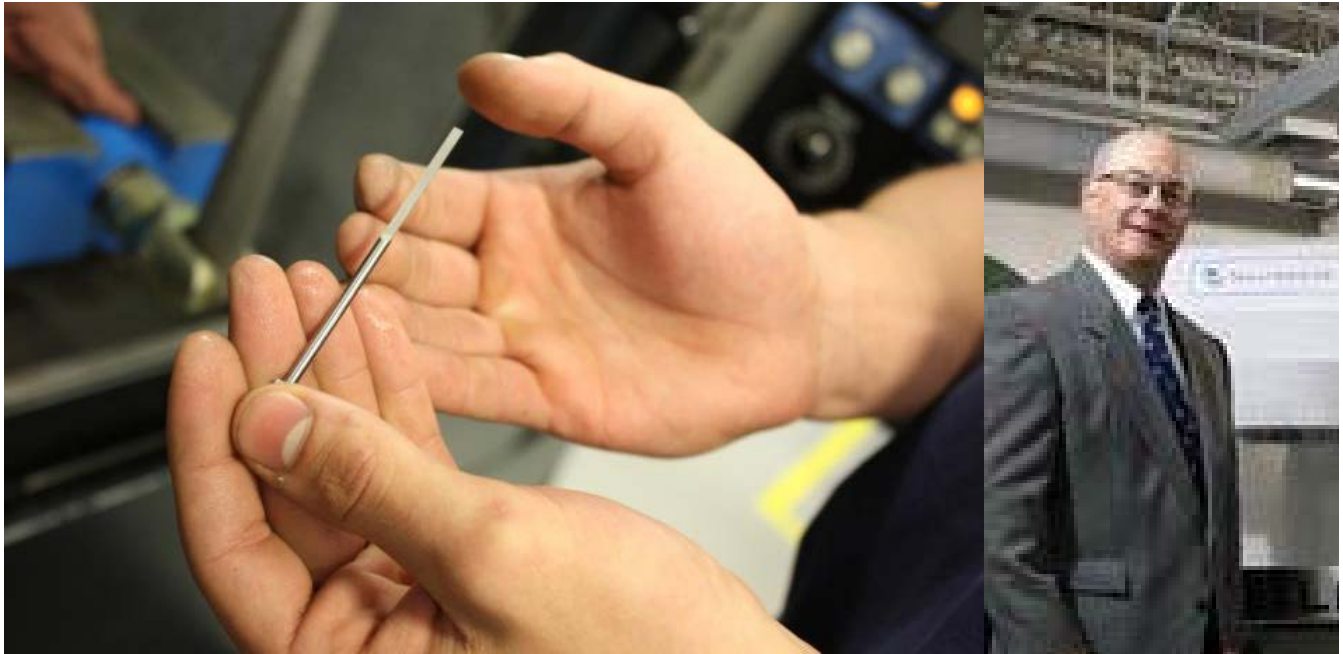
[Nashua Community College](#)

[NHTI - Concord's Community College](#)

Overview

Significant opportunities for improved energy efficiency lie in individual processes and machines, as well as process chains and factories as a whole. Planning and controlling

manufacturing systems requires finding a balance between technical, economic and environmental objectives.



Manufacturing process controls include all systems and software that control production processes. These manufacturing control systems include the operation and maintenance of process sensors, data processing equipment, actuators, networks to connect equipment, and more.

Choose your path from the following concentrations:

- *Quality assurance*
- *Operations management*
- *Process design and development*
- *Production using computer-controlled machines*
- *Advanced levels of mathematics*

Did you know?

New Hampshire has a long, storied history in the manufacturing industry and the Lakes Region is a prime example, as there are many small machine shops in the area that have been supporting

manufacturing for generations.

ROBOTICS & AUTOMATION



**ELECTRONICS &
ELECTROMECHANICS**



**ADVANCED MACHINE
TECHNOLOGIES**



**ADVANCED WELDING
TECHNOLOGIES**



**ADVANCED COMPOSITES
TECHNOLOGIES**



**ENGINEERING &
PROGRAMMING**



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- Great Bay
- Manchester
- Nashua
- NHTI
- River Valley
- White Mountains



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Let's Advance.

Engineering & Programming

An Engineering and Programming education includes the study of topics including computer-aided drafting, composites, materials and processes, machining, plastics, automation, robotics and more. If you like to make things, and if you aspire to make big things used in large industries, this is the course of study for you.

The following colleges offer programs related to this industry:

[Great Bay Community College](#)

[Manchester Community College](#)

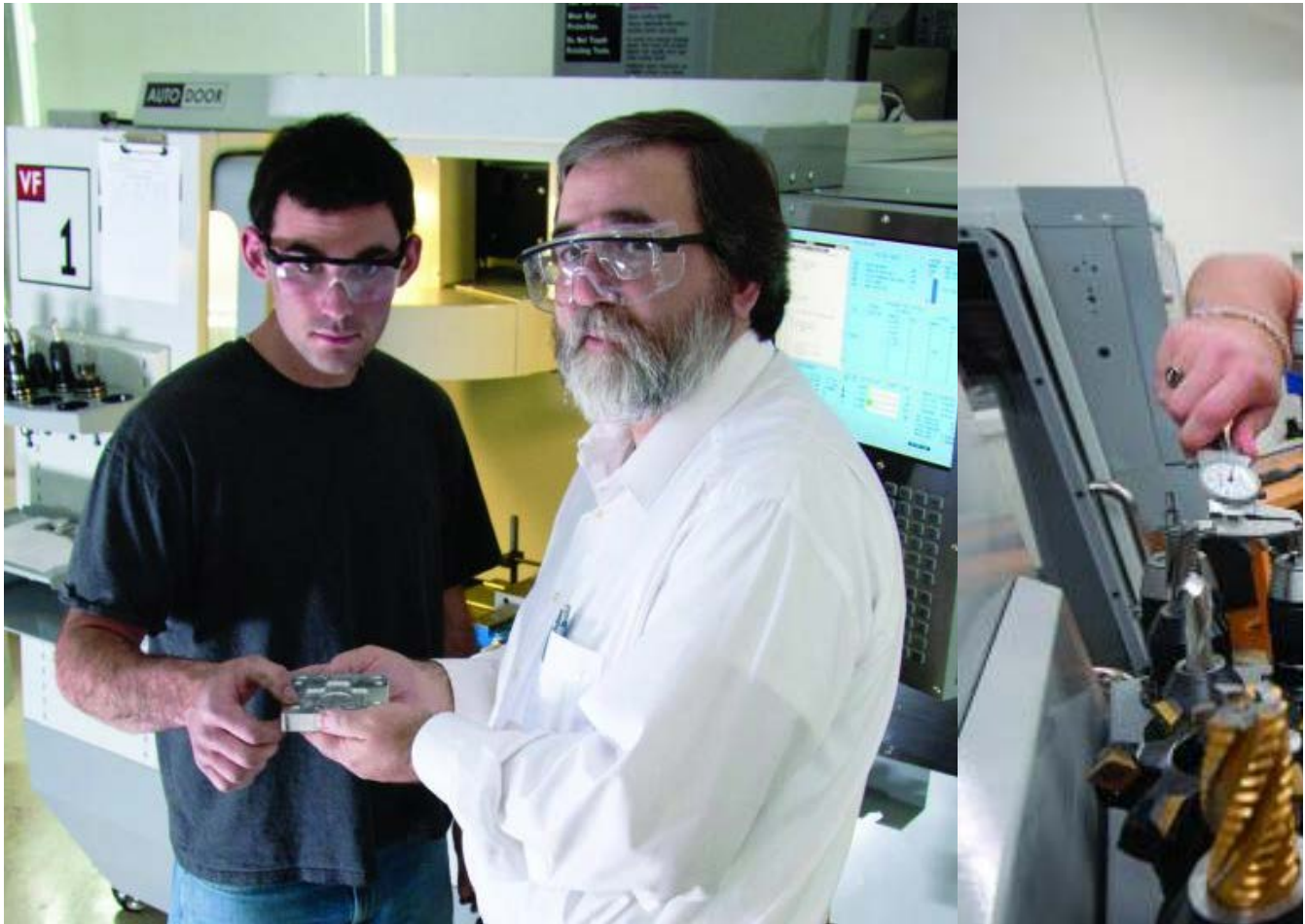
[Nashua Community College](#)

[NHTI - Concord's Community College](#)

Overview

As technology has evolved, so, too, has the manufacturing engineering field. A career in

engineering and programming entails working within a variety of manufacturing practices and focusing on the research and development of systems, machines, tools and equipment, and related processes.



With a career in engineering and programming, you'll contribute to the development, evaluation and improvement of manufacturing methods. Your knowledge-base will include, but certainly not be limited to, expertise in the following areas:

- *Materials and parts*
- *Assembly methods*
- *Quality control standards*
- *Machining processes*
- *Tool and production equipment capabilities*

Examples of employment in this field of study include:

- *Manufacturing technicians*
- *CNC programmers*

- *Mechanical designers*
- *Production planners*
- *Material planners*
- *Manufacturing engineering technicians*
- *Computer aided drafting*

Did you know?

Manchester Community College's lab simulates a professional high-tech production facility, including a system of robots affectionately called "The Blue Man Group."

ROBOTICS & AUTOMATION



**ELECTRONICS &
ELECTROMECHANICS**



**ADVANCED MACHINE
TECHNOLOGIES**



**ADVANCED WELDING
TECHNOLOGIES**



**ADVANCED COMPOSITES
TECHNOLOGIES**





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Let's Advance.

Great Bay Community College

GBCC in Rochester, N.H., is home to the brand-new Advanced Technology & Academic Center (ATAC). ATAC offers customized, highly technical composites manufacturing training for the benefit of job seekers and business owners alike.



Great Bay
Community College

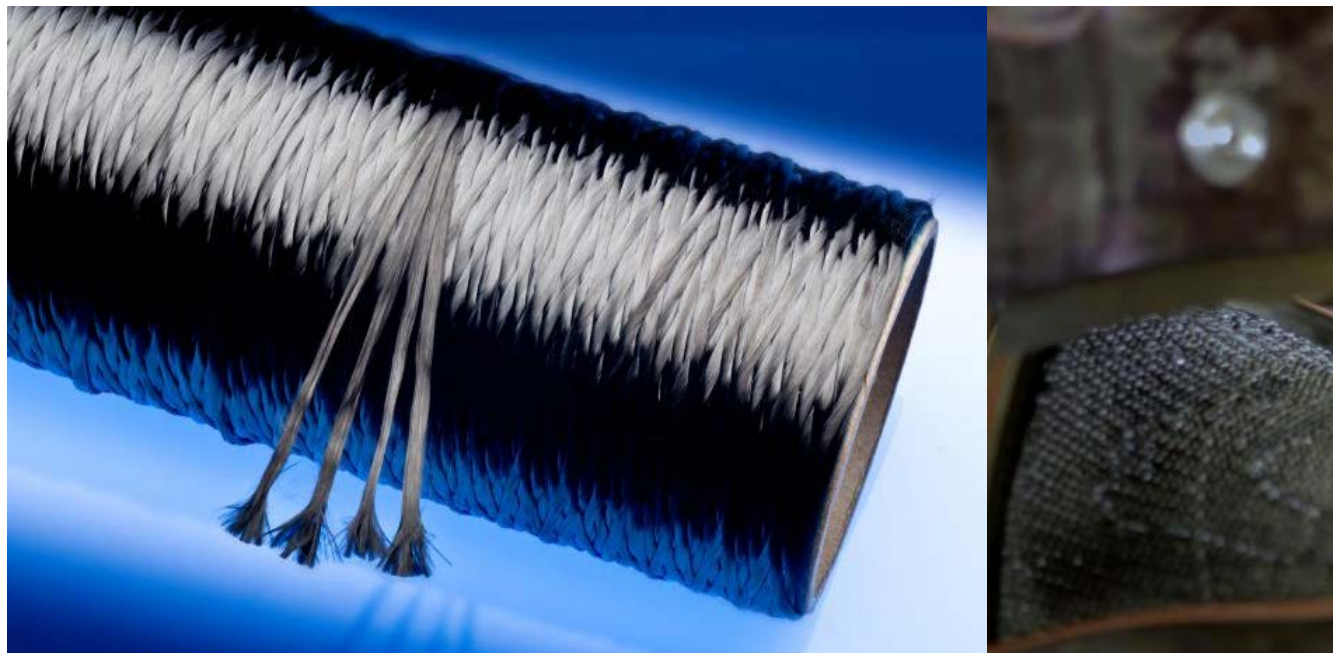
For additional course info and registration

[Get Started](#)

This will take you to Great Bay Community College

Overview

At Great Bay, we can help you to develop your communication, analytical and team building skills. Throughout your experience here, you will have opportunities to hone your leadership skills and to act innovatively and entrepreneurially. You will gain confidence, learn more about yourself and our global environment, and ultimately have a more positive impact in your work or home communities.



Advanced Technology & Academic Center

ATAC, in Rochester, features 17,000 square feet of training and education space equipped with state-of-the-art technology laboratories. In addition to Advanced Manufacturing courses, students can take courses for a degree in programs including business, marketing, computer science and more.

Advanced Composites Manufacturing Certificate

Introductory courses provide opportunities for students to experience working in a modern, clean, hands-on training lab while learning and applying skills critical for success. The program consists of two levels and can be completed in six months.

Level 1: The introductory level is designed to provide students with an overview of advanced composites manufacturing and to help them select an area of specialization based on interest, ability, and job outlook.

Level 2: Students will complete general fundamental manufacturing courses and concentrated courses of study leading to a machine operator certificate with one of eight specializations:

- *Paint Operator*

Prepares students for jobs painting parts using a handheld paint sprayer within an industrial spray booth. Students will also mix paint-related ingredients, apply masking techniques, and practice rework skills.

- *Weaving Technician & Preform Finishing*

Prepares students for jobs setting up and operating equipment used in 3-D composites fabric weaving, including a Jacquard loom. Topics will include loom operation and maintenance and troubleshooting. Students will learn proper use and documentation of measurement equipment, practice reading specialized engineered drawings and work instructions for weaving, and implement quality assurance procedures

- *Advanced Materials Technology: Resin Transfer Molding (RTM) Concentration*

Prepares students for jobs operating the processes of resin transfer molding. Students will learn RTM tool preparation, safe operation of the resin injector, safe operation of the press, and equipment care and maintenance. Students will apply polymer chemistry, physics, curing methods, and other theories presented in Fundamentals of Manufacturing, and will keep a course notebook linking process to theory.

- *Advanced Materials Technology: Bonding/Finishing Operator Concentration*

Prepares students for jobs operating equipment within the finishing processes for composites manufacturing. Students will learn to perform operations of bonding and vacuum bagging, to run an autoclave and record parameters, and to perform preventive maintenance on equipment.

- *Quality Inspector and Coordinate Measuring Machine (CMM) Operator*

Prepares students for jobs as quality inspectors and CMM operators where they will inspect, test, or measure materials, products, or work for conformance to specifications. Students will use precision measuring instruments as they apply advanced quality

inspection methods, processes, and standards.

- *Composites Milling/CNC Set-up Operator*

Develops the skills needed to use computer numerical control (CNC) to run a milling machine efficiently and within required quality standards. Students will be introduced to Solidworks and Mastercam, will learn the basics of writing CNC code, and will set up and run CNC milling machines. They will maintain cutting tools dedicated to composite manufacturing and perform machine maintenance.

- *Composites Repair Technician*

Provides theoretical and hands-on skills to detect, analyze and repair damage of composites structures. Students will be introduced to different typical failures of composites. Students will design and execute repair plans for different types of damage and bonding failures.

- *High Performance Composites*

Teaches students to use all the customary materials, tools and equipment for the manufacturing of high performance composites. The course covers composites processes, materials, equipment and supplies. Fundamentals of mechanical behavior of composites are taught.

Many students will enter the workforce after completing Level 2. They may continue to learn as they earn by studying in either technical or leadership tracks. A leadership path could provide opportunities to become a team leader within their specialization. A technical path could lead to increased skill level and potential certification by the Society of Manufacturing Engineers as a Certified Manufacturing Technologist.

CNC Production Boot Camp (Noncredit certificate program)

The CNC Production Certificate program combines an intense education program that readies an individual for employment with the potential to enter a US Dept. of Labor registered apprenticeship program. CNC has demonstrated success in training and employing professionals, specifically for technical jobs. In fact, CNC Operators play a major role in producing most of the consumer products on which we rely daily.

- *Eight weeks*
- *Forty hours per week*
- *Current location: SIG Sauer campus on Pease International Tradeport*

Learn more about the [CNC Production Boot Camp](#) and how to register.

Associate Degree Program

- *Technical Studies*

Builds on applied expertise through selected coursework, gaining knowledge and skills in a specific discipline or clearly articulated interdisciplinary areas. Students attain proficiency in the concepts, theories, and methods of inquiry pertinent to the courses chosen as Related Technical Electives; integrate knowledge of their technical specialty fields with new knowledge from their chosen Related Technical Electives; and advance in the development of skills necessary to interpret facts, solve problems, evaluate issues, develop multiple perspectives, and think critically and creatively.

[Learn more about Advanced Composites Technnologies »](#)

Great Bay Community College Admissions

Admissions counselors can answer many of your questions over the phone, but they can also set up an appointment with you to show you the campus and talk to you in person about your plans and goals, to go over courses and schedules.

Get in touch with admissions:

Admissions

1-800-522-1194

gbadmissions@ccsnh.edu

Financial Aid

Financial aid provides funds for direct and indirect college expenses. Direct expenses are generally those expenses charged directly to your student account, such as tuition, fees, room and board if you live on campus. Indirect expenses are those that you pay for out of pocket such as for books and transportation to and from college.

These funds come in three forms: grants/scholarships which do not have to be repaid; loans which require repayment; and part-time federal work-study jobs for which the student earns an

hourly wage. Students who are awarded financial aid may receive any or all of these forms of aid.

WorkReadyNH

WorkReadyNH helps NH job seekers and career builders get the professional and technical skills identified by companies as essential to workplace success. With national and college credentials in hand, successful participants will be immediately identifiable as "work ready."

Four of the eight WorkReadyNH centers are funded by the Department of Labor's TAACCCT-NH grant, which is used to better prepare adults for high-wage, high-skill employment in the advanced manufacturing industry.

[More about the TAACCCT Grant »](#)

"The community colleges show a clear understanding of the workforce needs for advanced manufacturing and the technology sector in New Hampshire, and are moving smartly and quickly to address those needs."



Fred Kocher

Trustee & former President, NH High Technology Council

Did you know?

There are more than 200 miles of carbon fiber in a "ship set" produced at AMPed NH partner Albany Engineered Composites, which includes a fan case, 18 fan blades, 18 spacers, and 18 platforms.



Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

- Lakes Region
- Great Bay
- Manchester
- Nashua
- NHTI
- River Valley
- White Mountains



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[Request More Info](#)

AMPedNH Connect

AMPedNH Connect is an online community connecting advanced manufacturing employers with advanced manufacturing students at NH's community colleges. It's a way to meet, advise and find students for future employment. Students receive first-hand information about the world of manufacturing, which helps them prepare for a career upon graduation.



2015/21/7 8:29am

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NEWS & EVENTS

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Let's Advance.

Nashua Community College

Nashua CC, in Nashua, N.H. offers training that will provide students with mechanical design and precision manufacturing skills and knowledge vital to engineering and producing machined components and working with electrical systems.



For additional course info and registration

[Get Started](#)

This will take you to Nashua Community College

Overview

NCC is a student-centered educational institution with the goal of advancing and enriching the educational, economic, and cultural aspects of the Nashua region. During your time at NCC, you will develop confidence in yourself, build a repertoire of specialized skills, and put yourself on a path to success. NCC has recently partnered with Granite State College in order to allow seamless transition from NCC to bachelor's degree programs at GSC.



Precision Manufacturing

The Precision Manufacturing and Mechanical Design industry requires properly trained individuals who can follow the design process from inspiration to the actual manufactured product. A mechanical designer requires a diverse knowledge in many areas including computer aided draft and design, machining skills and high-tech equipment operation.

Employees in this industry need to have project management skills and the ability to clearly communicate with others. The skills required include G and M code programming, the understanding of standards and safety procedures, proper material and tool identification, the ability to make precise measurements given strict tolerances, and the training to operate machinery properly. Employment opportunities for this field of study include:

- *CNC specialists*
- *Mold Makers*

- *Tech support technicians*
- *Field service representatives*
- *General machinists*

[Learn More About Precision Manufacturing »](#)

Nashua Community College offers the following programs:

- *Computer Numerical Control Certificate*

Prepares students with the basic skills necessary to begin a career in the NC or CNC operations area.

- *Machine Tool Technology CNC Programming Certificate*

Prepares students to become machine operators in the machine tool industry.

- *Mechanical Design Technology Associate Degree*

Responds to industry needs for individuals who can follow the design process from inspiration to the final production design of manufactured products. Upon degree completion, students will have the necessary skills and knowledge to effectively communicate manufacturing methods, interpret drawings, make precise measurements, operate CNC machines, write programs, calculate material requirements, and work as part of a team. The mechanical designer requires knowledge in many areas including Computer Aided Drafting and Design, Machine Shop, Robotics and Machine Components. Foundation courses provide knowledge of physics, mathematics, machine shop practices, machine theory and robot automation programming. Subsequent courses build upon this basic knowledge to develop applications related to modern machine design.

- *Electronic Engineering Technology Degree*

Concentrates on the use of principles and theories of science, engineering and mathematics to solve technical problems in research and development, manufacturing, sales, construction and maintenance. Through the use of modern electronic laboratories, the student will become familiar with the areas of electronics, including circuit analysis, analog and digital integrated circuits, discrete semiconductor devices, electronic communications and linear operational circuits. This hardware oriented program provides students with

knowledge of currently established design and laboratory techniques.

- *Precision Manufacturing Associate Degree*

The Precision Manufacturing industry needs skilled technicians to carry out new ideas and plans in the production of all types of manufactured parts. Many of these skilled technicians can earn more than \$50,000 a year. NCC's Precision Manufacturing students receive applied training in basic concepts of machine tool processes during the first year. In the second year, students will receive training in such specialized areas as production machining and Computer Aided Manufacturing (CAM), Computer Numerical Control (CNC) programming, setup and operation. Employment opportunities include CNC specialists, mold makers, technical support technicians, field service representatives, and general machinists. For students looking to pursue an education beyond the Associate Degree, this program may transfer to selected Bachelor Degree programs.

Nashua Community College Admissions

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[Get in touch with admissions »](#)

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Lizbeth Gonzalez

505 Amherst St.
Nashua, NH 03063
P: (603) 578-8900
F: (603) 882-8690
www.nashuacc.edu
School code: 009236

WorkReadyNH

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[More about the TAACCCT Grant »](#)

“During my training at NCC, the hands-on machining labs were of the most enjoyment to me. Making parts from scratch and learning how to write CNC programs were very exciting. Having community college training allowed me to get my foot in the door at a company that thrives in advanced manufacturing. Without the two years of technical training, I would have had a very difficult time trying to understand the concepts that the toolmakers at MTC were trying to show me.”



Brian Berg

2000 CCSNH graduate, Freudenberg NOK Employee

Did you know?

It's not uncommon for Nashua Community College's advanced manufacturing students to gain employment in their chosen field prior to graduating.



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We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

Lakes Region

Great Bay

Manchester

Nashua

NHTI

River Valley

White Mountains



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Let's Advance.

NHTI - Concord's Community College

NHTI in Concord, N.H., offers exceptional certificate and degree programs covering sectors like advanced manufacturing processes and engineering, robotics and automation.



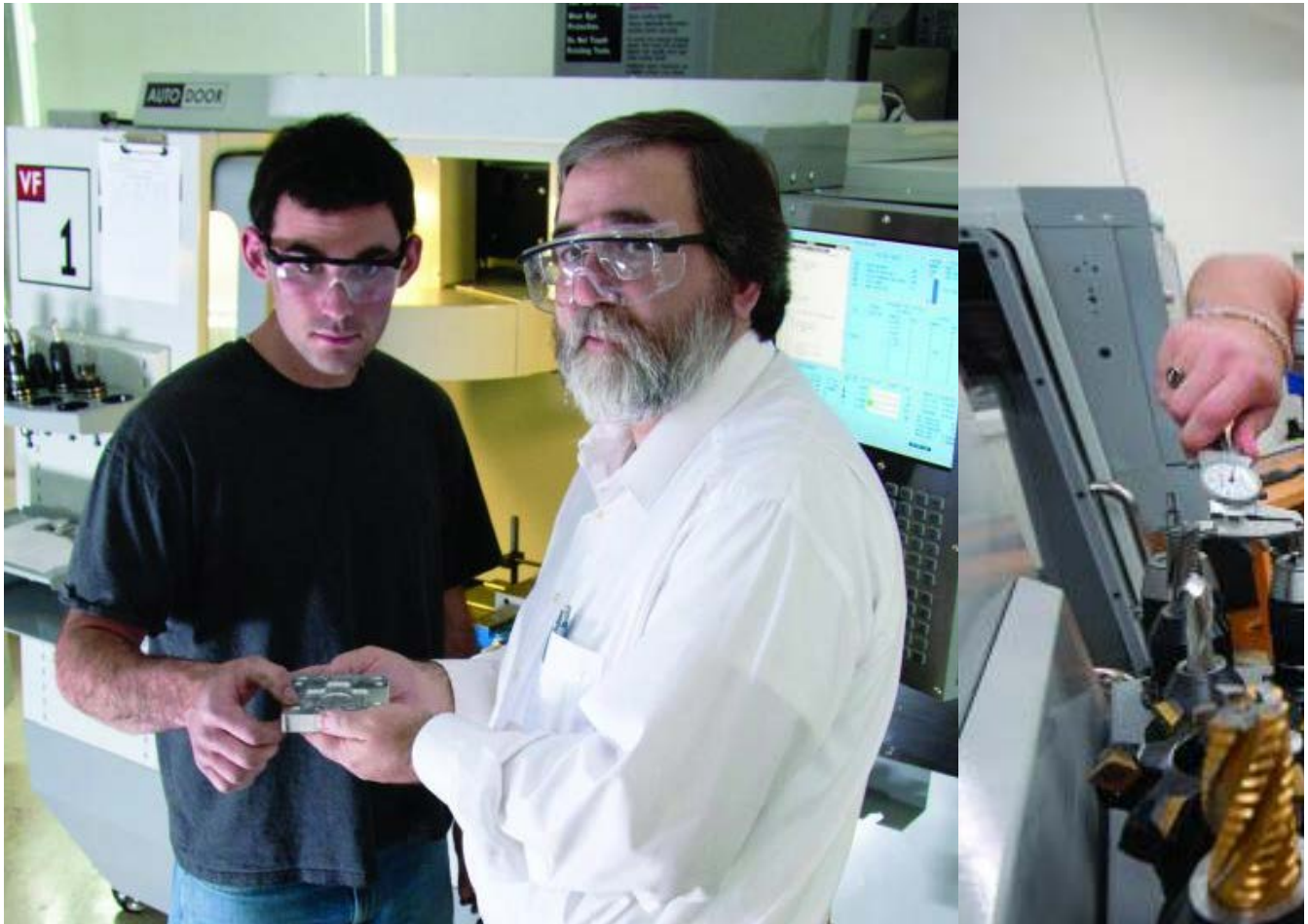
For additional course info and registration

[Get Started](#)

This will take you to [NHTI - Concord's Community College](#)

Overview

NHTI - Concord's Community College, serves students, business, and the community through targeted academic and technical education. The manufacturing programs at NHTI focus heavily on math and science in order to give students the basic tools to stay current with constant changes in technology. English and social science courses are also required in order to develop and improve vital communication skills. NHTI has built an excellent system of practicum opportunities throughout the community to promote hands-on learning alongside traditional coursework.



Electronics, robotics/automation & advanced manufacturing processes

A recent survey of New Hampshire advanced manufacturing companies identified a shortage of skilled employees. The knowledge you acquire during your time at NHTI will prepare you to fill the skills gap. Over the past several decades, there has been a significant push away from manual work, towards automated, smart manufacturing. Due to this trend, there is a great demand for a

highly skilled and properly trained workforce.

[Learn more about Robotics and Automation Engineering »](#)

NHTI offers the following programs:

- *Advanced Manufacturing Process Technology*

Provides a solid foundation for the manufacturing processes related to traditional machine tools and CNC automated machining centers. There are five major interrelated areas of study: application of shop and tool room mathematics; interpretation and understanding of engineering drawings; knowledge of machine tool processes and the basic machine tools: lathe, milling machine, grinder; CNC programming: mills and lathes; and CNC machine operation.

Along with the basic theory of manufacturing processes related to machine tools given in the classroom, students also apply the theory and obtain adequate laboratory time on industry-grade equipment to gain the experience necessary for employment.

- *Industrial Design Technology*

Designed to prepare students for entry-level positions in the field of Industrial design, the A.S. Degree requires students to master design fundamentals in drawing, 2-Dimensional design, 3-Dimensional design, engineering design, and manufacturing principles.

Emphasis is also placed on the study of mathematics and physical sciences while English and social science courses broaden and improve the student's communication skills.

A series of more advanced/specialized courses focus on the application and integration of new and existing technologies to both product design and product manufacture. Topics include material explorations in plastics, wood and metal, CAD software and human factors.

Graduates will have the foundation necessary to pursue a bachelor's degree and to take advantage of opportunities for life-long learning or professional development.

- *Manufacturing Engineering Technology Associate Degree*

Educates technicians in the manufacturing field. Program emphasizes mathematics and science courses to give students the knowledge to cope with changing technology.

Incorporates the theory and practice of manufacturing from planning and layout through the operation and control phases. Extensive computer applications are part of the program

including computer-aided drafting and computer-aided manufacturing.

- *Mechanical Engineering Technology Associate Degree*

Designed to educate technicians in the mechanical engineering field. The program includes courses in the areas of design, manufacturing and controls. Mathematics and physical sciences are emphasized to give students the basic knowledge to cope with changing technology. Course work incorporates theory and practice along with extensive computer application in drafting and design.

- *Computer Engineering Technology Associate Degree*

Prepares students to apply theoretical and practical knowledge and skills to analyze and solve complex technical and non-technical problems in the computer engineering technology industry or related environment; gain proficiency in the use of software and hardware systems used in the computer engineering technology industry or related environment; communicate effectively in oral, written and graphical modes in interpersonal and group situations at a level of effectiveness expected of industry employees; perform ethically and professionally in business and society, including a respect for diversity and an appreciation of the need to contribute to the community.

- *Robotics and Automation Engineering Technology Associate Degree*

Students master engineering fundamentals by taking courses in engineering design, manufacturing processes, computer programming, circuit theory, and digital electronics. Emphasis is also placed on the study of mathematics and physical science while English and social science courses broaden and improve the student's communication skills. A series of more advanced/specialized courses focus on the application and integration of new and existing technologies to both product design and product manufacture. Topics include robotics, machine vision, process automations, programmable logic controllers, motion control, and the use of computers for design and manufacture.

- *Electronic Engineering Technology Associate Degree*

Provides an opportunity for students to develop the necessary engineering technology skills through theoretical and practical application. Theory presented in lecture is reinforced through application in the laboratory. Fundamental concepts and skills are emphasized, providing a base of knowledge that allows students to advance to specialized areas in the diverse and rapidly changing world of electronic engineering technology.

- *Advanced Manufacturing Processes Certificate*

Designed to provide the entry level manufacturing technician or CNC operator with the basic knowledge of machining operations using traditional machine tools and basic CNC programming and CNC machine operation. Included are courses in related shop mathematics and engineering drawing interpretation. The laboratory component of the machining courses will provide the student with hands-on activities on actual machines in the machine shop and the CNC lab.

- *Computer Technology Programming Certificate*

Provides state-of-the-art capability in using computers, offering marketable programming skills and in-depth understanding and manipulation of hardware.

- *Electronic Technology Certificate*

Designed to accommodate people with technical backgrounds who are interested in learning electronics, e.g., those with liberal arts-based computer science degrees working in areas of software where basic electronics knowledge is needed.

NHTI Admissions

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[Get in touch with admissions »](#)

Financial Aid at NHTI

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hourly wage. Students who are awarded financial aid may receive any or all of these forms of aid.

Sheri Gonthier

31 College Drive

Concord, NH 03301

P: (603) 230-4000 or 800-247-0179

F: (603) 230-9306

www.nhti.edu/

School code: 002581

WorkReadyNH

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[More about the TAACCCT Grant »](#)

“I have found my community college education to be an invaluable resource that has helped me in every aspect of the machine tool environment. I would recommend community college training to others because it opens countless doors within the industry and it allows you to progress within the field much faster than if you didn’t have the training.”



Jaskiel McDowell

2011 CCSNH Graduate, Freudenberg NOK Employee

Did you know?

Students at NHTI receive training — from engineering and design to manufacturing processes — using six fully functional robotic arms.



Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

Lakes Region

Great Bay

Manchester

Nashua

NHTI

River Valley

White Mountains



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Let's Advance.

Lakes Region Community College

Lakes Region CC, in Laconia, NH, turns eager, mechanically inclined students into talented, professional-level machinists who are prepared to be competitive in the job market and achieve personal growth.



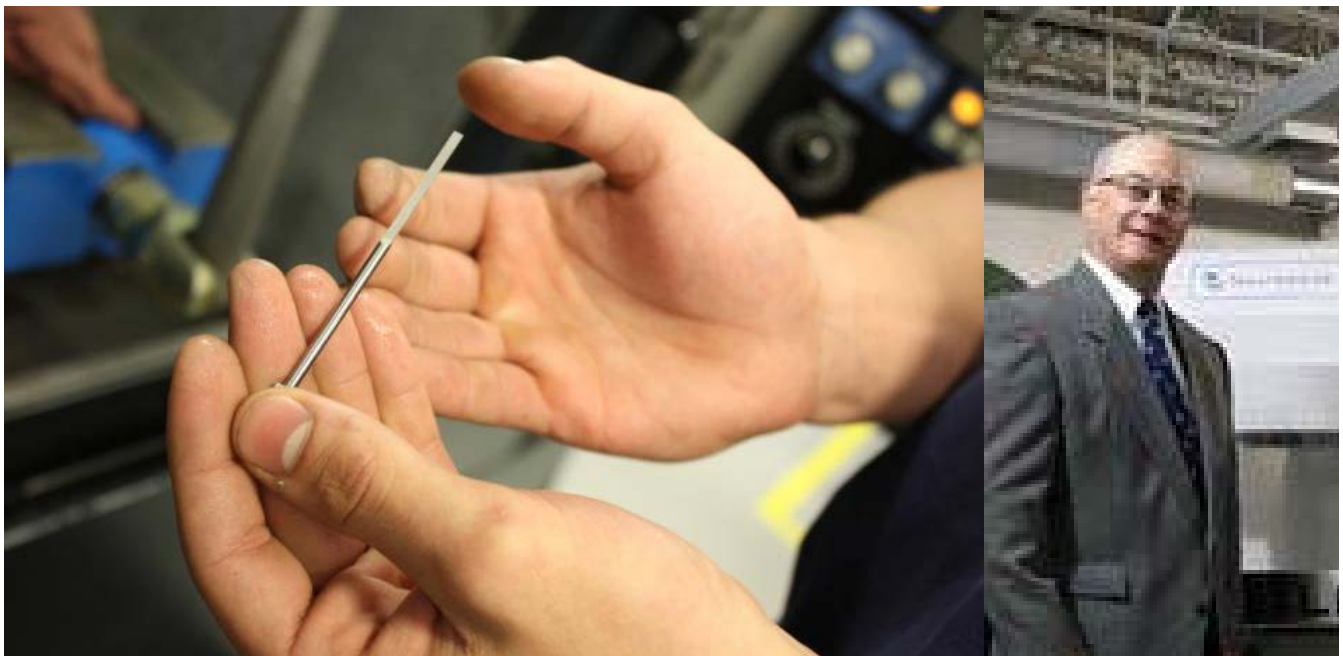
For additional course info and registration

[Get Started](#)

This will take you to Lakes Region Community College

Overview

An education in Advanced Manufacturing and Electromechanics at Lakes Region Community College gives students the opportunity to gain the specific knowledge and technical training they'll need to be difference-makers in their field. The curriculum was created to meet student needs, as well as the needs of business, industry and community partners.



Advanced Manufacturing & Electromechanics

The efficiency of energy systems, and energy consumption as a whole, are of great importance to many manufacturing companies for a variety of reasons. Significant opportunities for improved energy efficiency lie in individual processes and machines, as well as process chains and factories as a whole. Planning and controlling manufacturing systems requires finding a balance between technical, economic and environmental objectives.

Career paths include:

- *Quality assurance*
- *Operations management*
- *Process design and development*
- *Production using computer-controlled machines*
- *Advanced levels of mathematics*

[Learn more about Advanced Manufacturing & Electromechanics »](#)

Lakes Region Community College offers the following programs:

- *Advanced Manufacturing Certificate*

This yearlong program is divided into two semesters with courses covering manufacturing processes, basic machine shop math, blueprint reading, metrology and CNC machines. The ability to apply lessons will be provided through lab work and supervised demonstration of competencies on full-size CNC machines, in addition to eLearning simulation training.

- *Electromechanical Technician Associate Degree*

The Electromechanical Technologies Associate Degree consists of 11 core courses. Three of the core courses are part of the Advanced Manufacturing Associate Degree and four of the core courses are part of the Electrical Power and Controls Technologies associate degrees. Successful students should have the necessary skills to enter the manufacturing workforce, or excel in current employment, in machine technician positions. Students will have an understanding of electrical and mechanical theory and principles. Students will have acquired skills in troubleshooting electrical, hydraulic and pneumatic control systems. Students will also have acquired skills in computer-numeric controlled machine operations, electrical controls programmable controllers, principles of electrical motors, critical thinking skills, and oral and technical communication skills.

- *Advanced Manufacturing Processes and Control Associate Degree*

The Advanced Manufacturing Degree consists of 11 major core courses, five of which are the core courses of our Advanced Manufacturing Certificate program. Successful students will have skills necessary to enter the advanced manufacturing workforce or excel in current manufacturing employment, in positions a step higher than entry level. Students will have an understanding of manufacturing operations and processes, and will have acquired skills for decision making using quantitative and qualitative data. Students will have knowledge in materials, processes, quality control, machine operations, machine set-up and tool section, employee empowerment skills, critical thinking skill, oral and technical communication skills, and operation management skills.

Lakes Region Community College Admissions

An admissions counselor can answer many of your questions over the phone, and they can also set up an appointment with you to tour the campus and speak to you in person about your plans and goals, to go over courses and schedules.

[Get in touch with admissions »](#)

Financial Aid for Lakes Region Community College

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Financial aid contact:

Kristen Purrington

379 Belmont Rd.

Laconia, NH 03246

P: (603) 524-3207 or 800-357-2992

F: (603) 524-8084

<http://www.lrcc.edu/>

School code: 007555

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[More about the TAACCCT Grant »](#)



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Brian Berg

2000 CCSNH graduate, Freudenberg NOK Employee

Did you know?

New Hampshire has a long, storied history in the manufacturing industry and the Lakes Region is a prime example, as there are many small machine shops in the area that have been supporting manufacturing for generations.



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Let's Advance.

River Valley Community College

RVCC in Claremont, N.H., offers a comprehensive certificate program in Advanced Machine Tool Technology. This training will provide students with the specialized skills and in depth knowledge necessary to enter the machine tool trade.



For additional course info and registration

[Get Started](#)

This will take you to River Valley Community College

Overview

A small academic environment that allows for individualized attention is why River Valley stands out from the rest. Committed community partners, and a supportive faculty will guide you through the process of advancing your education. Our career oriented programs will provide you with a highly specialized skill set, allowing you to confidently enter the job market. You will leave River Valley Community College primed and ready for success.



Machine Tool Trade

A machine tool is a machine used for shaping ridged materials through cutting, boring, or another form of deformation. Machine tools have mechanisms for holding a workpiece, and a cutting tool which follows a controlled toolpath. The precise definition varies, but it is safe to say that machine tools are “machines that help people make things.”

Advanced Machine Tool Education

The Advanced Machine Tool Technology program will train you for skilled operation of CNC machine tools, programming of process control, and production of tools, dies, and molds. Students will be able to demonstrate an in-depth knowledge of the manufacturing process,

including the ability to read and write CNC programs, and perform operations that meet specific tolerance requirements. This certificate program can be used as a means to receiving a supervisory role promotion for students with previous work experience.

Upon completing the Advanced Machine Tool Technology certificate, students are encouraged to continue their studies by pursuing an Associate Degree in General Education with an Advanced Machine Tool Technology concentration. Students may also take courses for a degree in programs including, but not limited to, physical science, business, and technology.

- *Machinists*
- *Computer-controlled machine tool operators*
- *Numerical tool and process control programmers*
- *Tool and die makers*
- *Mold makers*

[Learn More About Advanced Machine Tool Technology »](#)

River Valley Community College offers the following programs:

- *Advanced Machine Tool Technology Certificate*

Designed to offer students comprehensive technical training that provides an in-depth knowledge and understanding of the machine tool trade. This innovative, state of the art course of study leverages community resources in an effort to build and sustain a well-trained/well-educated workforce that will meet the machine tool industry needs of today and in the future. Successful students can demonstrate knowledge of manufacturing process, machine selection, fixture work holding needs and basic cutting tools, with proper use and application to produce a product to customer requirements; read technical drawings; define terms specific to blueprints; interpret and apply dimensions and tolerances as defined in the "ASME Y14.5-2009" standard; interpret thread series and notations, surface finish marks, revision blocks, title blocks, line types/weights and notes; perform operations within the high precision tolerances requirements of the industry; write programs for basic parts using G & M Code programming language; and more.

- *NIMS CNC Machinist*

Industry certificate: The National Institute for Metalworking Skills (NIMS) was formed in 1995 by the metalworking trade associations to develop and maintain a globally competitive American workforce. NIMS sets skills standards for the industry, certifies

individual skills against the standards and accredits training programs that meet NIMS quality requirements.

River Valley Community College Admissions

Julia Dower

1 College Place

Claremont, NH 03743

P: (603) 542-7744 or 800-837-0658 NH & VT

F: (603) 543-1844

www.rivervalley.edu

School code: 007560

[Get in touch with admissions »](#)

WorkReadyNH

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[More about the TAACCCT Grant »](#)

“At RVCC, I enjoyed the small class size and all the hands-on learning. With only a GED, I fought for years for a good job. RVCC gave me a much-needed first step to change the direction of my life. In only two years, I went from never having stepped foot in a machine shop to running multiple machines in an advanced field, all due to the training and support of RVCC and Knappe & Koester.”



Chris Ziarnowski

2012 CCSNH Graduate, Knappe & Koester Employee

Did you know?

Each year our top 60 candidates for the program are selected after completing our annual "Career Simulation" day.



Great Bay
Community College



Nashua
Community
College



NHTI
Concord's Community College



LAKES REGION
Community College



RIVER VALLEY
Community College



White
Mountains
Community College



MANCHESTER
COMMUNITY COLLEGE

Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

Lakes Region

Great Bay

Manchester

Nashua

NHTI

River Valley

White Mountains



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AMPedNH Connect is an online community connecting advanced manufacturing employers with advanced manufacturing students at NH's community colleges. It's a way to meet, advise and find students for future employment. Students receive first-hand information about the world of manufacturing, which helps them prepare for a career upon graduation.



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Let's Advance.

White Mountains Community College

White Mountains Community College, with locations in Berlin, N.H., and in Littleton, N.H., offers training programs that cover every aspect of precision welding, preparing students for an exciting career with high growth and income potential.



For additional course info and registration

[Get Started](#)

This will take you to White Mountains Community College

Overview

White Mountains CC offers specific, targeted education and training so students are prepared to make seamless transitions into the workforce, embarking on challenging, rewarding careers. Student success is always our top priority. Recent high school graduates looking to join the workforce or planning to transfer to a four-year college or university, and adults looking to upgrade skills or start a new career path, have all found success in our programs.



Advanced Welding

Welding is all around us. It's a skillset, and in many ways an art form, used to help build bridges, skyscrapers, vehicles... even rockets. Welding is the most popular way to bond metal due to its efficiency, strength and versatility.

At White Mountains CC we offer training that provides students with the skills they need for American Welding Society (AWS) certification in structural welding, and the American Society of Mechanical Engineers (ASME) certification, as well as a broad overview of related welding skills and techniques. Students will learn in a balanced environment of classroom study and lab training as they explore shielded metal arc welding, metal inert gas, and tungsten inert gas welding.

Skills include:

- *Advanced blueprint reading*
- *Material selection and preparation*
- *Precision Welding Education*
- *Use of modern techniques for:*
 - *Shielded metal arc*
 - *Flux cored arc*
 - *Gas tungsten arc*
 - *Gas metal arc welding*

[Learn more about Precision Welding »](#)

White Mountains CC offers the following programs:

- *Advanced Welding Certificate*

The Advanced Welding Certificate is a full-time, two semester program that typically runs three days a week from September to May. Through a combination of classroom and laboratory training, the student will learn the applications of SMAW (Stick), GMAW (MIG), FCAW (Flux Core), SAW (Submerged Arc), and GTAW (TIG), as well the necessary safety, blueprint reading and practical application skills needed for employment in today's welding industry. This certificate not only provides the student with the skills and knowledge necessary to achieve the AWS certification in multiple processes, but the tests are included as part of the course. Students are prepared for and take the D1.1 Unlimited Structural Steel in SMAW and FCAW, and the D17.1 AWS certification in GTAW.

- *Pipe Welding Certificate*

Students can improve their employability by returning over the summer for Pipe Welding. It builds upon the skills learned in the Advanced Welding Certificate and provides the opportunity to add two ASME Pipe certifications (GTAW Root & SMAW Fill) to an already growing resume.

- *Precision Welding Certificate*

Students can take Precision Welding instead of the Advanced Welding Certificate. While

the two programs are almost identical, Precision Welding offers a Co-op/Capstone the following semester.

- *Associate Degree in Advanced Welding*

The Associate in Science in Advanced Welding degree is stackable with the certificate program and provides more hands-on instruction in advanced processes, inspection and testing. It prepares students for improved job prospects immediately, but even more importantly, positions them for advancement to further career goals. Furthermore, program graduates will possess the necessary foundation in welding to pursue further studies towards a higher degree.

White Mountains Community College Admissions

Admissions counselors can answer many of your questions over the phone, but they can also set up an appointment with you to show you the campus and talk to you in person about your plans and goals, to go over courses and schedules.

[Get in touch with admissions »](#)

Financial Aid at White Mountains Community College

Financial aid provides funds for direct and indirect college expenses. Direct expenses are generally those expenses charged directly to your student account, such as tuition, fees, room and board if you live on campus. Indirect expenses are those that you pay for out of pocket such as for books and transportation to and from college. At White Mountains CC, 85% of students receive some form of financial aid.

Contact:

2020 Riverside Drive

Berlin, NH 03570

P: (603) 752-1113 or 800-445-4525

F: (603) 752-6335

www.wmcc.edu

School code: 005291

WorkReadyNH

WorkReadyNH helps NH job seekers and career builders get the professional and technical skills identified by companies as essential to workplace success. With national and college credentials in hand, successful participants will be immediately identifiable as "work ready."

Four of the eight WorkReadyNH centers are funded by the Department of Labor's TAACCCT-NH grant, which is used to better prepare adults for high-wage, high-skill employment in the advanced manufacturing industry.

[More about the TAACCCT Grant »](#)

Did you know?

Every one of the White Mountain Community College students who completed the precision welding program in summer 2012 passed the industry standard ASME Pipe Certification Test, and all but one were hired into welding positions within weeks of graduation.



Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

- Lakes Region
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- Manchester
- Nashua
- NHTI
- River Valley
- White Mountains



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Let's Advance.

Manchester Community College

MCC, located in Manchester, N.H., offers certificate and associate degree programs that help students learn marketable manufacturing technology skills in a variety of automated manufacturing processes.



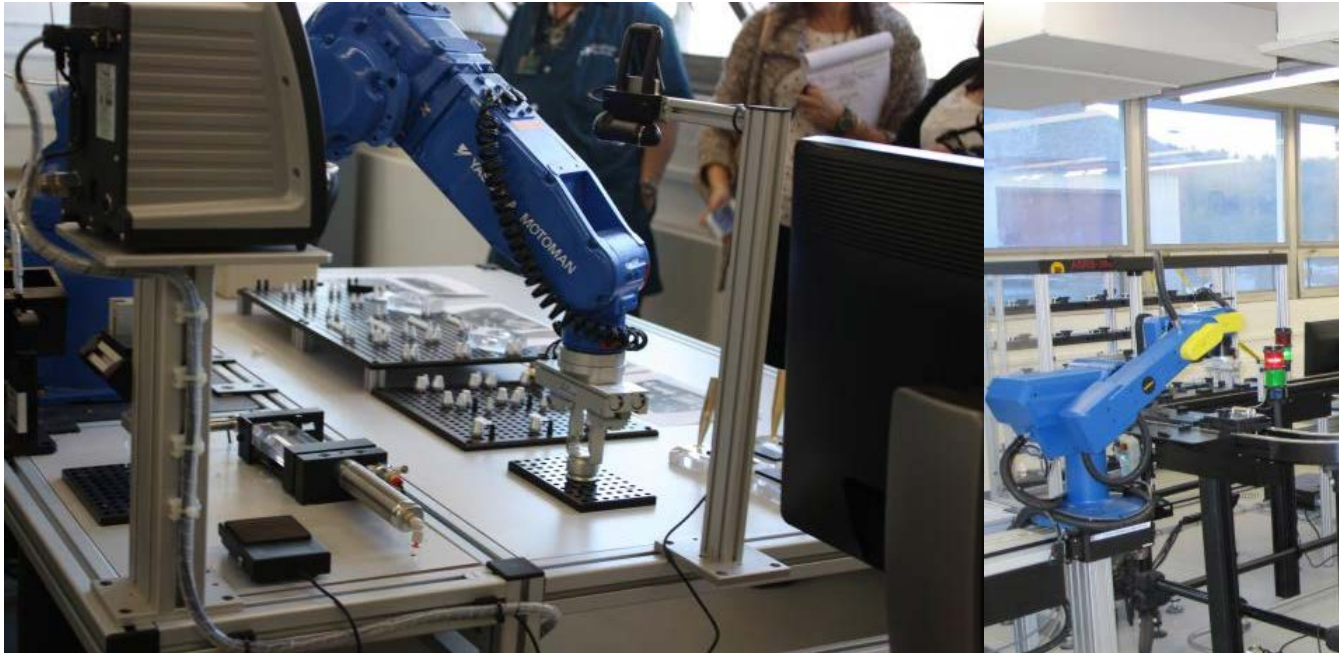
For additional course info and registration

[Get Started](#)

This will take you to Manchester Community College

Overview

Manchester CC is dedicated to providing all of its students a curriculum that empowers and inspires their success through exceptional and innovative education and the expertise to make a successful transition to the workforce. By offering programs that provide hands-on training and actual career knowledge, MCC is not only serving its students well, but promotes and fosters the intellectual, cultural and vibrant Advanced Manufacturing sector in New Hampshire.



Mechatronics & Robotics, Electrical Technology and Welding Technology

Mechatronics is used in the development of such everyday products like sliding glass doors, vending machines and garage door openers simply combined a mechanical system with electrical components. Today Robotics includes a fusion of mechanical engineering, controls systems, software and computers to develop photo copiers, robots, and the Segway.

[Learn more about Mechatronics & Robotics »](#)

Electronics and Electromechanics provide significant opportunities for improved energy efficiency in individual processes and machines, as well as process chains and factories as a whole. Planning and controlling manufacturing systems requires finding a balance between technical, economic and environmental objectives.

[Learn more about Electronics and Electromechanics »](#)

Welding uses a variety of energy sources to fabricate or sculpt process metals and thermoplastics by causing coalescence. The weld comes from melting the object you're working on and adding filler materials to form a molten weld pool that eventually cools to become a strong joint.

[Learn more about Advanced Welding Technologies »](#)

Manchester Community College offers the following programs:

- *Advanced Manufacturing Technologies Associate Degree*

Teaches how advanced manufacturing systems – using robotic and transport-based automation including modular work cells: assembly stations, storage locations, machining centers, welding centers and painting stations – play out in the product, from design to manufacture to delivery to the customer. Each student will acquire an overview of how a complete system is tied together to produce high quality product at a low cost.

- *Mechatronics Certificate*

The Mechatronics Certificate will provide detailed knowledge of machining, electrical and electronic theory as it applies to the latest technologies and skills required by manufacturers. Students will learn installation, troubleshooting and maintenance for all types of electromechanical and manufacturing machinery.

- *Robotics Certificate*

The Robotics Certificate will provide detailed skills and knowledge of robots in automation technology as needed to provide high quality in a production environment. Students will learn robotic operation, build and design and programming fundamentals specific to tasks the robot will complete.

- *Computer Aided Design Certificate*

CAD Certificate provides for short-term training for job-skill knowledge, development and advancement leading to employment. Prepares students to work in an engineering environment to create drawings for manufacturing operations and to help solve engineering problems through graphic communication. Skills acquired will give students the foundation to be continuous learners and to be adaptable to other CAD system software. This certificate will address all of the skills needed to support disciplines locally and globally

with the focus on architectural and mechanical drafting.

- *Electrical Technology Associate Degree and Certificate*

Manchester Community College offers an Associate Degree and a Certificate in Electrical Technology. Successful students will possess the competency to handle the electrical work that is becoming more complex with electronics, microprocessor based controls, and data communications integrated into residential, commercial, and industrial electrical systems. This increasing complexity is creating an ever-growing need for well trained and qualified licensed electricians and electrical technicians. Students enrolled in the programs will be provided with the opportunity to be issued a NH electrical apprentice identification card. The identification card will allow the student to earn practical working experience hours, as well as related classroom hours in accordance with NH electrical apprenticeship requirements.

- *Welding Technology Associate Degree*

Students in the Welding Technology program develop a variety of technical skills and knowledge of industry norms that are informed by theory and built on an academic foundation that includes mathematics and communication. Successful students possess basic competency in the four major welding processes; demonstrate basic concepts and practices of technical drawing and blueprint reading in accordance with industry standards; produce drawings using Computer Aided Drafting software; refine skills to meet code requirements for heavy plate & pipe welding; demonstrate knowledge of materials structures; heat treatment processes; the composition of ferrous and non-ferrous alloys; and the effects of heat-treatments on metals; and more.

- *Welding Technology Professional Certificate*

The Professional Certificate program meets entry-level employment objectives for non-code welding and includes the courses required for the first year of the A.A.S. degree.

- *Welding Technology Certificate (Evenings Only)*

Successful completion of this program gives you the necessary welding skills required for employment as a combination welder, including SMAW pipe. AWS 3/8" Plate Bend test skills are required to enter the Weld III Advanced Pipe/Plate course.

Manchester Community College Admissions

An admissions counselor can answer many of your questions over the phone, and they can also set up an appointment with you to tour the campus and speak to you in person about your plans and goals, to go over courses and schedules.

[Get in touch with admissions »](#)

Financial Aid

Financial aid helps students and their families pay for college expenses, both direct (charged to your college student account including tuition, fees, and on campus room and board) and indirect (including, but not limited to books, supplies, and transportation to/from college).

There are several types of financial aid including grants, scholarships, loans and work study.

- **Grants** – *No repayment necessary; usually based on need*
- **Scholarships** – *Typically no repayment necessary; based on merit and/or need*
- **Loans** – *Repayment is required; loan type is based on need*
- **Federal Work Study** – *Work for an hourly rate; based on need*

Students who are awarded financial aid may receive any or all of these forms of aid.

Click [here](#) to learn more about Financial Aid or contact Stephanie Weldon at (603) 206-8111 or sweldon@ccsnh.edu

WorkReadyNH

[WorkReadyNH](#) helps NH job seekers and career builders get the professional and technical skills identified by companies as essential to workplace success. With national and college credentials in hand, successful participants will be immediately identifiable as “work ready.”

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[More about the TAACCCT Grant »](#)

Workforce Development Center (WDC)

The Workforce Development Center fosters strategic partnerships that lead to quality, learner-centered professional and personal growth opportunities for the community in the areas of personal enrichment, professional development, and [corporate and customized training](#).

The WDC at MCC offers [non-credit courses](#) and training in numerous fields including: [Allied Health, Business & Industry, Computer Skills, Technical, and English as a Second Language](#).

For more information about the WDC, contact Kathy DesRoches at (603) 206-8161 or kdesroches@ccsnh.edu

“Manufacturing needs people, but they need applicants with the right skills. Community college can help a lot. As a matter of fact, right now, these guys are pretty much it in New England. They teach stuff a lot of big schools don’t. And — let’s say you like it; a degree here can help you later become a mechanical engineer. The program is almost like a tryout. It’s actual job training and it’s a screening for employers. They talk to instructors, who know what the jobs take. They can tell them this guy can work for you, with what you’re doing.”



Gary Flaherty

CCSNH Class of 2014

Did you know?

Manchester Community College's lab simulates a professional high-tech production facility, including a

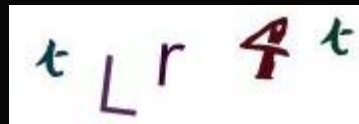
system of robots affectionately called "The Blue Man Group."



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GRADUATES WITH JOBS. The latest Great Bay Community College CNC Production Boot Camp class has a 100% job placement rate (the rate for all boot camp graduates since the program began in December 2013 is 98.5 percent). Graduates from the eight-week training, held at Sig Sauer at the Pease International Tradeport, have earned a CNC Production Certificate that can be used towards an Associate Degree in Technical Studies from GBCC.

Pictured, from left, are Shane Sousa (Rochester); Michelle Jadis (Lebanon, ME); Jeffrey Slankard (Rollinsford); Andrew Leck (Berwick, ME); Jon Valliere (Rochester); John Sygowski (Exeter); Benjamin Deckers (Bangor, ME) and Barbara Fiore (Hampton). Not pictured: John Wokuluk (Auburn) and Timothy Stickles (Rochester).

The boot camp is a program of AMPed NH, which is funded by a \$20 million federal TAACCT grant from DOL's Employment and Training Administration. NH's seven community colleges offer dozens of programs in disciplines including robotics and automation; electronics and electromechanics; advanced machine tool, composites and welding technologies; and engineering & programming.



Let's Advance.

News and Events

NH MANUFACTURING WEEK TOURS: You've GOT to see this! FREE ways to absolutely blow your mind



3-D printers Plasma cutters & lasers 5-axis CNC Robotic arms & systems
IN OUR LABS 3-D virtual welders high-tech job recruiters
 3-D weaving/carbon composites CAD/CAM software Coordinate measuring machines

YOU HAVE GOT TO SEE THIS

NH MANUFACTURING WEEK OPEN HOUSES AND TOURS
 Oct. 1, 2014 • group tours 8-10 a.m. • open houses 4-7 p.m.
 Demos taking place at all seven of NH's community colleges.
 *Group tour registration & open house info at ampednh.com/news-and-events.

Great Bay Community College LAKES REGION Community College NHTI RIVER VALLEY Community College
 Nashua Community College White Mountains Community College MANCHESTER COMMUNITY COLLEGE

AMPed NH is sponsored by a \$19.97M grant from the U.S. DOL's Employment & Training Administration. CCSNH is an equal opportunity employer, and adaptive equipment is available upon request to persons with disabilities.

Summer's drawing to an end. (No worries; that piece of breaking news is on the house!) Actually, we're so excited about what fall has in store that we're offering *everything* in this post on the house. And trust us, you've got to see this.

Life-saving medical devices, the world's most advanced cars, the coolest video games and the shuttles we launch into space are all made in part or full right here in New Hampshire. And NH's community colleges feature much of the technology needed to do it. It's manufacturing technology you've really got to see to believe, and we're inviting the public to see it up close and personal, in celebration of N.H. Manufacturing Week and National Manufacturing Day. Best part? It's all **FREE!**


Date: Oct. 1


Time: Open houses run between 4 and 7 p.m. No registration required. (Special group tours for schools, youth organizations and employment agencies can be scheduled between 8 and 10 a.m. Register [here](#).)


Locations: There is an NH community college near you no matter where you are in the state. See "map" links below for addresses.


What's in it for you:

- Ever wonder how jet engines are made? [Great Bay Community College \(MAP\)](#) students are learning how to build the lightweight, high-performance composite aerospace components like jet engine blades right now. But that's not all composites are used in. They're showing up everywhere, from protecting the heads of your favorite baseball players to helping our military's ships run faster and lighter. Check out the lab, which features 3-D printers, ruby-tipped automated coordinate measuring machine, five-axis computer numerical controlled milling machine, 3-D carbon fiber weaving loom, a clean room and more.


- So, OK, explosions are cool on TV, but the last thing we want is to have one in our home. [Lakes Region Community College \(MAP\)](#) has industry partners like Watts Water Technologies whose precise, high-tech products protect us from things like over-pressurized water heaters rocketing through the roof and high into the sky. (Really, it's a *thing!*) And that's just one of thousands of important roles the college's industry partners — and graduates hired right out of LRCC's labs — fill. Visit LRCC's teaching lab and get a real taste for what it means to be in "*electromechanics.*" Hint: It's even cooler than it sounds. Students take on skills in electrical, hydraulic and pneumatic (read: energy) control systems, and you can get a close look at the technology required during your tour. But that's not all! LRCC also has some pretty great precision CNC equipment it loves to show off, too!

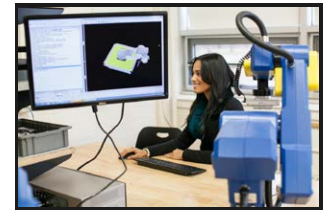

- ROBOTS! 'Nough said. Or at least that's all it takes for most. But if you need more explanation, here you go: We call 'em the Blue Man Group, and they're even more amazing than the original act. The robots in [Manchester Community College's \(MAP\) mechatronics lab](#) form a mini-production facility. From concept to production to packaging, they can do it all - and they do! Right now they're churning out personalized, laser-engraved souvenir dog tags for visitors, as well as personalized hand-held games and more. In the "real world," these babies are assembling vehicles, performing surgeries and more, with amazing precision and speed. And MCC students learn how to use computers to design products and then program and operate the robots to bring them to life! Come on by and meet the the Blue Man Group. But no autographs, please.


- Remember when you read about that firefighter who was injured while attempting a ladder rescue? If you're like us, your first thought was for a full and speedy recovery. Among many other applications, the technology in [Nashua Community College's \(MAP\)](#) and [River Valley Community College's \(MAP\)](#) labs helps



make that full and speedy recovery possible. We're talking extremely precise machining here. 3- and 5-axis CNC milling machines and Swiss lathes can shape metal into screws so tiny you can barely see the threads — screws that hold skulls and spines and femurs together. CNC technology is used to shape a surprising amount of ALL the metal products you use in your daily life, small and large — from your electronics, to components in your car, to medical prosthetics, to parts used in military aircraft and artillery. And we're not kidding when we say precise. In many cases, mistakes in accuracy can cost lives, so this is exceedingly important work. But that's not to say it isn't also a TON of fun - just ask one of the students when you visit. Don't forget to check out the virtual CNC learning units, the capabilities of the advanced CAD/CAM software students learn, and the 3-D printers! And we'd be remiss if we didn't mention RVCC's ground-breaking CNC boot camps. All the fun packed into two weeks, with increased employment potential at the end. Awesome.

- So you're more into the design and science behind all that impressive equipment? No problem; we've got that, too. Head over to [NHTI's \(MAP\) teaching labs](#), where you'll also find a high-tech selection of robotic arms, state-of-the-art CNC milling equipment and electrical systems. NHTI puts a strong focus on the programming and engineering that makes not only our world's move innovative products possible — but also the machines that create them! Advanced manufacturing is about constant improvement, so you'll want to keep your focus on safety and [green & lean](#) principles as you consider all engineering has to offer. What's so cool about NHTI? You can learn a LOT of it all under one roof. But don't take our word for it. Our students and instructors will be happy to talk about manufacturing processes technology, computer engineering technology, electronic engineering technology, manufacturing engineering technology, mechanical engineering technology and robotics and automation engineering technology. And they might even let you play with their robots!



- Did you ever sit there in class and wish you could be playing video games instead? [White Mountains Community College \(MAP\)](#) understands not everyone is happy to take notes day after day. Sometimes you want to strap on a helmet that plunges you into a first-person 3-D ~~gaming~~ learning experience you'll never forget. That's right; we said learning. And we'll bet you \$5 you'll love it. (That was a joke. We're pretty sure betting would get us into trouble with our bosses.) But seriously, there's not a lot that ISN'T, well, really cool when you combine heat and metal. And that's what WMCC is all about. Students start in simulated [3-D learning environment](#) that allows for detailed analysis of their performance using various welding techniques and technologies. It's so much fun you'll forget you're learning. But it's not all virtual - WMCC has a clean, bright, state-of-the-art teaching lab packed with the latest in SMAW, GMAW, FCAW, MIG & TIG technologies. Don't know what all that mean? Don't worry. Our students will fill



you in. While you're there, don't forget to ask about WMCC's plasma cutting table (this thing turns metal into works of art) and welding lab on wheels!

Whew! If all of that didn't sell you, you're a tough sell. But we're ready for you. Not only does entering an advanced manufacturing career path at one of NH's community colleges allow you to play with all the technology above while making a huge difference in the very way this world runs, we've got these two really important facts:

- *Studies show 83 percent of manufacturers report a lack of highly skilled employees is hurting their business, and they're having trouble filling career openings.*
- *All that despite the fact that New Hampshire's private-sector manufacturing employees are paid 21 percent more each week than the average for all employees in private industry.*

So, go see it. See all of it if you can. It'll be the best dollar you never spent!



Reach out to the colleges of your choice.

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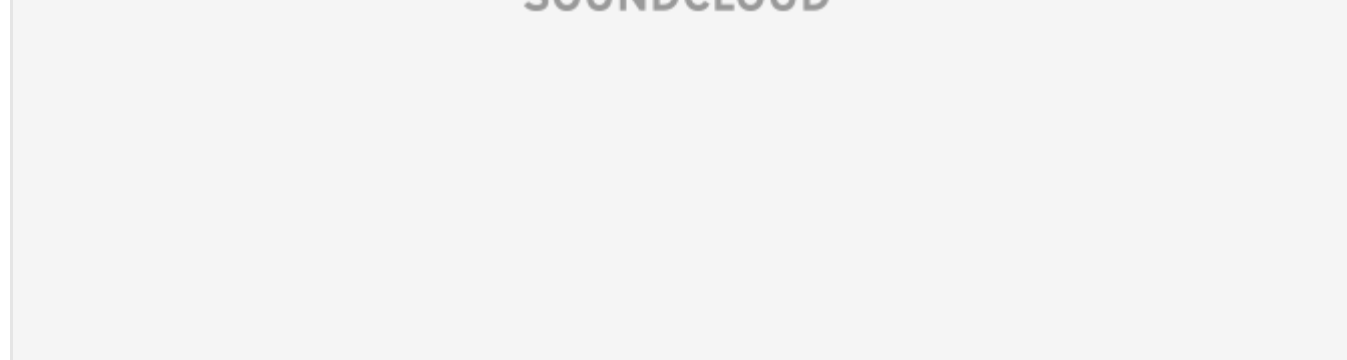
Let's Advance.

News and Events

Listen to our interview on WKXL-NH for all you need to know about manufacturing demand in NH, updated technologies and how you can get a free tour of our labs

We'd like to thank WKXL and "Financial Spectrum" host Bill Kearney for having us in the studio to talk about the increasing demand for high tech manufacturing employees, the importance of the industry and all you need to know about NH Manufacturing Week in NH!





Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

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Let's Advance.

News and Events

Lakes Region Community College welcomes industry experts as newest instructors

You know that saying: "Those who can't do, teach"? Not true. At least not at NH's community colleges. Here's proof! Lakes Region hires industry professionals to teach technical and professional skills to its advanced manufacturing students.

LRCC's newest CAD/CAM instructor comes to the college from NH Ball Bearings. LRCC welcomes Nathan Arnold, who began his manufacturing career path in high school before building his machining and engineering prowess. Arnold said he's thrilled to be sharing his manufacturing experiences with students at LRCC.

LRCC also welcomes Steve Grant as a machine process instructor. With over 30 years in the metal trades, five years in welding/fabrication, and production shop machining experience in the fossil fuel/nuclear power industries, as well as the automotive and aerospace industry, Grant is seen as a go-to CNC machining expert at NH Ball Bearings.

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Let's Advance.

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Jon Lam is 18 and 'way ahead of the game' thanks to White Mountains Community College welding program



BERLIN — Seven students were awarded a one-year full-tuition scholarship to NH community colleges through the new Bonnie Newman Endowed Scholarship Program, established by the Community College System of NH.

The students, Class of 2014 high school graduates, were selected based on leadership potential

through academic achievement, public service and career aspirations. Each is pursuing a program of study in a STEM (Science, Technology, Engineering and Mathematics) discipline.

We took a few minutes to chat with recipient Jonathan Lam, a 2014 Berlin High School graduate who just recently entered the advanced welding associate degree program at White Mountains Community College.

Actually, it's a bit misleading to say Lam just entered the program. Never one to shy from a challenge, Lam technically began his studies with WMCC before he even finished high school. Taking advantage of the NH community colleges' Running Start dual enrollment program, Lam graduated high school with nearly a third of the credits needed to complete his degree. Not only did it save him "a lot of money," but skills learned in the program's blueprint reading, related electricity, intro to industrial workplace and advanced arc welding courses helped him land a job in his field, all before he turned his tassle. Read on to learn what other opportunities Lam has taken advantage of to get ahead – and where he plans to go next.

AMPed NH: Why did you choose WMCC?

JL: I looked out of state – Ohio State's welding engineer program, for example. They were a lot more expensive. I figured, if I get an AS here, and I feel like I want to continue, I can. Plus, I wanted to stay local and WMCC was the most affordable option. I can still live with my parents, so I save a lot of money. I'm still with everyone I know and I have a job right out of high school because of people I met in high school.

AMPed NH: Why did you choose the advanced welding associate degree program?

JL: My high school welding teacher was pretty inspiring. He told us stories about his work — it's an art.

We did a lot of competitions in high school, and you can look at others' projects and see how you're doing and where you're at. You get a lot of constructive criticism, fix what's wrong and get better and better. I found out I was good at welding there.

If you weld a perfect bead — uniform, straight, just like a stack of dimes — it makes you feel a sense of satisfaction. I like being able to just focus and think about the task at hand and what you have to do to get the job done. It's almost like video games: There's different forms of welding — TIG, MIG, stick. You want to master each one in every position. It's a challenge; I



didn't want to do something simple. I wanted to do something that had an effect.

AMPed NH: How do the welding programs and labs at NH's community colleges compare with other labs you've seen?

JL: We have equipment here that's all up to date. A lot of bigger schools don't even have the stuff that we have. We also have companies like Lincoln Electric and Miller who come in and do demos. They show us how to work each machine. Using those machines and all the settings helps us when we get to the workplace. When we're trying to run the machines, we already know what each setting means. It helps us get the job done a lot easier and faster.

AMPed NH: What have you learned so far?

JL: First, I've learned how to be a professional in the workplace — how to be independent. Technically, I've learned a lot. We do every metal — aluminum, stainless, carbon; we learn flux core. MIG, stick, TIG. I like TIG welding because it's clean and when you get a perfect bead, you feel accomplished because it's the hardest process to run. It's very precision work. You have to multitask — run a foot pedal, feed wire and use the electrode guide all at the same time.

AMPed NH: What do you plan to do with your degree?

JL: Well, already have a job! I work 21 hours a week as a welder at Cross Machine and they work around my class schedule. They really let me go in whenever I have the time to go in and do all different welding processes.

For example: I welded a gantry for a hydrorake. They go in the river, right before a dam, and scoop up any garbage so the dam doesn't get clogged. It saves the people who own the dam a lot of money. I think it's pretty cool that my work has that kind of impact.

For the future, I want to get my AS here and then do an apprenticeship program at a shipyard. I'm thinking Portsmouth. Long term, I want to be a manager someday or a foreman. I still want to be attached to the work itself, but I want to be a supervisor. I'd rather work than sit at a computer and take notes. I've also thought, maybe, I see myself possibly being a machinist or millwright. I'd like to learn everything.

AMPed NH: With the majority of advanced manufacturing employers nationwide reporting a skills gap that is so severe it hurts their business, what would you say to someone wary about entering a career in welding?

JL: Compared to other 18 year olds, I'm way ahead of the game. I can go into any machine shop and know how to run each machine and have experience with all different types of material and metals.

If you're a welder, you don't have to do any one thing. You're not stuck on the top of a building (if you don't want to be!) or somewhere dirty. You can build furniture for a kitchen or do clean projects. You don't have to think of heavy duty; you should think of welding as an art. It's also kind of a hobby. It's kind of like a video game: The better you do, the better you feel. And the pay is really good (laughs).

AMPed NH: What are the most important ways the Bonnie Newman scholarship and WMCC are helping you?

JL: So, if you apply somewhere and they see that you're a welder, they may hire you. If they see you're a welder with an AS, they're definitely going to hire you AND they're going to pay you more than they would have without the degree. It puts you ahead of others. WMCC is helping because there are not too many schools that offer the AS.

Money is huge factor; the reason I didn't want to go to a bigger school is cost. I'm already certified in welding, so there was a point I wasn't even leaning toward going to college, but with the scholarship, Running Start and a \$5,000 scholarship I got for winning a state Skills USA welding competition, I got help paying and I know I'm going to do better in the future because of my time at college. It's kind of a no-brainer.

ABOUT THE SCHOLARSHIP:

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Let's Advance.

News and Events

With full-year scholarship, this NHTI student is going from licensed nurse's assistant to robotics engineer - and getting the best of both worlds

Seven students were awarded a one-year full-tuition scholarship to NH community colleges through the new Bonnie Newman Endowed Scholarship Program, established by the Community College System of NH.

The students, Class of 2014 high school graduates, were selected based on leadership potential through academic achievement, public service and career aspirations. Each is pursuing a program of study in a STEM (science, technology, engineering and mathematics) discipline.



We took a few minutes to chat with recipient Morgan Mackenzie, a 2014 Concord High School graduate who entered the Robotics Automation and Engineering Technology Associate Degree program at NHTI – Concord’s Community College.

While Mackenzie’s program at NHTI began just a couple of weeks ago, she got a head start on her studies through the college’s Running Start program, a partnership between NH’s community colleges and high schools that allows for students to earn college credits while still in high school. In addition to discounted tuition and the head start on college course requirements, students are able to take college courses during their normal school day. Through this program, Mackenzie said, she earned 6-7 credits toward her degree at NHTI before she graduated high school.

But that’s not all Mackenzie’s got going for her. The NHTI student is already a license nurse’s assistant. Read on to learn how she plans to leverage her health-care skills in the robotics engineering field.

AMPed NH: Why did you choose NHTI?

MM: I came to an open house here and, seeing how all the robots in the lab worked, I fell in love with the idea of programming. It was so much fun talking to NHTI students — *they* were having fun. They were able to program robots that could pick up objects and move them, using sensors and other technology. Seeing the automation was really cool.

AMPed NH: Why robotics engineering?

MM: My family is all in the health-care field. I love it, too, but I wanted an engineering aspect, so while I was at Concord (High School), I had a teacher help me look into majors that would allow me to mix them.

Becoming an LNA has shown me I love health care, but I like how robotics is a lot more hands on in the long term. The further you get in health care, you get less one-on-one time with patients and more paperwork. Robotics gives you more interaction with people *and* machines all along the career path.

I also like the variety in engineering. It's always changing and there's always something new to learn. You get a nice, overjoyed feeling when you conquer a challenge as you keep going. You're using different skills all the time: You can do mechanical aspect, the electrical aspect or programming. NHTI gives you taste of all of it, and you get good at each different piece.

AMPed NH: How does the robotics, engineering/design and machine tool technology at NH's community colleges compare with other labs you've seen?

MM: I toured other colleges, including Dartmouth. Here, it's more of a warm environment. Everyone is super friendly. I like how classes are all close together; you're not running around a huge campus. A lot of NHTI machines are more high-tech than stuff I've seen elsewhere. I didn't see anything, really, like this at other places. I had heard robotics was new, so I was surprised by how high-tech it was here. They already had robots working. It's just — wow!

AMPed NH: What have you learned so far?

MM: I've only been in class for 1.5 weeks, but we're already getting the chance to make circuits. I'm in a SolidWorks (CAD/CAM software) class, so I can learn to make parts for the robot. It gives you an online space where you can see how all pieces will fit together — the dimensions and how it will look — before you start building. It's important because engineering and manufacturing are expensive; we need to be able to budget materials and use resources wisely.

AMPed NH: What do you plan to do with your robotics engineering degree?

MM: I'm planning to go on to a four-year college and do biomedical engineering to produce prosthetic limbs. Prosthetics jumped out because it's really cool.

There were a lot of people hurt in the Boston Marathon (bombing). A lot of them were looking at not using an arm or a leg again, not going back to the work they were doing before. But doctors, engineers and manufacturers can make a new foot or arm designed for each specific

person.

The resources — they can make it look and move like a real hand, so you don't have to lose that human connection. It made me want to do it to help those people. The fact that you can build a hand and give a person the ability to clench the fist as if it was grown — it's amazing how far we've expanded technology to be able to do that. I think this field will expand even more to help people like them.

You can bring a smile to people who thought they may have lost everything. Some people thought they couldn't walk again, but you can allow them to do everything they thought they couldn't.

AMPed NH: Right now, the ratio of women to men in the engineering field is very low. What would you say to a female student who might feel unsure about pursuing a career in engineering?

MM: (Laughs.) I was on the FIRST Robotics Team at Concord High School. Women can do it, too. Girls rarely wanted to join the team, but when I joined I was actually *helping* the boys — and they were nice.

Girls can do just as much as guys can do. In fact, women give a completely new perspective and totally different ideas than men might. I try to encourage girls; anyone who like hands-on learning will love this, male or female.

AMPed NH: What are the most important ways the Bonnie Newman scholarship and NHTI are helping you?

MM: The scholarship helps me to pay for school, so I can focus on the actual robotics studies and not so much on working to pay for it. NHTI will help me further my education because I can transfer credits I earn here (from Running Start all the way through my associate's degree) to a four-year college.

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Let's Advance.

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September is a great time to connect with possible future employers

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Now that the first month of classes are over, you probably have some questions about manufacturing careers, growth and opportunities. This is the perfect time to start connecting with advanced manufacturing professionals to grow your network. This month, we will discover how the webs we weave when first trying to succeed can help you get the career advice and leads you need.

We are talking about [AMPedNH Connect](#), an online community connecting advanced manufacturing employers with advanced manufacturing students at NH's community colleges. Students receive first-hand information about the world of manufacturing, which helps them prepare for a career upon graduation.

And current advanced manufacturing professionals and companies can use AMPedNH Connect to meet, advise and find students for future employment.

Click through [this Prezi](#) to learn more, and when you are ready, come Connect with us!

Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

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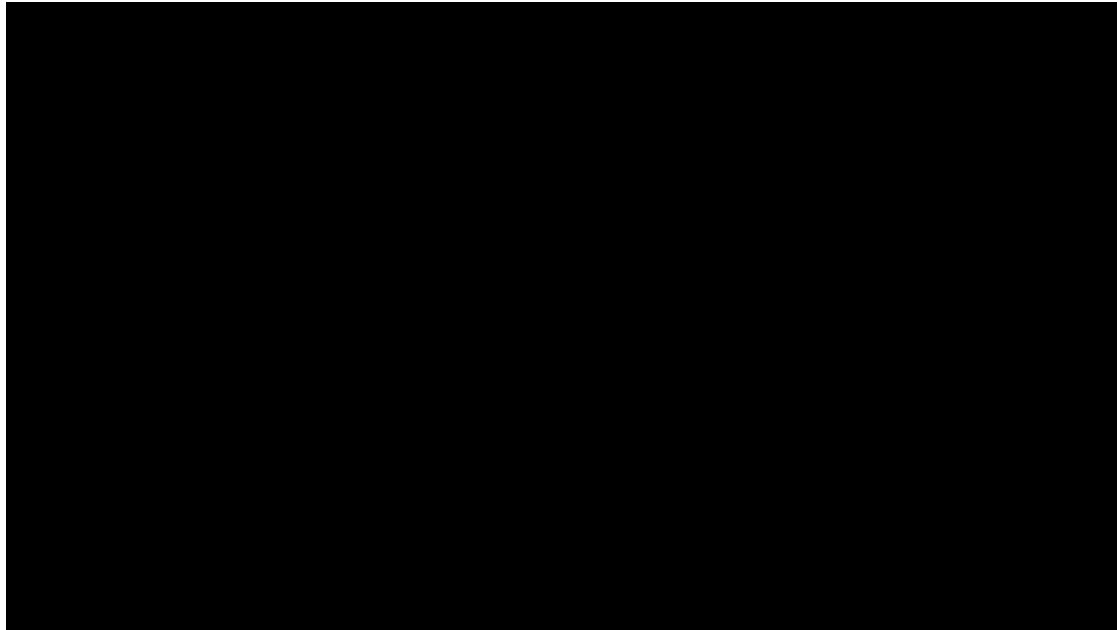




Let's Advance.

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Great Bay Community College's advanced composites training center, educator win prestigious economic development awards



ROCHESTER – The Northeast Economic Developers Association named, Great Bay Community College’s Advanced Technology & Academic Center, “Project of the Year” on Tuesday, September 8, at its annual conference. The award recognizes major economic development projects based on job creation, capital investment, leveraging of development resources, use of public/private and/or intergovernmental partnerships and benefits to the surrounding community and/or environment.

Since 1956, NEDA has championed effective and innovative economic & community development practices. The professional organization’s membership extends throughout the Northeastern United States including Connecticut, Delaware, Maine, Massachusetts, Maryland, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont and the District of Columbia.

“We are proud and grateful for this award which represents the culmination of a lot of hard work by people at both the state and local level” commented Great Bay Community College President, Will Arvelo. “This includes the Governor’s Office, the New Hampshire Department of Resources and Economic Development, the City of Rochester, Albany Engineered Composites, Safran, the staff at Great Bay as well as the TAACCCT/AMPedNH grant staff. It is a true testament to how state and local government, industry and education can partner and collaborate to create opportunity.”

The ATAC project was nominated by the Economic Development Office of the City of Rochester, and was praised for not only contributing to workforce development and training but also for providing a strong model for how the public and private sector working together to address critical needs. According to Karen Pollard, Rochester Economic Development Manager, Great Bay Community College partnered with the City of Rochester beginning in 2012 on the development of the Advanced Technology & Academic Center (ATAC). The project was in direct response to a serious need for developing a highly skilled workforce by aerospace manufacturer Safran and Albany Engineered Composites to support the opening of their new 300,000 square foot composite materials facility in Rochester.

ATAC is the largest single project under the statewide Advanced Manufacturing Partnerships in Education initiative (AMPedNH). Under AmpedNH, NH’s community colleges join forces with more than 100 industry partners, state and federal agencies to deliver dozens of advanced manufacturing training and education programs designed to build skills necessary for success in high tech, high demand, high pay advanced manufacturing careers. Amped NH is sponsored by a \$19.97 million grant from the U.S. DOL Employment & Training Administration TAACCCT Grant to Great Bay Community College and the Community College System. In addition, ATAC

is also funded by a \$4 Million investment from the State of New Hampshire, and also leveraged private sector resources and expertise from Albany Engineered Composites and Safran to complete the project.

“This project represents the new normal in economic development” said Pollard “where a sophisticated new response to future business demand - in particular, a long-term need for employee training - was met through the creation of new partnerships and leveraging a variety of resources at the local, state and federal level. It’s not the size of the community, but what we can do together that counts.”



During the NEDA ceremony, Advanced Materials Manufacturing Program Director/Designer, Debra Mattson was also presented with the first annual NEDA Richard Kelso Educator of the Year Award. According to NEDA Executive Director, Jim Keib, the award is presented to individuals who have made significant contributions to their local and/or regional economy as an educational leader by building partnerships between educators, businesses, and economic developers, demonstrating leadership in preparing students for the workforce as well as a long-term commitment to building a more competitive workforce.

In 2012 Mattson was hired to create the new industrial training program in composites materials manufacturing at Great Bay Community College’s Advanced Technology & Academic Center.

“Debra helped to build the necessary partnerships between educators, businesses and economic developers needed for program design and implementation” said Pollard. “She has been open to non-traditional learning opportunities and embraces input from business and economic development. Many of the experiential learning activities incorporated into the Advanced Composites Manufacturing certificate program offered at ATAC are based on employer needs, workplace evaluation methods, and attitudes to support career development.”

Since the opening in March of 2012, ATAC is not only providing skilled manufacturing employees for the 400+ positions needed by Safran and Albany by the end of the decade but for all of New England. They are currently teaching the 6th cohort of students enrolled in the Advanced Composites Manufacturing Certificate program, graduating students every 4 months. According to Mattson, out of the 20 students who graduated in May 2014, 17 are currently

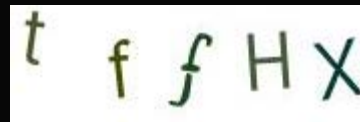
employed. The program is poised to grow from 60 graduates the first year to over 200 graduates in year three.



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Let's Advance.

News and Events

Why one WorkReadyNH grad and NHTI scholarship winner says career builders shouldn't turn down a golf invitation - plus other professional insights



When Billy Kitchens was let go from the big-box store he had worked at for over 15 years, he didn't know where to turn. He was frustrated with a fruitless job search.

"I worked in retail," Kitchens said. "I knew how to sell washers and dryers and I could sell you electrical supplies, but I didn't know how to sell myself."

He decided to go back to school. While enrolled at NHTI – Concord’s Community College as a general studies student, Kitchens enrolled in the tuition-free, 60-hour WorkReadyNH program

“I gained a lot of confidence during the class,” Kitchens said. “I learned how to sell myself and I wasn’t going to take no for an answer.”

Although he wasn’t looking for full-time employment, Kitchens landed a summer internship with the N.H. Department of Transportation, which could lead to a job after graduation.

While in the WRNH class, Kitchens also learned about career exploration and search resources available to him. He met a Workforce Investment Act counselor who helped him figure out what he wanted to do as a career. The Workforce Investment Act provides financial support for students receiving training for jobs in high-demand disciplines. The major he wanted to study, architectural engineering technology, was not approved for WIA funding. And that’s where Kitchens’ newfound confidence came into play. He decided he wouldn’t take “no” for an answer and his efforts paid off: He was granted get tuition assistance for the program.

He has also used the skills he learned in WRNH to successfully apply for several scholarships.

“It’s all about finding out what resources are available and selling yourself,” Kitchens said. He was awarded a scholarship from the New Hampshire Charitable Foundation as well as the CCSNH Foundation PSNH/NASA scholarship, awarded to students majoring in STEM (science, technology, engineering and math) fields.

He said he’s taking advantage of every opportunity available to him while in school, because he knows the value in networking for his future success. He’s been inducted in to the National Honor Society, serves on the NHTI Academic Steering Committee and recently joined the school’s golf team.

“I may not win a lot of matches for the school, but I know a lot of business decisions are made on the golf course,” Kitchens said with a smile.

Recently, Kitchens spoke to a WRNH class at NHTI, saying one of the most valuable messages he learned while he was in the class was that “positive energy attracts more positive energy.”

“I was in a deep emotional hole after losing my job,” he told the class, but by learning the skills he needed to succeed, he was able refocus his energy in a positive direction and the future is looking bright. Sounds like a hole in one to us!

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Let's Advance.

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Profile: NHTI alumni AND their local manufacturing employer say community college partnerships 'the way to go'



Jim Batchelder has to get up earlier than many of his classmates, but that's OK with him.

"I'm in a good spot — especially for being in college," said the NHTI advanced manufacturing processes student. "I make more than the average 20-year-old and I feel way more independent."

Batchelder was hired as a CNC operator and setup apprentice by



Vitex Extrusion of Franklin, NH, in April 2014 — and he’s not shy about giving thanks to those who helped him get a head start.

“The day after I said I needed a job, (instructor) Jeff Musheno arranged an interview,” said Batchelder.

It’s a common practice for industry-savvy advanced manufacturing instructors at NH’s community colleges to help match students with employers facing a significant workforce skills gap. Together, NHTI - Concord’s Community College and its six sister colleges are part of NH’s Advanced Manufacturing Partnerships in Education, a statewide initiative that unites the colleges, more than 100 industry partners and state and federal agencies to develop and deliver industry guided and approved education and training programs designed to provide seamless transitions from classroom to career.

Under a \$20 million TAACCCT grant from the U.S. DOL’s Employment and Training Administration, advanced manufacturing labs at all NH community colleges were opened or overhauled with state-of-the-art technologies found on professional production floors. More than 30 certificate and degree programs cover disciplines such as advanced machine tool and welding technologies, mechatronics and robotics/automation, engineering, electronics and electromechanics, and more.

The partnerships are mutually beneficial.

Vitex CEO Andrew Curland said “NHTI came through when we needed it most. We run 24 hours a day, five days a week, and have been especially busy this spring and summer. Jeff knew us, contacted us and — relative to regular recruits — brought in several stars. He outlined the potential of each candidate from NHTI, and we’ve been very pleased with what we’ve seen.”

Curland said, as manufacturing grows and evolves in the United States, increased automation demands deeper knowledge of machine operations and programming. For example, he said, a basic understanding of computer-assisted design and manufacturing software is essential.

“We need a higher level of people, Curland said. “So, on a large scale you see companies setting up training programs with community colleges to build these skills. We think this is the way to go.”

Curland said he’s optimistic not only about his company’s growth, but also the industry’s strength as a whole. Vitex manufactures custom aluminum extrusions and finished components.

The company has invested \$2.5 million into its fabrication business over seven years, and recently celebrated a record 122,106 pounds of aluminum extruded in one day.

While Vitex has hired several NHTI alumni as operators, the company has a laser focus on advancement. Already, Batchelder and another NHTI alumnus, Tim Plourde, are being groomed for growth.

“We’ve sat down and outlined a vision for Tim and Jim for the future, emphasizing where you can go,” said Human Resources Manager Carol O’Reilly. “At a smaller company, you can be more diverse.”

The pace has both challenged and thrilled Plourde and Batchelder.

“Manual machines are not really my thing,” said Plourde, a setup apprentice who is also a recent NHTI graduate with an associate’s degree in mechanical engineering technology. He much prefers the more modern technology NH’s community colleges are training for. “With (computer-numerical controlled machining), the machine is doing the work for you. And looking ahead, I’d love to be in programming, designing parts and doing programming right there in the shop.”



That could happen faster than Plourde ever imagined.

“They’re throwing me at everything,” Plourde said, grinning. “There’s a lot to learn, fast. And Andy really pushes for our advancement.”

Batchelder praised instructors at NHTI for making him a quick study.

“What you learn at NHTI sets you up for things you learn on the job,” he said. “We have some real-life blueprint, design and CNC experience. If you understand how a machine works and how programming works, it’s easier to pick up specific job instructions. And it’s good to know *how* a part is going to be made when you’re designing it. NHTI does a good job giving you a strong base to learn from. It makes us fast learners, and that’s what you need in production.”

Batchelder said it’s been exciting to continue his education while working full time, and he’s got support from both his employer and educators.

“(Curland) told me, ‘Take whatever time you need to take for school. I can help you finish your education.’ They’re very proactive about helping us help ourselves,” he said. “And the instructors at NHTI will bend over backwards for you. They know everyone and they want you

to get working — but keep educating yourself.”

“They want you to succeed,” Plourde added. “They’ve lived interesting lives, worked lots of places, and they tell us: You’re going to need school, but you’re also going to need experience.”

Experience, indeed.



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Let's Advance.

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'Opportunity Knocks' on WGIR features AMPedNH's growth and how ANYONE can get on the path to a great career

We had a great time with WGIR-AM and Manchester Community College President Susan Huard, talking all about advanced manufacturing career opportunities in New Hampshire, and how we're connecting job seekers and career builders with the right skills to obtain one of these high-tech, high-pay, high-demand jobs. There's also a lot in the way of resources if you're an advanced manufacturer looking to build a strong workforce for the future. Check it out!

From Manchester Community College's "[Opportunity Knocks](#)" podcast: Manufacturing is about 19 percent of NH's economy, with an average salary of about \$26 an hour, which translates to \$54,000 a year. And yet, many of these jobs are going unfilled, as employers search for the skilled workers they need. Now, under the Advanced Manufacturing Partnerships in Education program, MCC and its six sister colleges are offering dozens of specialized certificate and associate degree programs to teach the skills the employers demand. And it's working: community college students enrolled in AMPedNH programs frequently have job offers even before they complete their studies! Susan's guest is Desiree Crossley, who's responsible for getting the word out about AMPedNH.



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Let's Advance.

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What do teachers do on summer break? They go to class for high-tech training. See what's in store for Project Lead the Way





As kids darted around the green on a sun-soaked afternoon at NHTI, high school educators from as far as Washington state were settled inside, getting trained in STEM education by [Project Lead the Way](#) master instructors.

The Community College System of NH describes it like this: Project Lead the Way is a Concurrent Enrollment Partnership between participating high schools and NHTI, Concord's Community College. The PLTW initiative allows high school students to explore careers in engineering or engineering technology by completing a designated sequence of courses as part of their high school curriculum. Courses include Introduction to Engineering Design, Digital Electronics, Principles of Engineering and Computer Integrated Manufacturing. Students who have successfully completed any of these courses may be eligible to apply some of the credits to meet requirements in NHTI's Mechanical/Manufacturing Engineering Technology major.

Bob Arredondo, MET department head for NHTI is decidedly more animated about the whole thing. He was so excited to tell us all about how NHTI was hosting educators from as far away as Washington and Pennsylvania that he nearly forgot his lunch!



Basically, NHTI is walking the walk where "leading the way" is concerned. The summer program is designed to teach the teachers who will spread the knowledge to students all over the

nation. And it's pretty technical stuff: introduction to engineering and design, computer integrated manufacturing and more. They will cover curriculum and learning activities, as well as share challenges and best practices for delivery.

The goal, of course, is student focused: Providing early introductions to engineering helps seed a deeper interest in high-demand, high-pay STEM career paths. Concurrent enrollment provides an even more accelerated pathway.

The best part? The teachers see so much value in the program that they volunteer those warm summer days. Now that's dedication!



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Let's Advance.

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Stackable WorkReadyNH and advanced manufacturing certificates can put your resume at the top of the stack



After years of steady and meaningful employment, Ron Chapman of Troy, N.H., found himself unemployed and seeking a new career path. His journey began at the [NH Works](#) office in Keene, where he was introduced to the [WorkReadyNH](#) and advanced manufacturing programs available at [River Valley Community College](#) in Keene and



Claremont.

In an effort to strengthen New Hampshire's workforce, these programs collaborate to provide a full spectrum of training that enhances the knowledge and abilities of participants in myriad ways.

What do N.H. business owners want most from their employees? Show up on time, have a good attitude and do the work. Considered soft skills, these are the key competencies that can make or break a workplace.

WorkReadyNH offers 60 hours of soft skills instruction including communication, conflict resolution, problem solving, teambuilding and more. In addition, participants prove that they have the essential foundation skills of workplace reading, math and critical thinking skills by passing ACT's [WorkKeys](#) exam to earn the National Career Readiness Certificate (NCRC).

Combine WorkReadyNH with intensive hard-skills training that River Valley Community College's advanced manufacturing program offers, and graduates have all of the skills employers want, as well as the confidence to use them in the workplace. Students take several credit-bearing classes, such as CNC Operation and Machine Processes, and upon graduation earn a certificate in Advanced Machine Tool Technology. WorkReadyNH helps students brush up on their math skills to assist them in courses such as Machine Tool Math and Blueprint Reading.

Jim Britton, director of the advanced manufacturing programs, said, "All of the WorkReadyNH graduates have been well prepared for success in the classroom and in the workplace."

Out of 38 students in the three Advanced Manufacturing cohorts, 12 of them were graduates of WorkReadyNH.

Ron Chapman said, "We already knew each other from WorkReadyNH, so rather than having to start all over again building new relationships, we could focus on our learning and work as a team. It cut down the time it took to learn."

Although there is no cost to attend the WorkReadyNH program, the advanced manufacturing courses do come with tuition. However, River Valley Community College partners with the [Workforce Investment Act](#) representatives to supplement the cost of training for those who qualify.

Linda Cody of Swanzey, N.H., is one of two women who combined WorkReadyNH with machine tool training. Cody said taking both courses put her “a step above someone who doesn’t have them.” Classmate Richard Helstein agreed, adding, “We’ve built friendships and relationships and help each other whenever someone needs it.”

After six months of training between the two programs, the next step is obtaining employment. Advanced Manufacturing Outreach Coordinator Dan Osborne, who helps graduates find employment, said, “Graduates of the WorkReadyNH program have been the most proactive in updating their resumes, interviewing with the recruiter and actively seeking employment, which are all skills learned in WorkReadyNH.”

Six months after his journey began, a newly graduated Ron Chapman and his classmates have three certificates to add to their resumes, a variety of new and useful skills, several professional and employment contacts and many supportive friends who know how to work as a team.



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Let's Advance.

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AMPed NH Advisor: Easy, fun ways to promote your projects and successes

Welcome to the AMPedNH Advisor Corner, a place for you — a current or potential CCSNH Advanced Manufacturing student. Here you will find helpful advice and resources that promote your educational and professional success!

The dog days of summer are here, and your days of sitting on the dock of the bay are numbered. The embers of your camp fire have cooled and your tan is starting to fade. To keep your education and career hot throughout the year, check out the presentation [here](#) (or just click below!). Your AMPedNH Advisor has got s'more ways than not to promote your success as a student and an advanced manufacturing professional!

Keep your eyes peeled for more in-depth articles about each of these resources!

Prezi needs Flash Player 11.1 or better. Upgrade [here](#).



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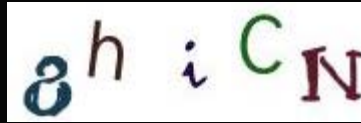
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AMPedNH Connect: Connecting YOU with Advanced Manufacturing Professionals

Through AMPedNH Connect, you will grow your professional network. You will engage in a professional environment that offers real-world advice, experiences, and potential internship and job leads through networking relationships.

Are you familiar with LinkedIn? The AMPedNH Connect community is sort of like LinkedIn, but with the CCSNH Advanced Manufacturing student at the center. Below is a list of organizations our current professional members are part of:

Aavid Engineering	http://www.aavid.com/
Acellent	http://www.accelent.com/
Agility Manufacturing	http://www.agilitymfg.com/
Admix, Inc.	http://www.admix.com/
Axenics	http://www.axenics.com/
Baron Machine	http://www.baronmachine.com/
Cutting Tool Technologies, Inc.	http://www.cuttingtooltech.com/
Electronic Representative Association, New England	http://www.era-ne.org/
EPTAM Plastics,Ltd	http://www.eptam.com/
Fireye	http://www.fireye.com/Pages/Home.aspx
Freudenberg-NOK	http://www.fst.com/
GI Plastek	http://www.giplastek.com/
Hollis Line Machine	http://www.hollisline.com/
Howard Precision, Inc.	http://howardprecision.us/
Jorgensen Tool Stamping	http://www.jorgensentool.com/
Kluber Lubrication	http://www.klueber.com/us/en/
Levasseur Precision, Inc.	http://www.levasseurprecision.com/
Morgan Advanced Materials	http://www.morganadvancedmaterials.com/careers/
Nantucket Beadboard	http://www.beadboard.com/
NH Ball Bearing	http://nhbb.com/
Northeast Machine Solutions	
Northeastern Nonwovens, Inc.	http://www.nenonwovens.com/
Praxair	http://www.praxair.com/
Quality Controls, Inc.	http://www.qcivalves.com/
S3 Development Corp.	http://www.s3dev.com/
Scotia Technology	http://www.scotia-tech.com/
Solidscape, Inc.	http://www.solid-scape.com/
Stamping Technologies	http://www.stampingtec.com/
Therma Fisher Scientific, Inc.	http://www.thermofisher.com/en/home.html
Titeflex Corp.	http://www.titeflex.com/
Vitex Extrusion, LLC	http://www.vitexextrusions.com/



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Still time to sign up for White Mountains Community College's welding program in Littleton! With our mobile lab, we bring the class to you!

Welding classes now available in Littleton: There are spaces available in the for-credit welding classes offered in RVCC's mobile lab, which will be stationed in Littleton on nights and weekends. Sign up for a September start and train while you work! Email [John Holt](#) for registration information.



**White
Mountains
Community College**

Your Journey Begins Here...

Advanced Welder Training Program
Train While Working: Nights and every other Saturday
Now being held in Littleton!

In the Fall of 2014, the White Mountains Community College Advanced Welding Program will be offering a selection of welding courses at our Littleton Academic Center. These courses are the same credit-bearing courses that are offered in their full-time Advanced Welding Certificate and Degree programs. They will be offered on two evenings per week and every other Saturday for two semesters. This program is in our Advanced Welder Training Unit and is limited to 8 students.

The White Mountains Community College Advanced Welding Program is known for three things: teaching hands-on welding skills, training on the most cutting-edge equipment and creating not just welders, but world-class professionals. Our strong industry ties are a product of the quality of our instruction and our ability to stay at the forefront of our field. Our program is intensive and a significant amount of time is spent learning the hands-on techniques that are directly applicable in industry upon graduation.

The base for our program is the Advanced Welding Certificate. This training is a portion of that certificate and over two semesters provides the student with the skills and knowledge necessary to achieve the AWS certification in the SMAW (Stick) and FCAW (Flux Cored) processes. The student will also learn the GMAW (MIG) process and the necessary safety skills and knowledge needed for employment in today's welding industry. This program is Financial Aid eligible. See our website or contact Admissions for more details.

Scheduled Courses for Fall of 2014

BWLDir1 Welding Safety	M 5:00-5:50pm
BWLDir2 Oxy-Acetylene Cutting/Beveling	W 5:00-6:30pm, *Sat 8:00-11:55am
BWLDir3 SMAW Theory	M 5:55-6:45pm
BWLDir4 SMAW Lab	M 7:00-8:30pm, W 6:50-8:30pm & *Sat 12:30-4:25pm

** Saturday classes are on 9/13, 9/27, 10/11, 10/25, 11/8, 11/22, 12/6
 Fall classes run from Sept. 8th to Dec. 19th.*



wmcc.edu
 Admissions/Enrollment: (800) 445-4345
 Littleton Academic Center: (603) 444-1326

This program is sponsored by Littleton part by a \$15.07 million grant from the U.S. Department of Labor, Employment & Training Administration TAACT Grant #TC-2010-11-404-01. The Community College System of NH is an equal opportunity employer and industry requirements is available upon request to persons with disabilities.



Reach out to the colleges of your choice.

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[News & Events](#)





Let's Advance.

News and Events

Thingamajigs @ MCC advanced manufacturing summer camp for kids! (With photo album!)



What's better than - well, a LOT of - other things? How about the look of utter satisfaction a kid gives after mastering a new skill, or creating a piece of art? Add to that the fun of doing it with a bunch of friends in a fun, supportive environment, and you've got the **Thingamajigs @ MCC summer camp** at **Manchester Community College**. Take a look at the photos below and **TRY** to tell us they don't bring a smile to your face. Best part? These kids are building a foundation for fantastic careers in technology and advanced manufacturing. Now **THAT's** cool. Stay tuned for more on MCC's amazing summer camps.

And in the meantime, [check out all the photos in this AMPed NH facebook post!](#) And make sure to "like" our page once you're there to keep up with fun updates like this.

Two days into Manchester Community College's Thingamajigs @ MCC summer technology camp for middle-schoolers, youngsters were already throwing around advanced manufacturing terms like CAD and CAM as if they were old pros. (That's computer-assisted design and manufacturing, by the way.)

It's the second year MCC has offered the camps, and this year it's offering three. In addition to Thingamajigs, there are also Advanced Manufacturing @ MCC camp and a Girls Career Camp.

In addition to CAD and CAM programming, Thingamajig students receive hands-on training in 3-D printing, laser engraving, robotics and automation, and more. Projects include the design and automated production of a pegboard game, MCC dog tags custom inscribed with the students' names and more.

For Tom Gerton (who will enter eighth grade this fall) and Chris Metcalf and Josh Booker (both entering seventh grade), the robots were a big draw, but the instructors were a pretty close second.

"You've got to love machines!" Gerton exclaimed. And the instructors? "They're awesome."

"To make the game, we had to use math to find radius and diameter," said Gerton, perched in front of a computer featuring a diagram of the pegboard. "We had to figure out the exact spots, using coordinates, to place the peg holes."



Metcalf's eyes were wide as he exclaimed, "We're in the lab with all these robots!"

But boys weren't the only ones rapt by the technology. Three of the 15 students were girls going into seventh and eighth grade, and they quickly emphasized girls can be just as successful as

boys in advanced manufacturing — sometimes even more so.

“All three of us finished the CAD project before the guys,” said Nancy DeManche, who added she likes being able to “choose what we want to make and draw it using CAD/CAM.”

Abi Dufault, in her second year at MCC’s camp, talked her friend, Charlotte Michaud, into attending this year.

“Charlotte’s always talking tech, and I wanted a friend to go with this year. I knew she would like it,” she said.

Michaud, for her part, was just happy to be in the lab.

“It’s cool to see how much technology is changing,” she said. “I think of the things we can make and do to help people. I mean, a computer can help somebody *live*.”

“And we’re showing people that we can do it, too,” Dufault chimed in, gesturing to the girls. “We can actually do manufacturing, work on machinery, help by putting our knowledge in.”

“Yeah, we can definitely do things boys can do, too. We’re doing something we like,” Michaud echoed. “It’s OK for girls to get into tech and science.”

With a focus on just that, the Girls Career Camp at MCC is \$59 per week. Spots are still available for the camp, which starts Aug. 4. Helping to keep the tuition down are lead sponsors Velcro and Women’s Fund of New Hampshire.

Nuts, Bolts & Thingamajigs, a foundation of the Fabricators and Manufacturers Association — with funding from Kelly Services, also supports the camps with decreasing annual grants. Kelly Services specifically cited Manchester, Detroit and Seattle as focus centers for technology education.

“This is a national partnership,” said Pat Lee, marketing director FMA, “and it’s clear to our partners that we have a serious skills issue in advanced manufacturing. The industry can’t solve it alone, and that’s where the community colleges’ career-focused education programs come in.”

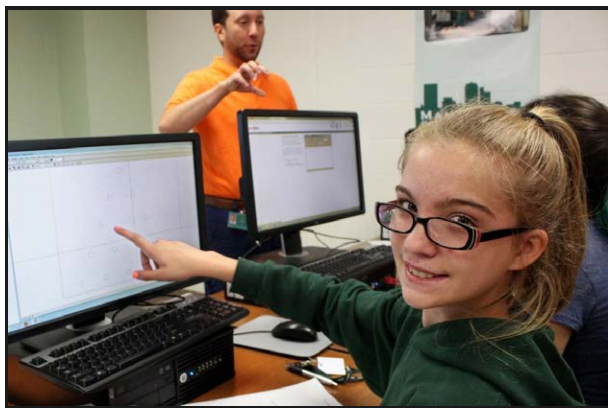
Partnering with organizations like FMA, New Hampshire’s community colleges can introduce advanced manufacturing skills to students in middle school. The goal is to show the high-tech, clean and exciting nature of the industry, and to drive home the need for students to pursue education in science, technology, engineering and math.

“You’d be amazed by the breadth of projects in these camps, and what the kids learn in only a

week,” said Lee. “The instructors teach math, physical and chemical principles using a creative process, where the skills are directly applied to the project at hand. Kids come in knowing nothing and walk out explaining these concepts clearly — saying ‘look what I made.’ We’re really igniting their curiosity and passion; it’s exciting to watch as the light bulb turns on.”

Manchester Community College offers training and education programs in advanced manufacturing technologies like mechatronics and robotics/automation, welding, 3-D printing and more. NH’s seven community college, along with more than 100 industry and state partners, comprise NH’s Advanced Manufacturing Partnerships in Education initiative. Under the initiative, funded by a \$20 million Trade Adjustment Assistance Community College and Career Training grant from the U.S. DOL’s Employment and Training Administration, the partners collaborate to develop and deliver industry approved advanced manufacturing certificate and degree programs. Students learn in state-of-the-art teaching labs using the same types of high-tech equipment found on professional production floors, leading to seamless transitions from classroom to career.

For more information about the camps, call Kathy DesRoches at kdesroches@ccsnh.edu, or visit www.mccnh.edu to download an application. To learn more about AMPed NH’s advanced manufacturing training and education programs statewide, visit www.ampednh.com.



EXTERNAL LINKS

[FULL GALLERY!](#)

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Let's Advance.

News and Events

Age fear and your job search: How WorkReadyNH makes it a nonfactor





PHOTO: Nashua Community College WorkReadyNH graduate Lisa Brand was hired after graduation by Triangle Credit Union.

Because WorkReadyNH is offered on the campuses of all seven of NH’s community colleges, it is often assumed that it serves traditional “college students”. Actually, WRNH is designed to help *all* employed, underemployed and unemployed adults over the age of 18.

Since WorkReadyNH’s start in October 2011:

- *36% of participants are over the age of 51.*
- *21% of participants are between the ages of 41 and 50.*
- *This means the total percentage of WRNH participants over the age of 40 is a whopping 57 percent!*

Many participants over age 40 are recovering from a lay-off, are looking to improve their skills or are re-entering the workforce after being working as stay-at-home parents.



We spoke with some recent participants and graduates about some of the obstacles they face as

well as the great things they can add to a workplace.

Ursula Ramjit, a graduate of WRNH at [River Valley Community College](#), said simply being out of the workforce for an extended time was her biggest hurdle. She didn't feel that people took her applications seriously. After years working in actuarial science and evaluating pension plans, Ramjit decided to leave her career to raise a family. After completing the WRNH program last spring, Ramjit is now employed part-time as a tutor in RVCC's Student Success Center.

Ramjit's supervisor, Leigh Marthe, had this to say: "It is amazing to me that people like Ursula are out there with an abundant educational portfolio and experience and are not working full time. We are so lucky to have her!

"In the community college environment, many of our students can relate to wanting to find meaningful and financially lucrative and reliable employment. The WorkReadyNH program is so wonderful in connecting people with the world of work and making sure they have what employers need to get their business goals met.

"Ursula will be a dynamic addition to our team at River Valley Community College and in coaching others who might need the same soft skills she found emphasized in the WorkReadyNH program."

We were overwhelmed with responses when we reached out to the NHLabornet, a network of human resources professionals in the state of New Hampshire, to ask them about their experiences hiring "mature workers." Take a look at some stats from Peter Gelninning, HR manager at Automotive Supply Associates/Sanel Auto Parts Co.

- *Out of a total 517 employees, the average employee ages is 50.*
- *57% of employees are over the age of 50.*
- *6 employees are over the age of 80.*
- *37 employees are ages 70-79.*
- *44 employees are ages 65-69.*

Gleninning said the age of his employees contributes to the very loyal, stable workforce. Many of his employees are in their second careers, after retiring from a variety of jobs including a patent attorney, police chief and postmaster.

Sue Fraser, district human resources manager at Sears Holding-Nashua District said she has had great experiences hiring mature workers.

"They usually have a life experience that enables them to better communicate and handle disruptions with the public. They have less call outs and attendance issues. They are usually

more willing to do something that is asked of them that is not the main part of their job, such as filling in in a different department. They tend to be better team players. They are more willing to mentor other associates.”

A surprising “perk” Fraser found is their technology skills. Although they may come to a job with little or no technology experience, she has found that they are more willing to listen to instruction when they are learning a new program.

“That willingness to learn and listen has reduced a significant amount of time I have needed to spend with different groups re-teaching and problem solving,” she said.

Claudette V. Brown, administrator at Concord Otolaryngology Head & Neck, PA Alliance, agreed that technology shouldn’t be a deterrent to hiring older staff. She talked about Mrs. B, an 84-year-old employee who had never used a computer and didn’t even know what a mouse was when she started.

“Now she is quite proficient with a mouse and scanners and lots of other office equipment.”

In addition to her ability to learn technology quickly, she is never late for work, rarely calls out sick, never complains, knows what has to be done intuitively without being prompted and “does the work of two younger workers”.

Mrs. B’s daughter, who was a triage nurse at Concord Otolaryngology, retired just last month, but “Mrs. B keeps on trucking,” said Brown.



Many mature participants in RVCC’s WRNH program recognized the obstacles they face in their job search. Some said they’ve felt intimidated by the digital natives, but were otherwise confident they could learn the skills. Some were frustrated because they are only being considered entry-level work, despite their valuable transferable skills. When asked about why

they should be hired, they listed many great qualities they had: they were dependable, flexible, had integrity, were “quick to get up to speed,” knew how to act in a business environment, and had lots of transferrable skills.

One of the biggest obstacles mature job-seekers said they were overcoming by taking WRNH was how to perform a modern job search.

Ramjit referred to the “black hole” she encountered when she sent letters to hiring managers using the “traditional methods”. In her class she learned the importance of networking or as she put it “that you have to find a way into a company via a person not a piece of paper.”

She also left class with an updated resume and tips and tricks for finding and applying for jobs.



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Let's Advance.

News and Events

Belly-flop-free zone: Our PAINLESS guide to diving into your advanced manufacturing courses

Prezi needs Flash Player 11.1 or better. Upgrade [here](#).

Treading the college waters can be tough. We've developed this presentation to prepare you for the course — or courses — ahead and to make sure you don't belly flop.

But (as they say) that's not all!

Below are tips from [RVCC](#) job placement coordinator Valarie Young and enrollment and academic support counselor Jenna Gawne at the [ATAC](#) for new and returning students:

- *Complete registration for your classes — and make sure you receive confirmation.*
- *Contact your financial aid department and confirm you have completed all the necessary paperwork.*
- *Sign up for and take your placement tests (for example, ACCUPLACER). [Find out what your college offers to prepare for these exams.](#)*
- *Get in touch with your academic advisor; you may need to set up an appointment.*
- *Attend orientation. Orientations are designed specifically for new students and provide information specific to your new school and new program.*
- *Be prepared for the time commitment. On average, students need to study two to three hours outside of the classroom for every hour in class. For example, one three-credit course will require a TOTAL of nine to 12 hours a week.*
- *Access your [student email account](#) and get into the habit of checking it regularly.*
- *If you are a returning student, think about last semester. Are there areas you need to improve on? Things you did well that you need to maintain? Make a list and seek out the support services to help fill in the gaps.*
- *Consider what obstacles you will face in the coming year. Make a list and seek out the support services to help fill in the gaps.*
- *Remember to come up for air; if you are over stressed or feel you are getting there, take a break. Whether it be from studying, exercising, cleaning, or whatever.*

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Let's Advance.

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NH's community colleges throw students a paddle - we have skill boosters, test prep sessions and more to help YOU

Feeling like you're barely treading water? Don't worry; we're here to help.



[Great Bay Community College](#) has myriad resources for you to check out, including the following:

1. Need a refresher? GBCC offers boosters in math, reading/writing and computer skills at both its Rochester and Portsmouth campuses. Each booster class costs \$25 and includes a free retest in the section of study. Call (603) 427-7700 to schedule an appointment with [Jenna Gawne](#), who can get you signed up.

2. GBCC also offers a free ACCUPLACER prep session from 5:30 to 7 p.m. July 30 at its Portsmouth campus. Call (603) 427-7621 to sign up.

3. GBCC students can sign up for [PLATOweb](#) to practice skills at home.

4. Free swim? For the student who wants a quick brush-up in math, we recommend visiting [Khan Academy](#). Email [Jenna Gawne](#) for a list of specific math subjects to check out.

Not a GBCC student? No problem! ALL our colleges offer helpful resources like those listed above. Click the links below to see what your college(s) of choice offers!

[Lakes Region Community College](#)

[Manchester Community College](#)

[Nashua Community College](#)

[NHTI, Concord's Community College](#)

[River Valley Community College](#)

[White Mountains Community College](#)



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Let's Advance.

News and Events

Gearing up for NH Manufacturing Week - Statewide high-tech student tours offer first-hand looks at advanced manufacturing. Sign up and you WILL be surprised.



We at AMPed NH are thrilled to team up with NH MEP, as well as state workforce development agencies, to make 2014's NH Manufacturing Week an even greater success than last year's event! Keep your eyes peeled for exciting event announcements for this fall. But for now, here's a sneak peek for our readers:

Are you a teacher or leader of an after-school or youth organization? Have you ever wondered what, exactly, is advanced manufacturing? How it works? How it looks? Get ready to see it all for yourself – but be ready for a surprise; it’s way cooler than you think!

AMPed NH invites students and youth organization participants to join us Oct. 1 for exclusive morning tours and information sessions in each of NH community colleges’ advanced manufacturing labs. Online registration for student and youth groups is free and easy. Space is limited, so don’t wait to sign up!

Click [here](#) to sign up.

The general public is invited to tour labs at each of our colleges between 4 and 7 p.m. Oct. 1 – no registration necessary!



EXTERNAL LINKS

[2013 NH MANUFACTURING WEEK OFFICIAL REPORT](#)
[STUDENT AND YOUTH ORGANIZATION GROUP TOUR REGISTRATION](#)

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Let's Advance.

News and Events

Great Bay Community College welcomes Advanced Composites Manufacturing Instructor



Great Bay Community College's Advanced Technology & Academic Center welcomes new [Advanced Composites Manufacturing Certificate](#) program instructor Sara Tower (At right, with GBCC's composites manufacturing curriculum designer Debra Mattson) to its ranks.

Tower, whose educational background and degree is in chemistry, brings to GBCC invaluable experience teaching in the STEM (science, technology, engineering and technology) disciplines.

The addition of Tower to the ATAC staff allows the Rochester campus to be offering evening and weekend programs for ACM, in addition to ATAC's original full time program, which is offered primarily in the day.

Tower will receive on-the-job and curriculum training from ATAC instructor Bret Blanchard this summer to ensure teaching is consistent across all sections of the same course.

Great Bay Community College is ramping up course offerings to meet needs of advanced composites manufacturers like Safran Aerospace Composites and Albany, with a peak enrollment planned for 2016-17 to meet workforce hiring demands on the Seacoast.

Advanced Composites Manufacturing info sessions are scheduled for 5 p.m. June 26, July 9 and Aug. 13 at GBCC's Advanced Technology & Academic Center, adjacent to the Lilac Mall in Rochester. For more on this and other Great Bay Community College open houses and information sessions, click [here](#).



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Let's Advance.

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Make waves and - more importantly - a great impression this summer using AMPed NH's student online services



For some, school's out for summer. For others, summer is an opportunity to sow and grow their education and advanced manufacturing careers.

Take Tim Martinelli, a [Nashua Community College](#) student pursuing advanced manufacturing training. You won't find Tim at the beach this summer; he is getting work experience at a local

machine shop and instead of catching rays he is catching grades. Tim is taking three online courses!

If you don't want your summer to be a total wipeout, check out our Career Resources page. You can log into [Blackboard](#) and access the Advanced Manufacturing Student Online Suite (S.O.S.), or cruise on over to our [public page](#) which conveniently hosts the same resources.

Forget about the sandcastles; instead of picking up your shovel and pail, surf the [CareerOneStop](#) page. This robust resource is sponsored by the Department of Labor and includes a [Career Tools](#) page that will make your future as sweet as a fire-roasted marshmallow.

This summer [AMPedNH Connect](#), our online professional networking site, will sizzle with new options like the new Goals feature. With Goals, you can create, track, and accomplish goals with suggestions and advice from your Connections.

The resources above will keep your head above water, and if you need more, why not stop by the S.O.S. or email ampednhadvisor@ccsnh.edu.



Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

Lakes Region

Great Bay

Manchester

Nashua

NHTI

River Valley

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Let's Advance.

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Melting pot: Students with vastly different backgrounds come together to heat up work readiness skills



“I’m re-entering the workforce and trying to change careers at the same time, I can’t afford to be at the beach this summer!” said Eric Miller, WorkReadyNH participant at NHTI, on a sunny and warm afternoon in June.

Eric was one of 14 participants in the WorkReadyNH class that day,



working on a team-building activity. Even though the rest of the NHTI campus is fairly quiet this time of the year, the WorkReadyNH class in Farnham Hall is buzzing with excitement while the groups compete to build the tallest structure they can that will hold a giant marshmallow using only plastic straws, ingenuity and collaboration!

WorkReadyNH students learn hard and soft skills necessary for professional success. Activities are geared to help students build interpersonal skills, teamwork, dependability, reliability, professional and personal acceptability and communication. In addition, students build and are assessed for math and reading competencies. Students have the opportunity to earn national recognized career readiness credentials upon completion of the program.

When asked why they were at WorkReadyNH instead of out enjoying the warm summer day, students agreed that, while the call of a sandy beach was tempting, they knew they were gaining skills necessary to find employment. And while summer is fleeting, expert career training can offer a lifetime of benefits.

The students and their histories vary greatly.

There's the mother who has spent the last 20 years educating her own kids and volunteering outside the home. Now, she needs help refining her resume and building her confidence so she can become gainfully employed.



There's the 20-years-loyal employee who lost his job unexpectedly and said, "The job search methods and resources have changed dramatically since I last looked for a job. I didn't know where to start." With the help he's getting at WorkReadyNH, he said he feels much more confident in his ability to start a productive job search.

There's the part-time worker looking for the stability of full-time employment and banking on the opportunity to use skills she's learning this summer to better present herself during her job search. "I want to know what kind of questions they'll ask and how I should answer them," she said.

And then there's the admitted loner with a great sense of humor: "I am very comfortable working by myself, but I know that in order to work in certain environments, I need become more comfortable with other people ... and this is cheaper than therapy."

In addition to the NHTI location, WorkReadyNH classes under way or starting soon at each of NH's community colleges, all across the state.

Learn how you can get involved [here](#).



Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

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Let's Advance.

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WMCC expands advanced welding training options for fall



White Mountains Community College

Your Journey Begins Here...

Advanced Welder Training Program in Littleton, NH

In the Fall of 2014, the White Mountains Community College Advanced Welding Program will be offering a selection of welding courses at our Littleton Academic Center. These courses are the same credit-bearing courses that are offered in their full-time Advanced Welding Certificate and Degree programs. They will be offered on two evenings per week and every other Saturday for two semesters. This program is in our Advanced Welder Training Unit and is limited to 8 students.

The White Mountains Community College Advanced Welding Program is known for three things: teaching hands-on welding skills, training on the most cutting-edge equipment and creating not just welders, but world-class professionals. Our strong industry ties are a product of the quality of our instruction and our ability to stay at the forefront of our field. Our program is intensive and a significant amount of time is spent learning the hands-on techniques that are directly applicable in industry upon graduation.

The base for our program is the Advanced Welding Certificate. This training is a portion of that certificate and over two semesters provides the student with the skills and knowledge necessary to achieve the AWS certification in the SMAW (Stick) and FCAW (Flux Cored) processes. The student will also learn the GMAW (MIG) process and the necessary safety skills and knowledge needed for employment in today's welding industry. This program is Financial Aid eligible. See our website or contact Admissions for more details.

Scheduled Courses for Fall of 2014

BWLD101 Welding Safety	M 5:00-5:50pm
BWLD102 Oxy-Acetylene Cutting/Beveling	W 5:00-6:30pm, *Sat 8:00-11:55am
BWLD103 SMAW Theory	M 5:55-6:45pm
BWLD104 SMAW Lab	M 7:00-8:30pm, W 6:50-8:30pm & *Sat 12:30-4:25pm

* Saturday classes are on 9/13, 9/27, 10/11, 10/25, 11/8, 11/22, 12/6
Fall classes run from Sept. 2nd to Dec. 19th.



Weld.

wmcc.edu
Admissions/Enrollment: (800) 445-4525
Littleton Academic Center: (603) 444-1326

This program is sponsored by (or in part by) a \$19.97 million grant from the U.S. Department of Labor, Employment & Training Administration TAACCCT Grant #T2220411464-20. The Community College System of NH is an equal opportunity employer, and adaptive equipment is available upon request to persons with disabilities.



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
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Let's Advance.

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Psst! Manchester Community College's advanced manufacturing summer camps are so much fun, kids won't know they're learning!



Summer fun and learning are not mutually exclusive. In fact, at Manchester Community College, they're one and the same. The college is once again offering its popular summer STEM camps.

Middle school-age kids will get up close and personal with manufacturing and engineering

technology with the following camps:

- *Thingamajigs@MCC starts July 21.*
- *Advanced Manufacturing@MCC starts July 29.*

A special offering is on tap for young female learners:

- *Girls Career Camp for Grade 6-8 students interested in technical careers starts Aug. 4.*

According to Frank Xydias, M.Ed/adjunct professor, the camps are focused on introducing kids to the wonderful world of automated manufacturing. Students learn concepts of the design, lean manufacturing, CNC machining, programming, robotics, laser engraving, as well as soft skills (including communication, teamwork and problem solving). This year, MCC will also feature instruction in industrial robotics, automation, tooling, fixturing and CNC lathe work. The projects range from designing a puzzle game, belt buckle, dog tag key chains, and mini baseball bats.

Learn more and sign up [here](#).

MANCHESTER COMMUNITY COLLEGE

Summer Day Camps

All Summer Camps are \$59 per camper, per week, and open to children in 6th-8th grades.

THINGAMAJIGS @ MCC

July 21-25

The Thingamajigs @ MCC summer camp will show participants what an advanced manufacturing career involves. Campers will design their own projects, and then get hands-on experience in the manufacture and assembly of their own creations. This will take place in MCC's new Advanced Manufacturing Lab with its 5 state-of-the-art robots. In addition, they will get an opportunity to tour Manchester area companies and hear actual success stories from NH business people.

Advanced Manufacturing @ MCC

July 29-Aug 1

The Advanced Manufacturing @ MCC Summer camp picks up where the Thingamajigs @ MCC left off. This camp is open to those who have completed the Thingamajigs @ MCC camp and includes 3D modeling, more hands on projects and work with robotics.

Girls CAREER CAMP

August 4-7

The Girls Career Camp will show girls what non-traditional female careers involve. During this 4-day camp, campers will explore the HVAC, CAD, Manufacturing and Automotive career options.

For more information about summer camps or to register, please contact
Kathy DesRoches at Kdesroches@ccsnh.edu / (603) 206-8161

1066 FRONT STREET, MANCHESTER, NH • WWW.MCCNH.EDU

The cost to put on the camp is funded by grants and the generosity of our sponsors. As a result, campers can enjoy this experience for \$59. There are 15 camperships available and applications will be accepted on a first come, first served basis. Don't miss this great opportunity - get your applications in as soon as you can!

Reach out to the colleges of your choice.

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Let's Advance.

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Look beyond the summer job: See how AMPed NH paired students with employers - and the careers of their lives



Summer job? Hmph. You can do better than that! But don't take our word for it. Check out these AMPed NH career success stories

For many advanced manufacturing students, this season won't be spent idly sipping cool beverages or even serving them up as temporary summer staff; it'll be spent settling into high-

tech professions with huge potential. Cheers to careers!

NH's community colleges are increasingly becoming reliable recruiting grounds for AMPed NH's industry partners. Here's just a sample of hiring highlights from May and June!

- *Lakes Region Community College congratulates the following students and their new employers:*
 - *Robert Recio – Sig Sauer, Newington*
 - *Robert Fitzgerald – NHBB, Laconia*
 - *Thomas Lynch – Saint Gobains Manufacturing, Merrimack*
 - *Keith Churchill – Granite State Harmony Metals, Inc., Laconia*
- *Manchester Community College reports rapid growth*
 - *As of early June, a whopping 75 percent of the first Mechatronics Certificate class had been placed with full-time careers in the area.*
- *Nashua Community College students set bar high*
 - *The college's advanced manufacturing Class of 2014 saw 14 graduates all placed in careers within their industry. And the success was reflected in the classroom, too! Nine students graduated with honors, one with Suma Cum Laude designation.*
 - *Two NCC students are spending their summer as Deka interns.*
 - *Five students completed internships with GE Aviation.*
 - *NCC graduates are also currently employed at Omni Components in Hudson and are simultaneously attending UMass Lowell to further their education in the Mechanical Engineering program.*
- *On-the-job training a feature for White Mountains Community College students*
 - *WMCC has connected with Westinghouse to offer summer training opportunities for advanced welding students.*

Whether you're an entrepreneur in need of highly skilled manufacturing employees, a student looking for a path to a rewarding future or a person simply looking to make a smart professional change, we can help. With targeted training programs from two weeks to two years and spanning a wide array of advanced manufacturing and engineering fields, we can help you get the skills you need for the job you want.

And you'll be surprised how much is out there in the way of financial assistance. As a wise friend once told us, "No ask, no get."

Want to learn more? Email [Desiree Crossley](#) and, simple as that, you'll be on your way.



Reach out to the colleges of your choice.

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AMPed NH's high-tech workforce development initiative featured in White House report

We can't help it; we're excited!

AMPed NH was featured on Whitehouse.gov's ["Fact Sheet & Report: On White House Roundtable on Investing in America."](#)

AMPed NH's efforts are mentioned in the section titled, "Safran." Safran, an AMPed NH industry partner, is listed as a participant in the President's SelectUSA Roundtable, and the fact sheet highlights the company's partnership with Great Bay Community College:

Here's just a taste of what you'll find in the report regarding Great Bay's partnership with Safran: "Graduates will fill key positions including bonding and finishing operators, paint operators, and inspection and coordination of measuring machine operators."

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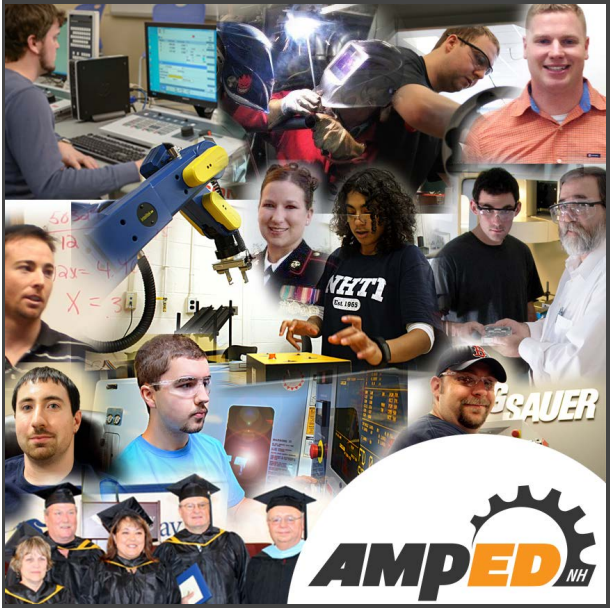




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Graduation season: Looking back on AMPed NH accomplishments and ahead to promising careers for graduates



It's the end of May, which is tassel-turning time at NH's community colleges — and we couldn't be more excited to see our students advance in their educational and professional

pursuits. We at AMPed NH extend hearty congratulations to the 2013-14 advanced manufacturing education and training program graduates — many of whom not only completed their programs, but also began working for their employers of choice before or within days of program completion! The success of our students not only in academics and training, but in the workplace, is our mission at AMPed NH, and we salute them!

Here is *just a sampling* of AMPed NH highlights for the 2013-14 academic year:

- *AMPed NH was granted full-year extension for activities under the \$20M TAACCCT grant awarded to NH's community colleges..*
- *Nearly 3,000 students participated in advanced manufacturing courses under AMPed NH this year.*
- *AMPedNH Advisor launched a full-service online student services suite, including eMentoring, ePortfolios, networking, tutoring and more!*
- *100% student hire rates are seen in several classes – including Great Bay Community College's CNC Production Boot Camp and White Mountain Community College's advanced welding program. Students were hired either before or days after completion of training programs. Where 100% hiring was not attained, it's not at all uncommon for the majority of students in an advanced manufacturing class at one of NH's community colleges to attain employment or internships before they've finished their studies. In these cases, employers become supporting partners in the student's continued education and professional advancement.*
- *Hires, internships and recruiting – Safran, SIG Sauer, Corfin Industries, Superheat/Bremco, Structal, Portsmouth Naval Shipyard, Bath Iron Works, Bancroft, Millwrights, Sturm Ruger, GE Aviation, Omni Components, Rapid Machining, NH Ball Bearings, Westinghouse and many more.*
- *A strategic outreach and awareness alliance was signed with the U.S. Small Business Administration.*
- *AMPed NH received a Best of Business award for putting advanced manufacturing careers and training on the map for students and job seekers in New Hampshire*
- *Career pathway and articulation agreements – NH's community colleges are rapidly expanding articulation agreements that allow for accelerated certificate and degree attainment and credit transfer. Dozens of agreements are in place and/or in the works with high schools, Career and Technical Education centers, four-year colleges and universities and even industry partners all over New England.*

Great Bay Community College has been approached by recruiters for companies as far away as Michigan looking to hire its advanced composites students, expanded its advanced composites class offerings, installed new state of the art composites manufacturing equipment and is planning an expansion of its Advanced Technology & Academic Center.

Lakes Region Community College increased student placement in advanced manufacturing careers and internships and launched a new Electromechanical Technician Associate Degree program.

Manchester Community College offered summer camps for middle school-aged children, placed its mechatronics students in jobs and internships with industry partners and contributed to the advancement of working students in their careers.

Nashua Community College reports that the majority of its students in 2013-14 attained employment in advanced manufacturing positions while attending classes. It launched an internship program with GE Aviation and grew its WorkReadyNH program significantly.

NHTI hosted NH Project Lead the Way STEM conference, judged VEX and FIRST Robotics competitions in NH, hosted the second annual Girls in Technology Day and held an Advanced Manufacturing Career Fair.

River Valley Community College launched new CNC machining boot camps that quickly became reliable and well-used recruiting grounds for industry partners and is currently in talks with a partner to launch a customized, revolving training program to help build up its workforce. The frequency of these intensive boot camps allows for start dates every two weeks and the accelerated growth of the CNC workforce.

White Mountains Community College launched a new advanced welding associate degree, added three industry certifications to its curriculum, launched its mobile welding training lab and received the WMCC President's Award.



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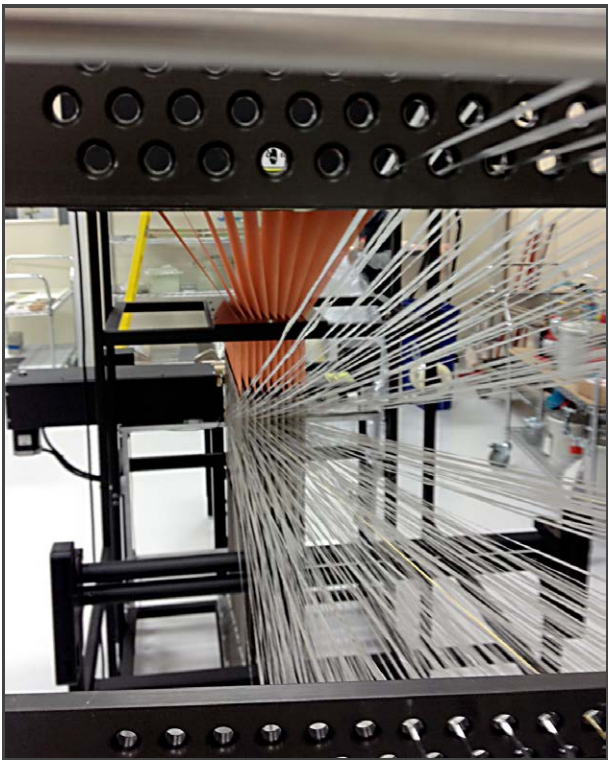




Let's Advance.

News and Events

3-D carbon fiber weaving loom arrives at Great Bay CC! Classes begin in October



After a full week of intensive training on a custom-built jacquard loom, GBCC's Advanced Technology & Academic Center is ready to start training future advanced composites manufacturing employees. The first certificate courses that include the weaving and RTM specialties will be offered in October. Four instructors and staff from ATAC, as well as three engineers from GBCC industry partner Albany Engineered Composites attended the training and are now well versed in operating and troubleshooting the weaving loom. AEC's engineers have started designing parts that will be used in the training for the resin-transfer molding process. AEC strongly supports the GBCC training program and is assisting by providing expertise in equipment and course selection and setup. Weaving and RTM courses will be taught by instructors who are experts in their fields and are currently employed at AEC in Rochester.

About 3-D composites weaving

3-D — three dimensional — weaving is the latest technique to create high quality composite parts for the aerospace industry. Case in point: Safran and AEC, in a joint venture, are producing fan blades, fan cages and other carbon fiber reinforced plastic components for GE's LEAP engines, which will power the Boeing 737 MAX and Airbus 320 Neo.

It is estimated that well over half of all planes in this market segment will use the LEAP engines, resulting in a very large demand for CFRP parts by the end of the decade.

High-tech employees wanted

To manufacture such large quantities of blades, SAFRAN and Albany have built a 350,000-square-foot plant in Rochester. To support the effort, Great Bay Community College, which set up ATAC to train up to 200 employees per year for their needs. ATAC has already graduated two classes out of the ACM program, a majority of which have been hired by SAFRAN to work as advanced machine operators in the new plant.

Looking for a cutting-edge career? Email [Jeff Pruyne](#) to learn more about Great Bay CC's [Advanced Composites Manufacturing certificate program](#) and how to get started.



Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

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Great Bay

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Let's Advance.

News and Events

AMPed NH awarded full-year grant extension



In recognition of promising training and advanced manufacturing hiring results, as well as ambitious workforce development goals under AMPed NH, the U.S. Department of Labor's Employment and Training Administration has approved an extension of AMPed NH's Trade Adjustment Assistance Community College and Career Training grant activities for one year. All seven of NH's community colleges will continue work to meet and exceed grant goals through September 2015, and are grateful for the opportunity provided by DOLETA.

New Hampshire's Advanced Manufacturing Partnerships in Education unites all seven of NH's community colleges, more than 100 advanced manufacturing industry partners and multiple city and state agencies to offer industry-guided and approved training and education programs designed to deliver seamless transitions from classroom to career in high-tech, high-demand, high-paying advanced manufacturing.

Over the last couple of years, AMPed NH has redefined industry education at the community colleges, which now provide dozens of certificate and degree programs statewide. Education and training programs run from two-week intensive training “boot camps” to two-year associate degree tracks.

As of December 31, 2013, nearly 4,000 unique participants had been trained under AMPed NH.

Highlights for 2013-14

100% student hire rates: Transformed manufacturing programming and industry partnerships are already making a lasting impact on New Hampshire’s largest industry sector. Students, including trade adjustment assistance (TAA) participants, the unemployed, returning veterans and other non-traditional learners, have reported in the last year being better prepared for high-wage, high-skill employment, and success stories are adding up. Dozens of students have been hired right out of AMPed NH teaching labs in the last year. In some cases, entire class rosters have been hired by AMPed NH industry partners within days of graduation. Advanced manufacturers are now looking to NH’s community colleges as reliable recruiting grounds, with presentations, networking events and more continually arranged to connect job seekers with hiring managers.

Expanded Student Services: Added in the last year is a suite of online advanced manufacturing student services, including eTutoring, ePortfolios and a mentoring and networking community called AMPedNH Connect, which links advanced manufacturing employers with students at NH's community colleges. For employers, it's an easy way to meet and advise future employment candidates; for students, it's a way to receive first-hand information about the manufacturing industry, build contacts and prepare for a career upon graduation.

AMPedNH.com: AMPed NH launched an informational website, ampednh.com, where the public can learn about credit and noncredit training programs, connect with admissions staff, access student services and read up on the latest AMPed NH news. In the works is a Web-based self-assessment and career exploration tool, which will also be accessible from the website by fall of 2014.

ACFAM: AMPed NH has launched the groundbreaking [Applied Career Fundamentals for Advanced Manufacturing certificate](#), a for-credit program offered at all NH community colleges that provides students with core academic and technical skills identified by manufacturers as necessary for success in entry-level jobs within the industry. Courses are offered in classroom, online and hybrid formats for easy accessibility, and credits are transferrable between all seven community colleges. For a limited time, new students in the program can take advantage of a tuition-free first course.

Strategic alliance with U.S. Small Business Administration: In May 2014, AMPed NH signed a strategic alliance with the U.S. SBA to help grow small businesses in advanced manufacturing, the state's largest industry. The missions of the SBA and AMPed NH align in their efforts to aid small businesses in New Hampshire, which make up the majority of the its industry. The SBA provides business development assistance and advocates for small businesses with the government. Through the alliance, the two groups will combine and expand efforts to increase awareness of and access to programs and resources to increase the skilled workforce pipeline, as well as sales and exportation opportunities for NH businesses.

Program and lab details as of Spring 2014

College	Programs of Study	Program Type(s)	Lab Highlights
GBCC	Advanced Composites Manufacturing (8 concentrations)	Certificate	New campus. 5-axis CNC machine and simulators, resin transfer molding equipment, 3-D loom, 3-D printer, clean room, autoclave, CMM
	CNC Production Boot Camp		
	Technical Studies	*Certificate Associate Degree	
LRCC	Advanced Manufacturing	Cert. and Assoc.	Fully updated shop and classroom space; CNC milling machines (tabletop and full size) and simulators; hydraulics, pneumatics, robotics and electronic training equipment
	Electromechanical Technician	Associate Degree	
MCC	Computer Aided Design	Certificate	Lab grand opening March '13; welding training equipment; electrical training equipment; robotics/mechatronics training lab simulating production from conceptualization to shipping; 3-D printer
	Mechatronics	Certificate	
	Automation/Robotics	Cert. and Assoc.	
	Welding Technology	Cert. and Assoc.	
	Electrical Technology	Associate Degree	
	Advanced Manufacturing Technology	Associate Degree	

NCC	<p>Computer Numerical Control</p> <p>Machine Tool Technology CNC Programming</p> <p>Mechanical Design Technology</p> <p>Electronic Engineering Technology</p> <p>Advanced Machine Tool Technology</p>	<p>Certificate</p> <p>Certificate</p> <p>Associate Degree</p> <p>Associate Degree</p> <p>Associate Degree</p>	<p>Fully updated shop and classroom space mirroring true job shop; CNC simulators, Star Swiss lathe, 3-D printers, multi axis CNC machines</p>
NHTI	<p>Advanced Manufacturing Processes</p> <p>Computer Programming</p> <p>Electronic Technology</p> <p>Manufacturing Engineering Technology</p> <p>Mechanical Engineering Technology</p> <p>Computer Engineering Technology</p> <p>Robotics and Automation Engineering Technology</p> <p>Electronic Engineering Technology</p>	<p>Certificate</p> <p>Certificate</p> <p>Certificate</p> <p>Associate Degree</p> <p>Associate Degree</p> <p>Associate Degree</p> <p>Associate Degree</p> <p>Associate Degree</p>	<p>Updated lab grand opening October '13; robotics and automation engineering training equipment; CNC simulation and training equipment; measuring equipment</p>
RVCC	<p>Advanced Machine Tool Technology</p> <p>CNC Boot Camp</p> <p>NIMS CNC Machinist</p>	<p>Certificate</p> <p>*Certificate</p> <p>*Certificate</p>	<p>Fully updated lab; CNC simulators and training equipment; metrology tools; new computing equipment; 3-D printer</p>
WMCC	<p>Welding Technology</p> <p>Pipe Welding</p> <p>Precision Welding</p> <p>Advanced Welding</p>	<p>Certificate</p> <p>Certificate</p> <p>Certificate</p> <p>Associate Degree</p>	<p>Fully updated lab; new extraction system, 25 workstations, virtual welding units, training equipment for multiple types of welding; mobile welding lab operational</p>
All colleges	<p>Applied Career Fundamentals for Advanced Manufacturing</p> <p>WorkReadyNH</p>	<p>Certificate</p> <p>*Certificate</p>	

*Noncredit certificate			

Performance goals of the TAACCCT grant

Goal	Status (4/14)
Provide training and skills development to 8,800 students	Ongoing
Develop more than two dozen new certificate and degree programs	Surpassed
Update all existing manufacturing programs with direct input from NH manufacturers	Complete, ongoing
Create a common core advanced manufacturing curriculum across CCSNH	Complete
Build partnerships with more than 100 NH manufacturing companies	Complete, ongoing
Add nearly \$10 million in new equipment for training across the community college system.	Complete
Expand training capacity by renovating labs at NHTI, MCC, NCC, LRCC and WMCC, and adding new labs at RVCC and GBCC's Advanced Technology & Academic Center (Rochester)	Complete
Develop career pathways by aligning manufacturing curricula across CCSNH with manufacturing skill requirements	Complete, ongoing
Assist manufacturers in ensuring all workers meet basic work skill requirements through a community college wide WorkReadyNH program	Complete, ongoing
Maximize use of technology (e-classes, virtual mentoring) to accelerate the time through school while keeping education affordable and enhancing instructional quality	Ongoing

Develop articulation agreements with high schools and 4-year institutions to reduce barriers and provide opportunity for continued learning and career advancement of students.	Ongoing
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History

AMPed NH was born in Fall 2011, when the Community College System of New Hampshire was awarded a \$19.9 million grant (#TC-22504-11-60-A-33) by the U.S. Department of Labor Employment and Training Administration under the Trade Adjustment Assistance Community College and Career Training Act to develop education, training and outreach programs that bolster NH's advanced manufacturing industry.

Additional information on manufacturing programs offered at the community college system is available at www.ampednh.com.

AMPedNH is sponsored by a \$19.97 million grant from the U.S. Department of Labor, Employment & Training Administration TAACCCT Grant #TC-22504-11-60-A-33. The Community College System of NH is an equal opportunity employer, and adaptive equipment is available upon request to persons with disabilities.

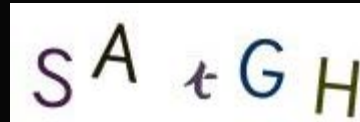


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Let's Advance.

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Competing for high-demand careers? Our ePortfolios help students blow the competition out of the water



Do you feel like this guy? Getting noticed by your employer of choice can be difficult, but it doesn't have to be. See how we're helping our students' resumes not just rise to the top of the stack - but beat the stack entirely! It's a high-tech world, so why not have a high-tech resume

and portfolio?

Last month the AMPed NH Advisor Corner introduced [ePortfolios](#), a cutting edge tool to help our AMPed NH students stand out when applying for jobs, internships and graduate degrees. Basically, an ePortfolio is a transformation of that old-school, leather-bound portfolio. AMPed NH students include in their ePortfolios education and work history, and interactive work samples, which they share with employers via a unique URL.

At the beginning of May, the AMPed NH Advisor team visited [Sig Sauer](#) to get Great Bay Community College's [CNC Production Boot Camp](#) students started with their ePortfolios. These students will graduate at the end of May, and have their eyes on becoming CNC manufacturing professionals.

Carrie Noyes, one of the CNC Production Boot Camp students, is excited to start her new career, and [shared her ePortfolio](#) with us this month. Check out her skills – in her arsenal she has completed the [WorkReadyNH](#) program, earned a National Career Readiness Certificate and has a desire to learn. Carrie will have enough ammunition and ambition to land employment as a CNC professional by mid-June!

Using creative ways to share your professional skills and goals is one way to land a job after graduating from one of our [AMPed programs](#). That's why we have ePortfolios and [AMPedNH Connect](#), tools students can use to plan and shape (dare we say *engineer* or *assemble*?) their future when enrolled in an AMPed program. The very act of creating an ePortfolio and engaging in a professional online community can help a student transform into a professional.

We asked our AMPedNH Connect professional members [what kind of advice](#) they would give our graduates. The guidance from Mark R. St. Gelais, [Stamping Technologies Inc.](#), is invaluable to anyone as they plan and act for their future: "Remember, as you climb the ladder of success, never break the rungs behind you. You may have to climb back down."

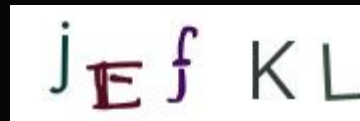
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Portsmouth Herald: Seacoast aerospace manufacturing initiative takes off

NH's community colleges are playing a large role in helping to grow the aerospace manufacturing sector and workforce in New Hampshire.

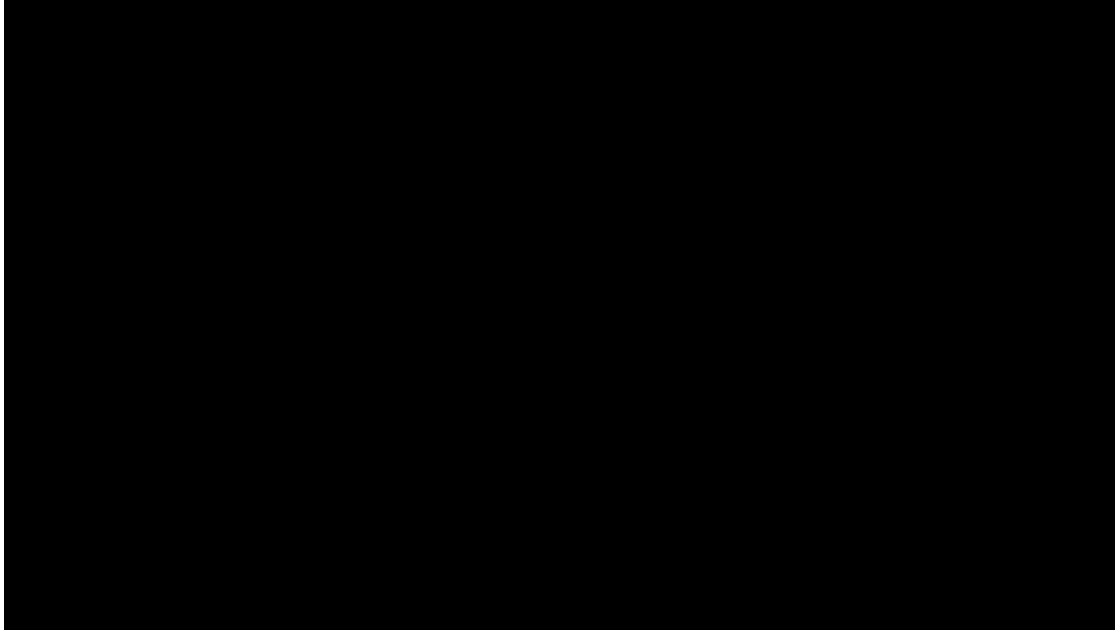
Great Bay Community College and other members of the NH Aerospace and Defense Consortium signed a letter urging Canadian manufacturing companies to visit Seacoast advanced manufacturing sites and educational institutions in an effort to build partnerships and collaboration in the aerospace industry.

“An important part of economic development and growth is the availability of a skilled workforce to support existing and new companies. The consortium recognizes that local educational partners are a critical component to attract aerospace and defense companies to the region,” said GBCC AVP for Corporate and Community Education Lin Tamulonis.

Thanks to the Portsmouth Herald for its coverage of this very important event.

Learn more about Great Bay Community College's Advanced Composites Manufacturing certificate program [here](#).

Video courtesy Seacoastonline.com



EXTERNAL LINKS

[FULL STORY VIA SEACOASTONLINE.COM](#)

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Let's Advance.

News and Events

WorkReadyNH - Success by the numbers



Talk about success!

As graduates across the nation accept their credentials and look toward the future, WorkReadyNH salutes its program graduates. Allow us to introduce just a few who've found success in our program:

- *Glen Sanford, a [Manchester Community College](#) WorkReadyNH graduate, was contacted by a recruiter for a material handler position at BAE Systems. He began his job within a month of completing WRNH!*
- *Sharon B. graduated from the [NHTI](#) WorkReadyNH program a few months ago. She was hired by Milpower source as an Electronics Tester. She said that the WorkReadyNH program “Helped me to focus and have confidence in myself.”*
- *Barbara Guillemette was hired as an Accounting Assistant at NeighborWorks Southern New Hampshire shortly after graduating from the [MCC](#) WorkReadyNH program. She said, “I got the job on the first interview I went on. I walked into the interview feeling very confident and self-assured. I knew the questions to ask and the answers to give. Also, it helped with my negotiation and reasoning skills”*

About WRNH

WorkReadyNH started in October 2011, with the goal of giving give job seekers and career builders the opportunity to learn and practice soft skills in a simulated workplace setting and improve essential foundation skills through online, self-paced tutorials. Graduates earn two nationally recognized credentials; the WorkReadyNH certificate from NH’s community colleges and the [National Career Readiness Certificate](#) from ACT Inc.

WRNH today

- *More than 2,400 people have registered for WorkReadyNH*
- *About 200 participants are currently active in a WorkReadyNH class.*
- *Over 80% were unemployed when they began*
- *A majority of the other 20% are “underemployed” (working less than 30 hours a week). Some are working, but see the value in improving their skills in order to build a better career.*
- *More than 1,200 participants have successfully completed the soft skills course and scored higher than a 3 on the WorkKeys exam, qualifying them for an NCRC certificate.*

The most common reason people don’t finish WorkReadyNH is because they get a job!

How our students are doing

ACT has an extensive data base of careers that are tied to the NCRC credential.

- *220 of our graduates have received bronze certification (have the necessary foundation skills to perform 16% of jobs in the data base)*
- *729 received silver certification (have the skills for 67% of jobs)*
- *239 received gold certification (able to perform tasks for 93% of the careers)*

- *3 people received platinum certification (able to perform 98% of careers)*
- *50% are employed or have remained employed*
- *About 14% have decided to continue with their education (many of those in the advanced manufacturing programs available at NH's community colleges).*

A recently compiled list of local businesses that have hired our graduates is more than 300 names long! The range of industries and careers is vast.

- *Public sector (State of NH, many school districts, US Postal Service, many towns)*
- *Large national companies (UPS, Talbots, Lowes, Charles Schwab)*
- *Hospitality industry (Wentworth Resort, Province Lake Golf Course, Red Jacket Resort, many restaurants, Lakes Region Casino)*
- *High-tech and manufacturing companies (BAE Systems, Unistar Corp, LenTex. P.J. Noyes Company, PC Connections)*
- *Construction companies (HP Cummings Construction, Firmly Rooted Landscaping, Armand E. Lemire Company)*
- *The service sector (Crotched Mountain Rehab, Triangle Credit Union, Dartmouth Hitchcock Medical Clinic, The American Red Cross)*
- *Many small, locally owned businesses (Harris Family Furniture, Harrisville Designs)*

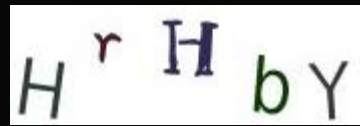
Some of the job titles include machine operator, mechanic, teacher's aide, customer service representative, academic affairs specialist, account manager, real estate agent, store manager, glass installer, home visitor, burner technician, call center worker, assembler, clerk, logistics, information technology specialist and retail associate, to name a few.

If you'd like to become WRNH's next success story, or you know someone who could benefit from updating his or her hard and soft workplace skills, email [Mandy Fraser](#) for program information.

Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

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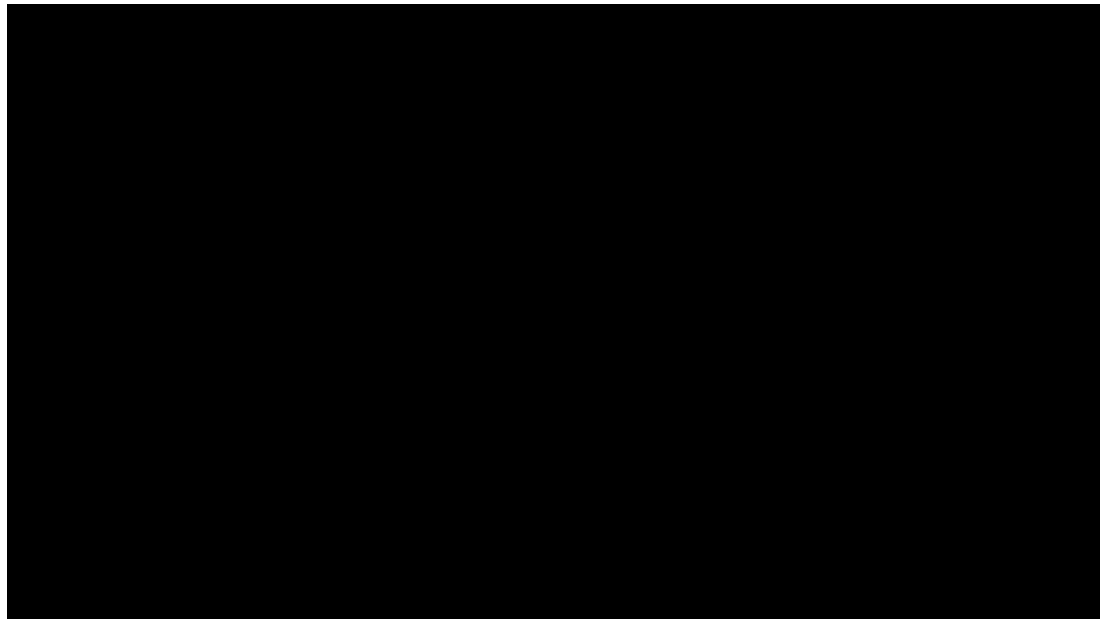




Let's Advance.

News and Events

We make it easy to experience the White Mountains Community College advanced welding lab - check out our virtual tour!



As the man (the man being John Holt, AMPed NH Project Coordinator at White Mountains

Community College) says, "We have a great reputation for teaching hands-on welding skills and creating professionals."

And they're taught on top-of-the-line welding simulation and production equipment. Check it out!

Last year's class saw a 100% hire rate shortly after graduation, and Holt expects the same for the Class of 2014.

What's in the lab:

- *24 Individual student booths. Each with: Localized extraction and hardpiped gases Miller XMT 350 – Industry standard workhorse*
- *1 Manual Plasma Cutting Downdraft table*
- *2 Backdraft stations for Grinding*
- *4 Dynasty 200's for Thin Aluminum and Alloys*
- *3 Virtual Welding Stations with the ability to practice Stick, MIG and Flux Core in any position. Includes a large flat screen TV for demo/teaching.*
- *1 Torchmate 2x2 CNC Plasma Cutting Table*
- *1 Bug-O Modular Drive System*
- *4 Dynasty 350's for Heavy Aluminum and Alloys*
- *1 MillHog Pipe Beveler*

Want to get started? It's easy. Just email [John!](#)



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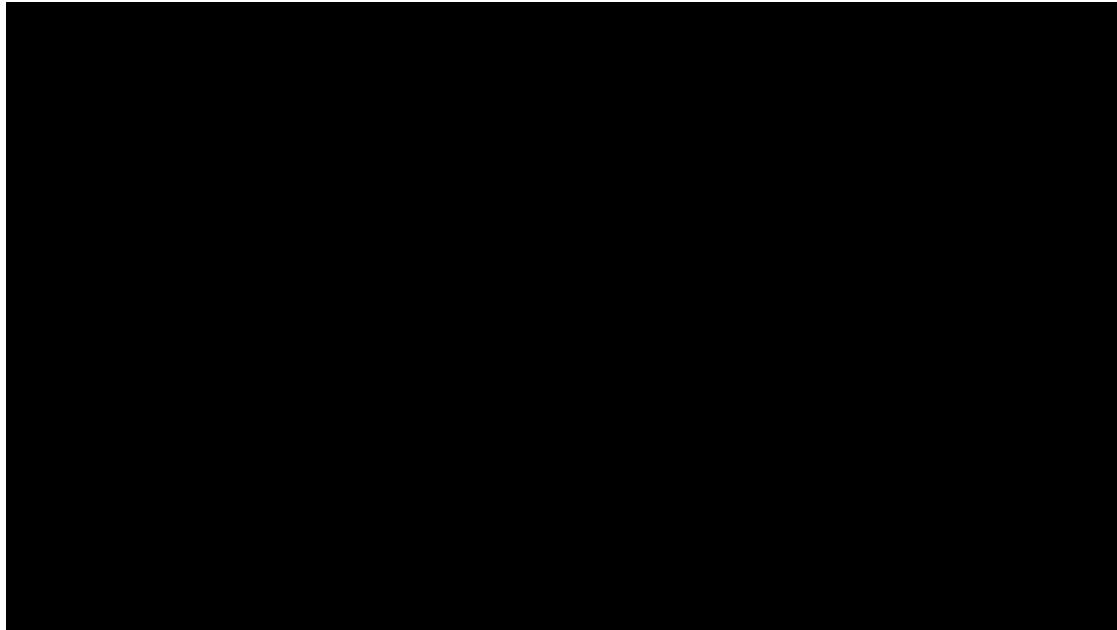




Let's Advance.

News and Events

With perfect student-hire record in welding certificate programs, WMCC announces
Advanced Welding Associate's Degree



White Mountains Community College's set of advanced welding certificate programs is known for three things: hands-on teaching of advanced welding skills, training on the most cutting-edge equipment and creating not just welders, but world-class professionals ready for hire.

"We're fighting off the employers," joked AMPed NH Project Coordinator John Holt, who actually would never turn away an opportunity to build a relationship that could lead to more employment options for WMCC students. "They love our welders."

And it's true. Every single graduate of the welding program last year was hired within weeks of completing the program, and Holt expects the same for this year's class.

It's all evidence of the quality of instruction and ability to stay at the forefront of the field; to meet the needs of advanced manufacturing hiring managers, the program is intensive and a significant amount of time is spent learning techniques that are directly applicable in the industry.

And now WMCC is introducing another offering: the **Advanced Welding Associate Degree**. One might ask why, given the perfect student employment rate already in place? Because, Holt said, students are coming out of the certificate programs with good jobs; they're making good money; but an associate's degree will most certainly increase both options for and speed of advancement. And who doesn't want that?

Building on stackable credits that are part of WMCC's certificate program, the associate's degree track provides more hands-on instruction in advanced processes and techniques.

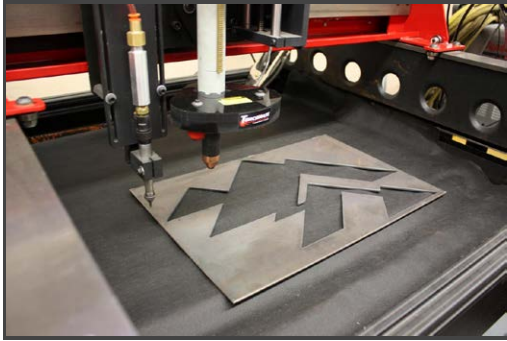


The base for the program is the **Advanced Welding Certificate**. This certificate provides the student with the skills and knowledge necessary to achieve the American Welding Society (AWS) certification in multiple processes. Through a combination of classroom and laboratory training, the student will learn the applications of Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux

Core Arc Welding (FCAW), Submerged Arc Welding (SAW), and Gas Tungsten Arc Welding (GTAW), as well the necessary safety, blueprint reading and practical application skills needed for employment in today's welding industry. This program includes additional time spent preparing the student for the D1.1 Unlimited Structural Steel Vertical and Overhead AWS certification in SMAW, D1.1 Unlimited Structural Steel Vertical AWS certification in FCAW, and D17.1 AWS certification in GTAW. The certificate program allows students to transfer

credits into the degree program.

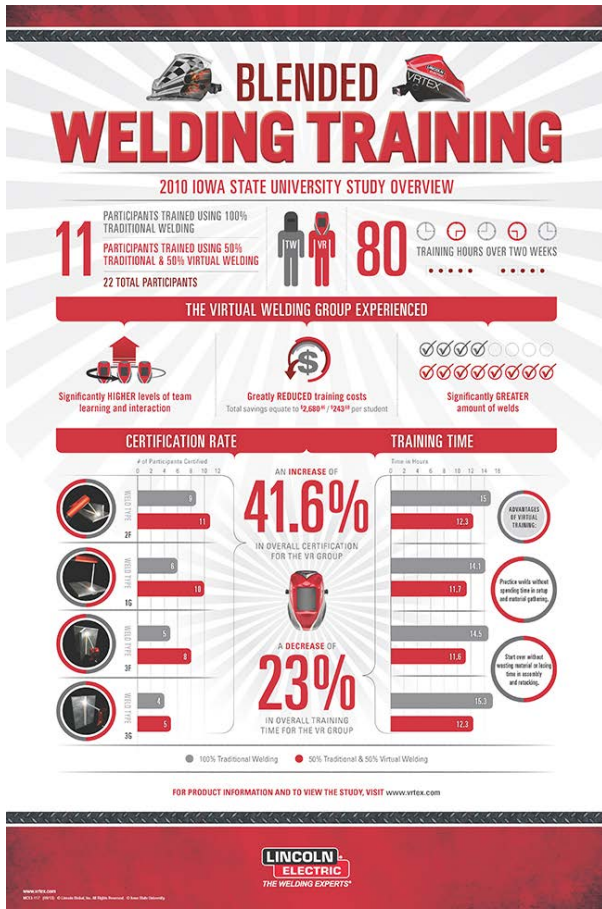
The **Pipe Welding Certificate** program provides the student with the skills and knowledge necessary to achieve the American Society for Mechanical Engineers (ASME) certification. Program admission is limited to students who have successfully completed the Advanced Welding Certificate program and have passed the American Welding Society (AWS) certification, or with instructor permission.



The **Precision Welding Certificate** is an alternate option that covers much of the same material as the Advanced Welding Certificate. It also includes an opportunity to practice the skills learned throughout the school year in a Co-op or Capstone program in an advanced manufacturing environment over the summer.

To learn more about WMCC's Advanced Welding Associate's Degree program, email [John Holt](mailto:John.Holt@wmcc.edu).

Advanced welding training and education programs are also offered at [Manchester Community College](#) and [Great Bay Community College](#).



Reach out to the colleges of your choice.

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Let's Advance.

News and Events

Student success story: Rising welding star Benjamin Day credits 'true professionals' at White Mountains Community College

The time I spent at White Mountains Community College was so precious to me. Not only did I become a good welder and a safe, hard worker, I earned the career of my choice and built some incredible relationships. The instructors at WMCC are professionals. They taught me more than how to be a talented welder. I use the lessons I learned every day. — Benjamin Day



By Benjamin Day, WMCC alumnus

In the spring of 2011, I applied to the [welding technology program](#) at WMCC. At the time, I was deployed overseas with the Army. I was able to get in contact with the course instructors and organize a visit during my two weeks of leave. I was met with a friendly welcome and a very

supportive attitude from Mr. Pike. He gave me a tour of the facility and welding lab, and seemed genuinely passionate about his job. I was eager to attend. I returned home from Kuwait in August, about a week before the class start date - just in time for the last new student orientation.

From the first day of class, the professionalism was quite apparent. Mr. Pike was very clear that he expected us to act as respectful adults, and treat this course as if it were a job. That motivation endured the whole year. Not only were we going to learn to weld, but we were going to learn how to be good employees in a competitive trade.

We started with the basics: introduction to the welding equipment, tools of the trade and related theory. There was always an emphasis on safety. I remember Mr. Pike telling us we all had a lot of years to work ahead of us, and we needed to work safe and wear our protective equipment.

After some demonstration, we were all in our welding booths striking arcs. Spending time in the booth was the only way to improve your skill. We started with the basics, and progressed to more difficult tasks, and multiple processes. The goal was to become well-rounded enough to get a job.

I was particularly fond of TIG welding. I spent as much time as I could welding pipe. I really enjoyed it. It wasn't long before I realized that's what I wanted to do for a living. So after passing my structural certification tests I enrolled in the summer semester of pipe welding.

Throughout the year, I was introduced to multiple possible employers. There were visits from companies seeking talented welders. I also learned of a possible career at the [Portsmouth Naval Shipyard](#). I was helped with the process of applying, and creating a resume. We also took a field trip and toured the Shipyard. As soon as the job openings appeared on [USAJOBS](#), I submitted my application.

I finished the summer semester and received my pipe welding certification. Immediately after, I got a job working for [Nordic Construction](#) as a pipe welder. I realized quickly how invaluable the lessons on safety and work ethic were. It was a serious trade where people don't cut corners. I was prepared, and was very successful with that company.

The process of getting into the Shipyard is long. I went through a written exam, security background check and physical. I made it through the steps and was notified of my acceptance into the Welding Apprentice Class of 2013.

The time I spent at White Mountains Community College was so precious to me. Not only did I become a good welder and a safe, hard worker, I earned the career of my choice and built some incredible relationships. The instructors at WMCC are professionals. They taught me more than

how to be a talented welder. I use the lessons I learned every day.

I now have a great apartment in Dover, N.H., a nice new car, and a Harley. I plan on buying a house in the next 12 months or so. I am in the second year of my apprenticeship at the Shipyard, and being recruited into nuclear pipe welding.

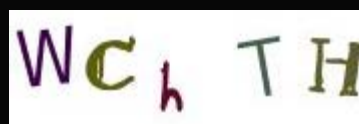
Do you want to become a success story? Email [John Holt](#) to find out how to enroll in the next advanced welding class.



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Let's Advance.

News and Events

MCC educates NH's educators - what IS advanced manufacturing, and why should we steer students to these careers?



Manchester Community College hosted the Greater Manchester Chamber of Commerce Educator Leadership Initiative for an Advanced Manufacturing Day April 16. Twenty high school and middle school teachers and administrators were treated to a tour the college's new Advanced Manufacturing Technologies Lab. In addition, presentations were made by college staff responsible for the AMPed NH education and training initiative, and a senior manager of local manufacturer Burndy LLC. Attendees learned a lot about advanced manufacturing in NH and

how it is a viable career choice for students. Would your group like a tour? Email [Phil](#).



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Let's Advance.

News and Events

Great success! Every single Great Bay Community College CNC boot camp graduate hired in field



GBCC CNC Production Boot Camp alumnus Ian Kaylor

If it were a credit card commercial, it might go something like this:

Accelerated workforce training program - \$6,500

Gas and expenses (est.) - \$200

Hearing "you're hired" before class is even over – Priceless.

Except Great Bay Community College's [CNC Production Boot Camp](#) isn't a credit card commercial. It's better, because it's putting money IN wallets.

One hundred percent of students who've completed the 8-week boot camp since the program's inception last fall have been hired into advanced manufacturing careers or promoted in their current careers. And for several of those students, training was provided at no cost to them, thanks to aid programs like the Workforce Investment Act and the Job Training Fund, which provide financial support to students and businesses for training and workforce development purposes.

"I didn't see it coming," said Ian Kaylor, who was laid off after eight years in a construction industry job. "It was August 2013, and we were about to have a baby. I was out of work for six months."

But all that changed when [NH Works](#) staff reached out and connected Kaylor with GBCC – and the WIA funding to pay for his training. He was enrolled in a boot camp that ended March 28, and was hired as a computer-numerical controlled machine operator at his employer of choice, SIG Sauer, by March 31.

"I was reaching for straws," Kaylor said about his job search frustrations. "I knew I needed to find a career with a company that's growing, and I didn't want to be in a mindless job. Advanced manufacturing enticed me, and I'm challenged every day. I was always good at working with my hands, but this is not a career you can get without good practice."

In fact, Kaylor said, he'd applied for CNC operator position before his boot camp training, but his applications went ignored.

"For me, with no experience, this gave me the opportunity to get into this industry," Kaylor said. "It was a door opener. I never would have gotten a response before this training."

For Kaylor and several other students, in addition to the full cost of the training program, expenses like mileage were covered under the re-employment program.

GBCC's CNC production eight-week boot camp is designed to impart skills imperative for success in entry-level advanced manufacturing positions — and fast.

"The program structure — leveraging a project-based learning model — accelerates students' acquisition of skills," said Sean Hoeing, curriculum developer for



GBCC. “Industries’ rapid expansion into advanced manufacturing has created a tremendous need for these types of skilled workers. Highly structured and intense training, combined with motivated candidates, is producing a workforce responsive to industry needs.”

As for the perfect hiring record for boot camp students?

“I’m excited about feedback from companies that our students have been so well prepared —In technical knowledge, work habit and attitude,” Hoeing said.

“When we hear from on-the-job trainers that our students knew more about the technology than some of the people they’ve hired with two years’ experience, it says a lot. Because we did it in 8 weeks.”

And that success is seen in a diverse range of students, male and female, 23-64 years old, they’ve successfully coordinated midlife career changes, as well as launched new careers — many with no previous manufacturing experience prior to boot camp.

The boot camp is becoming a reliable recruiting ground for SIG Sauer and other Seacoast advanced manufacturers, and the success is not unique to this community college program.

All over the state, students of community college accelerated education and training programs created or enhanced under NH’s Advanced Manufacturing Partnerships in Education initiative, are being hired soon after or even during their advanced manufacturing studies.

The initiative, funded by a \$20 million Trade Adjustment Assistance Community College and Career Training grant from the US DOL’s Employment and Training Administration, unites each of NH’s seven community college, more than 100 industry partners and state and federal agencies. Together, they provide industry guided and approved education and training programs designed to provide seamless transitions from classroom to career. Programs run the gamut from robotics to welding, composites manufacturing, machine tool technologies, electronics, engineering and more.

“Great Bay’s partners, including SIG Sauer, WIA and NH Works, the Job Training Fund, and WorkReadyNH have all partnered to make this program a success for both employers and job seekers,” said Hoeing.

For his part, said Kaylor, who noted that adding the boot camp to his resume brought him multiple job offers before he chose SIG Sauer, “WIA is one of the most underutilized programs in the state. Why aren’t more people doing this? Here’s what you do: Don’t lose hope. Put yourself in the right position to take advantage of help – then take advantage.”

The next boot camp runs from June 9 to Aug. 1, and applications are being accepted now. The following two boot camps start Aug. 11 and Oct. 13. To learn more, visit www.ampednh.com.



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Let's Advance.

News and Events

Employers: Struggling to find the right match in a pool of skilled job candidates?
WorkReadyNH's job profiling tools can help.



How many employers with whom you've spoken have said they struggle to find qualified candidates in the applicant pool? Does your organization struggle with inaccurate job descriptions? Does management need help identifying training needs across departments?

These are the common complaints of employers across New Hampshire today, and WorkReadyNH has found a solution: [ACT Job Profiling](#).

What is it? Job profiling is an intensive analysis of individual jobs to create a specific task list and customized report of the exact skill levels needed to be successful in the position. The profiler collects training documents, tours the work facility and meets with incumbent employees to determine specific levels of math, reading, problem solving, teamwork, workplace observation, listening, and writing skills at various points of employment.

How does it work? Instead of simply relying on the broad set of skill levels identified in the National Career Readiness Certificate, you can have WRNH assess the exact skill level *you* need at *your* company. You get a detailed, customized task list and full report; useful information for hiring, promotion and training; and employee buy-in because they contributed in the process.

Sound good? We think so, too, and we want to help. Email [Mandy Fraser](#) for information on how to get started.

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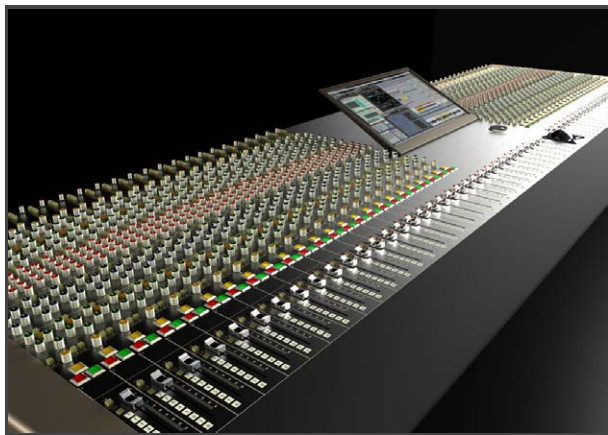




Let's Advance.

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Savvy tips and tools for getting noticed by potential advanced manufacturing employers



Courtesy student Matthew Marcil

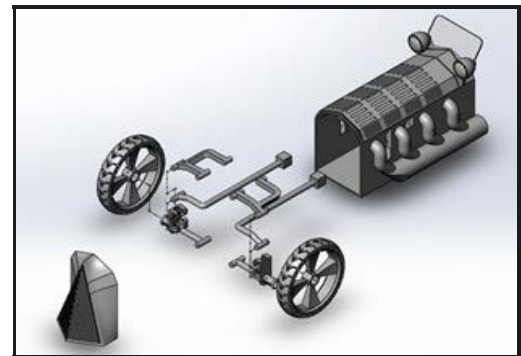
Through [AMPed NH](#), the Community College System of New Hampshire is providing a unique and cutting edge tool for our advanced manufacturing students that can help them stand out when applying for jobs, internships and graduate degrees. A major objective of AMPed NH is to redefine how NH's community colleges prepare their students for advanced manufacturing

careers, and as such each certificate and degree student has an opportunity to create an [ePortfolio](#) to share their experience, knowledge, and skills through “artifacts”, also known as evidence and work samples.

- *For the student, this is an online space in which they can personalize and add slideshows, videos, audio, blueprint drawings, and more of the hard work and projects they created to meet and exceed their certificate and degree requirements. The ePortfolio becomes a digital collection of the student’s work samples, resume, education and work history, and references.*
- *For the employer, this is a way to learn more about the abilities of the student and see firsthand what they have accomplished during their high tech training from the CCSNH.*

[Employers and hiring managers across the nation](#) are becoming privy to ePortfolios, and some indicate ePortfolios will become part of the hiring process. We already know our CCSNH students are smart, motivated, and skilled for your workforce. Now you can see just how prepared they are and hand pick your next generation of advanced manufacturing professionals. To get you started, we are featuring two ePortfolios from NHTI students, both of whom are pursuing not one but *two* majors.

- *Devlin Melvin is a quick learner who is eager to succeed, and plans to spend his summer preparing for Calculus and Chemistry through open educational resources like [Khan Academy](#). He is interested in obtaining a part time job in the field of CAD modeling or as a materials tester. “I just want to get my foot in the door and get some real experience.” See his work and contact information [here](#). (See example of Devlin's work at right.)*
- *[Matthew Marcil](#) is the CCSNH pioneer when it comes to ePortfolios. He is the first student to create an ePortfolio, and his ePortfolio is often demonstrated during faculty, industry partner, and student presentations. Matthew is currently seeking a summer internship in CAD or advanced manufacturing in the Concord, NH area. To check out his amazing projects and contact him, please visit his ePortfolio [here](#).*



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Let's Advance.

News and Events

Doing it all: Celebrating Lakes Region Community College students advancing their skills while working in advanced manufacturing

WorkReadyNH, Lakes Region Community College & NH Works working hand-in-hand



Jeffrey Bilodeau of Meredith wasn't sure what he would get out of attending LRCC's WorkReadyNH program.

He was referred by NH Works, the State's employment agency. "Give it a try," said NH Works Laconia Office Manager, Carol Cantin and Bilodeau did. He has now completed the 3-week training and the rest is history.

"Jeff's experience with WorkReady at LRCC lead to a boost in self-confidence, a sense of accomplishment, and a source of inspiration to go back to school," says LRCC WorkReadyNH Program Director Manuela Bittner-Shuey. "The WorkReadyNH program gave Jeffrey the nudge needed to move into a career pathway that he had been thinking about for quite some time. With only two weeks to the beginning of the Spring Semester, Bilodeau registered and arranged for funding for the LRCC AM certificate program again, the rest is history."

When asked what he felt was the best part of the WorkReadyNH program, Bilodeau believed that the small group size, role playing, discussion, and hands-on activities helped him absorb the workplace soft skills needed in today's job market. "WorkReady Instructor, Stephanie Alicea; Program Assistant, Valarie Young and I made the program memorable for Bilodeau. Jeffrey will do well in whatever he chooses to pursue."

Bilodeau's future goals include completing the LRCC Advanced Manufacturing Certificate program, securing a CNC Machinist position in the area, and continuing for the LRCC AM Associate Degree.

For information about WorkReadyNH, call (603) 366-5396. To find out more about LRCC's Advanced Manufacturing Associate Degree and Certificate programs, call (603) 366 - 5301 or visit the College's website, www.lrcc.edu.

LACONIA — Lakes Region Community College (LRCC) Advanced Manufacturing (AM) student,

LRCC Advanced Manufacturing student, Jeffrey Bilodeau, works on his mid-term exam in Machine Processes. He is deburring a part on the belt sander. Bilodeau completed the WorkReady program at LRCC and has now entered LRCC's Advanced Manufacturing Certificate program. (Courtesy photo)

Story clip courtesy Laconia Daily Sun

Lakes Region Community College celebrates the drive and success of students advancing their manufacturing skills while working full time in the industry, and recognizes industry partners who support their education.

Congratulations to the following students and employers, who represent just a few of the many area industry partners supporting LRCC with their A.M. training programs.

- *Wes Carter of Laconia, employed at Aavid Thermalloy in Laconia*
- *Keith Allain of Gilford, employed at Aavid Thermalloy in Laconia*
- *Ed Kenney of Meredith, employed at Watts Water Technologies Inc. in Franklin*
- *Adam Calnan of Laconia, employed at New Hampshire Ball Bearings Inc. in Laconia*
- *Mark Hebert of Hill, employed at Freudenberg-NOK in Northfield*
- *Jacob Parker of Laconia, employed at Levasseur Precision Inc. in Gilford*
- *Paul Toutaint of Belmont, employed at Aavid Thermalloy in Laconia*
- *Willard Welsh of Strafford, employed at Stamping Technologies Inc. in Laconia*
- *Carl Dickerson of Franklin, employed at PCC Structural Inc. in Northfield*

Lakes Region Community College's Advanced Manufacturing training program has roughly 30 students currently enrolled and registered. Ten are pursuing the two-year Associate's Degree and the remaining 20 are pursuing the one-year certificate program.

Want to add your name to the list? Contact [Don Brough](#).



Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

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Introduction to Manufacturing Boot Camp June 2-27, 2014 Monday-Friday 8am-5:40pm

Accelerate completion of the
Applied Career Fundamentals for Advanced Manufacturing Certificate
Or
Advanced Manufacturing Processes Certificate

NEW NHTI announces a new 4 week intensive program designed to provide the entry level manufacturing employee or those interested in manufacturing with the basic knowledge and skills required in the industry.

Classes meet Monday-Friday from 8am-5:40pm

MP 104 Shop Mathematics

This course covers various shop related mathematics including decimals, fractions, basic algebra, basic geometry and right angle trigonometry. Applications from machine shop practice are used so that the student understands the method of technical problem solving using mathematics as a tool.

MP 105 Basic Engineering Drawings

Basic engineering drawing practices will be covered including, multi-view projection, dimensioning, section and auxiliary views, basic GD&T concepts, hole/thread callouts. Sketching assignments will reinforce common drawing practices and conventions. While the course focuses on reading and understanding drawings, a basic introduction to Computer Aided Design, CAD, will be included.

MP 101 Manufacturing Processes

This course covers fundamentals of machining processes using traditional machine tools: lathe, milling machine, surface grinder, and cutoff saw. Shop safety and the use of standard precision measuring tools including micrometers, dial calipers, vernier scales, etc. is presented. The lab portion of the course allows students to apply classroom theory to actual machine tools using precision measuring tools.

**CALL NOW TO REGISTER, Boot Camp begins June 2
(603)230-4022**



AMPed NH is sponsored by a \$19.97 million grant from the U.S. Department of Labor, Employment & Training Administration TAACCCT Grant #TC-22504-11-60-A-33. The Community College System of NH is an equal opportunity employer, and adaptive equipment is available upon request to persons with disabilities

NHTI, Concord's Community College
Business Training Center
31 College Drive | Concord, NH 03301 | (603)230-4022
nhtibtcc@ccsnh.edu | www.nhti.edu/businesstraining



Let's Advance.

News and Events

Women in manufacturing - How far they've come and why we need more

We Can Do It!

"We need to share the truth about careers in manufacturing — that they're rewarding, lucrative and creative. We need to get young women interested in the mechanics of 'making things' — things that make a difference in people's lives. We need to show them how exciting and fun that can be."

Debbie Holton
SME

"I see women who are group leaders and owners — so, definitely, the sky is the limit for women in the advanced manufacturing industry. It has given me a true sense of independence."

Cheryl McCall
EPAM Plastics

"I felt as though I was a pioneer entering this field, and that feeling added to the excitement of learning something new. I would say to women: Today's manufacturing facilities are clean and well organized. There is nothing in manufacturing that a woman can't do."

Karen Kouting
Curtin Industries

Currently, only 3 percent of U.S. professional welders are women, but that number is slowly growing as more women come to recognize the potential of careers in the welding industry. It's a great career with clear promotion paths and we are doing all we can to change perceptions about the industry."

Wally Ehagjess
WVCC

Women's History Month Read more at AMPedNH.com

In recognition of National Women’s History Month, March’s Powered By AMPed NH update shines a light on women and manufacturing – yesterday, today and for our future.

Want to make history and get paid well doing it? Email [us](#) to get started.

J. Howard Miller's Rosie the Riveter is arguably the nation's most celebrated image of women in manufacturing, and for good reason: The World War II icon inspired an explosion of women in the American workforce — manufacturing included.

By 1944 there were about 2.5 times more unmarried women ages 20-34 in the defense sector than their male counterparts.

But Rosie, who came to represent the millions of women who stepped up during the war, was just the start of a movement that still exists today. The collective “Rosie” proved that women excel and are indeed an invaluable asset in the workplace. That fact is celebrated in the advanced manufacturing industry today, by everyone from education to manufacturing to civic leaders who continue to call for efforts to increase the number of female STEM students and employees all across the nation. We can do it!

But don't take our word for it. Here's proof, from four successful women who know:



“The reason I chose machining in the manufacturing field is because it allowed me to learn a trade while raising two children on my own. As I look around EPTAM, I see women in engineering, sales — who are group leaders and owners — so, definitely, the sky is the limit for women in the advanced manufacturing industry. It has given me a true sense of independence.” — Cheryl McGee, [EPTAM Plastics](#), Northfield, NH (EPTAM Plastics is a [Lakes Region Community College](#) industry partner)

“We need to share the truth about careers in manufacturing — that they're rewarding, lucrative and creative. We need to get young women interested in the mechanics of ‘making things’ — things that make a difference in people's lives. We need to show them how

exciting and fun that can be.” — Debbie Holton, managing director of industry and technology, [Society of Manufacturing Engineers](#)



“I was very excited about the prospect of learning something new and challenging in advanced manufacturing. I have a passion for problem solving and understanding how things work, and this was right up my alley. I've been in the high-tech environment most of my career.

When entering the Advanced Manufacturing Technology program I was quite surprised at being the only woman in the program. It was then that I felt as though I was a pioneer entering this field, and that feeling added to the excitement of learning something new. With a little help from friends, classmates and teaches, I've been able to take on some challenging aspects of the field. It's been an extraordinary experience.

I would say to women: Don't be intimidated by the old idea of manufacturing. The idea conjures up images of workers sweating over loud, grease-laden machines in a dark, dingy environment. This scenario is a thing of the past. I have been on a few manufacturing facilities tours, and today's manufacturing facilities are clean and well organized. Additionally, there is nothing in manufacturing that a woman can't do. It's all in where your passions lie. Manufacturing is a growing field, and if you want to be a part of it, then I say go for it. Additionally, obtaining a degree or certificate is plus when entering the work force, and I'm now considering obtaining a certificate in robotics

I have developed close relationships with my classmates and all the faculty I've come in contact with at Manchester Community College. It is a very welcoming environment. As an adult, this is important when re-entering the educational arena. MCC will bend over backwards to help you get to where you want to go. All the support I've received at MCC has been most beneficial. — Karen Keating, [Manchester Community College graduate of the Mechatronics Certificate Program](#), operator at [Corfin Industries](#), Salem, NH

“The American Welding Society estimates that the average American welder is 54-years-old and projects the need for 111,000 new welders in the next five years. Currently, only 3 percent of U.S. professional welders are women, but that number is slowly growing as more women come to recognize the potential of careers in the welding industry. Starting wages for entry-level welders average over \$15 an hour and quickly top \$20 with experience. It’s a great career with clear promotion paths and we are doing all we can to change perceptions about the industry.” — Kathy Eneguess, president, [White Mountains Community College](#), Berlin, NH

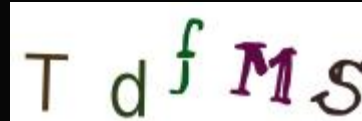


Ready to be a Rosie? We can show you how.

Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

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Let's Advance.

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Women's History Month: This awesome video honors women in manufacturing

Special thanks to the Manufacturing Institute for creating this video.

Do YOU want to make history? We can show you how. Get started [now](#).

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AMPed NH on WTPL's The Pulse talk show

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Let's Advance.

News and Events

NH students rock robotics, engineering and more at Girls Technology Day at NHTI

Submitted by Alan Blake, NHTI



CONCORD —There may be a shortage of women pursuing technical careers in the STEM fields (science, technology, engineering and mathematics), but Girls Technology Day at NHTI is one step in reversing that trend.

“In New Hampshire, as in other states, there is a severe shortage of women pursuing technical

careers,” says conference Chairwoman Mary Laturneau, who works for NH DOE’s Career Development Bureau.

Fewer than 2% of students pursuing computer science degrees in New Hampshire are women.



About 300 girls from 17 schools around New Hampshire attended the second annual event, held at NHTI on March 19, where they were exposed to the many opportunities available to them through the STEM fields.

Leighanne Springer, a marine machinery mechanic at Portsmouth Naval Shipyard, taught a reverse engineering workshop with female co-workers, letting the students take stuff apart—and try to put it back together. The shipyard was one of more than a dozen employers, technology companies and educational institutions that sponsored the day's workshops and exhibits.

Tom Warner, an admissions counselor at NHTI, shared with students the many programs the community college offers that lead to careers in the STEM fields, from new degrees in Mathematics and Robotics & Automation Engineering Technology, to Mechanical Engineering Technology and computer IT.

“These young women are very enthusiastic about technology,” says Alan Blake, director of communications at NHTI. “They are excited about working with state-of-the-art technologies, as well as intrigued by the opportunities in terms of employment security, higher-than-average wages, and the opportunities for career advancement.”

Girls Technology Day focuses on Grades 8, 9 and 10, the age at which many young people begin

focus on career paths and, incidentally, when girls seemed to be turned off from academics related to STEM fields, says Laturneau.

Typically, just 12% of students in engineering and computer science classes are female. — Mary Laturneau



She wants to change that: "We want to expose the girls to new careers," she says.

The girls broke up into hands-on workshops, led by educators and business leaders from various New Hampshire universities, community colleges and industries, exploring various high tech topics, including everything from 3-D modeling, game programming and inventing apps for Android phones, to making ethernet cables, industrial robotics and reserve engineering, among others.

Emily Edwards, a sophomore at Nashua High School North, stopped by the college and industry fair held during the lunch break. Catherine Dill, a nuclear engineer who is the shipyard's diversity and inclusion program manager, showed her how to operate a "hand pod" from an atmospheric diving suit. She likes to explain to girls that engineering is really about problem solving. "Don't think about it as math and science," she says. "Look around you: All the stuff you have today, an engineer made it possible."

Edwards said she wants to go into video game design, a field that's been dominated by males. "I've had a game idea ever since I was 10 years old," she says.

Justyn Constant, vice president at Technology Education Concepts, showed Caitlin Galea of Con-Val High in Peterborough, how to use a digital microscope. "The great thing about this new technology is that it's exciting," Constant says. "So they see opportunities for themselves."

"It kind of encourages us to do things like this," says Angeliz Lopez, a student at Manchester School of Technology who wants to study computer design.



Reach out to the colleges of your choice.

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Let's Advance.

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We can do it! How WorkReadyNH helps women find their confidence and achieve career goals



When it comes to expertise and educational achievements, the women served by the tuition-free [WorkReadyNH](#) program are right on par with their male counterparts; indeed, what's often lacking is professional self-confidence.

This may be one of the reasons why, comprising 55% of enrollments, female WorkReadyNH clients have traditionally outnumbered men.

While the program is designed to meet the skill- and confidence-building needs of both sexes, according to NHTI WRNH Director Barbara DelloRusso, “We have a number of women who have been stay-at-home moms and now want to get back into the workforce, but are at a loss as to what to look for and how to improve their chances of getting a job.”

*Dear Martha (WRNH director at River Valley Community College),
I signed up for the WorkReadyNH course to improve my soft skill in the workplace. I have found improvement within my personal life using these skills.
Skills dealing with interviewing, positive thinking, to conflict resolution and interpersonal skills have changed my approach to meet employers expectations.
WorkReadyNH has given me the knowledge and confidence to take with me as I begin the Advanced Machine Tool Technology Program. I am excited for this opportunity to use the skills I have learned at WorkReadyNH in my new career path in the Advanced Manufacturing industry.
Thank You for this opportunity,
Robin Guimond*

Like many WRNH clients, some have been displaced from their jobs or are looking to improve their skills in an effort to find better jobs or advance in their current careers.



Some WRNH graduates have been hired by the community colleges themselves. Both Rae Eldridge (left) and Nancy MacDonald (center) were hired as program assistants at WorkReadyNH’s Great Bay Community College site after

graduating WRNH.

Sue Laware (right) a WorkReadyNH, a January River Valley Community College WRNH program graduate, was hired by RVCC President Dr. Harvey-Smith in March.

“As an unemployed woman, I gained a stronger respect for myself through the WorkReadyNH program,” Laware said. Soon after graduating, I was hired by River Valley Community College President Dr. Harvey-Smith as the Academic Affairs specialist for the vice president of academic affairs.”

They’re not alone. Almost daily, the WorkReadyNH staff hears success stories of the women who have graduated from the program. Many come in the form of letters from graduates, like this one:

Dear Regina (WRNH director at Manchester Community College),

Thanks to WorkReadyNH and the support after attending the program I was able to secure a position with a locally owned NH business.

During this program I gained new confidence along with practical interpersonal skills that I will carry with me for life. We learned to write an eye-catching resume, how to sell yourself at the job interview, teamwork, and basics of how to write a business plan, just to mention a few.

The WorkReadyNH program was a great boost during a very difficult time in my life. Having no job, no money and limited interaction with other unemployed adults I felt lost and very discouraged trying to find a new career.

At the program, I got to know many other people who were having the same struggles trying to find gainful employment. We all learned how to overcome and tackle the job market hurdles.

Before the program, I lacked the work skills that are so important in this tough competitive job market. This program gave me the skills I needed and courage to go forth.

All of the staff at MCC and WorkReadyNH were very supportive. I appreciate all they did for me. I hope that this program will continue to be able to assist others as it has helped me.

Sincerely,

Sharon Whitcher

Graduate of WorkReadyNH, January 2013

Learn more about how [WorkReadyNH](#) can serve you!



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Let's Advance.

News and Events

Networking boost: How AMPedNH Connect promotes women in manufacturing - and the industry itself



Not just *history* anymore

We've heard the [stats](#): There is a shortage of qualified manufacturing workers.

- *70% of the college student population is women.*

BUT

- *Only 45% pursue STEM (science, technology, engineering, math) related majors.*

This may explain [why less than a quarter of manufacturing professionals](#) are women. How do we increase the skilled labor workforce and simultaneously introduce more women to manufacturing? And how do we connect when we are already looking for that 25th hour every day? We've got that covered.

- *We connect our students with manufacturing professionals. We help them network with women and men, students and professionals, employees and leaders to discover real world examples of women in manufacturing.*
- *We offer online networking tools, which provides a way to connect with likeminded individuals whose paths may not otherwise cross. The conversation doesn't always have to be shop talk, and the best advice on balancing school, work, family and health comes from someone with experience.*

How you can help

Professionals: Join [AMPedNH Connect](#), the CCSNH online networking site for advanced manufacturing students and professionals. Women seeking careers in advanced manufacturing may not know what opportunities there are for them in manufacturing. Words, language and storytelling shape our world. Through sharing stories, professionals can reveal trends, opportunities, challenges, and successes they have experienced along the way to becoming advanced manufacturing professionals. As a role model, you can offer insight to both women and men about the growth of women in manufacturing. In return you can share your successes, feel proud of your work, and recruit new talent for your organization.

Students; Join [AMPedNH Connect](#) to help seed, sow and grow your career as manufacturing professionals. To hear real life stories and learn how diversity is a key ingredient in success.

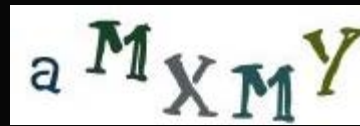
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Let's Advance.

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Featured in Union Leader and Portsmouth Herald: CNC 'boot camp' offers opportunities for rapid growth

Excerpts from the Union Leader:

"The program is not specific to Sig Sauer; we're training CNC for the Seacoast," Sean Hoeing, training manager with Great Bay Community College, said. "We have people in the class who have never worked in manufacturing."

The college hopes to have up to a dozen students in future classes; the next begins April 7. The enrollment period ends March 21.

"Once you're admitted, you can enroll in any course," Hoeing said, noting the plan is to run five classes in 2014.

Excerpt from the Portsmouth Herald:

"The application process does a good job to identify those with passion," said boot camp program developer Sean Hoeing.

The thought was echoed by instructor Jeff Bean, an inventor and engineer whose own products are sold nationally and used in the teaching lab.

"It's impressive," Bean said. "They come in at different levels. They tend to be hands-on learners, and that's what we want. That, combined with patience and attention to detail.

"We get to see them at the beginning of their training and then as they progress," Bean said. "There are so many career paths they can choose."

Indeed, the boot camp model has been a successful workforce solution for AMPed NH industry partners all over the state, who in years past have reported concerns that the pool of these high-tech employees was drying up. Many students from AMPed NH's myriad industry-approved advanced manufacturing certificate and degree programs have already been hired by partners like SIG Sauer, who view the programs as reliable recruiting grounds for their growing operations.

To learn more about CNC Production boot camps, contact [Sean Hoeing](#).

EXTERNAL LINKS

[PORTSMOUTH HERALD FULL STORY](#)

[UNION LEADER FULL STORY](#)

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Work or play? It's both! NHTI Professor Joe Cunningham having a blast as a judge for the FIRST Robotics district competition at UNH





Work or play? How about both?! [NHTI](#) robotics Professor Joe Cunningham is having a blast today judging the [FIRST Robotics](#) district competition at the University of New Hampshire in Durham. [Seacoastonline.com](#) reports that a whopping 1,000 high school students are taking part. See full story [here](#).

Looks like fun, right? Good news: We make it easy to get started on a career path in robotics, manufacturing and engineering. Learn more about the programs offered at NHTI [here](#).

EXTERNAL LINKS

[FULL SEACOASTONLINE STORY](#)

[NHTI ROBOTICS, MANUFACTURING AND ENGINEERING PROGRAMS](#)

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AMPed NH named Best of Business in 2014 for advanced manufacturing outreach



CONCORD — AMPed NH (New Hampshire's Advanced Manufacturing Partnerships in

Education) has been selected as a winner in New Hampshire Business Review's 2014 BOB Awards, which honor the best of business in New Hampshire in over 90 categories.

AMPed NH was honored in the Editor's Choice category as a "Program That's Putting Advanced Manufacturing on the Radar Screens for N.H. Students."

Under AMPed NH, NH's community colleges are answering the call by manufacturers to close an advanced-skills gap by collectively offering dozens of career-focused certificate and degree programs in the field. And it's working; it's not uncommon for community college students enrolled or registered in AMPed NH programs to be hired even before they complete their studies.

Outreach efforts have focused on educating the public about the myriad career paths advanced manufacturing offers, as well as reshaping outdated perceptions of the industry to match current

realities. The industry is a leader in green energy use, offers average pay significantly higher than other private industries and is in need of a workforce with the right skills to keep up with quickly evolving technologies. Nowadays, manufacturing operations are largely automated, reducing the amount of manual work involved and greatly increasing the need for skills in science, technology, engineering and math.

Each AMPed NH training and education program is designed with direct input from advanced manufacturers themselves, and students are trained on the same equipment used in the high-tech industry. Disciplines include robotics and automation/mechatronics; electronics and electromechanics; engineering and programming; and advanced composites, machine tool and welding technologies.

In addition, WorkReadyNH, expanded under AMPed NH, helps build foundational hard and soft skills at no cost to students. The program offers assessment and training, as well as the opportunity to earn nationally recognized credentials. WRNH is also a 2014 BOB Award winner.

AMPed NH is funded by a \$20 million Trade Adjustment Assistance and Community College Career Training grant from the US DOL's Employment and Training Administration.

The BOB Awards are presented by NHBR and are sponsored by Comcast Business Class, FairPoint Communications, Anthem Blue Cross and Blue Shield, AutoFair, Cross Insurance, Business & Industry Association of NH and WZID.

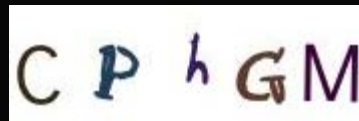
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[BEST OF BUSINESS 2014 WINNERS](#)

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Boy Scouts turn to AMPed NH, community colleges in bid to add manufacturing merit badge to national offerings



One intrepid Boy Scout troop in New Hampshire is endeavoring to add an advanced manufacturing merit badge to the Scouts' national offerings, and is making NH's community colleges part of its pitch.

Daniel Webster Council Troop 123 of New Boston toured high-tech advanced manufacturing training labs at [Manchester Community College](#) and Great Bay Community College's [Advanced Technology & Academic Center](#) in Rochester, where they received crash courses in robotics & automation, as well as advanced composites manufacturing.

As the Scouts cheered — and playfully jeered — each other in hands-on lab activities and enthusiastically shouted out answers to questions, Assistant Scout Master Doug Cullen talked about the importance of adding a merit badge focused entirely on manufacturing.



“Given the remarkable amount of value-add manufacturing has in accordance with developing the communities in which Scouts live, a Manufacturing Merit Badge would be a great addition to the Scouting skills development,” Cullen said. “Plus, it would be yet another way to enhance how manufacturing is a traditional, yet also contemporary, career path — especially given the integration of newer technologies.”

Newer technologies form the backbone on which NH's seven community colleges built their more than two dozen advanced manufacturing training and education programs. From two weeks to two years in length, the programs are offered in a variety of formats but have two things in common: First, they are developed with direct input from NH advanced manufacturers to ensure they provide high-tech skills necessary for career success. Second, students receive hands-on training on the same equipment used on cutting-edge production floors.

Those technologies include CAD/CAM software and 3-D virtual learning equipment, robotic arms, 3-D printers, 3- to 5-axis computer-numerical controlled machines, 3-D carbon fiber weaving looms, coordinate measuring machines and much more.

The labs at all seven community colleges were opened or updated with funds from a \$20 million federal Trade Adjustment Assistance Community College and Career Training grant aimed at closing the high-tech skills gap identified by advanced manufacturers and increasing the technically skilled workforce in New Hampshire's leading industry.

The Boy Scouts of America has made STEM (science, technology, engineering and math)

studies a big priority in recent years, offering more than 61 merit badges in connected fields of study.

According to Cullen, the process of adding a Manufacturing Merit Badge starts with ensuring it would promote a hobby or career interest consistent with the Aims of Scouting, which include community involvement, environmental stewardship, career development, and personal growth and leadership.

“In this case,” said Cullen, “We could focus on leadership, character development and green processes, as well as the obvious career development advantages.”



Manufacturing is a strong leader in the use of renewable energy. In 2011, the industrial sector used 2.3 quadrillion BTUs of renewable energy, compared with 1.9 quadrillion BTUs from the transportation, residential and commercial sectors combined.

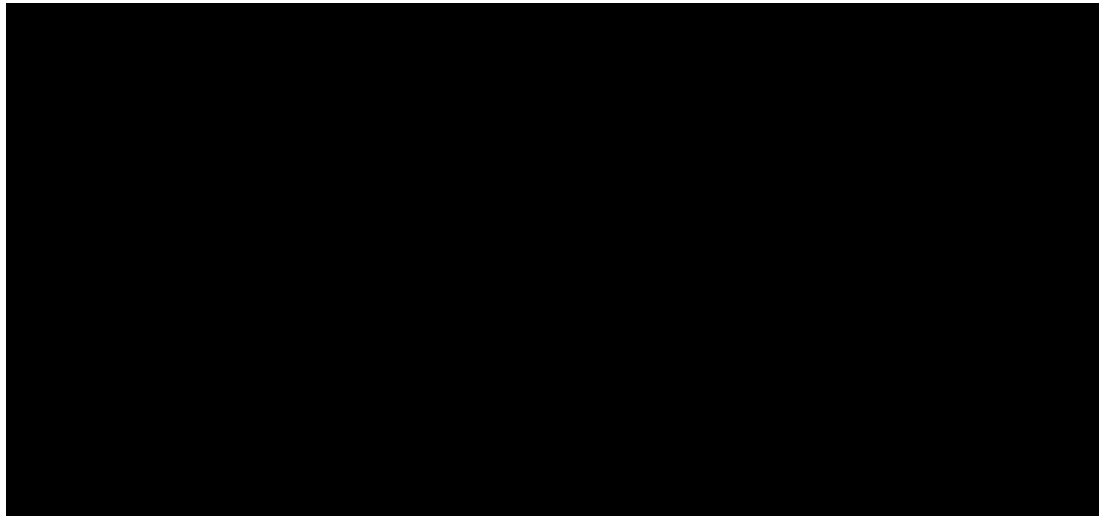
It all speaks to advanced technologies and lean manufacturing processes, the cornerstone of the community college's programs in robotics & automation/mechatronics; electronics & electromechanics; programming & engineering; and advanced composites, welding and CNC machining technologies.

Brian Evans, Troop 123 founder and committee chairman, was just as animated as the Scouts as he learned about mechatronics and composites manufacturing technologies in the labs.

“I needed to see this for myself,” he said. “As I remember it, manufacturing was a dinosaur. If you don't see this in person, you do not know what it's really like today. It's new, different and hands-on. I'm loving what I'm seeing here. I'm excited because I see the Scouts testing the waters in this industry. It's even sparked an interest in me! ”

“It is still a long process to obtain approval,” said Cullen, but there is no better way to illustrate advanced manufacturing career paths than by seeing them firsthand at the college labs.

“These programs are a great complement to Scouting, which aims to enhance passion for learning,” Cullen said.”



EXTERNAL LINKS

[BOY SCOUTS OF AMERICA](#)

[BOY SCOUTS TROOP 123 - NEW BOSTON, NH](#)

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SBA regional leadership praises community college advanced manufacturing labs



Andrea Cocquyt, composites manufacturing expert and Great Bay Community College technical advisor, explains the process of basic CNC machining at the teaching lab at GBCC's Advanced Technology & Academic Center in Rochester.

Regional Small Business Administration leaders expressed confidence in advanced manufacturing programs at NH's community colleges during a roundtable and tour event focused on workforce development.

With more than 95% of New Hampshire's employers considered small businesses and with high-tech and manufacturing making up the largest industry in the state, promoting training that increases the advanced workforce is essential to a healthy economy, said Seth Goodall, SBA New England Regional Administrator.

The SBA group visited [Manchester Community College](#) and Great Bay Community College's [Advanced Technology & Academic Center](#) in Rochester to learn about targeted programs they offer and to experience the learning environments firsthand.

"You're way ahead of the curve with this technology," said Goodall about the hands-on teaching labs opened or updated under the Advanced Manufacturing Partnerships in Education initiative.

"Small companies constantly need workforce training and higher skill sets for their employees," he said. "We work on helping them get that specialized training, as well as providing technical assistance, access to capital and other services, and we're seeing lots of results. So these collaborations between AMPed NH, businesses and workforce development agencies are critical."

All NH community colleges are answering the call by manufacturers to close an advanced-skills gap by offering dozens of certificate and degree programs in the field. AMPed NH is funded by a \$20 million Trade Adjustment Assistance and Community College Career Training grant.

"This 'skills gap' was just a lack of communication between businesses and education," said Andre Cocquyt, composites manufacturing expert and GBCC technical advisor. "We close that gap by working closely with entrepreneurs to avoid going in a direction that doesn't directly solve industry needs."

Each program is industry guided, and students are trained on the same equipment used by advanced manufacturers. Disciplines include robotics and automation/mechatronics; electronics and electromechanics; engineering and programming; and advanced composites, machine tool and welding technologies. Programs run from two weeks to two years in length and are offered night and day, and in classroom, online and hybrid formats. The goal is flexibility.

"There's something going on literally seven days a week here," said [Susan Huard](#), president of MCC. "Our labs are open as late as 11 p.m., and if you drive by at night, you'll see vehicles in the parking lot with the names of small businesses on the sides. They're in the lab. The people behind those businesses are taking courses here."



The colleges also partner with state agencies to connect job seekers with financial assistance for qualified training programs through the [Workforce Investment Act](#). For employers, the [NH Job Training Fund Grant](#) can contribute up to 50% of employer costs for training.

“Our job is to get everyone a job,” said Phil Przybyszewski, AMPed NH project coordinator at MCC.

“The grant helps the unemployed and underemployed get the skills necessary to start a new career or advance in their manufacturing careers. Our student base is adults; there’s a different attitude in how they approach education. So we mirror that as we work to build highly skilled technicians.”

The workforce-centric approach is similar to SBA’s, said Goodall. “We try to be the coach or QB, to help businesses march their way down the field,” he said. “Be it capital, benefits assistance or other resources, you name it – we are the connector.”

So, too, is AMPed NH; it’s not uncommon for community college students to connect with and be hired by advanced manufacturers even before their studies are finished, and many continue their education while working full time.

The challenge for both SBA and AMPed NH remains ensuring busy small-business leaders are aware of the opportunities to increase the number of highly skilled employees and career candidates.

“That’s our challenge,” said Goodall. “How do we work together to cross-market these opportunities?”

Suggestions included building on already-successful strategic alliances to broaden awareness and, thus, access to training programs.

“A big part of what we do is build relationships,” said Amy Bassett, NH Deputy District Director for SBA. “We could build on those in so many different ways.”

Huard agreed. “New Hampshire is still learning about and coming to understand the value of the comprehensive community college,” she said. “Any way we can collaborate would be beneficial.”

In photo above: Seth Goodall, New England Regional Administrator for SBA, gets a crash course in robotics and automation at Manchester Community College's mechatronics lab.



EXTERNAL LINKS

[SMALL BUSINESS ADMINISTRATION - NEW HAMPSHIRE](#)

[NH JOB TRAINING FUND GRANT](#)

[WORKFORCE INVESTMENT ACT](#)

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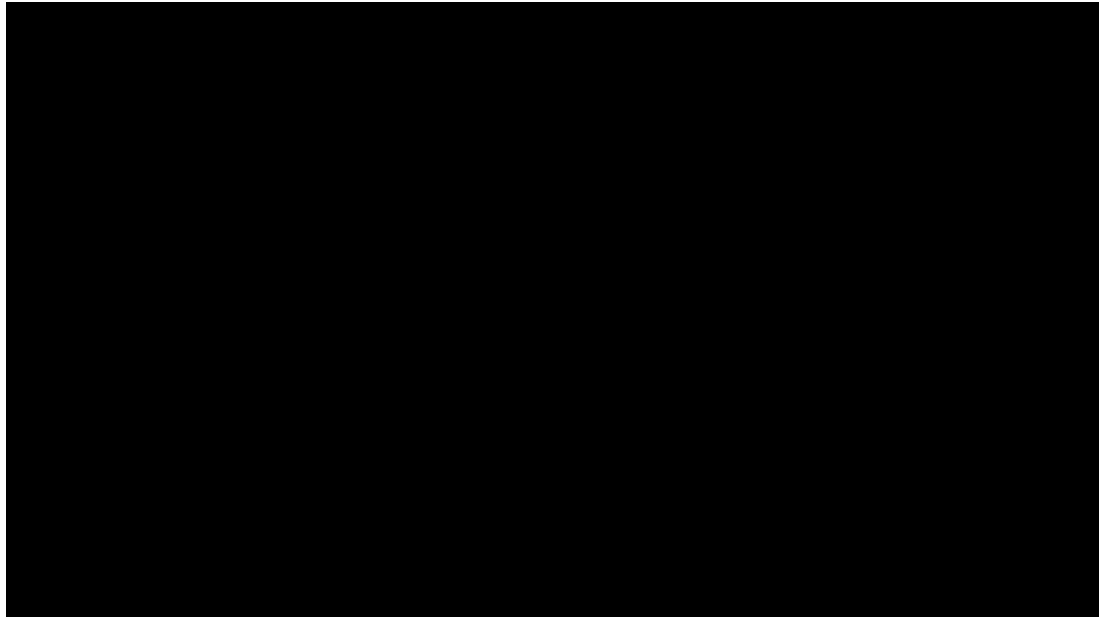




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AMPedNH Advisor's Corner: Mid-semester tips for success in advanced manufacturing education programs



So it is mid-semester. How are you? Smooth sailing? Facing an avalanche of work? The next few weeks will fly by, so now is not the time to sing the same **old song and dance**. If you started the semester off with a plan and are meeting all of your deadlines – kudos! If you are buried by homework, projects, studying and snow, you can use some of the tips below to dig yourself out. Keep these tips in mind for next semester, too!

To help you manage your time, check out the tips below:

- *Plan early. During the first week of the semester, start using a calendar to plan for the upcoming weeks (see the next tip!).*
- *Review the syllabi for each class and add important dates to your calendar AND estimate steps you need to take prior to meet the assignment expectations and due date. Self-assign due dates for each step.*
- *Ask for clarification on assignments EARLY if you don't fully understand the expectations.*
- *Anticipate what you will need to spend extra time on. If there is something (a course subject, assignment, reading, etc.) that you know you will struggle with, carve out extra time in your schedule for it.*

Your time-management habits as a college student will prepare you for employment. As an employee, you will stand out if you get your work done on time and demonstrate the ability to manage multiple projects at once.

Lastly, be sure to stay consistent with your plan and calendar. You don't want to be as unpredictable as the New England weather!

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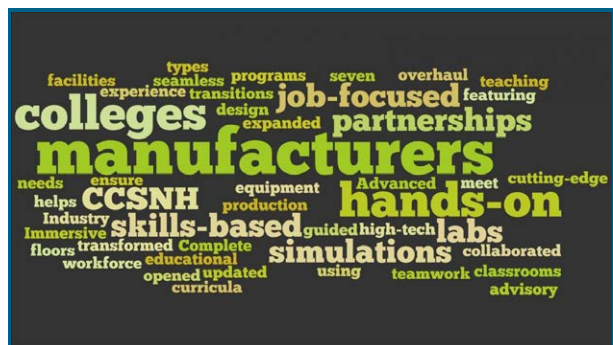
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AMPed NH Training Graphic - How we do it

We provide workforce development solutions through targeted training programs. This is how.

1. We started with the **MANUFACTURERS**, who for years have asked for assistance in building and ensuring a healthy pipeline of highly skilled technicians who can compete in a quickly evolving high-tech, high-demand, high-pay advanced manufacturing environment.
2. Alongside our manufacturing partners, we developed and now deliver more than two dozen **HANDS-ON** training and education programs. We check in with industry regularly to ensure our programs remain in alignment with its needs.
3. Our programs are **JOB-FOCUSED**, answering demand in each of our college's regions. Expect programs in disciplines like advanced composites technologies, electronics and electromechanics, robotics and automation/mechatronics, advanced machine tool technologies, advanced welding technologies, and engineering and programming.
4. Recruiting straight out of our **COLLEGE LABS** - Industry partners have come to recognize that NH's community colleges are reliable recruiting grounds for their workforce needs.

Need a new, rewarding career for the future? Need highly-skilled employees? Shoot us an [email](#) - we'll make it easy.



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Innovative CNC training boot camps helping NH employers build workforce



Great Bay Community College CNC Production Boot Camp instructor Jeff Bean works with a student on a CNC machining simulator.

Innovative boot-camp-style training programs offered by NH's Advanced Manufacturing Partnerships in Education are benefitting not only scores of community college students, but also employers statewide.

Programs like Great Bay Community College's [CNC Production boot camp](#) can save precision

manufacturers money and time by teaching the exact hard and soft skills they require, using the same equipment they use. Learning takes place away from production floors, allowing staff to focus on meeting product deadlines and exceeding standards. At the same time, boot camps can turn over new qualified candidates in a matter of weeks, building a healthy pipeline of qualified career prospects.

Offered in an accelerated eight-week format, the CNC Production boot camp is instructed by field experts and offered on-site at AMPed NH industry partner **SIG Sauer**'s state-of-the-art firearms manufacturing facility on Pease International Tradeport.

Collaboration starts at the very beginning. Community colleges work in concert with industry partners to develop and deliver specifically targeted training programs such as the CNC (computer numerically controlled) boot camp, which readies students for high-demand, well-paying CNC machining careers.

But job seekers aren't the only ones clambering to sign up. Current SIG Sauer employees, with support from their company, are also receiving training in preparation for advancement.



Freedom Chandavong, 23, of Newmarket, a two-year employee at SIG, started in packaging and shipping and is already advancing within the company. He's in the boot camp to prepare for a career in composite component production. SIG Sauer supports his ambitions by providing tuition reimbursement and time to train.

Just two days into boot camp, Chandavong said, the depth of topics covered was impressive.

"We were already getting into hands-on simulation training," Chandavong said. Simulators allow students to identify and correct design and production problems in a safe, supportive learning environment before moving on to actual production equipment.

"In today's precision manufacturing, 'good enough' doesn't count," said Chandavong, and boot camp has bolstered his confidence and determination. "SIG has made a commitment to me, and I'm going to return that commitment. I'm not going to fail them. For me, this is not a job; this is a career – and with the composites industry growing, there's a future here."

The commitment is not unusual, as exhibited by the students who routinely hang back in the lab, celebrating new breakthroughs even as break times begin.

“The application process does a good job to identify those with passion,” said boot camp program developer Sean Hoeing.



The thought was echoed by instructor Jeff Bean, an inventor and engineer whose own products are sold nationally and used in the teaching lab.

“It’s impressive,” Bean said. “They come in at different levels. They tend to be hands-on learners, and that’s what we want. That, combined with patience and attention to detail.

“We get to see them at the beginning of their training and then as they progress,” Bean said. “There are so many career paths they can choose.”

Indeed, the boot camp model has been a successful workforce solution for AMPed NH industry partners all over the state, who in years past have reported concerns that the pool of these high-tech employees was drying up.

Many students from AMPed NH’s myriad industry-approved advanced manufacturing certificate and degree programs, have already been hired by partners like SIG Sauer, who view the programs as reliable recruiting grounds for their growing operations.

The boot camp’s location itself speaks to that growth, as well as the demand for a more robust STEM (science, technology, engineering and math) workforce; SIG Sauer expanded to the site after outgrowing operations in Exeter. In addition to its Exeter and Pease sites, the company operates a training center in Epping and is opening another facility in Dover, as well as sites outside America. Combined, dozens of new hires are anticipated in the coming months locally.

Computer-numerical controlled machines are widely used where very precise manufacturing is required. Unlike manually operated equipment of the past, CNC machines shape components automatically by reading computer design code. They are faster and more versatile than ever before.

Under AMPed NH, funded by a \$20 million federal [TAACCCT grant](#) from DOL’s Employment and Training Administration, NH’s seven community colleges offer dozens of programs in disciplines including robotics & automation; electronics and electromechanics; advanced machine tool, composites and welding technologies; and engineering & programming.

To learn about upcoming CNC Production boot camps, contact [Sean Hoeing](#). Learn about all

advanced manufacturing programs offered by [AMPed NH](#).



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Let's Advance.

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Work-readiness training at no cost to you. Find out how we can help employers as well as students.



WorkReadyNH serves job-seekers and career builders well — but it's also a powerful tool for employers.

Offered at all seven community colleges, the program helps job seekers and career builders improve skills and add nationally recognized [work-readiness certificate](#) to their resumes, all at no

cost to them.

Included in WRNH is assessment, instruction and credentialing in key hard- and soft-skill areas identified by employers as essential to workplace success. Thus, WRNH also helps employers find qualified applicants and improve current employees' skills.

Better yet, WRNH can meet many unique needs of its industry partners. At companies where demand for skill-building is high but travel is not an option for employees, WRNH can be offered on-site. It can also be embedded within technical training programs offered off campus, which is the case with [Great Bay Community College's](#) new CNC Production Boot Camp, currently under way at [SIG Sauer](#).

Not only is WRNH ensuring boot camp students learn new foundational skills alongside technical training, it's doing so right on SIG's modern campus on Pease International Tradeport. The partnership with the world renowned firearms manufacturer illustrates both SIG's investment in current employees and its interest in helping to meet demand all across the Seacoast area for highly skilled CNC career candidates.

In just a few classes, boot camp instructors have reported a marked difference in class teamwork and efficiency, and credit the improvement to the professional development students receive from WRNH. Students are animated and actively participating in class, adding their expertise and knowledge to enhance the class discussion.

Learn more about [WorkReadyNH](#).

EXTERNAL LINKS

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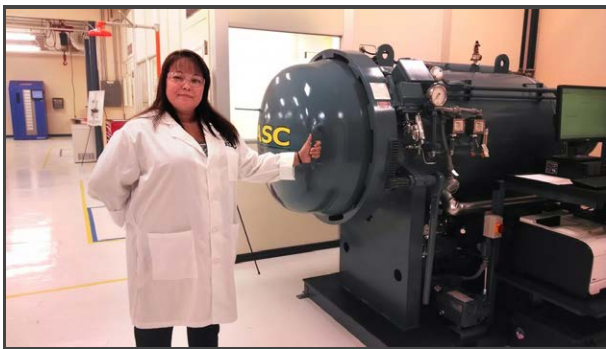




Let's Advance.

News and Events

Alumni Spotlight: Single mom Kerri Uyeno finishes training, achieves career dream in six months



Talking to Kerri Uyeno, it seems she's exactly where she's meant to be. But if you'd asked her less than a year ago, it's unlikely even she could have predicted just how happy and confident she is today.

Kerri was hired as a bonding operator at Safran in Rochester and began work Jan. 4, less than three weeks after finishing her [Advanced Composites Manufacturing certificate](#) from Great Bay Community College, with paint operator and bonding and finishing concentrations. Safran is a

manufacturer of state-of-the-art composite aerospace components found in aircraft all over the world.

“Oh my God,” she said, “It’s just been an awesome start to the new year.”

Ask her to reflect on her recent past, and she’ll tell you this: Waiting tables and bartending as a single mother, she didn’t feel she was building a “real promising foundation” for her or her children. She had a background in manufacturing, but not the right skills – or certifications – to advance.

Now? “I know what I’m doing,” Uyeno said with her characteristic enthusiasm. “I’m the girl for that position- and I don’t need to be started at entry level.”



With the leg up provided by the certificate, Kerri now is building the foundation she felt was missing before her time at Great Bay. She specifically cited great pay, as well as full benefits that cover both her and her children as changes that have helped better the family’s lives.

Getting there wasn’t always easy, Kerri admitted, but Great Bay’s instructors were “awesome,” supporting her in myriad ways, including allowing her to get lab work in between classes so that she was able to complete a dual-concentration certificate.

And now that she’s achieved her employment goal?

“I absolutely love it,” Kerri said about her work. “I can’t even tell you how perfect this job is. I look forward to going in every day. I’m early - and I don’t think I’ve ever been early for anything in my life.”

According to Kerri, training at Great Bay’s [Advanced Technology & Academic Center](#) provided her with valuable technical experience. The Advanced Technology & Academic Center is an extension of Great Bay Community College with a focus on technical, composites manufacturing, and academic courses that serve New England job seekers and business owners. The Advanced Composites Manufacturing certificate program consists of two levels and can be completed in 6 months. The introductory level is designed to provide students with an overview of advanced composites manufacturing and to help them select an area of specialization based on interest, ability, and job outlook.

“I definitely didn’t go in blind,” she said about her pre-employment knowledge of cutting-edge

manufacturing techniques and terminology. “I was excited right off because I knew what the on-the-job trainers were talking about from the very start. Usually you don’t know what to expect -- what you’re really going to be doing. But, for example, in the bonding class at ATAC we learned about tools and precisely how to use them. It definitely gave us a jump start in the training because of the skills we learned and the equipment we used in the lab were exactly the same as what’s used at work. It seems to have made it a lot easier on the trainers, too.”

Kerri is quick to emphasize she’s still learning. But she knows the fundamentals of her job, she says.

“I could jump right in and help,” during on-the-job training, she reported. “We won’t be slowing our employer down like conventional training might. We can be more of an asset in a lot shorter an amount of time.”

By “we,” Kerri means her fellow ATAC alumni. Several others from her class were also hired right out of the program.



“I wouldn’t be doing any of this without the school. I wouldn’t have ability to have this confidence and to be so satisfied,” Kerri said of her success. And she appreciates that she has moved into employment with her classmates, and still gets to see her instructors when they visit her new employer, which is quite often. Great Bay staff meets regularly with Safran to collaborate on curriculum development, articulation and more.

And if it wasn’t obvious, she IS satisfied. The single mother says advanced manufacturing is a perfect career choice for females like herself.

“With the growing lean manufacturing operations and technology, it’s not like the old-fashioned picture in your mind. You’re not in the grit and grime. It’s clean manufacturing. You’re using your mind, not just your hands,” she said.

“As women, we’re always thinking of the next thing. There’s so many things going on in our lives and minds at any given moment, so it’s always like ‘what’s next,’” Kerri reflected. “It’s the same here. You have to think things through – and quickly. I’m just as challenged in my work as I am with life. The only difference is at work I get a sense of completion every day!”

Kerri said even the work itself is meaningful.

“I feel like I’m a part of something, not just a robot on a line. My own personal techniques and talents are something that through the school I’ve sharpened — and they utilize that at Safran.”

From admissions interview, to staying late to help her with her job search and application process, Kerri said she’s thankful for the Great Bay staff’s commitment to her success.

“Honestly,” she said, “Don’t be the person who says ‘what if, what if’ Get up and go to the college. Ask questions, go for a tour — just do it.”

She did, and neither she nor her children are looking back.



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Let's Advance.

News and Events

Congresswoman Kuster cites AMPed NH programs in bid to bring President Obama's AMP 2.0 meetings to NH

WASHINGTON, D.C. – Continuing her efforts to foster innovation and grow New Hampshire's manufacturing sector, Congresswoman Annie Kuster (NH-02) this week urged President Obama to bring the Advanced Manufacturing Partnership 2.0 program to the Granite State.

Last year, President Obama announced plans for a second round of the highly successful Advanced Manufacturing Partnership (AMP). Initially launched in 2011, the program brought together leading manufacturers, research universities and the federal government for a series of four work sessions intended to identify ways to propel America's growing advanced manufacturing sector. The sessions, located around the country, set the stage for the National Network of Manufacturing Innovation, among other initiatives.

Following the success of AMP 1.0, the Obama administration has announced plans for a second round of work sessions.

“As your Administration works to schedule regional working sessions and forums for AMP 2.0, I

urge you to arrange such a meeting in New Hampshire,” **Kuster** wrote Wednesday in a letter to the President. “The Granite State’s dynamic economy is the ideal backdrop for a discussion in the future of this advanced field.”

New Hampshire stands as a strong manufacturing hub for the region and for the country. Despite its small size, the Granite State ranks 6th nationally in the number of new companies started each year. It is home to world-class manufacturers, nationally distinguished engineering schools, and a dynamic statewide manufacturing program within the Community College System.

“By hosting an AMP 2.0 work session, we hope to highlight the incredible work taking place here in New Hampshire to advance and grow the manufacturing field,” **Kuster** said. “As a host, the Granite State’s world-class engineering, manufacturing and educational institutions would be at the center of this important national conversation, and it would help us determine how to best help our small- and medium-sized manufacturers that represent the greatest opportunity for continued economic growth.”

Since taking office, Kuster has worked to nurture innovation and grow New Hampshire’s manufacturing sector. Last year, she called on President Obama to establish a Manufacturing Innovation Institute in New Hampshire to help drive manufacturing innovation, create jobs, and spur economic growth. In this week’s State of the Union address, the President announced his intention to create an additional six high-tech manufacturing hubs this year. Strengthening manufacturing is a key plank in Rep. Kuster’s *Middle Class Jobs and Opportunity Agenda*.

January 29, 2014

Dear President Obama:

Thank you for your enduring dedication to maintaining our country’s leadership in the advanced manufacturing sector. The continued efforts of your Administration send a clear message that the United States recognizes the critical role advanced manufacturing plays in securing high-quality jobs for American workers in the 21st Century economy. As you know, this sector represents more than 12% of our gross domestic product, so every effort we make to strengthen our manufacturing base yields significant benefits for our country.

The Advanced Manufacturing Partnership (AMP) 1.0 did a fantastic job in identifying the challenges, needs, and opportunities for our manufacturing sector. In addition to setting the stage for the National Network of Manufacturing Innovation, AMP 1.0 recommendations serve as the handbook for securing our nation’s manufacturing competitiveness. Knowing that manufacturing represents a more powerful economic multiplier than any industry, I am committed to working with you to ensure additional success for AMP 2.0. Furthermore, I applaud the commitment made yesterday in your State of the Union address to develop six additional manufacturing hubs over the next year. I pledge to compliment your efforts in Congress by working to pass legislation that further establishes the National Network for Manufacturing Innovation.

As your Administration works to schedule regional working sessions and forums for AMP 2.0, I urge you arrange such a meeting in New Hampshire. Manufacturing is a critical industry for the economic vitality of my state and AMP 2.0 would benefit from the experience and expertise of our local manufacturers, academic institutions, and industry leaders who have already made great strides enhancing manufacturing in our region.

The Granite State’s dynamic economy is the ideal backdrop for a discussion on the future of this advanced field. Despite its small size,

New Hampshire ranks 6th nationally in the number of new companies started each year. Our state is home to world-class manufacturers, nationally distinguished engineering schools, and a dynamic statewide manufacturing program within our Community College System. Public-private partnerships like Keene State's College's Regional Center for Advanced Manufacturing (RCAM) are a New Hampshire tradition. A successful model that should be emulated nationwide, RCAM brings together Keene State College, the Keene Chamber of Commerce, the Community College System of New Hampshire, the local school system, and leading manufactures in the region to resolve industry-wide challenges.

As a hub of population, manufacturing activity, highly-skilled workers, and cutting edge academia, New Hampshire is uniquely well-suited to host an AMP 2.0 working session or forum. I stand ready to work with you and your Administration to arrange such a meeting, to strengthen American manufacturing, and to secure our country's position as the world's largest manufacturer of high-tech products. Thank you for your consideration of this request.



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Let's Advance.

News and Events

Alumni Spotlight: Former geologist hired straight out of composites program says ATAC gave him 'leg up,' has plans to grow with high-tech industry



One might suggest it quite a leap from a career in geology to one in advanced composites

manufacturing. But as it turns out, Brian Warner's previous job led him straight to his new career – quite literally.

Brian became well aware of the expansion of Safran Aerospace Composites and Albany Engineered Composites into a brand-new facility in Rochester when he took part in an environmental project related to the construction site.

In 2012, after losing his job as a geologist and struggling to find something new in his field, he recalled that construction site and turned his sights toward gaining employment with Safran, in a field he knew is growing in New Hampshire and the nation.

Brian said he contacted Great Bay Community College after reading about its new [Advanced Technology & Academic Center](#) in Rochester. ATAC is an extension of Great Bay Community College with a focus on technical, composites manufacturing, and academic courses that serve New England job seekers and business owners. The Advanced Composites Manufacturing certificate program consists of two levels and can be completed in 6 months. The introductory level is designed to provide students with an overview of advanced composites manufacturing and to help them select an area of specialization based on interest, ability, and job outlook.

He interviewed with the center's admissions staff, whom he said helped him obtain a valuable scholarship.



“And the rest is history,” said Brian, who in December completed Great Bay's [Advanced Composites Manufacturing certificate](#) program with a concentration in inspection and who on Jan. 6 began work at Safran as a composites inspector and [coordinate measuring machine](#) operator.

“I like to be part of something big,” Brian said about his new career. “And it's a big deal. This LEAP engine is going to be on thousands of new planes for decades.”

The LEAP engine is a cutting-edge piece of equipment that, due to its lighter components like the blades made right in Rochester, allow airlines to cut down greatly on fuel costs. “It's really exciting,” Brian said. “It's a little stressful knowing these parts we're making are so critical – I mean, they keep people alive - but it keeps my focus strong, especially as an inspector.”

Brian's career responsibilities include examining components to ensure they meet extremely precise standards.

"We work with really high-tech, high-end equipment," Brian said. "They obviously want to do this right. We check for any defects in paint or fiber, write up detailed technical reports and present these reports to quality department teams. We do inspections on incoming and outgoing products."

Brian said his six months training at ATAC left him well prepared for his career in advanced composites.

"From how 3-D fibers react with resins to how it's all put together, I have an understanding of how it all works," Brian said. "Not everybody gets that kind of training."

While that training certainly proved useful in his hiring, Brian is also planning to turn to it in the future.

"If I want to move on to be quality manager or quality engineer, having this knowledge of how composites expand, contract and interact with their environment will help in my advancement," he said. "We're getting in early with this company and the industry in New Hampshire," he said about himself and other ATAC alumni hired at Safran. "It's a growth process, and I like the idea of me growing with them. ATAC gave me a great leg up.

"These are good, full time careers," Brian said about the industry in general. "From what I see, there's always a chance for problem solving and troubleshooting. There's always something new and something to learn. Procedures evolve all the time."

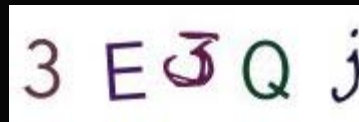


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Let's Advance.

News and Events

WorkReadyNH offers new professional beginnings, even to 'old pros'

Liz Lawrence was an accomplished 20-year professional with experience in social work, education and public health community outreach when she found herself without a job last year. Struggling with a challenging job market, she stumbled upon the WorkReadyNH program at Manchester Community College.



WRNH graduates can earn a nationally recognized [career readiness certificate](#), which according to [ACT](#), "is a portable credential that demonstrates achievement and a certain level of workplace employability skills in applied mathematics, locating information and reading for information." But that's not all. Students can also earn a [community college certificate](#) that covers soft skills such as teamwork, discipline, customer service and management skills!

These certifications benefit both job seekers and employers seeking skilled workers.

Liz realized that not only could she improve her job seeking skills, she could also brush up on her academic “hard skills” at the same time.

“My goals were to increase my math scores, practice my leadership skills and network with different people — and the WorkReadyNH staff made these goals very attainable,” Liz said of her experience in the program.

Liz graduated from the WorkReadyNH program in the fall and has recently accepted a position as a Young Child Wellness Advisor for a Project LAUNCH, where she will utilize her skills to help young children prepare for success in educational environments.

“WorkReadyNH helped me achieve my goals of finding a meaningful career position by teaching up-to-date, best-practice human resource intelligence and job search skills, and applied on-the-job academics, while at the same time providing a forum in which to safely practice and improve these skills,” said Liz.

Liz joins a growing list of WRNH alumni who are using the hard- and soft-skills developed in the free program to gain professional employment.



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Freudenberg NOK announces high-tech job openings in NH

Freudenberg NOK, one of AMPed NH's advanced manufacturing industry partners, is seeking highly skilled employees to fill the following positions, as of 1/21/14. The locations are in Bristol (3rd shift) and Northfield (2nd shift), NH. These are temporary to permanent positions and could be direct hire for the right individual, says the company. Candidates are asked to send their resumes to 4023@kellyservices.com or to call Karen MacLeod, account talent manager onsite at Freudenberg NOK, at 603-744-1607.

Electromechanical Millwright/Maintenance Technician

Primary Responsibilities:

Incumbent is responsible for ensuring efficient, continuous, and safe operation of all molding, finishing and other primary and secondary equipment within the manufacturing business. This includes installation, troubleshooting, up time maintenance and preventive maintenance.

Incumbent will have overall maintenance responsibility with BPS but may be asked to perform

other functions as necessary to keep equipment in operation. Other duties as assigned by Supervision.

Special Skill Requirements:

The candidate must be very knowledgeable in pneumatics, hydraulics, welding and the use of machine shop equipment, and must be able to read blueprints. Ability to follow written and verbal instructions to repair and maintain machinery required. Mechanical and electrical repair skills required. Candidate should have strong PLC experience / electrical controls capabilities. Candidate should have ability to program machines using a programming computer. Candidate must have own tools and an excellent attendance record. Candidate must be computer literate and be comfortable using maintenance scheduling software. The candidate must be able to work any shift and overtime as needed to complete machine repairs and to support manufacturing requirements. Must have a Fork Lift License. The chosen candidate must be able to perform the physical requirements of job i.e. lifting, bending, stooping, etc. Candidate must be a self-starter and capable of problem solving with little to no help.

Process Technician

General Responsibilities and Functions: This position is responsible for process troubleshooting, scrap reduction, and the introduction of new products to the manufacturing areas. The process technician will develop the product process, manufacturing procedures, and cell layout, recommend the required equipment, and follow-up on correct manufacturing practices. The process technician will also assist in changeovers and tool cleaning and assembly. The process technician will make decisions on incoming component quality and issue SQC's when appropriate. The position will focus on Lean Manufacturing techniques such as one piece flow manufacturing. Will work closely with engineering and quality to maintain world class quality and competitive costing.

Coordinates With: Department Managers, Business Group Leaders, Group Leaders, Maintenance personnel, Quality Auditors, shift production personnel

Job Duties:

- Help with the development of manufacturing processes for new production.
- Help establish required training by process and production part
- Follow up on production changes and new requirements

- Review all plant routers on bi-annual basis • Set up and review all quality standards by part
- Monitor and review non-conforming rate by part and process
- Develop and maintain a project list and activity log for review
- Provide technical support to manufacturing team by troubleshooting, molding/manufacturing related problems
- Perform check heats on new and existing tooling
- Conduct projects aimed at scrap reduction, quality improvements, productivity increases and general support of GROWTTH activities.
- Maintain positive communication between all team members on all shifts
- Performs necessary functions to adhere to Quality Standard guidelines.
- Performs necessary functions to adhere to Environmental Standard guidelines.

Qualifications:

- Ability to understand the technical aspect of the written specifications involving set-up, operation, condition of equipment, incoming stock and procedures for running production jobs.
- On-the-job manufacturing experience with production parts and process, prior experience preferred.
- Post-secondary education in a technical field preferred.
- Positive human relations skills with the ability to work on cross functional teams or alone.
- Must have good interpersonal skills. Must have strong written and verbal communication skills. Ability to deal with multiple, concurrent tasks is a must. This job description in no way states or implies that these are the only duties to be performed by this position. The Incumbent will be required to follow any other instruction and to perform any other duties as requested by his or her supervisor.



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Student Spotlight: For Matt Marcil, manufacturing engineering is business and pleasure



Matt Marcil is an NHTI student in the [mechanical engineering](#) and [manufacturing engineering](#) programs. At 31 years old, he's happily married and works as a full-time audio engineer in Concord. While Matt's always had an interest in music and sound – even owning and operating a small recording studio for the last seven years – he's also an unabashed advocate for science, math and physics.

Did particular skills you possess play into your career path?

I love to learn the way things are: The way stars form, how sound travels - I've even committed 32 digits of Pi to memory. I hope to have at least a few hundred digits by the time I'm old. Physical and mathematical constants just seem so cool and meaningful to me. I grew up loving "Bill Nye the Science Guy" and "Beakman's World." I've long studied STEM fields on my own and found NHTI's mechanical engineering and manufacturing engineering tech programs to be a convenient and economical way to take my interests and passions further. I'm now the first in my family to attend college.

My interests have increasingly become quite wide and diverse: music, visual art, astronomy, acoustics, woodworking, CAD, video, graphic design, writing, photography, etc. I find that, to some extent, it really doesn't matter so much *what* I'm learning and exploring, but simply *that* I'm learning and exploring. I do prefer physical sciences, such as mechanics and physics, to biological sciences. Although, I do have a nice microscope and enjoy finding out what things look like at 2000 times.

What is your plan after graduation from NHTI?

I plan to complete a bachelor degree in mechanical engineering tech at UNH after NHTI. If I have my druthers, I will never stop taking classes. Of course finding work that allows for class time would be a deciding factor. I'd love to get degrees in chemistry and physics someday, but who knows? I may just continue personal study if formal study is not feasible. I'd really like to find work doing CAD, since I enjoy it so much. Spending all day doing testing and/or math problems would be pretty fun too. I'm really pretty open to most things.

What made you decide to engage in a double major? Will it take you longer to graduate due to the double major?

Honestly, the fact that the manufacturing degree has a fair bit of overlapping courses with my original major; mechanical, was a big part of it. I've even been able to use one of the manufacturing courses as a technical elective in my mechanical degree, so it may only add a semester and a half to do both degrees. You also don't get to do as much hands on stuff in the mechanical program as the manufacturing.

In regards to everything you are learning, what are you enjoying most?

I really love math. I even look forward to doing my math homework each night! However, physics and how you can literally calculate every aspect, every force, of an action as complex as, say, driving your car off a ramp, are immensely interesting and probably have the most immediate real world application. Not that I often drive my car off ramps.

Numerous supports have been implemented for advanced manufacturing students. Have you engaged in any of them?

The [ePortfolio](#) is the best way to share with potential employers, faculty and anyone with similar interests what I have accomplished academically and professionally. It is right along the lines of what I did when I first started my recording studio. I made a website and shared some of my history, recordings, and testimonials, and I definitely feel it helped in getting work and inspiring confidence in clients even before they came in. The site itself has deep features and full customize-ability. You can share any file-type and embed from many sites.

The [eMentoring](#) site has been fun, seeing posts about all sorts of interesting engineering related topics. I've asked two professionals to mentor me, and one has already agreed and even given me some advice on my big interest, CAD, that I have not found elsewhere. I think it's a great professional tool for both the student and manufacturer.

There is also the SOS, [Student Online Suite](#), which houses just about any information a student might need to navigate the Community College System, and find help for anything from tutoring to how to excel as an online student. It's very comprehensive and allows us students to find what we need with just a click!

EXTERNAL LINKS

[SOS - STUDENT ONLINE SUITE](#)

[EPORTFOLIOS](#)

[AMPEDNH CONNECT](#)

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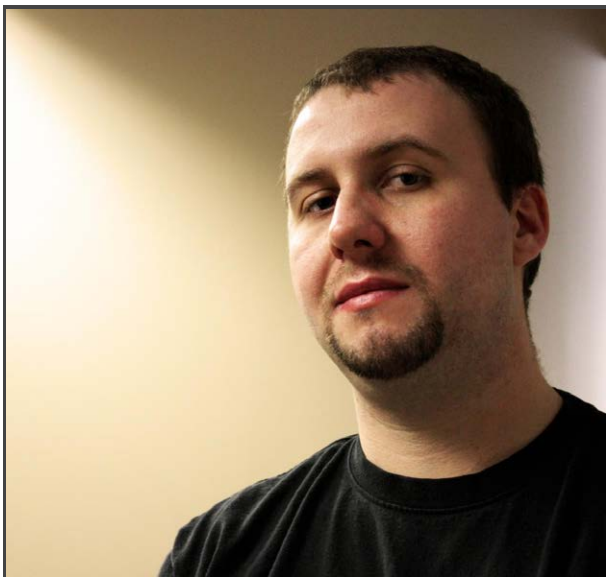




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Student Spotlight: Chris Byron wanted more, and he found it in a 'great career' in advanced manufacturing



Christopher Byron isn't afraid to tell you he dropped out of high school, because you have to know where he started to fully appreciate how far he's come.

Since December 2013, Chris splits his time between his machine shop job at Omni Components in Hudson, a manufacturer of precision machined parts largely for the medical and defense industries, and the lab at [Nashua Community College](#), where he's enrolled in the [Advanced Machine Tool Technology](#) associate degree program and is designated an honors student.

"I was working dead-end jobs," Chris said, when a friend already employed in the precision manufacturing industry suggested he take a leap. Chris found himself on a path to changing his life.

Chris said he immediately took an interest in the high-tech machine shop, but knew he needed the right skills before he'd be allowed to work on the type of modern manufacturing equipment that allows for the creation of full parts, all on one machine, with fewer errors and in less time.

"These automated machines take a lot of human error out of the process, compared to more manual predecessors," Chris said, and at NCC he found he could be trained on the exact same precision turning equipment as he'd be using in his future career.

That future came faster than many might have predicted. Not only do NH's community colleges offer industry-guided and approved advanced manufacturing training on professional-grade equipment in safe and supportive environments, instructors and staff make it a priority to support students in advancing down their career paths.

In Chris' case, NH Advanced Manufacturing Partnerships in Education project coordinator Jon Mason recognized his talent just months into the program and personally arranged an interview for the student with hiring staff at Omni.

"They really liked me," Chris said with a laugh, "and I like the people here. I'm still learning the ropes and I know that, but I love the work and they liked my attitude and enthusiasm."

Chris said the hard and soft skills he's building at NCC definitely gave him the head start he needed to break down the barrier that previously kept him out of the machine shop. His lab training, with a strong emphasis on troubleshooting, problem solving and teamwork, also allowed for an easier transition into this new life, which is exactly where he wanted to be.

Chris sees himself using the skills he continues to build at NCC and Omni to become a machine programmer and perhaps a planning or prototyping manager.

"It's a great career to choose," said Chris. "Manufacturing made this country and people tend to forget that. In manufacturing technology, we are ahead of the game, and we need more young people to fill the changing needs of the industry."

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Alumni Spotlight: Francis Thogo's advanced manufacturing career path winds all the way from Kenya, and he's still going



To say Francis Thogo has come a long way fast is an understatement in the most literal sense of the word.

The May 2013 graduate of [Nashua Community College's Advanced Machine Tool Technology associate degree](#) program came all the way from Kenya in 2008, decided on a career path,

enrolled at NCC and was hired in his chosen industry within a month of completing his program. And he's not stopping here.

"I'm seeing promotion," said the quietly confident 26-year-old laser engraving technician hired by Omni Components in Hudson, a high-tech manufacturer of precisely machined components used in the medical and defense industries, to name just a couple.

Francis said he loves the work he performs in an environment he calls friendly and mentally challenging.

"It's fun when you see parts you make go on to your clients who have global reach," Francis said. "I play a part in this system. (The parts are) out there all over the world, and you know you made them. It's exciting to know we make parts used in the medical field. Actually, it feels great when you start thinking about it."

When he arrived from Kenya in 2008 and began researching career options, he quickly noted a plethora of openings in high-tech manufacturing.

"I had to find high-tech manufacturing training," Francis said, "and NCC had it. I didn't know it would be this fun."

Francis also used the word "challenging" to describe his training at NCC, but that was exactly what he was looking for.

"It's the same challenging and exciting experience you get at a real job," he said, "even down to deadline stress. It's a motivator."

Better yet, the instructors and NH Advanced Manufacturing Partnerships in Education staff actively advise students on the best local career options for them. Francis discovered Omni during a class trip to the production facility.

"I exhausted myself looking around," Francis said. With NCC staff references, interview and resume coaching, and direct networking, "It's being at NCC that got me the job here."

And it's that training and his experience at Omni that are getting him even further down his high-tech, high-pay career path.

Francis is currently enrolled at the University of Massachusetts-Lowell with his sights set on becoming an engineer. While he is just getting started, he said he feels well prepared from his training at NCC and well-supported at Omni, which allows flexible scheduling and provides tuition reimbursement benefits.

And the opportunity he sees also keeps him going.

“There are a lot of options available to CCSNH students in the industry,” Francis said. “And it’s not what many think. It’s good working conditions, it’s a fun time, it’s great pay – and we even get raises based on performance.”



EXTERNAL LINKS

[OMNI COMPONENTS](#)

[PHOTO TOUR OF OMNI COMPONENTS](#)

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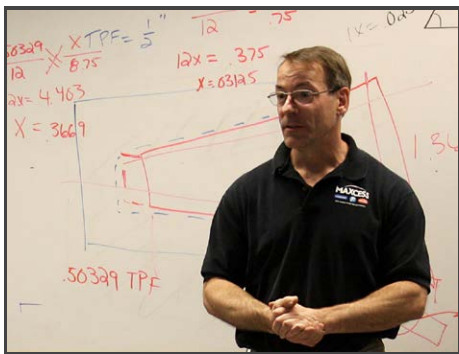
River Valley Community College Machine Tool Boot Camp a recruiting ground for high-tech manufacturers



KEENE — It's a refreshing switch-up, even in today's recovering job market: A room of career seekers listening intently as local employers work to sell them on openings for high-tech, high-pay jobs.

That's how it went down this month during River Valley Community College's second Machine

Tool Boot Camp, an intensive, hands-on introductory course in advanced manufacturing that curriculum designers say “fits an entire college semester of training and education into two weeks.”



The full-time program includes project-based training in blueprint reading; occupational and lab safety; hand tools and bench work; measurement, metrology and inspection; manual machining; manufacturing and materials science; technical mathematics; introduction to computer numerical controlled machining; and geometric dimensioning and tolerancing.

That training was designed with direct industry input to meet the exact needs of advanced manufacturers in New England.

“We want students to finish this program and continue growing,” said RVCC Adjunct Instructor Chris Gray, who leads the Boot Camp. “We want to make them hungry for even more training.”

And that training can evolve to fit changing needs of RVCC industry partners. Nimble adjustments are a hallmark of the college’s growing “manufacturing-driven” offerings.

“We want folks like you to say, ‘I have these jobs open. We need these classes. Go!’” said Gray to the visiting employers, referencing ever-evolving partnerships between college and industry.

Entry-level jobs in advanced manufacturing require levels of skills and knowledge nearly unparalleled in other industries. New hires are expected to recall and retain large amounts of job specific techniques and data, and are called upon to make split-second decisions that could determine the welfare of expensive equipment.

RVCC's Machine Tool Boot Camp provides a learning experience in which the work is consistent and intense. But key – and unique in the industry – is that it also allows for mistakes and learning in a supportive educational environment impossible to achieve on a busy high-tech production floor. Students of RVCC's Boot Camp experience the very real pressures of high precision/high production manufacturing in a setting that is learner-centered, not product-centered.

It's one of dozens of industry approved training, certificate and degree programs created under NH's Advanced Manufacturing Partnerships in Education initiative, made possible by a \$20 million federal Trade Adjustment Assistance Community College and Career Training grant awarded to NH's community colleges by the U.S. Department of Labor's Employment and Training Administration. Each of NH's community colleges offers certificate and degree programs in advanced manufacturing disciplines such as advanced composites manufacturing, advanced welding, electronics and electromechanics, mechatronics and automation/robotics, machine tool technologies, and programming and engineering technologies.

The employer presentations and professional networking session were part of a workforce luncheon. Enthusiasm for the targeted training program was obvious in three visiting companies that are experiencing remarkable growth, yet are struggling to find career candidates with the right skills.

Richard Dennis, HR manager for Sturm Ruger & Co.'s Newport, NH, facility, said the firearms-manufacturing company with sites across the United States, made 2.2 million firearms last year. But more to the point, where it employed 800 in 2010, the most recent employee count has nearly doubled at 1,549.

"It's hard to find people who know what an XYZ axis is," Dennis said, pointing for emphasis to a whiteboard scribbled over in mathematical equations. "Job applicants don't know what they are getting into" in terms of the very technical nature of today's manufacturing techniques.

Dennis said Boot Camp graduates are far more qualified and prepared for that reality. He said it's a great place to start for someone considering a job in the industry. And if a job seeker has already been rejected by his company? Go through the program and – absolutely - apply again, Dennis quipped.

“What would it take for *me* to get a job?” one student tested.

“Here – I’ll give you my business card,” Dennis retorted. “You are coming in with an edge with this program. You’re further in, and that only accelerates your options for further advancement” like management and engineering tracks.

Victor Kissell of Maxcess International, a source for guiding, winding, slitting, inspection & tension control products with facilities worldwide, echoed Dennis’ message of growth and the need to close the workforce skills gap.

“There’s a stigma that this industry is going to China. Way off,” Kissell said. “We are still the No. 1 manufacturing country in the world.”

Kissell described growth that precipitated the joining of forces of Tidland with other advanced manufacturing entities to create Maxcess International. Currently, he said, there are six open positions at the company’s Keene facility alone – and four of them pay about \$60,000 a year.

“But we can’t fill them,” he said, “and it’s due to the skills gap. Only 11 percent of applicants we see can pass ninth-grade level math test. ... But with the right candidates, we could be hiring 15 new people a year.”

That would be 1.5 times the size of the current Boot Camp student body, which runs the gamut from late 20s to 60s, male and female, employed and unemployed. RVCC works with state workforce development and unemployment agencies, as well as the Veterans Administration, to ensure training and education needs are met for those populations.

The good news, Kissell said, is that RVCC students are jumping that skills gap, and those who work for Maxcess, likely would be sent back to RVCC for additional training through apprenticeship partnerships the company is forming with the college.

“This is just the beginning. This is a high-paying, lively career choice with a future. These are the jobs that will enable you to buy a new car, a new house – and improve your life,” said the manager who expects to lose 20% of his workforce in coming years, leaving openings in upper level positions.

“Across America, we have an aging workforce. We need more of you to take courses like this and have the drive to move forward.”

The employers affirmed the effectiveness of these types of education and professional partnerships as key to the continued growth of the state’s largest industry.

“We’re so busy it’s hard to even stop to think of the future,” Dennis said. “But this will certainly lead to quicker advancement. We’re very excited about Boot Camp because sourcing is very difficult. Now you’re saying we can fill these positions with skilled people?! Wow. This isn’t a dream. This is for real.”

And it’s a necessary reality, he said. “I can see these partnerships as the future of our industry. We have to become more involved in terms of training and development to stay competitive.”

Also attending the luncheon were Chris Wellington of NH’s Department of Resources and Economic Development, and David Hansel of Filtrine, which provides custom engineering solutions

for drinking water or process applications.

The next Machine Tool Boot Camp by RVCC will be held in March. To register or to learn more, email [AMPed NH Project Coordinator Bob Stillings](#). Learn more about education opportunities at all NH community colleges with [AMPed NH](#).



In photos, top to bottom: 1. Richard Dennis, HR manager at Sturm Ruger & Co's Newport, NH, facility, speaks to River Valley Community College Machine Tool Boot Camp students. 2. Boot Camp students ask about opportunities for accelerated promotion due to their advanced manufacturing training. 3. Victor Kissell of Maxcess International talks about the skills gap that plagues hiring managers at high-tech manufacturing companies. 4. RVCC Adjunct Instructor Chris Gray instructs students on basic CNC machining techniques.

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[MAXCESS INTERNATIONAL](#)

STURM RUGER & CO.

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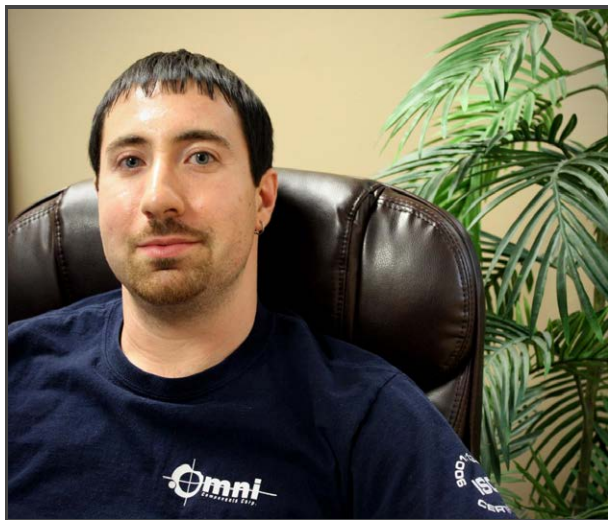




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Student Spotlight: Alex Sargent's got two CNC certificates and a great job. So why's he back at college?



One could say Alex Sargent is no longer a rookie at [Omni Components](#) in Hudson. The [Nashua Community College](#) alumnus earned his [computer-numerical control](#) and [machine tool technology/CNC programming](#) certificates about three years ago and found himself employed

within about five months of completion.

Alex, who decided he wanted more for himself while working a job at a foundry, has carried that spirit of “more” through into his professional life, and with the encouragement and support of his employer, he’s now back in classes at NCC, this time on a mechanical engineering track.

The 5-axis CNC setup operator said it was the “nasty work” at the foundry that inspired him to want better for himself, and he’s certainly found it at Omni. Not only is his work clean and the equipment top-of-the-line, but his mind is challenged daily, too.

“I love creating new parts,” Alex says of the products made at Omni. The company specializes in highly precise machined parts for the medical and defense industries, among others. “Not only is it selecting the perfect tool for the job or programming high-tech machines – I love seeing the finished product and knowing I’m helping people in some way.”

With a smile on his face, Alex recounts a memory of a time his grandmother had back surgery.

“I was looking at the medical components used in that type of surgery,” Alex said, “and I’m thinking, ‘Hm. That looks familiar.’”

Alex said his hands-on CNC training at NCC prepared him well for a working environment in which the products he makes literally impact the lives and health of consumers all around him. He said the programming skills he obtained were the most useful, as they gave him a wider understanding of the science behind the manufacturing and let him build a great respect for the efficiency allowed by today’s cutting-edge technology.

Omni supports its employees who choose to continue their education. Advancing career paths is a priority for the company, which offers a healthy tuition-reimbursement package and flexible scheduling to accommodate academic and training needs.

“We want people with engineering skills, and we want them to continue to grow,” said Suzanna Rose, HR director. “We actively develop continuous improvement plans.”

And a strong foundation in CNC machining is a great place to start, she and Alex agreed, and they recommend doing just as Alex did and starting at a community college that offers industry-guided and approved advanced manufacturing programs, then letting the employer help fund continued education.

“It wasn’t easy to go back,” balancing full-time work and an academic calendar, Alex said, “but it’ll pay off in the long run. I’m creating a better life for myself. I can afford more. I’m not getting dirty every day.”

And as you can see, said the employee who was scooped up shortly after program completion and now sees the sky as the limit: “New technology and new skills are definitely in demand. By staying ahead of the curve and continuing my education and training, the future’s good.”



EXTERNAL LINKS

[OMNI COMPONENTS](#)

[OMNI COMPONENTS PHOTO TOUR](#)

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MANUFACTURING MATTERS MONTHLY

Education | Skills | Technology | Industry | Careers | Success | Growth

Baron Machine of Laconia excited about potential for new manufacturing programs at local community college

The challenge? Over the last two decades, manufacturing in New Hampshire has morphed into a high-tech economic giant, but the science, technology, engineering and mathematics skills of job seekers have not kept up, hiring managers say. And they need help.

That's where the Community College System of NH, under the Trade Adjustment Assistance Community College and Career Training grant, has stepped in. Working in partnership with advanced manufacturers, each of the system's colleges is expanding or developing new advanced manufacturing labs, equipment and curricula to directly meet the needs of the industry. Focus areas include advanced materials and composites, advanced machine tools, precision welding, mechatronics and robotics, precision manufacturing, automation and process control, and energy, processes and controls.

"It is clear from our research that manufacturing, together with high technology, drives New Hampshire's economy," wrote NHCPPS officials. Lakes Region Community College and its partners in advanced manufacturing aim to keep it that way.

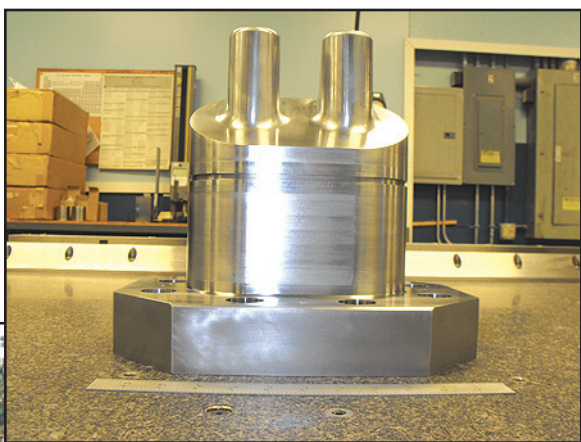
Baron Machine was established in 1957 and is located on Primrose Dr. in Laconia. With 48 employees, it manufactures components and fabrications for the food, medical, aerospace, defense and commercial industries. In fact, you can find Baron products in satellites, solar panels, military helicopters and jet fighters.

With "concept to completion" manufacturing capabilities, Baron's range of operations is impressive. But so is its range of products, which can range in size from a quarter-inch in diameter to more than 30 feet in length and 10,000 pounds.

Here, we meet Jeremy Baron, vice president of Baron Machine in Laconia.

Q: Describe a product you manufacture and the effect it has on consumers' lives.

A: We manufacture the main components for



luggage scanning equipment for a very large company. These are in most of the major airports around the country, and greatly improve the safety of millions of air travelers daily.

Q: What does the future have in store for the Baron workforce?

A: We are seeing a steady growth opportunity over the next five years. I would like to think that we will be able to hire 2-5 new employees per year for the next 2-3 years. The challenges that we face are finding employees with a decent knowledge of the machine tool trade. We are willing to train, but we require some experience up front.

Q: How have you partnered with Lakes Region Community College to help build the workforce?

A: I can't begin to explain how excited we are about the potential that LRCC is bringing to the area with the new manufacturing programs. I feel that it will have a direct impact on Baron Machine in that LRCC will be pouring young, interested and - most importantly — educated potential lifetime employees into the community.

Q: Who should choose a career in advanced manufacturing in New Hampshire?

A: Anyone who likes seeing their accomplishments come to life before their eyes. One can achieve a great feeling of self worth from taking a drawing or CAD file, creating a program and machining a complete component out of a raw piece of material. To anyone hesitant about the industry, I would simply say this: Stop by and take a look at our facility. The industry has a stigma of being a dirty, dangerous trade with low pay. Actually, it is quite the opposite; we offer a clean, safe working environment with a very aggressive pay scale.

To learn about advanced manufacturing training and academic programs at Lakes Region Community College, email TAACCCT project coordinator Don Brough at dbrough@ccsnh.edu. To learn more about CCSNH advancements under the TAACCCT grant, e-mail marketing coordinator Desiree Crossley at dcrossley@ccsnh.edu. To learn more about Baron Machine, email jeremyb@baronmachine.com. AMPed NH is sponsored by a \$19.97 million grant from the U.S. Department of Labor, Employment & Training Administration TAACCCT Grant #TC-22504-11-60-A-33. The Community College System of NH is an equal opportunity employer, and adaptive equipment is available upon request to persons with disabilities.

Baron Machine photos



Bank NH group takes day trip to Seacoast

LACONIA — Bank of New Hampshire Prestige Plus members visited Stonewall Kitchen's state-of-the-art Cooking School classroom in York, Maine.

While there, they watched a cooking demonstration by Guest Chef George Kando at the cooking school and enjoyed the finished holiday meal. After lunch the group shopped in the Stonewall Kitchen Store and completed the day with holiday shopping in Historic Portsmouth.

Bank of New Hampshire's Prestige Plus program has sponsored day trips, seminars and world travel for 24 years. For more information, call 1-800-832-0912 or visit www.BankNH.com.



Bank of New Hampshire Prestige Plus Members Charlene and Peter Fijalkowski and Patricia and Dick Castrucci, visited Stonewall Kitchen's state-of-the-art Cooking School classroom in York, Maine. (Courtesy photo)

Snowstorm slows effort to get power restored

GARDINER, Maine (AP) — Snow fell Thursday in places still hustling to get power back on after a weekend ice storm that turned out the lights from Michigan to Maine and into Canada.

Eastern Maine and parts of the state's interior that have been without electricity since Sunday anticipated 3 to 7 inches of snow by the time the latest system pushed off the coast Thursday night. Utilities worried that the additional weight on branches and transmission lines could cause setbacks in the around-the-clock efforts to restore power.

"We don't think it's going to help us much, that's for sure," said Susan Faloon, a spokeswoman for Bangor Hydro Electric in Maine. "There was some concern expressed over the last couple of days about that storm coming because obviously we still have lot of stuff weighing down trees and lines.

"The system is pretty compromised out there," she said. "We expect we will have more outages."

Maine reported more than 21,000 customers still out, down from a high of more than 106,000.

from preceding page

is required. More information is available at www.watervillevalley.org/Recreation.html.

Start your celebration early with Starry Nights on Saturday — gourmet dining mountainside around a fire inside the Sunnyside Timberlodge. Guests will enjoy the stars as they ride up the Valley Run Quad then ski or ride to the Sunnyside Timberlodge along a torch lit trail. Book by calling Therese at 603-236-8311 ext. 3000.

For more information, call 1-800-GO-VALLEY or visit www.visitwatervillevalley.com and www.waterville.com.



Let's Advance.

News and Events

Hop aboard! It's a cutting-edge welding technology lab – and it's on wheels



We are excited to unveil our new mobile teaching space, which brings high-tech welding training to you!

At 48 feet in length, it offers six welding booths, plus a virtual unit for an immersive 3-D teaching environment, classroom space and more.

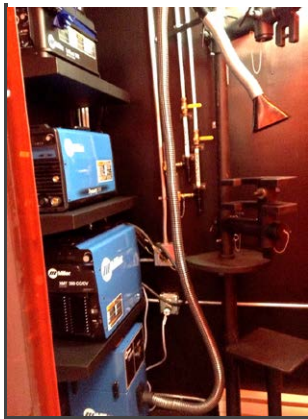
More about the mobile advanced welding lab



The trailer unit will be towed by a 1-ton pickup

- *It features an awning-covered area for external work, including two worktables and power for hand tools and a plasma cutter.*
- *It is completely energy self-sufficient, with a 60kW diesel generator and air compressor.*
- *The mobile lab's welding booths include the following:*
 - *Full Miller Welding setup with an XMT350 and suitcase wire feeder*
 - *Two shielding gasses hardpiped from a manifold at the back*
 - *Localized extraction via a Miller Filtair unit*
 - *A welding stand, curtains, stool and compressed air*
 - *Two booths have Miller Dynasty 200's and one has an XMT350 MPa*
- *The lab offers a classroom with the following equipment*
 - *Lincoln VRTEX360 Virtual Welder*
 - *40-inch flat screen TV*
 - *Fold-up counter*
 - *Available 110V power for using laptop computers*

Deployment

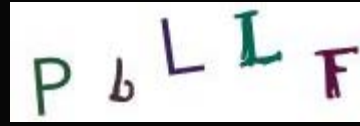


White Mountains Community College is planning a noncredit 48-hour Introduction to MIG/Production Welding course for the spring and is planning some promotional visits. In addition, a credit-bearing offering will be offered in Littleton in the future. Contact [John Holt](#) for more information.

Reach out to the colleges of your choice.

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Let's Advance.

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Lakes Region Community College welcomes two new advanced manufacturing instructors

Welcome Ken Martin and Michael LaBrecque!

LRCC's newest advanced manufacturing program instructors will start in the spring semester.

Martin, teacher and manager of the four-year Manufacturing Engineering Technology Program at Laconia High School's Huot Technical Center, will lead LRCC's Blueprint Reading/Solid Modeling course.

LaBrecque, longtime machinist and tool & die professional with Watts Water Technology in Franklin, NH, will lead CNC Machine 1 & 2 courses.

Learn more about Lakes Region Community College's advanced manufacturing training and education programs [here](#).

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Machine Tool Boot Camp: How you can get ready for an advanced manufacturing career
- fast



Even entry-level jobs in advanced manufacturing require very high-tech skills.

New hires are expected to perform specific techniques and retain large amounts of data and must make split-second decisions that can determine the welfare of expensive and often delicate equipment.

Training for these careers must be immediate, consistent and intense but also allow for mistakes and learning in a supportive environment. River Valley Community College's Machine Tool Boot Camp model has been developed to provide such an environment. Combining a strong academic/theoretical component with a “high-touch” experiential learning pedagogy, new hires

will experience the pressures of high precision/high production manufacturing in a setting that is learner-centered rather than product-centered.

The last Boot Camp, RVCC's first, saw three students hired immediately after the program.

The instructor for January's class is Chris Gray, who is an assistant professor at Keene State College.

UPDATE: River Valley Community College's second Machine Tool Boot Camp is full for the Jan. 6-17 term. Learn more about future Boot Camps and other RVCC advanced manufacturing offerings by emailing [Kelly Roe](#).



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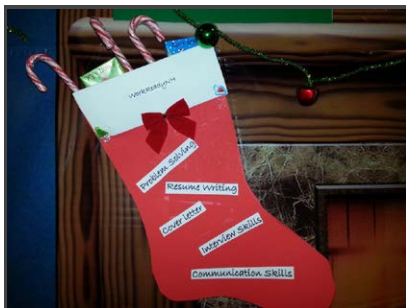




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How spreading the word about tuition-free workforce training via WorkReadyNH helps you!



Our holiday wish at WorkReadyNH centers at New Hampshire's community colleges is to spread the word about WorkReadyNH to more people across the Granite State.

Let's get the word out to job-seekers and career builders about this tuition-free program that improves **both hard and soft workplace skills** so participants can land the perfect job for them.

We also want to spread the word to working professionals about the many benefits of hiring WRNH graduates, who can earn a nationally recognized **career readiness certificate**, which according to **ACT**, "is a portable credential that demonstrates achievement and a certain level of workplace employability skills in applied mathematics, locating information and reading for information." But that's not all. Students can also earn a community college certificate that covers soft skills such as teamwork, discipline, customer service and management skills!

These certifications benefit both job seekers and employers seeking skilled workers.

One business that recognizes the value of WorkReadyNH is [Santander Bank](#), which recently visited the WorkReadyNH Class at Nashua Community College.



Santander Bank is a Spanish National Bank that bought Sovereign Bank. Maurice Kolthof, vice president; Chaunte Hines, personal banking representative; and Karen Miller, Nashua branch manager, spoke to the WorkReadyNH class at Nashua Community College about interviews, resume writing and careers in banking.

Please invite your friends and colleagues to "like" our [page](#) so we can hit our New Year goal of 200 "likes."

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'Twas the Night after Class - An advanced manufacturing student networking story



'Twas the night after class, while I sat in my house
without motivation to get off the couch.

As I read my course textbook I had an idea
for an advanced manufacturing career!

But where do I start? What tools do I need?

I wish I had someone's trusted advice to heed.

So I got on the computer and started Googling away,
trying to find someone with something to say,
and then I remembered something available to me:

It was [AMPedNH Connect](#) – an online community!

It was a place I could find people with career advice,
and rest assured they would be professional and nice!

So I logged right in and started connecting with them,
and even found some of my fellow student friends!

Everyone had so much wisdom and experience to share,

I felt so lucky to know there were people who cared!

So after I found answers to the questions I asked

and bragged about the technical test I had just passed,

a mentor of mine asked if I was looking to be employed,

and I answered, “YES!” — totally overjoyed!

So I am glad I spent time in the [AMPedNH Connect](#) community,

because if I hadn't, I may have missed this opportunity!



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Rewarding CNC teaching jobs available with AMPed NH

Do you have expertise in CNC technology?

How about in advanced composites manufacturing?

Do you enjoy sharing your knowledge with others?

Instructors are needed NOW to teach advanced manufacturing courses throughout the Community College System of New Hampshire. [Contact your local college for more information.](#)

"A teacher affects eternity; he can never tell where his influence stops." — Henry Adams Read

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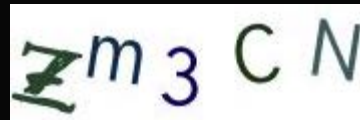
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Let's Advance.

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Six FUN ways to promote advanced manufacturing careers - for FREE

Help us promote advanced manufacturing career paths!

Free posters are available to hang in high-traffic areas to promote advanced manufacturing career paths in advanced composites, precision welding, electronics, programming & engineering, mechatronics and automation/robotics and advanced machine tool technologies.

View posters at the link to your right and send requests for desired designs to Desiree Crossley at dcrossley@ccsnh.edu

FILE ATTACHMENTS

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Let's Advance.

News and Events

ATAC's first advanced composites students receive interviews, high-tech job offers; how you can, too

ROCHESTER — Each of the first students to successfully complete the Advanced Composites Manufacturing Certificate program at Great Bay Community College's Advanced Technology & Academic Center in Rochester has received interviews with area manufacturers, such as Safran Aerospace Composites and SIG Sauer.

Better yet, several have also already been hired in their field.

On Dec. 18, the students gathered with instructors, family, members of the college community and other invited guests at ATAC for a private reception to celebrate their completion of the six-month program and their new preparedness for jobs in the high-growth field of advanced composites manufacturing. The program, which began in June of this year, offers a combined curriculum of practical classroom training and hands-on lab experience. Training is structured around a six-month tiered model where at the end of the six months, full-time students earn a certificate in Composites Manufacturing and are qualified for positions as high level machine-operators with options for continuing on to roll program credits into an associate degree in

Technical Studies.

Excerpts from the [Union Leader](#) (photos by Desiree Crossley):



After working for the past 30 years, Lino D'Andreti, 55, of Exeter (at podium), said returning to the classroom was a big change.

D'Andreti, who had been unemployed for a sales position in the electronics industry for more than a year, said he decided to enroll in the program after spotting a flier. "I was always driven to learn new things," D'Andreti said, adding age is no obstacle to initiative. "It's all in the mindset."

D'Andreti said he's excited to start working as a composites inspector — the field he focused on for the past eight weeks — at the new Safran plant in Rochester on Jan. 6.



Fellow graduate, Evan Doyon (center, gray shirt), 20, of Durham, who previously worked at Coyote Creek in Rochester, is also excited to begin at Safran next year as a computer numerical control operator. Doyon said the program, which required balance and motivation for the past six months, was challenging for all. "It got me where I needed to be," Doyon said.

ATAC is the largest single project under the statewide Advanced Manufacturing Partnership in Education initiative, formed by the Community College System of New Hampshire under the

\$20M federal Trade Adjustment Assistance and Community College Career Training grant.

The center's lab houses the newest equipment for high tech composites manufacturing, including an autoclave, resin-transfer-molding press, curing oven, a 3-D weaving loom (coming soon), a full range of CAD, CAM, CNC and CMM equipment, as well as other commonly recognized equipment used in manufacturing facilities.

Registration is now open for the spring semester for both traditional academic courses (starting Jan. 21) and the Advanced Manufacturing program courses beginning on Feb. 24. For more information, students can contact Jeff Pruyne, Enrollment & Outreach Counselor at 1-800-522-1194 or email: jpruyne@ccsnh.edu. Great Bay Community College will also be hosting an Open House at ATAC on Thursday, Jan. 16 from 4:30 to 7 p.m. for anyone interested in learning more about the ACM program or other course offerings.



EXTERNAL LINKS

- [FOSTER'S DAILY DEMOCRAT - ADVANCED COMPOSITES STUDENTS INTERVIEW](#)
- [UNION LEADER - CHRISTMAS COMES EARLY FOR GREAT BAY GRADUATES](#)

Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

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Manchester
Nashua
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Let's Advance.

News and Events

How more NH students are saving thousands - think \$26,000 - on their education

Easy transfers from community college to four-year universities can save big!

Excerpt from [NHPR](#): Twenty-six thousand dollars. That's about how much students can save by going to a community college for two years, then transferring to a four-year school. Not including financial aid or room and meals.

Those \$26,000 are changing the plans of more and more students in New Hampshire. And that's good news for students, and possibly for the University System at large.

Since 2007, the number of students transferring from community colleges into the state's university system increased by 57 percent. That number has been growing steadily in part because of a simplified transfer agreement between the state's Community College and University Systems, which got underway in 2009.

New Hampshire is one of the first states in the nation to have such a broad transfer agreement. Erica Brown, the career and transfer coordinator at Great Bay Community College, helped spearhead the new process. She says the new application doesn't require an essay, SAT scores, or an application fee. Now, New Hampshire community college students are guaranteed admission to one of the state's four-year schools. They just need a certain number of completed credits, and a certain GPA.

Partnerships with high schools ease transition

Excerpt from [Concord Monitor](#): Through a new partnership with 16 high schools, the Community College System of New Hampshire is aiming to increase matriculation by 25 percent over the next three years. This project, called the Partnership Initiative, seeks to better educate high school students and their parents about the value of attending a two-year college, either as the precursor to a career or a four-year bachelor's degree.

Another goal is to increase participation in the Running Start program, which allows high school students to take courses for college and high school credit. Participating high schools include Concord, four schools in Manchester, Kearsarge Regional, Laconia and Dover. Representatives from the community college system are starting the initiative by reaching out to school leaders, including administrators, school boards and principals. Each participating high school will then create a leadership team tasked with finding ways to educate students about the community college system. Projects could include hosting college fairs with information about the community college system and financial aid information sessions for parents.

Members of the community college system attended Concord's school board meeting this week, and will hold similar meetings with other boards. The purpose of the meetings is to present information on the value of a community college education, programs offered, possible career opportunities and transfer pathways, as well as campus features and student life.

The Running Start program allows high school students to take courses that will give them credit toward high school graduation and college. The goal of this initiative is to increase enrollment. For \$150 a course, students can save future costs and streamline their college pathway.



EXTERNAL LINKS

[HTTP://BIT.LY/18WZJQC](http://bit.ly/18WZJQC)

[HTTP://GOO.GL/CRRJAZ](http://goo.gl/CRRJAZ)

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Let's Advance.

News and Events

Lakes Region Community College to hold 1st LRCC SPEEKS event - TED-talk style

Mark your calendars for Friday, December 13!

Lakes Region Community College's new student-run organization, S.P.E.E.K.S., is hosting its first conference and the lineup of speakers is sure to provide an interesting evening. The event runs from 6 to 9 p.m. and is free of charge. Appetizers Provided. Refreshments available for purchase.

Speakers:

- *Robin Chase, founder and CEO of Buzzcar, a service that brings together car owners and drivers in a car sharing marketplace.*
- *Jack Bernard, a Vietnam veteran, who will share lessons learned as an Army Ranger*
- *Professor Scott Cracraft, who will share his experiences in South America*
- *Rob McCoul, an integrative therapist in Gilford, who will speak about Mindfulness*
- *Professor Wes Golomb, who will share songs by "Gerry and the Atrics"*
- *Dr. Rick Pollak, a Concord family doctor and hospice medical director, who will speak on "Healthcare Quality"*

- *Shana Aisenberg, musician and writer, who will speak about her life experiences including transitioning gender.*

Seating is limited, so reservations are recommended. Call 722-0622.

LRCC S.P.E.E.K.S.

Scholarly People Educating and Encouraging Knowledge for Society

We are a student run organization at Lakes Region Community College in Laconia, NH. Our mission is to spread information and knowledge throughout the community by creating and sponsoring speaker based events meant to incite conversation and interest on a variety of informational and creative topics.


The leadership of LRCC S.P.E.E.K.S. would like to thank the L.R.C.C. Student Senate for their support, Kim Briley for the President, Dr. Larissa Riba and Professor Jay Pflue for the Advisor.

Another thank you goes out to President Scott Kalkicki and Vice President Tom Gaudin for their support as well as for allowing us to use the beautiful Academic Commons.

S.P.E.E.K.S. would also like to extend a special thank you to Brad Pollak and Tom Bantz, our advisors, for their support and continued efforts in adding us to its organizing both our thoughts and this event.

President- Brad Currier
Vice-President- Ariana Marcella
Secretary/Treasurer- Brad Bechard

Brandon, Ariana, and Bradley are majoring in Early Childhood Education, Business, and Liberal Arts respectively.




Lakes Region Community College
 179 Belknap Road
 Laconia, NH 03246
 Phone: (603) 428-3133

LRCC S.P.E.E.K.S.

First Semi-Annual Fall Conference

December 13th, 2013
 6-9 pm
 LRCC Academic Commons

Admission is free
 Seating is limited
 For reservations call 722-0622
 Appetizers Provided
 Refreshments available for purchase



LRCC S.P.E.E.K.S. Fall Conference

LRCC S.P.E.E.K.S. will be hosting its first Conference on Friday, December 13, 2013, from 6-9 pm.

Presentation Schedule:

6:00 p.m. Robin Chase
 6:20 p.m. Prof. Scott Cracraft
 6:40 p.m. Jack Bernard
 7:00 p.m. Discussion and Speaker Questions
 7:20 p.m. Intermission
 7:40 p.m. Prof. Wes Golomb
 8:00 p.m. Shana Aisenberg
 8:20 p.m. Dr. Rick Pollak
 8:40 p.m. Dr. Rob McCoul
 9:00 p.m. Discussion and Speaker Questions

Speakers:

Robin Chase: Robin Chase is founder and CEO of Buzzcar, a service that brings together car owners and drivers in a car sharing marketplace. Robin is also founder and former CEO of Zipcar, the largest car sharing company in the world, and Goloco, an online ride sharing community. In 2009, she was selected by Time magazine as one of the world's 100 most influential people.

Jack Bernard: "Vietnam – The Lessons I learned as an Army Ranger"
 Jack served in the Special Forces for 3 years of duty in Vietnam. He has lived in N.H. for the past 37 years and on the staff at LRCC.

Scott Cracraft: "The 1973 Chilean Coup and Human Rights"
 Scott is a frequent traveler to South America, especially to Chile. He has long been interested in human rights in that region. Scott brings his personal knowledge of the region to his presentation. Professor Cracraft teaches history and Anthropology at LRCC.

Robin Chase - Keynote Speaker




Rob McCoul, DVM: "Mindfulness 101"
 Rob is an integrative therapist in Gilford utilizing a variety of modalities including Acceptance and Commitment Therapy, CBT, and Mindfulness.

Wes Golomb: Songs by "Gerry and the Altos"
 Wes is a professor of energy services at LRCC. He was one of the founders of N.H. Energy Efficiency and Sustainable Energy Board and serves on the board of the N.H. Sustainable Energy Association. Wes is the "Weird Al Yankovic of N.H."

Rick Pollak, MD MPH: "Healthcare Quality - A Case of the Measureable Displacing the Important"
 Rick is a Concord family doctor and hospice medical director who has consulted on quality assessment with various medical practices and insurance companies around the state.

Shana Aisenberg: "Both Sides Now: A Transgender Journey"
 Shana Aisenberg is an acoustic musician, composer, songwriter and writer who lives in the Lakes Region of NH. Her life experiences include transitioning gender, three times. Shana is enjoying her return to being a red head. You can find Shana on the web at: <http://shanasong.com/>





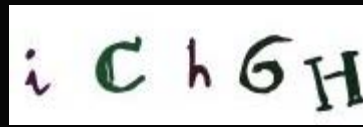

EXTERNAL LINKS

[HTTP://WWW.LRCC.EDU/ABOUT-LRCC/CAMPUS-NEWS/LRCC-SPEEKS](http://www.lrcc.edu/about-lrcc/campus-news/lrcc-speeks)

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Let's Advance.

News and Events

LRCC's Keith Fletcher aims to expand advanced manufacturing programs



Lakes Region Community College's new Electrical and Advanced Manufacturing programs Department Chair Keith Fletcher of Belmont (above) is assuming responsibility for LRCC's Electrical Systems Installation and Maintenance and Electrical Power and Control Technologies programs as well as LRCC's activity under the statewide Advanced Manufacturing Partnerships in Education statewide initiative.

“I look forward to the new responsibilities and challenges of developing further the ESIM and EPCT programs that are so well-known throughout New England,” says Fletcher, a 1990 LRCC EPCT honors graduate who worked in the electrical industry for 18 years before returning to the college as a professor. “LRCC’s new AM program has massive community support from business and industry, and it will be exciting to see it expand.”

Fletcher, along with LRCC Social Sciences Professor Dave Pollak, received one of the first-ever Chancellor’s Community College Innovation Fund Awards in January 2013 to generate interest in and promote awareness of renewable energy sources and energy efficiency.

For additional information about ESIM, EPCT, and AM programs, contact LRCC’s Admissions Department at (603) 524-3207 x6766 or visit www.lrcc.edu.

Lakes Region Community College is a fully accredited, comprehensive community college located in the Lakes Region of New Hampshire that serves over 1,200 students annually. LRCC offers 23 associate degree programs including Nursing, Fire Technology, Energy Services, Media Arts, Culinary Arts, Automotive, and Marine Technology, as well as short-term certificate programs. In addition, LRCC provides a strong background in Liberal Arts for students who choose to do their first two years at a community college and then transfer to a four-year college or university for a baccalaureate degree. LRCC is part of the Community College System of New Hampshire.

AMPed NH is funded by a \$20M federal Trade Adjustment Assistance Community College and Career Training grant from the U.S. DOL Employment and Training Administration. CCSNH is an equal opportunity employer and adaptive equipment is available upon request to those with disabilities.



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Let's Advance.

News and Events

NHESGR Guest Blog: 5 reasons military veterans should choose a career path in advanced manufacturing



Submitted by Johanna Brown, Deputy Public Affairs, NH Employer Support of the Guard and Reserve

Veterans currently face a higher than average rate of unemployment and oftentimes that is due to difficulty translating their skill sets to the civilian employment market. Yet these very same skill sets are what's required to be successful in the advanced manufacturing career field.

Five reasons military veterans and high-tech manufacturing careers are a good match

1. Global perspective - Military veterans have a view of world events and how important an understanding of the local economy and manufacturing needs can be in implementing change.
2. Can-do attitude and advanced technical skills - Military veterans possess critical skills and understand that nothing is impossible - key traits in approaching new manufacturing procedures required in a quickly evolving high-tech manufacturing environment.
3. Understanding diversity - Military veterans can be very successful in a very diverse workplace.
4. Responsibility - Military veterans approach learning and tasks with the ability to make decisions and meet deadlines.
5. Professionalism and leadership - Key components of any successful endeavor, military veterans have both in spades. They have a high degree of integrity and self-respect and are excellent leaders and followers - loyal, dedicated and highly motivated.

EXTERNAL LINKS

[**NH VETERANS' RESOURCE GUIDE**](#)

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Certificate Program

Applied Career Fundamentals for Advanced Manufacturing

December 2013 Update

NH's community colleges offer a certificate program designed to fill the high-tech skills gap identified by manufacturing industry leaders. The program will provide the skills you need for an entry level position in advanced manufacturing. For a limited time, new enrollees can take their first course tuition free.

Where is the certificate program offered?

The full ACFAM Certificate program is currently available at all of New Hampshire's community colleges: Great Bay Community College, Lakes Region Community College, Manchester Community College, Nashua Community College, NHTI, River Valley Community College and White Mountains Community College.

Will the courses be exactly the same at all seven colleges?

The courses may be different at each college but will meet the competency requirements. Courses will have the same content such as composition, business, computer applications and communication but may have different titles and numbers. The science and math course will be based on what is applicable to the Advanced Manufacturing Associate Degree programs at individual colleges.

Will courses within the certificate program transfer between colleges?

Yes. Credit for the courses will transfer between 7 colleges for the certificate. The

courses may transfer into an associate degree program.

In what formats will courses be offered?

The courses within the certificate will be offered in 8-week terms to address the immediate workforce needs and shorten time to completion. Courses may be offered in online, hybrid or classroom formats.

What are the education requirements?

Students who wish to pursue any certificate or degree program must have a high school diploma or equivalent.

REQUIRED COURSES

6

General education

2

Manufacturing electives

General education courses include business, computer applications, communications, English, math and science. Manufacturing elective choices are unique to each college.

COURSES OFFERED TUITION FREE

Some courses within the Applied Career Fundamentals for Advanced Manufacturing certificate program will be offered tuition free for a limited time to students who qualify.

What courses will be offered tuition free?

Please call your college of choice or visit

www.ampednh.com/acfam

to confirm tuition-free course availability.



TO LEARN MORE

Please call the person listed as the contact for your college of choice.

GBCC

Jeff Pruyne

jpruyne@ccsnh.edu

1.800.522.1194

LRCC

Don Brough

dbrough@ccsnh.edu

603.524.3207 x6601

MCC

Phil Przybyszewski

pprzybyszewski@ccsnh.edu

603.206.8185

Ken LaRocque

klarocque@ccsnh.edu

603.206-8188

NCC

Pat Klein

pklein@ccsnh.edu

603.578.6817

Jon Mason

jmason@ccsnh.edu

603.882.6923 x1763

Jan Sullivan Curtis

jcurtis@ccsnh.edu

603.578.8969

Lisa Yorio

lyorio@ccsnh.edu

603.578.8987

Lila Valdez

lvaldez@ccsnh.edu

603.578.8985

Elaine Casperson

ecasperson@ccsnh.edu

603.578.8906

NHTI

Lynn Szymanski

lszymanski@ccsnh.edu

603.230.4000 x4139

RVCC

Robert Stillings

rstillings@ccsnh.edu

603.357.1948

WMCC

John Holt

jholt@ccsnh.edu

603.369.7075

GENERAL PROGRAM QUESTIONS

JoEllen Space, director of online programs

jspace@ccsnh.edu

603.230.3500 x7087



AMPed NH is sponsored by a \$19.97 million grant from the U.S. Department of Labor, Employment & Training Administration TAACCT Grant #TC-22504-11-60-A-33. The Community College System of NH is an equal opportunity employer, and adaptive equipment is available upon request to persons with disabilities.

When do the tuition free courses begin?

Tuition-free courses will be offered in two 8-week sessions in Spring and Summer terms, and one 8-week session in Fall of 2014 by all seven colleges.

Who is eligible to take a free course?

Participants must be first-time students, 18 years old, and employed in manufacturing or have a strong interest in manufacturing.

Will students be responsible for the costs of typical fees and/or books?

Please check with your college of choice to determine if you will be expected to pay for any applicable fees, such as admission, registration and textbook costs.



Certificate Program

Applied Career Fundamentals for Advanced Manufacturing

The Community College System of New Hampshire, through its Advanced Manufacturing Partnerships in Education initiative, announces a new certificate program designed to fill the high-tech skills gap identified by New Hampshire manufacturing industry leaders. The ACFAM Certificate program will provide the skills you need for an entry level position in advanced manufacturing. For a limited time, new program enrollees can take their first course tuition free.*

Beginning in January 2014, the following courses will be offered for **FREE** to new eligible CCSNH students who enroll in the ACFAM Certificate program:

College	Tuition-free course(s)	Format	To learn more
GBCC	Intro to Business Intro to Computers	Campus Hybrid	Jeff Pruyne jpruyne@ccsnh.edu 603.427.7770
LRCC	College Composition	Classroom	Don Brough dbrough@ccsnh.edu 603.524.3207 x6601
MCC	Intro to Business PC Applications	Hybrid Hybrid	Phil Przybyszewski pprzybyszewski@ccsnh.edu 603.206.8185 Ken LaRocque klarocque@ccsnh.edu 603.206.8188
NCC	Introduction to Business Computer Tech & Apps	Online Online	Jon Mason jmason@ccsnh.edu 603.882.6923 x1763
NHTI	PC Applications	Online	Lynn Szymanski lszymanski@ccsnh.edu 603.230.4000 x4139
RVCC	To Be Announced	TBA	Robert Stillings rstillings@ccsnh.edu 603.357.1948
WMCC	Software Applications	Online	John Holt jholt@ccsnh.edu 603.369.7075

Online: 100% online, access to a computer, Internet and microphone required. There may be real-time online chat/webinars as a requirement.

Hybrid: Requires few on-campus meetings, there will likely be a strong online component. Access to a computer, Internet and microphone is necessary.

Classroom: The class will meet on campus at designated times.
Numerous student success supports are available

*Please contact your college's Admissions Office for the most up-to-date information. Admission, registration and textbook fees may apply. To be eligible, you must be at least 18 years old, and must be employed in or possess a strong interest in entering the advanced manufacturing workforce.

AMPedNH is sponsored by a \$19.97 million grant from the U.S. Department of Labor, Employment & Training Administration TAACCCT Grant #TC-22504-11-60-A-33. The Community College System of NH is an equal opportunity employer, and adaptive equipment is available upon request to persons with disabilities.



Let's Advance.

News and Events

AMPed NH outreach campaign for ATAC advanced manufacturing programs wins award

PORTSMOUTH — Saltwater Integrated Creative Agency won a Summit Marketing Effectiveness Award in the category of Education Marketing for its campaign with Great Bay Community College's Rochester-based Advanced Technology and Academic Center, part of the statewide Advanced Manufacturing Partnerships in Education initiative.

Saltwater created a coordinated marketing strategy that included a brand identity, Web site and recruitment-focused advertising. The Summit MEA honors companies for innovative and unique creative work that uses strategy and results-based effectiveness to create solutions. This is the third Summit MEA that Saltwater has won in the past year.



"ATAC was an interesting challenge because it was a brand new program," said Mariah Keith Morgan, director of client service at Saltwater. "This allowed us to have more creative freedom and we are very proud of the end result."

Lisa Proulx, public information officer at Great Bay, said Saltwater staff immersed themselves in learning about ATAC's goals, the industry, opportunities and key audiences. "The result was the development of an innovative, high-quality video piece that at the same time provokes an interest and educates," she said.

Working with AMPed NH staff, Saltwater also produced a video for the statewide AMPed NH initiative, featuring facets of the state's largest industry: smart manufacturing and high tech. The video can be seen at www.ampednh.com.

Visitors to the site can also learn about programs in robotics & automation/mechatronics, electronics and electromechanics, precision machine technology, advanced welding, programming and engineering and more.

Saltwater is a full-service, integrated creative agency that works with clients from a variety of industries to strategize and execute creative and technology initiatives. For more information, visit www.saltwaterco.com.

ATAC is the newest campus of Great Bay Community College with a focus on highly technical composites manufacturing training to serve job seekers, career builders and business owners. For information, visit www.gbrochester.com.

To learn more about the more than two dozen advanced manufacturing certificate and degree programs offered at all seven of New Hampshire's Community Colleges, visit www.ampednh.com.

AMPed NH is funded by a \$20M federal TAACCCT grant. CCSNH is an equal opportunity employer and adaptive equipment will be provided upon request to those with disabilities.

In the photo: Lisa Proulx, public information officer for Great Bay Community College in Portsmouth and Rochester, left, receives the Summit MEA award along with Desiree Crossley, outreach coordinator for the AMPed NH statewide initiative.



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We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

- Lakes Region
- Great Bay
- Manchester
- Nashua
- NHTI
- River Valley
- White Mountains



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News & Events





Let's Advance.

News and Events

Military veterans get training that works for them at WorkReadyNH

Elizabeth R. Minickiello of Plymouth attended Lakes Region Community College's WorkReadyNH career training program in November 2013.

She is a proud veteran of the U.S. Navy and is actively involved in her community today as a Historical Museum tour guide/volunteer, substitute wellness aquatic instructor and Asquam Snowmobile member/volunteer.

Elizabeth is in transition back into the work force after taking care of family members and the home for 20-plus years. WorkReadyNH helped Elizabeth regain self-confidence and identify her



strengths and skills that can be applied to the workplace. The program also provided Elizabeth with an opportunity to connect and network with a diverse group of individuals and re-evaluate her continuing career goals.

Elizabeth said she enjoyed reviewing and upgrading her academic skills after a long break from the educational world and hopes to continue with further post-secondary training and education. Elizabeth looks forward to new job adventures and life possibilities.

More about WRNH

WorkReadyNH helps job-seekers and career builders improve their skills and add two nationally recognized credentials to their resume. WorkReadyNH helps companies foster a skilled workforce, and find qualified applicants and employees.

The program provides assessment, instruction and credentialing in key skill areas, identified by employers as essential to workplace success. WorkReadyNH will:

1. Assess basic workplace skills in Applied Mathematics, Reading for Information, and Locating Information (the [WorkKeys Assessments](#))
2. Help improve these skill areas to earn a [National Career Readiness Certificate](#) at the bronze, silver, gold or platinum level (through the self-paced and fully online [KeyTrain learning modules](#))

3. Provide classroom instruction in “soft-skill” practices identified by employers as key to workplace success ([the Soft Skills course](#)) in a mock business format
4. Upon completion, provide a nationally recognized credential and a community college certificate that signals to employers that the WorkReadyNH participant has mastered key work-related skills and is ready to become a valuable employee.

WorkReadyNH is an initiative of the Community College System of New Hampshire, the Office of the Governor, the NH Department of Resources and Economic Development, the NH Department of Employment Security and the federal TAACCCT grant. WorkReadyNH is offered at all seven of NH’s community colleges.

EXTERNAL LINKS

[WORKKEYS ASSESSMENTS](#)

[NATIONAL CAREER READINESS CERTIFICATE](#)

[KEYTRAIN LEARNING MODULES](#)

[SOFT SKILLS COURSE](#)

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Let's Advance.

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November 2013 AMPed NH Advisor: Here, getting support for your advanced manufacturing studies is easy as pie

AMPed NH Advisor's Corner

Stuffed with Homework?

If you are an advanced manufacturing student looking for homework help and learning support beyond the brick and mortar of your college campus, you may feel thankful to know that your AMPed NH Advisor's got a feast of tools from which you can select!

[Smarthinking](#) is a LIVE online tutoring service available at no cost to CCSNH students. Smarthinking provides tutoring in a variety of subjects which are available 24/7. Log in to Blackboard to access Smarthinking.

If you are looking to plant the seeds for your future success in courses like math, science,

reading, writing and grammar, please [request Plato access](#). Through tutorials, practice exercises and mastery tests you learn at your own pace and get immediate results regarding your proficiency. Plato is an excellent resource to prepare you for success in your coursework and reinforce difficult concepts. You can log in to the S.O.S. to complete a request for Plato access.

And if that's not enough to stuff your turkey, you can log into [Blackboard](#) and access the Advanced Manufacturing Student Online Suite to find a whole spread of learning resources. From learning style assessments, to study aides and free apps, there is a dish for every appetite. So go ahead, access these resources and feed you desire to succeed!

Now that's sweeter than pumpkin pie.

EXTERNAL LINKS

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[PLATO](#)

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Let's Advance.

News and Events

Fix higher education by funding community colleges

By Ross Gittell, Glenn DuBois, Joe May, Scott Rawls and Thomas Snyder

America is mired in a higher education crisis. Two out of every three jobs available in the United States will require more than a high school diploma by the end of the decade. Yet the incoming generation of workers is less educated than the retiring baby boomers they will replace.

Student loan debt is at an all-time high, while policymakers question the sustainability of federal financial aid. Further, the nation is failing to produce enough science, technology, engineering, mathematics and health science graduates to meet American employer needs, let alone keep pace internationally. Instead of embarking on an expensive, arduous and divisive quest for new strategies to meet these challenges, the nation should bolster the problem-solving institutions we already have, namely America's community colleges.

Community colleges helped create and sustain America's middle class. If that is to continue, we must release some outdated notions about the institutions and increase both public- and private-sector investment in them. After all, as open-access institutions, community colleges are tasked

with higher education's toughest challenges yet given the fewest resources.

America's democracy colleges

Some 12 million students attend American community colleges, nearly half of the nation's undergraduate enrollment. That figure was 20 percent in 1963. The average full-time annual tuition cost for an in-state community college student is \$3,100 — roughly one-third of the comparable costs students face at public and private four-year universities.

Two out of every three students who attend a community college require remedial education. Yet, community colleges have the least to spend on student support services.

As fewer American families can afford the four-year comprehensive experience offered at many universities, community college transfer programs are gaining popularity. As many as two out of every five people, in some states, who earn a bachelor's degree have community college experience.

Increasingly, business leaders and elected leaders see community colleges as "go-to" organizations for creating and offering customized training that closes headline-grabbing economic deals and helps employers of all sizes compete in today's market. Global Insight projects that in the United States from 2006-2020, associate degree employment is expected to increase more than any other degree employment group except graduate degrees.

Community colleges make an impressive impact despite their relative shoestring budgets. Public support for community colleges, at less than \$6,000 per full-time equivalent student, is only about one-third of the amount public doctoral universities receive.

Community college faculty and staff are paid far less than their higher education counterparts. America's misguided "bachelor's or bust" mentality has wrongly diminished, and fueled misconceptions about, community college student achievement. In addition, when it comes to winning philanthropic investments, community colleges lack the pedigree of institutions that pack donors into football stadiums and basketball arenas.

Credentials for careers

Community colleges prioritize the opportunities that lead individuals to good-paying jobs and careers. Associate degree graduates can earn 30 percent more than those who hold only a high school diploma.

Community college graduates benefit from the colleges' focus on "mid-level" skill training and education in career fields such as advanced manufacturing, health care and information

technology. These jobs require unique skills and judgment and are difficult to outsource or replace. This is America's largest skill level segment and labor market economists say it is growing.

A recent Brookings study found 50 percent of science, technology, engineering and mathematics (STEM) jobs do not require a bachelor's degree — and more than half of STEM bachelor's degree holders start their education at community colleges.

The lack of graduates with associate's degrees is holding America back and making it difficult to grow U.S. manufacturing. A shortage of 30,000 industrial engineers, not the additional four dollars per device cost, prevents Apple from producing iPhones in America, according to recent reports.

"There has to be a fundamental change in the education system to bring back some of this [labor]," said Apple CEO Tim Cook in an interview with the technology Web site, AllThingsD.

Rebuilding the middle class

Community college is where the American dream becomes reality for many. For decades, these institutions have helped families earn their way into the middle class and stay there.

The need for more college graduates to meet our nation's workforce needs and raise the standard of living for millions of American families is among few topics — if not the only one — that inspires consensus in American politics today. People from all parties and levels of government agree that higher education needs to be accessible, affordable and producing more graduates whose skills meet the demands of today's economy.

We invite policymakers to act on those sentiments. Invest in higher education access, affordability and attainment. Invest in the institutions that have established a track record advancing those principles. Invest in America's community colleges.

The authors of this opinion piece lead five of America's statewide community college systems, which serve a combined total of more than 1.6 million students a year. Glenn DuBois is chancellor of Virginia's Community Colleges; Ross Gittell is chancellor of the Community College System of New Hampshire; Joe May is president of the Louisiana Community and Technical College System; Scott Rawls is president of the North Carolina Community College System; and Thomas Snyder is president of Indiana's Ivy Tech Community College.

EXTERNAL LINKS

[HTTP://WWW.SEACOASTONLINE.COM/ARTICLES/20131124-OPINION-311240317](http://www.seacoastonline.com/articles/20131124-opinion-311240317)

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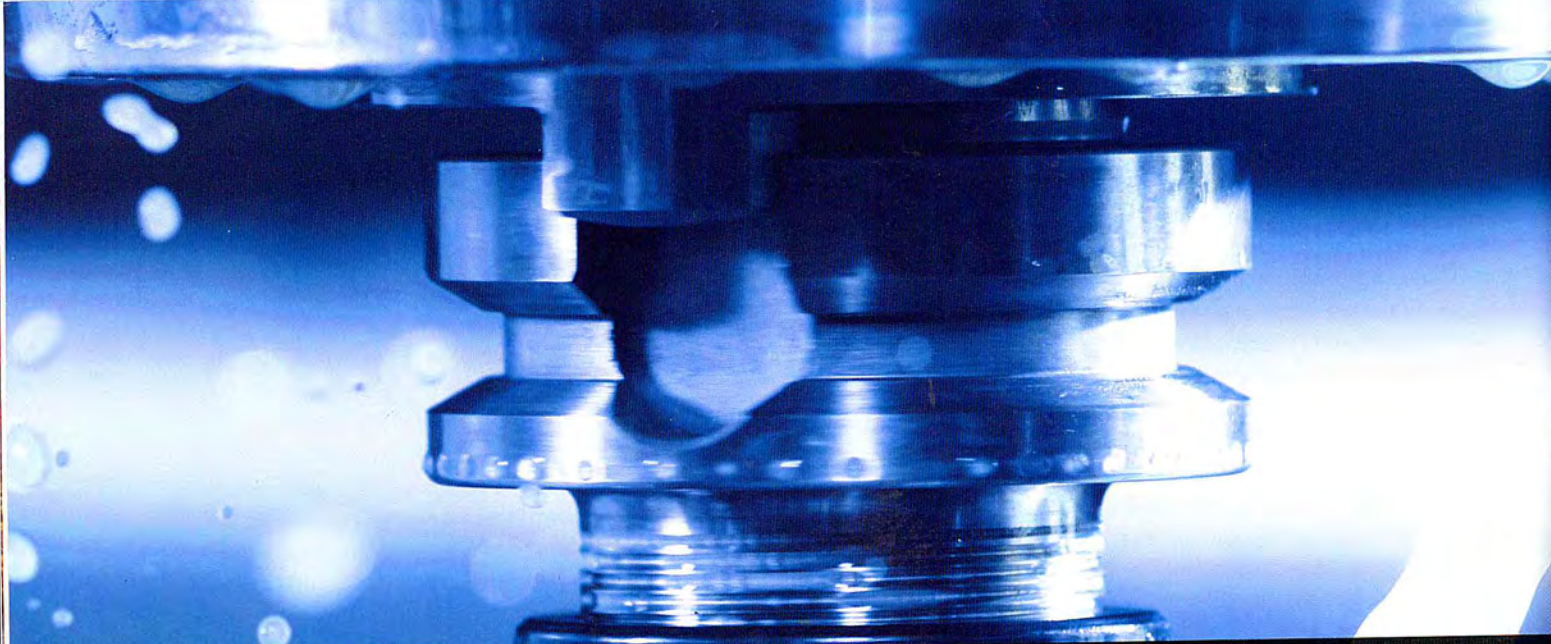


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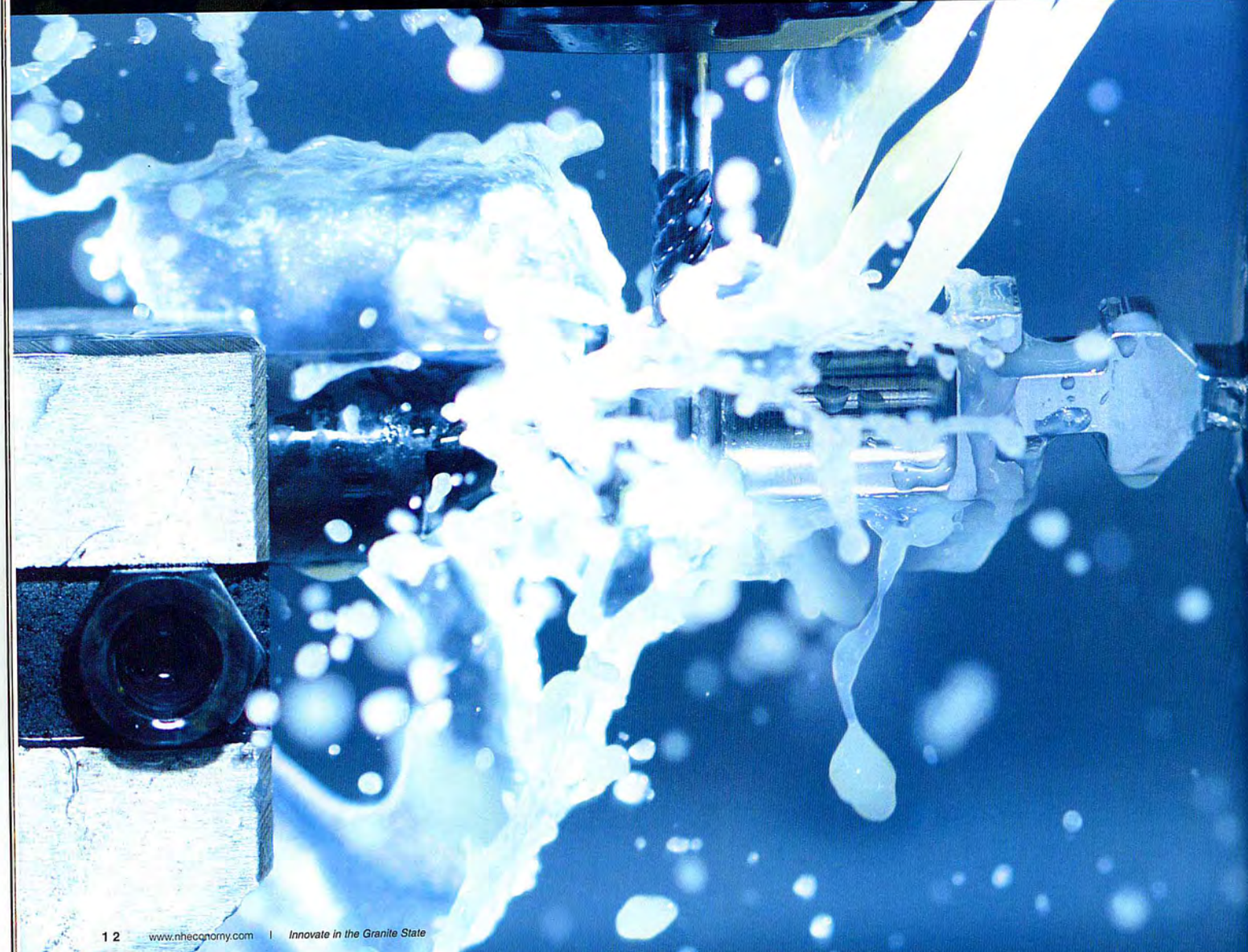
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MANUFACTU



As Other States Struggle,

RING

is on the Upswing in NH

BY CINDY KIBBE

It's no secret. There was a time when manufacturing jobs shifted from the U.S. to other countries and that had a dramatic impact on every state in the nation.

So how is it that manufacturing in New Hampshire, the state's top industry for both employment and revenues, is on the upswing?

"Our products were born in a culture of innovation, efficiency and strong commitment from workers," said Christopher Way, interim director of the New Hampshire Division of Economic Development. "We're a small state, which enables us to have very strong relationships with our manufacturers, their markets and their challenges."

Through technological advances, and the ups and downs of financial markets, manufacturing has always been the bedrock of New Hampshire's economy. In June 2013, more than 66,000 people were employed in manufacturing, according to the New Hampshire Economic and Labor Information Bureau. The U.S. Bureau of Economic Analysis finds the manufacturing sector accounted for 15.5 percent of New Hampshire's Gross Domestic Product by state in 2011 – the largest of any other sector.

How's Business?

Looking at the recession in the rear view mirror, those years did have an impact on jobs here, "but the other half of the story is that the output per employee is more productive now than it's ever been," said Dennis Delay, an economist with the New Hampshire Center for Public Policy Studies.

In fact, many manufacturers "are finding ways to be more productive and innovative," said Zenaghi Brahim, director of operations for the New Hampshire Manufacturing Extension Partnership.

One example is Watts Water Technologies, a global maker of plumbing valves and components. In June 2013, it opened a multi-million dollar, 30,000-square-foot foundry at its Franklin facility, where it will assemble lead-free products. It brings the 140-year-old company into compliance with the new federal Reduction of Lead in Drinking Water Act of 2011.

"I believe we're on the upswing," said Tyler Stone, Watts' director of operations in Franklin.

The 500 employees of the Franklin plant alone turn out 280,000 valves each week, which are "25 percent of Watts's global sales," Stone said.

On the other side of the state, sales increased over the last few years for Charlestown-based medical device manufacturer Design Standards.

"We expect those sales to grow by as much as 15 percent in the next three years, as the market for the technology in our pipeline matures," said Eric Crainich, company president.

Innovation is the key that keeps Design Standards—and its 110 employees—flourishing in New Hampshire.

"Our customers think of a theoretical way to solve problems and then we take it from there and innovate beyond the theoretical to the workable," said Crainich.

Innovation is the cornerstone of a company that's been in business in Pittsfield since 1901. The fire gear Globe Manufacturing Co. makes today is not your grandfather's firesuit - it has more in common with high-tech athletic and military apparel than simple waxed canvas.

Employing nearly 400, Globe's sales have remained solidly around \$80 million in recent years as its customers—primarily municipalities and their fire departments—rebuild their balance sheets.

Robert Freese, the fourth generation to own the company, said that just means he has to be more creative.

Globe is incorporating into its products research on multi-layer dressing systems from Cornell University and advanced fiber studies from North Carolina State, for example.

The company also collaborated with the U.S. Army and others on its WASP T-shirt, an undershirt that collects, transmits and displays location and physiologic data.

“There’s no way we could do the level of development that they do, but we can tap into that innovation,” said Freese.

Birds of a feather

Globe’s partnerships with universities and the military are prime examples of the clustering trend seen in New Hampshire – manufacturing stakeholders banding together to share products, knowledge and services to help all parties succeed.

“New Hampshire has very high concentrations of clusters in the more innovative parts of the manufacturing industry,” Delay said.

One of those clusters is the New Hampshire Aerospace and Defense Consortium. The New Hampshire International Trade Resource Center and other government and industry partners are working together to help connect the state’s aerospace and defense companies to the global marketplace.

“There is something to be said about ‘tribal knowledge’ and how an industry can access it by working together and sharing from their experiences,” said Tina Kasim, program man-



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Employees making firesuits at
Globe Manufacturing in Pittsfield, NH.

ager for the ITRC. “Hands-on, practical experience continues to be vital to our companies.”

No place like ‘home’

Many New Hampshire manufacturers have customers around the world, but they have chosen to keep operations right here in the Granite State, leveraging its resources and enviable quality of life to their advantage.

And it has paid off.

Watts has called Franklin home since 1959; the new foundry is the 17th expansion in the company’s Granite State history.

New Hampshire has remained a great fit for Design Standards since his father opened the Charlestown facility in 1988, said Crainich.

“I have an appreciation for how the state recognizes that manufacturing is a vital and important part of the economy,” he said.

Challenges and solutions

The story of New Hampshire’s manufacturing industry continues to be one of change. Technology, like additive manufacturing and the advancement of 3D printing, is taking it to higher levels. The creation of new parts and prototypes is more cost effective now than it ever has been. Barriers of the past, which may

have deterred entrepreneurs, are gone and the climate for innovation is very inviting.

After an NHMEP survey of manufacturers in 2013 found concerns about the availability of skilled labor, the Advanced Manufacturing Partnerships in Education Program was created. It is an initiative created from the \$20 million Trade Adjustment Assistance Community College Career Training Act grant by the U.S. Department of Labor.

The initiative is driving development of training programs to support the advanced manufacturing industry.

‘Alive and well’

With companies continuing to innovate, partnerships creating novel training programs and dynamic collaborations driving success, the future looks very promising for Granite State manufacturers.

Or as Design Standards’ Crainich put it: “Manufacturing is alive and well.” ❖

Cindy Kibbe is owner of Cindy Kibbe Creative Communications. She has more than 10 years of award-winning journalism experience, including writing and editing for several Boston-area media companies and regional publications.



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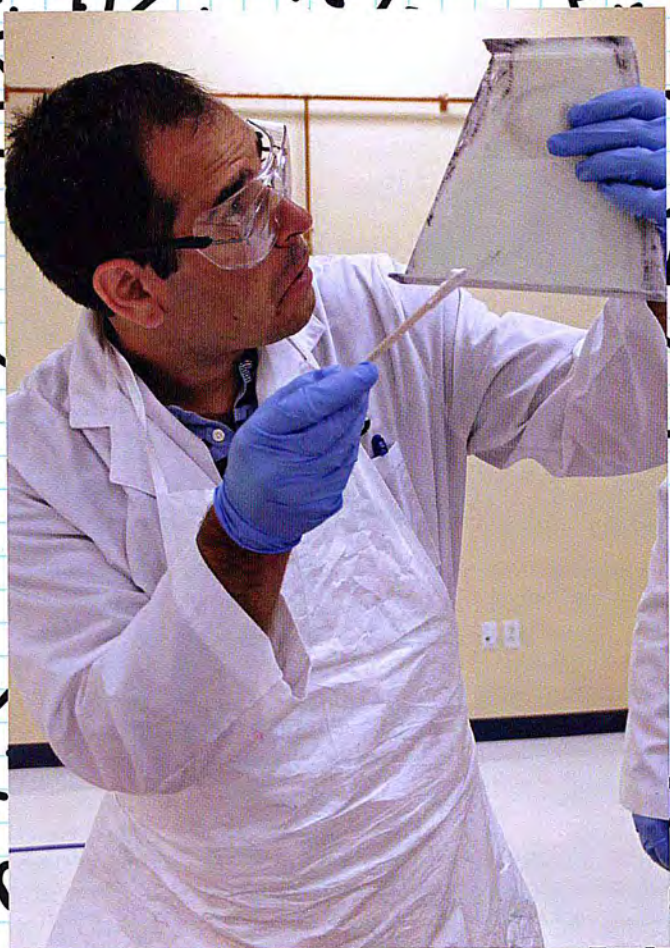


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HIRE PURPOSE

New industry demands new skills;
New Hampshire knows just how to get them.

BY CINDY KIBBE

Here's the good part: Industry and technology have their eye on New Hampshire, drawn to the state's business-friendly environment, targeted incentives, low taxes and high quality of life.

Yet here's the challenge: Every one of those industries requires employees with highly specialized training, in fields like advanced manufacturing, energy efficiency and precision welding. So where will this new breed of urgently needed industry experts come from?

Right here in the Granite State.

"Training and educating future skilled workers is essential for the community college system," said Ross Gittell, chancellor of the New Hampshire Community College System. "We want to make sure our students benefit from education and training and are placed in well-paying careers, as well as enhance competitive industry in New Hampshire."

Advanced Manufacturing

The importance of manufacturing is reflected in New Hampshire's commitment to education. Within the University System of New Hampshire, the University of New Hampshire's Innovation Research Center and Keene State College's Regional Center for Advanced Manufacturing are preparing a new generation that will evolve the industry. Dartmouth College, which receives about \$200 million a year for research grants, is at the forefront of development and gives rise to innovation clusters in the region, finding ways to make products cost effective and efficient.

New Hampshire's community colleges are also answering the demand manufacturing is creating in the state.

The U.S. Department of Labor awarded the Community College System of New Hampshire a \$20 million grant from the Trade Adjustment Assistance Community College Career Training Act (TAACCCT) in 2011, to develop training programs supporting New Hampshire's advanced manufacturing industry.

Two years later, Portsmouth-based Great Bay Community College launched the Advanced Composites Manufacturing training program in Rochester and is already being hailed as a successful education-industry partnership.

The program, funded in part by the grant, was developed in collaboration with the public-private consortium Advanced Manufacturing Partnerships in Education, state and local partners and Albany Engineered Composites and Safran Aerospace Composites. The two com-



Students and faculty are seen working in the advanced composites program at Great Bay Community College

panies, co-located in Rochester, plan to hire more than 400 workers in the next few years.

More than just a new curriculum, classes are held at the new multimillion-dollar, 17,000-square-foot Advanced Technology and Academic Center in Rochester – which includes 4,000 square feet of lab space built especially for the program.

Debra Mattson, director and designer of GBCC's Advanced Composites Manufacturing program, said the maximum enrollment of 18 was reached easily, with openings for future cohorts filling fast.

The six-month program covers basic manufacturing concepts like blueprint reading and applied math, followed by opportunities to focus on one of eight specializations, such as quality control inspection, composite weaving and high-performance fabrication.

"As machine operators, they need a high level of decision-making capability," said Mattson, pointing out that math is interwoven into many of the classes. "We've seen places where production stops because of a math problem. We want to avoid that."

While the program will serve the workforce needs of Albany/Safran, "the graduates will also support other area manufacturers," Mattson said.

"Community colleges are enmeshed with their communities. This allows them to have their finger on the pulse of what the needs are of the communities they serve."

- John Holt
project coordinator
White Mountains
Community College

Energy efficiency

At Lakes Region Community College in Laconia, students are learning how to make homes and buildings more energy efficient in the Energy Efficiency Training program.

Through credit and non-credit classes, as well as the Building Operations certification program, students learn such skills as energy auditing, lighting calculation and weatherization installation. A specially-designed climate-controlled classroom provides students with hands-on training and is one of only two in the country, according to LRCC officials.

"Each of the four walls is made of a different material so students can see different levels of heat loss," said Tom Goulette, LRCC's vice president of academic affairs.

To bring awareness to energy efficiency and LRCC's programs, a mobile classroom with interactive displays demonstrating how energy is produced and conserved visits schools across the state.

LRCC's energy efficiency programs were developed through a collaboration between a wide variety of public and private stakeholders including the New Hampshire Division of Economic Development, the Plymouth Area Renewable Energy Initiative and the U.S. Department of Energy.



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Enrollment in Energy Services and Technology associate's degree program is growing.

"The non-credit workshops, however, have trained literally hundreds of people in the past two years," Goulette said. "We've held outreach from Berlin to Nashua."

LRCC also offers an advanced manufacturing degree program, providing manufacturers in the central part of New Hampshire with a work force that helps them remain competitive.

Precision welding

The students at White Mountains Community College in Berlin are discovering there's more to precision welding than soldering pieces of metal together. In the college's Precision Welding program, welding joint tolerances are measured in thousandths of an inch.

And some of the training doesn't involve arc welders at all.

"One of the newest pieces of equipment we use are virtual welders," said John Holt, WMCC project coordinator. "Once the student puts the welding mask down, a simulator screen is projected onto the mask, which reacts to his movements."

Prospective workers initiated the precision welding program, rather than area manufacturers looking for that talent. Holt said the paper mill closures in the North Country several years ago displaced many workers who already had some welding skills but wanted to learn more and become certified.

"They approached the college and, in six or eight weeks, we put together a program and received accreditation," said Holt.

While much of the support came from TAACCCT-NH grant, Granite State manufacturers – such as Structal-Bridges in Claremont (a division of Quebec-based Canam Group Inc.), Bremco Inc., in

Newport and Claremont, and industry giant Westinghouse, with facilities in Newington – helped advise on the program's development.

The successful partnership between manufacturers and WMCC has been a boon to area employment.

"Structal was so impressed with our last class, all the students were asked back for second interviews," said Holt.

Advantages

New Hampshire's community colleges have numerous advantages over private training firms or even four-year colleges and universities when it comes to developing workforce training programs.

"Community colleges are enmeshed with their communities," said WMCC's Holt. "This allows them to have their finger on the pulse of what the needs are of the communities they serve."

He also said that there are less layers of management to go through to get approval for new programs, making community colleges very agile when it comes to course development.

Mattson of GBCC said students enrolling in workforce development programs at community colleges are frequently 'non-traditional' learners – many of whom are seasoned workers but need to retool their skill sets.

"Community colleges have a high level of success with these students," she said.

New Hampshire's community colleges include Manchester Community College; NHTI-Concord's Community College; Nashua Community College; Lakes Region Community College, Laconia; Great Bay Community College, Portsmouth; River Valley Community College, Claremont and White Mountains Community College, Berlin. ❖

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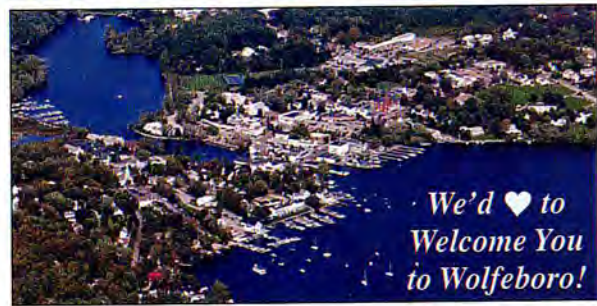


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On a winter's morning in December 2012, a red ribbon was cut to celebrate the opening of a bridge at Rochester's Granite State Business Park, marking a new era in a region that's long been known for its manufacturing heritage.

The bridge reaches the new plant in which French-owned Safran Aerospace Composites and Albany Engineered Composites work in partnership to produce revolutionary lightweight parts for next-generation aircraft engines. Albany relocated its corporate headquarters from New York to Rochester in 2011.

"About 45 percent of all new aircraft built between 2016 and 2030 will have advanced composite parts that were developed right here," said Joseph Morone, president of Albany International, at the ribbon cutting. "Most of the composite parts for 45 percent of all new aircraft, in one way or another, will start here."

AEC and SAC manufacture fan blades, fan case and other components for the CFM LEAP engine, which are used in the Boeing 737 Max, the COMAC A19 and in some Airbus A320 NEO aircraft.

To meet the demand over the next two decades, Safran and AEC will hire over 400 workers. Officials on the Seacoast are confident other composites and high tech manufacturing compa-

nies, their suppliers and businesses to support the needs of the workforce will also come to region.

The Seacoast is ready for these businesses and workers to land here.

"We are reaching out to embrace the opportunities that are coming with advanced and high tech manufacturing," said Karen Pollard, deputy city manager and director of community development for the city of Rochester. "Rochester has energy and enthusiasm and is prepared for the future."

The New Hampshire Division of Economic Development is partnering with the four cities that anchor the Seacoast - Dover, Portsmouth, Rochester and Somersworth - as well as the Pease International Tradeport and Great Bay Community College to bring in new businesses related to composite manufacturing and other advanced manufacturing opportunities.

This kind partnership, said Christopher Way, interim director of the division, is a model that can be established in other parts of the state, where there are clusters of specific industries.

"There is excellent cooperation between the Seacoast communities to be a global competitor in composites and high technology manufacturing," said Nancy Carmer, Portsmouth's economic development program manager.



FOR LANDING:

New Hampshire's Seacoast: An emerging hub for composite manufacturing

BY LORNA COLQUHOUN

The mix of community and industry also includes education. To help companies answer the demand for skilled employees, Great Bay Community College in Portsmouth created its Advanced Technology and Academic Center in Rochester to train workers in composites manufacturing.

"We have a world class education system here that is aligning with the needs of industry to develop more science, technology and engineering workers for our growing companies, as well as the ones relocating here," said Will Arvelo, president of Great Bay Community College.

The Seacoast is well-situated for companies considering relocation. Interstate 95 is a major commerce corridor and three rail lines move freight throughout the Northeast and beyond. New Hampshire's only deepwater port in Portsmouth remains ice-free in the winter and the Pease International Tradeport is home to 245 companies that employ 7,000 people, with a capacity for more.

"Location, location, location," said David Mullen, executive director of Pease. "The tradeport is immediately adjacent to I-95 and the Spaulding Turnpike and a one hour drive from Concord, Boston and Portland, Maine. The three-state demographic workforce that can commute here is extremely large and diversified."

With the Atlantic Ocean as the front yard of New Hampshire and the Seacoast within reach of the Lakes Region and North

Country, the region offers a quality of life that balances the thriving economic climate.

MONEY Magazine included Dover as one of the top 100 places to live in the U.S. and the city is one of the fastest growing one in the state. It balances a sense of history with a high percentage of well-educated residents.

In neighboring Somersworth, there's a new vitality and energy coming with the new opportunities unfolding on the Seacoast.

"We are becoming a diverse business community, offering a balance of goods and services," said Christine Soutter, Somersworth's economic development manager. "We are going to be a community that connects education and business; businesses to other businesses and a local government that is visible and accessible. I'm excited to see the revitalization of our downtown begin - it's really going to be a fantastic representation of the community."

For more information about doing business on New Hampshire's Seacoast, visit www.AerospaceNH.com or call Cynthia Harrington, business recruiter at the New Hampshire Division of Economic Development, at 603-271-2591. ❖

Lorna Colquhoun is the communications director for the New Hampshire Division of Economic Development.



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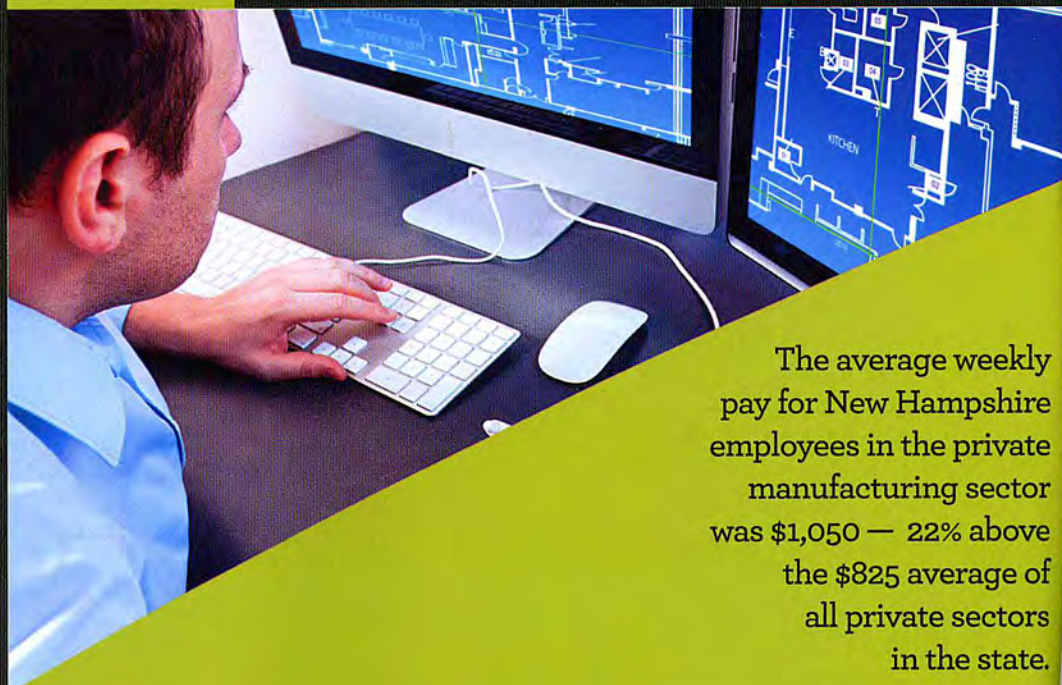


PRECISION WELDING

AMPed NH is sponsored by a \$19.97 million grant from the U.S. Department of Labor, Employment & Training Administration TAACCCT Grant #TC-22504-11-60-A-33. The Community College System of NH is an equal opportunity employer, and adaptive equipment is available upon request to persons with disabilities.

GET THE SKILLS YOU NEED

FOR THE JOB YOU WANT.



The average weekly pay for New Hampshire employees in the private manufacturing sector was \$1,050 — 22% above the \$825 average of all private sectors in the state.

— Economic and Labor Market Information Bureau, Spring 2013

HIGH-TECH JOBS IN NH

Manufacturing has been a vital part of New Hampshire industry for generations — and now it's advanced. It's smarter, faster, cleaner than ever before, and demand is high for technically skilled employees.

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New Hampshire's community colleges have more than 100 industry partners supporting AMPed NH's mission in a variety of ways, including but not limited to, expressed support for the programs and hiring of CCSNH alumni and students and more. CCSNH makes no hiring or pay guarantees on the behalf of any supporting company. A small sampling of our participating partners: Albany Engineered Composites • NH Ball Bearings • Hypertherm • Omni Components Corporation • Hitchiner Manufacturing • Freudenberg NOK • OSRAM Sylvania

To see the entire list, visit www.AMPedNH.com



MANUFACTURING MATTERS MONTHLY

Education | Skills | Technology | Industry | Careers | Success | Growth

Watts Water Technologies sees STEM education as key to rewarding & lucrative careers in advanced manufacturing

Viewing footage of a pressurized water heater rocketing through the floors and roof of a home and blasting high into the sky, one may be inclined to write off the event as a movie-set stunt. But the risk and the danger are real.

An exploding 30-gallon water heater has the force of about one pound of dynamite and has the power to destroy a house and injure or kill those inside, according to Michael Mullavey, design engineer at Watts Water Technologies. Intrigued by this possibility, the stars of the popular Discovery Channel show "Mythbusters" demonstrated this force in 2007 when they set up an experiment that culminated in a mighty "kaboom" as their water heater was launched high overhead.

Thankfully, companies like Watts Water Technologies, with a facility located in Franklin, have the technology to prevent such explosions. Since 1874, the Watts Water Technologies family of companies has designed and manufactured valves and related products that promote the comfort and safety of people and the quality, conservation and control of water used in commercial, residential, industrial and municipal applications.

Watts relocated manufacturing operations from Lawrence, Mass., to Franklin in 1959. The Franklin campus has since expanded to include two foundries and a distribution center, in addition to the original Webster Valve factory.

Watts Water Technologies has worked with Lakes Region Community College to address today's industry needs and promote the rewarding careers available to students in science, technology, engineering and mathematics programs.

Here, Mullavey talks about Watts' products, its future and the exciting career opportunities available in the advanced manufacturing industry.

Q: Describe a product you manufacture and the effect it has on consumers' lives.

A: The largest volume product line at the Franklin facility is the Temperature and Pressure (T&P) Safety Relief Valve, for which Watts first obtained the patent in 1931.

Thankfully, equipment failure and explosions have been significantly reduced because T&P relief valves are now being used worldwide to protect water heaters. T&P relief valves, when installed and maintained properly, prevent high water temperatures which can cause flashing of hot steam at outlets, or cause an explosion. They also prevent the buildup of high pressure, which can damage the water heater, piping or system

components.

Q: What does the future have in store for the Watts workforce?

A: The Franklin campus currently employs more than 520 people in foundry, machining, assembly, distribution, professional and related careers. Watts is constantly evolving through pursuits in lean manufacturing in order to remain competitive in this industry. This constant and innovative change requires skilled and creative people.

Q: How have you partnered with Lakes Region Community College to help build the workforce?

A: Watts has partnered with Franklin High School and the Huot Center in Laconia to steer prospective students towards a STEM career pathway. We continue to work with these students and adults alike, and strongly urge them to continue their education in the available LRCC certificate and degree programs related to STEM and advanced manufacturing. This education is critical to their success in quality, engineering, pattern making, tool and die, and CNC machining careers. This skilled workforce is also critical to the success of the Watts flagship Franklin facility.

Q: Who should choose a career in advanced manufacturing in New Hampshire?

A: Part of promoting the rewarding careers available in advanced manufacturing is to correct the common misbelief that manufacturing means working in old, dark, dirty and unsafe factories. Today's factories are clean, safe, modernized and computerized, and demand a skilled workforce. Anyone with a creative and/or analytical mindset should consider a rewarding and lucrative advanced manufacturing career (and keep in mind: math, math, and then some more math). Don't be afraid to fail.

To learn about advanced manufacturing training and academic programs at Lakes Region Community College, email TAACCCT project coordinator Don Brough at dbrough@ccsnh.edu. To learn more about AMPed NH training and education programs at all seven of NH's community colleges, email outreach coordinator Desiree Crossley at dcrossley@ccsnh.edu or visit www.ampednh.com. To learn more about Watts Water Technologies, email Michael.Mullavey@wattswater.com or visit the website at www.watts.com. AMPed NH is funded by a \$20M TAACCCT grant from the U.S. DOL Employment and Training Administration.

Watts Water Technologies photo



Gunstock Mountain Resort hosts Leadership Lakes Region's Orientation Day

GILFORD — Gunstock Mountain Resort and food partner Centerplate Dining recently hosted Leadership Lakes Region's Class of 2014 Orientation Day.

The day began with ice-breaker exercises designed to get the new class of 23 members acclimated to one another and was followed by an overview of the Leadership Program Year.

The Orientation Day progressed with a facilitated discussion on the main topic "Leadership and Your Community" led by two graduates from last year's Leadership Lakes Region's class, Mary MacDonald and David Hall and continued with leaders involved in the 98.3 WLNH Children's Auction. Panelists included Molly King, Program Director for WLNH and Children's Auction Board of Directors, Ed Darling, Board Member, RJ Harding, CEO of Bank of New Hampshire Pavilion at Meadowbrook and Allan Beetle, Patrick's Pub & Eatery.

After lunch the class took Gunstock's Zip and Segway Tours and then moved to the Aerial Treetop Adventures Course for more team building exercises.

The day concluded with a social hour catered by Centerplate and involving the new class, several past graduates and members of the Leadership Lakes Region Board of Directors.

"The success of today's Orientation, which sets the tone for the year ahead, is due to the outstanding support and sponsorship that we received from Gunstock Mountain Resort and Centerplate," said Leadership Lakes Region Program Coordinator Jennifer McLean.

Other graduates attending the social hour besides MacDonald and Hall were Dona Murray, Joyce Meisel, Kyril Mitchell, Sara Dunham, Peg Purcell, Bill Clark and Paul Charlton. Others in attendance were Alan Robichaud, representing Granite United Way, Kim Sperry, alumnus and Board of Directors for Leadership Lakes Region and Don Morrissey, Board Chairman.

The next Program Day for the new class is History and Culture Day, scheduled for November 6.

For more information about Leadership Lakes Region, please visit the website at www.leadershiplakesregion.org

from preceding page

"This is a tremendous family fun-oriented event each year" said the Mayor. "I encourage Lakes Region families to come down to the Beach on Saturday, November 23 11 a.m. to either take the Plunge, cheer on those who Plunge or enjoy the post-Plunge luncheon" Seymour added.

This year's luncheon will again feature food and drink from some of the area's best known restaurants.

Leading that group for the ninth year in a row will be Patrick's Pub and they will be joined by O Steak & Seafood, Fratellos, Kitchen Cravings, T-Bones/Cactus Jack's, Hart's, and the new Junior's Crush House. Beverages will be provided by Lago and Coca-Cola of Northern New England while culinary arts students and faculty from the Lakes Region Community College will handle serving the chili, chowder, soups and stews donated as well as preparing mouth-watering desserts.

Lunch is free for Plungers and open to the general public for a modest \$5 donation. Every luncheon attendee will be entered into several raffle drawings for gift certificates donated by local merchants. Anyone interested in registering to Plunge, forming a team of 2-25 members or in donating in support of a Plunger and the Salvation Army may visit the Plunge website at www.saturkeyplunge.org or by calling the Salvation Army at 524-1834.



Let's Advance.

News and Events

AMPed NH spotlight on military veterans: Meet Heather Wells - WMCC student, Marine Corps veteran and National Guard member



She's traveled the nation as an accomplished military musician



and has degrees in music, English and business administration. So what lies ahead for White Mountains Community College student and U.S. Marine Corps veteran Heather Wells? A career in the advanced welding industry.

If your mind is screaming “non sequitur,” you’re not alone. But consider this: Advanced manufacturing requires acute attention to detail, as well as a set of high-tech skills and a breadth of knowledge much larger than many think. In this industry, art and science are by no means mutually exclusive, and it’s the

same with Heather, who wouldn’t be the success story she is without her combination of artistic and technical know-how.

“Speaking technically, welding requires very involved scientific theory and application,” she said. “Like a lot of advanced manufacturing, there’s not a lot of room for improvisation with the techniques. BUT you can take different approaches to different projects; that’s where the art comes in.”

Heather, a lifelong musician who plays four instruments, auditioned a junior in high school for the Musical Enlistment Option program with the Marine Corps.

“It was a great opportunity to serve my country and see if music was what I was meant to do,” Heather said.



She was immediately assigned to the Marine Band at the 2nd Marine Division at Camp Lejeune in North Carolina and later to the Marine Corps Logistics Base in Georgia. She played from 1999 to 2007, even acting as associate conductor for the 39th Army Band. Having achieved one dream, she turned her sights to finding new successes. In 2010, Heather finished her double enlistment and went straight into the NH National Guard. While she still plays bassoon, clarinet, flute and saxophone with community groups, Heather wanted a career in which she could apply her unique skill set. Her next dream is to take over the family business, Vulcan Forge Blacksmith shop in Lancaster, NH, and she’s well on her way as a student in WMCC’s

welding technology certificate program.

Heather said White Mountains Community College has been a “blessing” to work with, working

efficiently to help her navigate financial assistance requirements of the government and ensuring her success in the academic and training program.

“It’s very personal here at WMCC,” she said. “You’re a person. You’re not a file or a student folder. That’s not necessarily true of larger educational facilities.” Further, she said, the environment strongly supports success.

“The instructors tie everything in so you get the ‘hows and whys,’” instead of just following instructions step by step,” she said, and the different perspectives they bring from their own welding backgrounds “give you more tools for your toolbox. It’s a challenge, and you’ll struggle for days in the lab, and then all of the sudden an instructor will explain just a little differently and a light bulb will go off and you’ll wonder why you didn’t get it before.”

To be fair, there’s a lot to learn in the WMCC lab. “The equipment is almost overwhelming,” Heather said. “Everything is state of the art. At this point, the only downfall I see to WMCC’s program is that not every industry is going to have that level of technology - yet. It gives you an idea of what the future of the industry will be. WMCC is on cutting edge of this technology and the way it’s taught.”

Being on the cutting edge means exposing students to a large selection of tools meant for both learning and professional environments – and that includes virtual welding units.

“Sometimes it’s just nice to come out of your booth to practice (on a virtual unit) and have others watch and critique you,” Heather said. And as for entering a male-dominated profession? Well, that’s nothing new for this military vet, but still ... “It’s not your grandfather’s welding,” Heather said about both the work and the environment. “For example: You have submerged arc welding; that’s an innovative technology. You’re not actually doing the welding; you have to know how to run the machine that does it. You’re an operator rather than a laborer. And everything is cleaner than you could ever imagine. It’s safer, more efficient. It’s not just slapping metal together. You’re not doing maintenance on old machinery. It’s very technical and you have to have the knowledge.”

And now’s the time to get in it, said an enthusiastic Heather.

“You have a lot of people in welding industry who are 55 or older. The workforce is going to shrink and gaps mean opportunities. And it’s not just going to be entry level positions. Across the board, there will be need – inspectors, QA, supervisors.” She identified welding and other advanced manufacturing careers as a great match for returning veterans. “With returning veterans, a lot of skills you have are transferrable to civilian life, but you have to make a choice

about what you're going to do," she said. "A lot of these technical skills are easy for vets to pick up. A military background gives you more focus and determination. A lot of students with military backgrounds come in with more conviction. It's something they want. They've already started a career, and this is their decision for their next step."

Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

Lakes Region

Great Bay

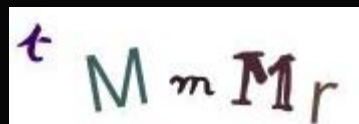
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Joined @WhipHoyer to discuss the future of American manufacturing & the strength of advanced manufacturing in NH! <http://t.co/IHM2VxdDmK>

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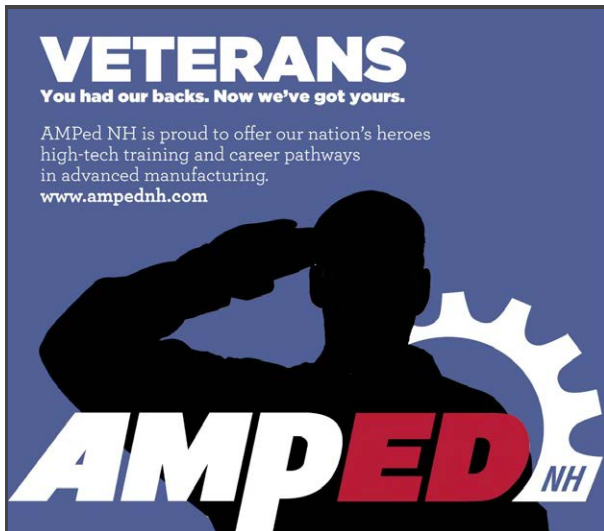




Let's Advance.

News and Events

AMPed NH spotlight on military veterans: CCSNH offers support, career pathways in advanced manufacturing



Whether it's a job offer or admission into one (or more!) of our training and education programs designed to provide the exact skills U.S. military veterans need to be successful in exciting advanced manufacturing careers, AMPed NH is proud to help our nation's heroes reach their

professional goals.

Learn the many ways we can help

New Hampshire's community colleges and AMPed NH are committed to providing our nation's active servicemembers and military veterans with the skills they need for the job they want in advanced manufacturing. Colleges provide myriad services specifically designed to guide veterans through the admissions, enrollment, financial aid, learning and job-search processes. The goal is to assist veterans, reservists and guardsmen to succeed.

Dedicated veterans liaisons are well-connected within the community and knowledgeable about government and academic requirements. They can provide support in both academic and personal matters.

In addition, veterans clubs and lounges are available in select locations to offer social support. On-campus services include help locating educational resources and electronic reporting to the Veterans Administration of enrollment verification for properly documented veteran-students.

Admissions information for veterans

[Great Bay Community College](#)

[Manchester Community College](#)

[Lakes Region Community College](#)

[Nashua Community College](#)

[NHTI](#)

[River Valley Community College](#)

[White Mountains Community College](#)

But that's not all

NH's community colleges team up with NH Employment Security and other veteran-advocate agencies to help connect veterans with high-tech, high-demand, high-pay careers in advanced manufacturing, as well as a wide range of professional and financial support services. Complete information can be found in the [NH Veterans' Resource Guide](#).

Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

- Lakes Region
- Great Bay
- Manchester
- Nashua
- NHTI
- River Valley
- White Mountains



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NEWS & EVENTS

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Let's Advance.

News and Events

AMPed NH spotlight on military veterans: Meet Jeff Musheno - NHTI lab assistant and Vietnam War veteran

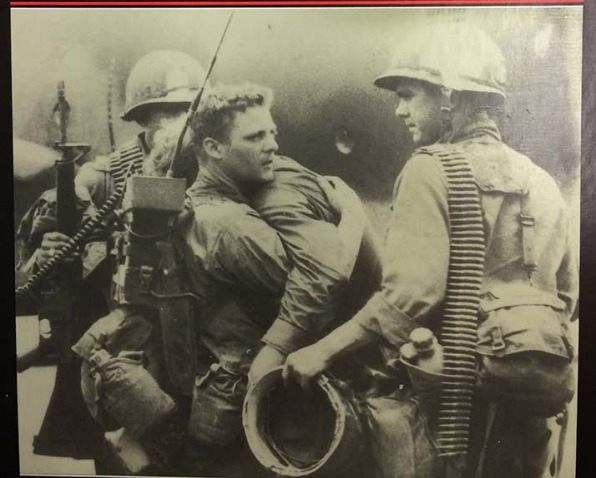


Cover Photo:

Operation Byrd, August 26, 1966. A soldier of the 1st Cavalry Division comforts a buddy after a fire-fight that took the lives of most of the men in his platoon.

The Vietnam Experience

A War Remembered



Jeff Musheno, NHTI Lab Assistant in the MET program, stands at right in the photo above.

Military veteran, student, instructor – Jeff Musheno’s done it all! An Army Ranger during the Vietnam War, he saw combat from 1966 to 1968 before devoting over 30 years to the NYC police force.

After retirement, Musheno returned to a former love — the machine shop. Before his service in the war, he was an apprentice in a machine shop in Brooklyn and fell hard for the work. Even during his tenure with NYPD, he maintained his own machine shop and after retirement, Musheno found himself in New Hampshire, where he got involved with the Veteran’s Administration and heard high praise for NHTI’s commitment to veterans.

The reputation of NHTI at the Veterans Administration is one of a highly accredited, serious engineering program that is VERY "vet friendly," said Musheno.

He became a student of the college’s MET program in 2010 and it wasn’t long before his academic performance and obvious leadership abilities landed him a job as an assistant instructing Manufacturing Engineering and Mechanical Engineering



programs in the very same lab he took classes in. Driven by his “anything to improve my nation” philosophy and wanting to continue NHTI’s tradition of veteran support, he helped organize the college’s Veterans Club.

“NHTI will accommodate vets in any way necessary, which is important as some are living with both physical and mental challenges – everything from the loss of a limb, eyesight and other physical and psychological trauma. War changes you.”

And Musheno knows. After 22 months in Vietnam and decades with the NYPD, he can empathize.

“It’s important to remember, this is the only demographic in the school that’s been shot at. I know what it’s like to be shot at, so veterans can feel comfortable sharing their concerns with me,” Musheno said.

Where veteran support at NHTI is concerned, “‘fantastic’ is an understatement,” Musheno said. “The entire administration seems morally driven to understand and work with veterans. They have the depth and breadth of expertise to prepare returning vets for further education at four-year institutions or for immediate employment in the high-tech workforce. You can only flourish in an environment like this.”

That environment includes the dedicated Veterans Lounge, which offers a place for students, faculty and staff who are also veterans to assemble, relax and commiserate. And the successes are real; Musheno credited the skills learned in NHTI’s advanced manufacturing and engineering programs for the fact that it’s not uncommon students are hired right out of the teaching lab. And as for those jobs?

“I’ve been waving a flag a long time,” Musheno said. “This is important. There are magnificent jobs in advanced manufacturing. You can work in the defense sector and still participate – it lends itself to the betterment of our country.

"But there hasn't been a day I've headed to a job in a machine job and said, 'I'm going to work.' It's like getting paid to spend time in a hobby shop. I enjoy this work."

He also enjoys the gratification he sees on his students' faces when, for example, someone with no prior experience realizes they've become competent in this high-tech environment and can design and build anything.

"As they gain experience," Musheno said, "they apply those skills and confidence to life and their professional ambitions. This supports their dreams."



Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

Lakes Region

Great Bay

Manchester

Nashua

NHTI

River Valley

White Mountains



What code is in the image? *

Enter the characters shown in the image.

Request More Info

AMPedNH Connect

AMPedNH Connect is an online community connecting advanced manufacturing employers with advanced manufacturing students at NH's community colleges. It's a way to meet, advise and find students for future employment. Students receive first-hand information about the world of manufacturing, which helps them prepare for a career upon graduation.



2015/21/7 8:29am

Joined @WhipHoyer to discuss the future of American manufacturing & the strength of advanced manufacturing in NH! <http://t.co/IHM2VxdDmK>

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2015/21/7 8:27am

Looking for a job? <https://t.co/0dbTqosLNF>


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2015/21/7 8:26am

Senators working with high-tech manufacturing firms to develop bipartisan Manufacturing Skills

Act <http://t.co/AW2TUgHqbl> #manufacturing #NH

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WorkReadyNH Update: Community outreach event forms symbiotic relationship

The WorkReadyNH program at River Valley Community College participated in the 14th Allwin Community Outreach Day in late summer at Tuck School of Business at Dartmouth. The Center for Business & Society organizes the day for the entering class of MBA students to connect with the issues at the intersection of business interests and society's needs, as well as the people and organizations involved.

The students quickly build direct knowledge about social needs in the Upper Valley, as well as the ways in which organizations meet those needs. Their skills are then applied to increase the positive effects of the organizations.

WorkReadyNH provides 60 hours of soft skills training for professional development that includes communication, conflict resolution and problem solving skills. Participants are also assessed and certified in workplace reading, math and critical thinking skills through ACT's WorkKeys exam. Those who pass receive the National Career Readiness Certificate. Graduates of the program increase their knowledge and practical skill levels at no cost to them and employers who interview employees who possess the WorkReadyNH certificate know that they have the skills that employers want most.



Tuck students offered a fresh perspective and practical and creative marketing strategies to WorkReadyNH Program Director Martha Mott. Mott said, "The students were vibrant and intelligent with strong communication and teamwork skills. Working with them was a meaningful experience and their ideas will help communicate the value of the WorkReadyNH program to NH citizens."

Dr. Harvey-Smith, the new president of River Valley Community College said, "These types of institutional partnerships are valuable to strategically repositioning River Valley Community College to better serve the region. WorkReadyNH is an excellent example of responding to the needs of employers."

For more information about the WorkReadyNH program, contact Director Martha Mott at 603-542-7744 or workreadyrvcc@ccsnh.edu. Also, see more at www.rivervalley.edu or www.facebook.com/workreadynhrvcc.

In the photo: Wesley Xu (China), Karthik Ramachadran (Chicago), Russ Barnes (San Francisco), Martha Mott, Caitlin Moore(D.C.), Lyusha Goldberger(Boston), Anatoly Borudulin (Russia)

AMPed NH Advisor: Opportunity knocks

Halloween is exciting, but remember when you were a little kid and it was scary? Knocking on doors asking for candy can be frightening for a child, especially when you don't know who's on the other side! But you did it because it was also exciting – and rewarding! (And likely because you knew your parents were right there for support!)

Building professional relationships and networks can be intimidating, too. And it's not like you can hide behind some awesome costume – or your parents' legs. You probably know that building professional relationships and connections is one way to get your adult-sized treat: a JOB.

Meeting advanced manufacturing professionals to connect with is easy when you join our eMentoring community, [AMPedNH Connect](#). Your mentors know what it is like to be an advanced manufacturing professional and want to help you get started in your new adventure as an advanced manufacturing professional.

Signing up is simple. Many have already received an email invitation, but if you haven't received yours, visit ampednhconnect.com and register. You can watch a [registration video](#) and an [overview of the community](#).

See? No tricks, all treats, courtesy of AMPed NH! (And we're always here with the support you need to feel confident opening new doors!)

Serious about advanced manufacturing: In bid to bolster workforce, community colleges offer tuition-free courses to 2,000 students

Innovation's been the name of the game where the NH community colleges' AMPed NH is concerned. And now AMPed NH is taking innovation in workforce development to a whole new level. It's offering tuition-free courses and myriad academic and professional support services to as many as 2,000 new students who enroll in a core advanced manufacturing certificate program.

The Advanced Manufacturing Partnerships in Education is an initiative of NH's seven community colleges, advanced manufacturers, state agencies and others formed to increase the highly skilled workforce through targeted training and education programs. It is funded by a \$20 million TAACCCT grant from the U.S. DOL Employment and Training Administration.

AMPed NH has developed dozens of industry driven and approved training and education programs that directly meet the high-tech needs of New Hampshire's advanced manufacturers. Its approach mirrors that of the industry itself: Lean. Clean. Precise. Smart. Students are taught the exact science, technology, math and engineering skills identified by manufacturers as necessary for success. In the colleges' updated labs, students use state-of-the-art virtual machines before advancing into work with the same types of cutting-edge equipment used on professional design and production floors. The goal: a seamless transition from classroom to career.

Sector-specific certificate and associate degree programs build skills in concentrations such as mechatronics and automation/robotics, advanced composites manufacturing, engineering technology, advanced machine tool technologies, electronics and electromechanics and advanced welding, and satisfy the very specific skill-set needs of those sectors. But the community colleges also identified a common thread in the concerns expressed by NH's manufacturers; a gap had developed in a core set of universal advanced manufacturing skills as technology advanced faster than the competencies of the workforce.

The innovative solution? Develop a core-curriculum certificate program to build the highly skilled workforce, then strip away the major barriers faced by students and job seekers considering enrollment.

With that, the Applied Career Fundamentals for Advanced Manufacturing Certificate was designed to prepare students for successful entry into the advanced manufacturing industry.

"The Applied Career Fundamentals for Advanced Manufacturing Certificate, and the decision by the community colleges to offer courses tuition-free for a limited time accelerates the enhancement of the pipeline," said Ross Gittell, chancellor of NH's community colleges. "This approach — which represents another innovation designed to bolster the NH economy— should generate interest statewide."

Based on government competency models and industry feedback, the certificate program builds skills in science, math, composition, communication, business fundamentals and computer skills. Students will also select two manufacturing elective courses to round out the requirements. Credit awarded in the

program will be fully transferrable between NH's community colleges and may later be counted toward associate degree requirements.

Top concerns for job seekers and prospective students include cost, accessibility and fear of the technical nature of the program. To address these, classes within the advanced manufacturing core are available in online, traditional classroom and hybrid formats. Twenty-four-hour online academic support and networking resources are available through AMPedNH Connect and, finally, the colleges are solving the cost issue by offering one course per new student tuition-free for a limited time.

By offering the first course within the advanced manufacturing core tuition-free to up to 2,000 students systemwide, AMPed NH aims to accelerate the growth of the pipeline of highly-skilled advanced manufacturing workers in the state and throughout New England.

Will Arvelo, President of Great Bay Community College and administrator for the TAACCCT grant said, "This initiative should help to level the playing field for those who are interested in entering advanced manufacturing but who feel they do not know where the entry point is. We hope many will take advantage of getting on this path that will lead to well-paying jobs in New Hampshire."

To learn more about the certificate program and how to enroll, contact the admissions office at your local NH community college. To learn more about AMPed NH and its full complement of training and education programs, visit www.ampednh.com.



NH Manufacturing Week 2013

Virtual welding units and 3-D printers and robotic arms, oh my!

National Manufacturing Day on Oct. 4 was a success, with more than 830 events scheduled nationwide — but a day wasn't enough for New Hampshire, where advanced manufacturing is such a big deal it took a week to properly showcase cutting-edge products and career opportunities.

In addition to the annual Governor's Manufacturing and High Tech Summit Oct. 10, N.H. Manufacturing Week featured open houses at advanced manufacturing facilities, high schools and each of NH's community colleges. New Hampshire advanced manufacturers serve customers worldwide in industries such as aerospace, defense, medical, computers and more.

Through high-tech science and presentations and hands-on exploration, tour participants experienced firsthand the state-of-the-art, safe and comfortable nature of today's manufacturing environments, and they were wowed!

NH's community colleges reported hundreds of people attended their Oct. 9 open houses, and industry leaders said busloads of students and teachers checked in to get a taste of what high-tech manufacturing is all about.

"It speaks volumes that our state has so many exciting stories going on in advanced manufacturing that we had to expand National Manufacturing Day into a Manufacturing Week in order to tell them all," said Desiree Crossley, marketing and outreach coordinator for New Hampshire's Advanced Manufacturing Partnerships in Education. "For example, it's not uncommon that community college students are recruited into advanced manufacturing careers even before they finish their chosen programs. By graduation time, they're already enjoying a return on their educational investment."

With manufacturers nationwide reporting shortages of well-trained, highly skilled employees, opportunities abound for exciting, challenging careers in the industry. According to the Economic and Labor Market Information Bureau, the

average weekly pay for NH workers in the private manufacturing sector was \$1,050 in spring 2013, 22% above the \$825 average of all private sectors in the state.

During the governor's summit, DRED Commissioner Jeffrey Rose touted partnerships like AMPed NH as important to growing the highly skilled workforce. AMPed NH is a partnership of NH's seven community colleges, advanced manufacturers, state agencies and more to increase the highly skilled workforce through targeted training and education programs. It is funded by a \$20 million TAACCCT grant from the U.S. DOL Employment and Training Administration.

"It's not about what we are today, but what we will be tomorrow," Rose said, acknowledging public/private partnerships like AMPed NH bolster New Hampshire's economy.

"A skilled workforce is critical for growth. Employees today are required to possess highly specialized skills, to adapt, think critically and work cooperatively to succeed."

Gov. Maggie Hassan

At the summit, N.H. Gov. Maggie Hassan declared Manufacturing Week a success, saying New Hampshire is "on the threshold of a bright new economic future" thanks to leaders who came together to practice "collective problem solving" and are now moving N.H. forward.

"A skilled workforce is critical for growth," Hassan said. "Employees today are required to possess highly specialized skills, to adapt, think critically and work cooperatively to succeed."

Under AMPed NH, industry guided and approved certificate and associate degree programs are offered at NH's community colleges. Teaching labs feature the same cutting-edge equipment used in professional production facilities in order to provide a seamless transition from classroom to career — in sectors like robotics & automation, electronics & electromechanics, advanced machine tool technologies, advanced welding, advanced composites and engineering & programming. Work-readiness training and certification is available free of charge to participants by WorkReadyNH.

NH Manufacturing Week was organized by the state's seven community colleges, advanced manufacturers, NH MEP, NH Works, economic development groups and others. To learn more, visit www.ampednh.com.





NH Manufacturing Week 2013

AMPed NH offered open houses at each of NH's community colleges Oct. 9. Advanced manufacturing lab tours featured demonstrations, student representatives and more.



11th Annual Governor's Advanced Manufacturing and High Tech Summit
Clockwise from top left: Project Coordinators Don Brough and Jon Mason represent AMPed NH; WorkReadyNH's Mandy Fraser and AMPed NH's Desiree Crossley smile with Gov. Maggie Hassan; NHTI student Matthew Marcil touts STEM.



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Governor's Advanced Manufacturing and High Tech Summit

ABOVE: Vic Kissell of Maxcess International shows off a fully functional product made in a 3-D printer.

RIGHT-CENTER:

Zenagui Brahim of NH MEP talks about the success of events that took place in NH for Manufacturing Week.

FAR RIGHT: Summit attendees took rides on a cooler that was transformed into a transportation device.



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Great Bay Community College's Open House at its Advanced Technology & Academic Center campus in Rochester

LEFT and BELOW: Great Bay Community College students lead tours of the advanced composites manufacturing lab, describing the functions of each piece of high-tech equipment.



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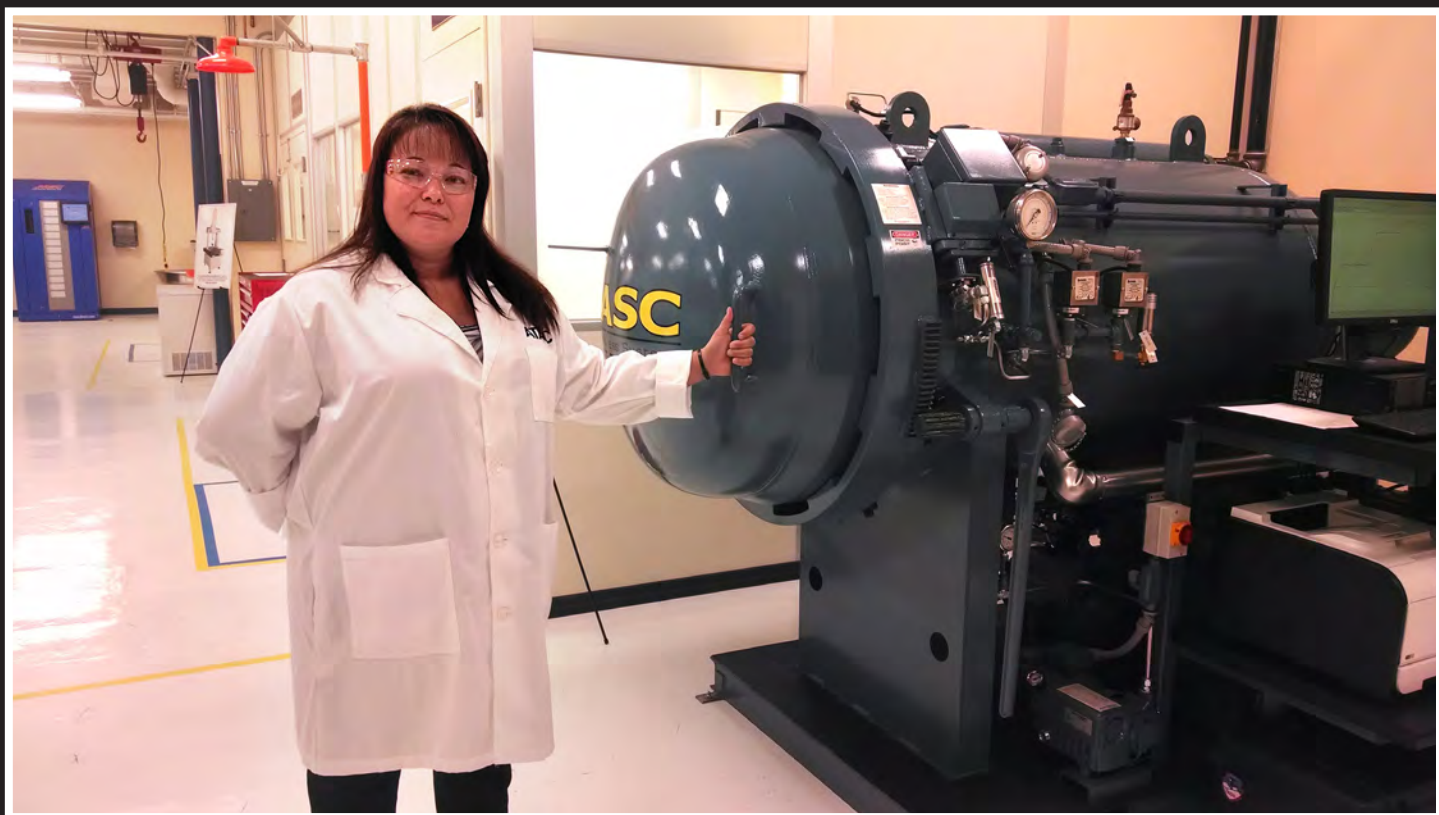
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Great Bay Community College's Open House at its Advanced Technology & Academic Center campus in Rochester

Students Kerri Uyeno and Joe Hutter (in white lab coats) explain advanced composites manufacturing processes and show off professional-grade equipment including a 5-axis CNC machine and an autoclave.



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Great Bay Community College's Open House at its Advanced Technology & Academic Center campus in Rochester

Great Bay Community College students in the Advanced Composites Manufacturing certificate program receive a lesson in the state-of-the-art Metrology Lab at the college's Advanced Technology and Academic Center.

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White Mountains Community College Open House

CLOCKWISE FROM TOP: Members of the public, community college and industry try their hands at 3-D simulated welding and check out other advanced welding equipment in the lab.

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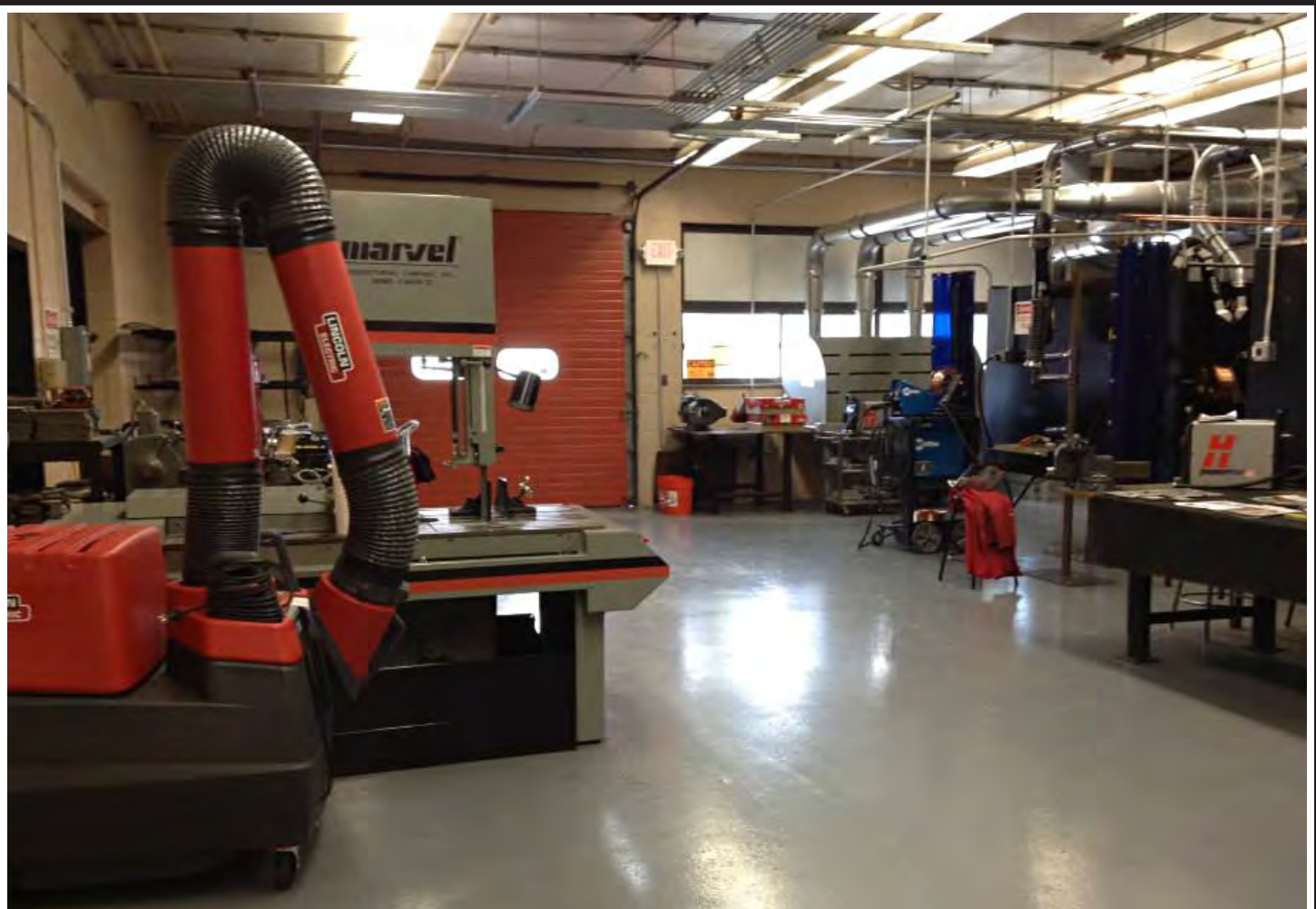
NH Manufacturing Week 2013

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White Mountains Community College Open House

TOP: 3-D virtual welding units illustrate the extremely precise and scientific nature of the job and measure students' aptitude using myriad benchmarks.

BELOW: The advanced welding lab at White Mountains Community College offers 24 welding learning stations featuring the latest technologies.



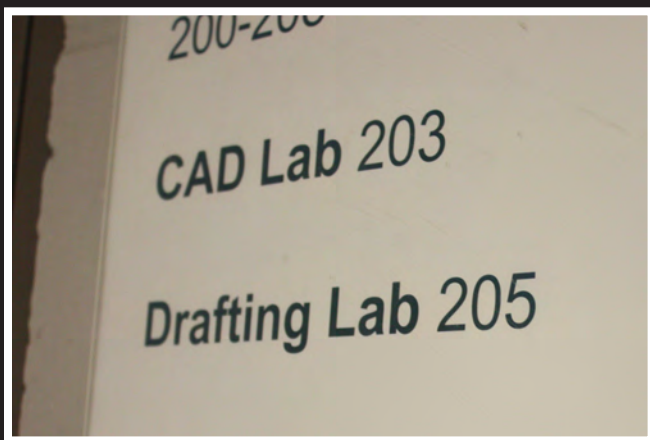
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Manchester Community College Open House

3-D printing equipment — on the cutting edge of manufacturing technology, especially where prototyping is concerned — was a popular stop for members of the public during Manchester Community College's open house. The college's 3-D printer produces fully functional parts based on designs that can be created using CAD software.

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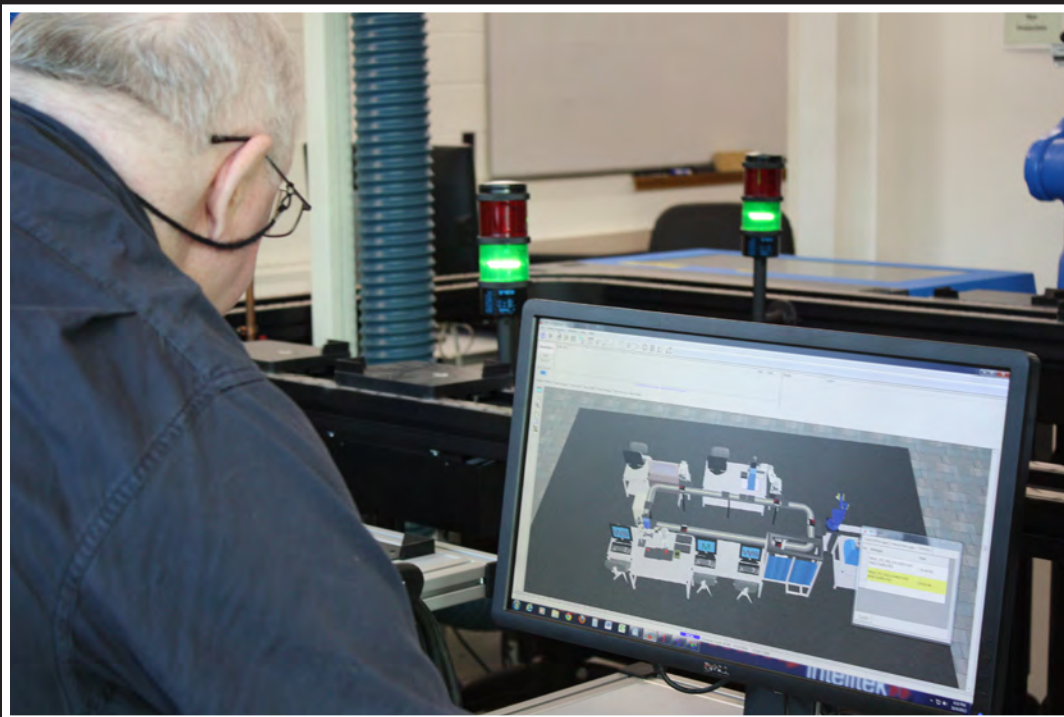


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Manchester Community College Open House

Phil Przybyszewski, AMPed NH project coordinator at Manchester Community College, shows groups from YouthBuild and the National Able Network, as well as NH State Rep. Linda DiSilvestro, how robots in the college's Mechatronics lab create, assemble and organize products made of materials like metal, plastics and resins.



Manchester Community College Open House

Advanced Technologies & CAD Professor Ed Ely prepares the mechatronics teaching system in a Manchester Community College lab to perform an advanced manufacturing demonstration during the tour.

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Manchester Community College Open House

CLOCKWISE FROM TOP LEFT: AMPed NH online student resource and networking programs are explained in a brochure featured at Manchester Community College's open house; (from left) NH State Rep. Linda DiSilvestro, AMPed NH Project Coordinator Phil Przybyszewski and National Able Network's Dan Hobbs talk about manufacturing career opportunities; and teens with YouthBuild NH tour the Mechatronics Lab.

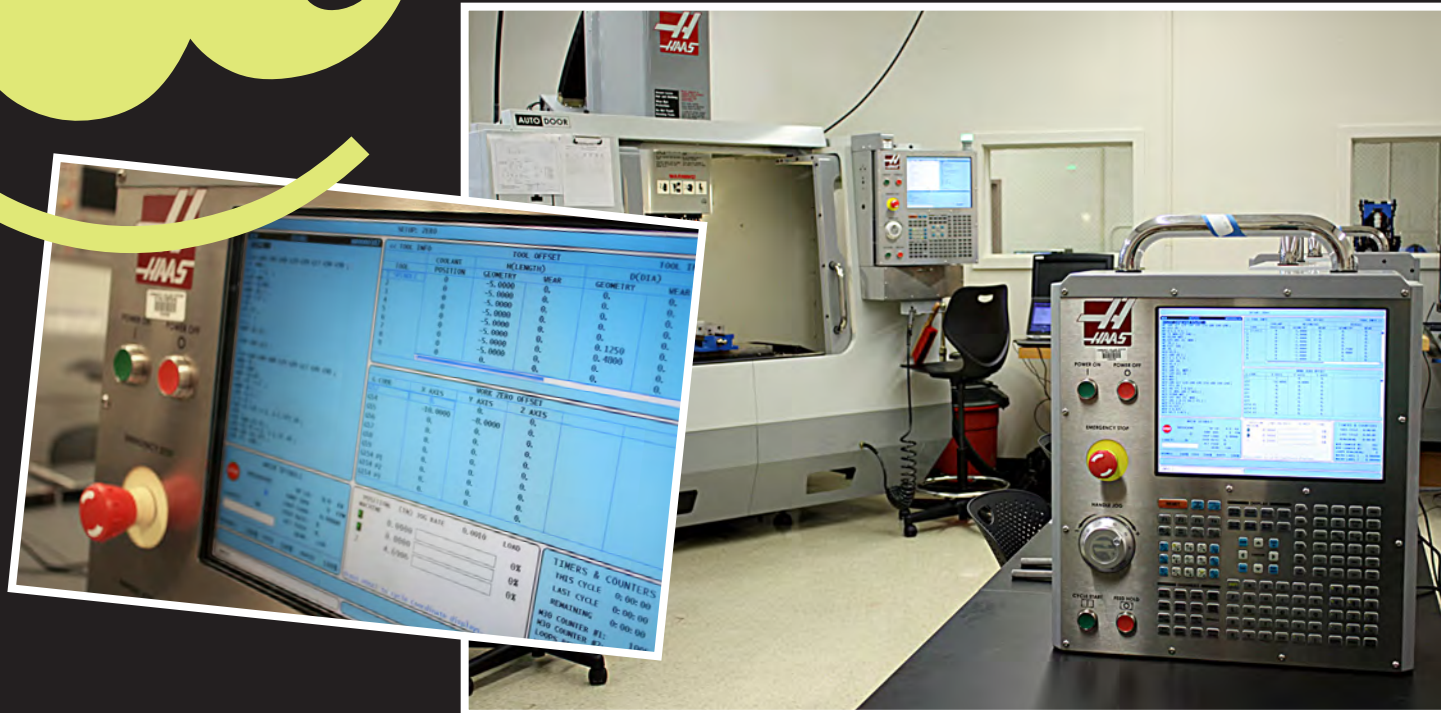


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NHTI's Robotics & Automation Engineering Lab Grand Opening & Open House

NHTI showed off its completely updated manufacturing and advanced robotics and automation engineering labs, including state-of-the-art CNC machines and simulation training units.

GET THE SKILLS YOU NEED FOR THE JOB YOU WANT.

MFG DAY

MANUFACTURING WEEK IN NH • OCT. 7-10

Manufacturing has been an essential component to the quality of life in New Hampshire and New England for generations. From the early days of the Industrial Revolution to the modern era of automation and robotics, manufacturing has been a driving force in the region's economic growth.

Take for yourself Oct. 7-10 as New Hampshire's first-ever Manufacturing Week. This week-long celebration will feature a variety of events, including open houses, demonstrations, and networking opportunities. It's a chance to see the latest in manufacturing technology and to meet with industry leaders.

Learn about the latest gear technologies, attend seminars, and see the latest in manufacturing equipment. And the industry's top talent will be on hand to help you find the jobs of your future.

HIGHLIGHTS

- OCT. 7-8** - Attendance from 100,000+ people from across the state, including high school and college students.
- OCT. 9** - High school students and industry professionals will gather for a day of networking and learning opportunities.
- OCT. 10** - A day of networking and learning opportunities for industry professionals.

Full schedule of events and more information at www.AMPedNH.com

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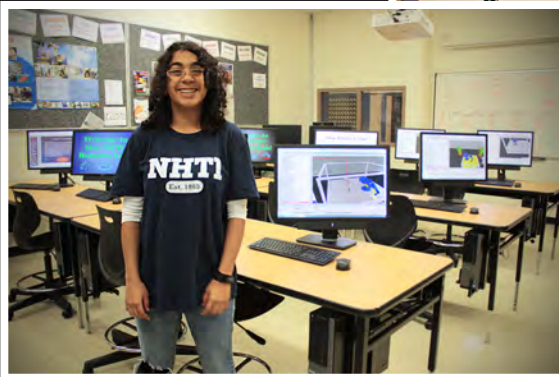


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New Robotics Club



NHTI's Robotics & Automation Engineering Lab Grand Opening & Open House

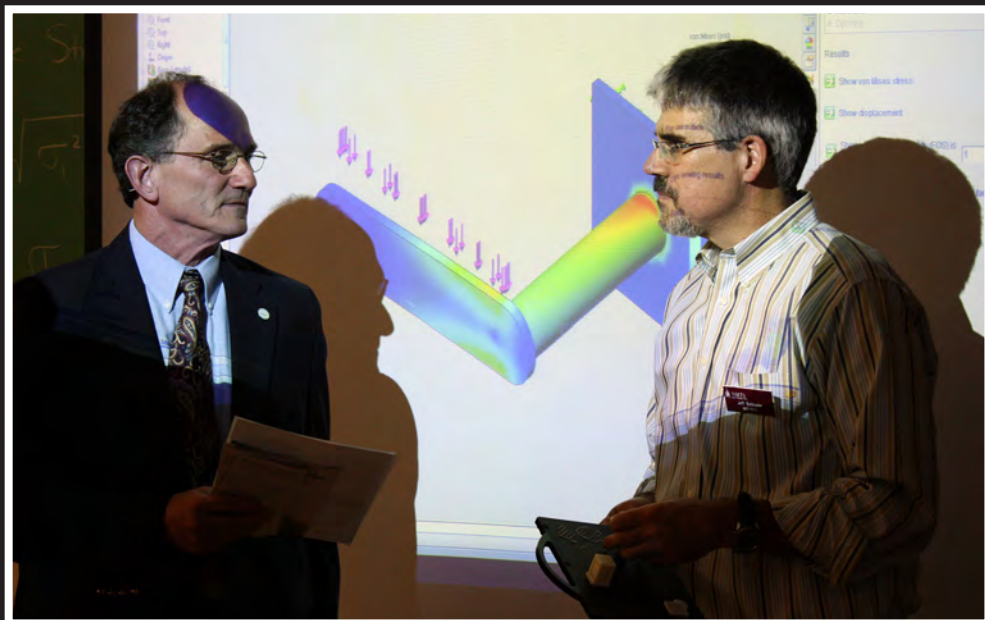
NHTI students Kevin Kezar and Tabitha Nieves, who is also president of the college's Vex Robotics Club, show off equipment in the robotics engineering lab and a few robots built by students.

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NHTI's Robotics & Automation Engineering Lab Grand Opening & Open House

ABOVE: Mechanical Engineering Technology/ Manufacturing Engineering Technology Professor Jeff Beltramo, right, talks about today's technologies in an NHTI classroom during the college's open house. BELOW: One of the advanced manufacturing labs at NHTI features CNC simulators and machines in a clean, bright and safe learning environment.

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Lakes Region Community College Open House

Staff, students and members of the public examine high-tech manufacturing equipment. LRCC offers advanced manufacturing, as well as electronics and electromechanics, academic programs.

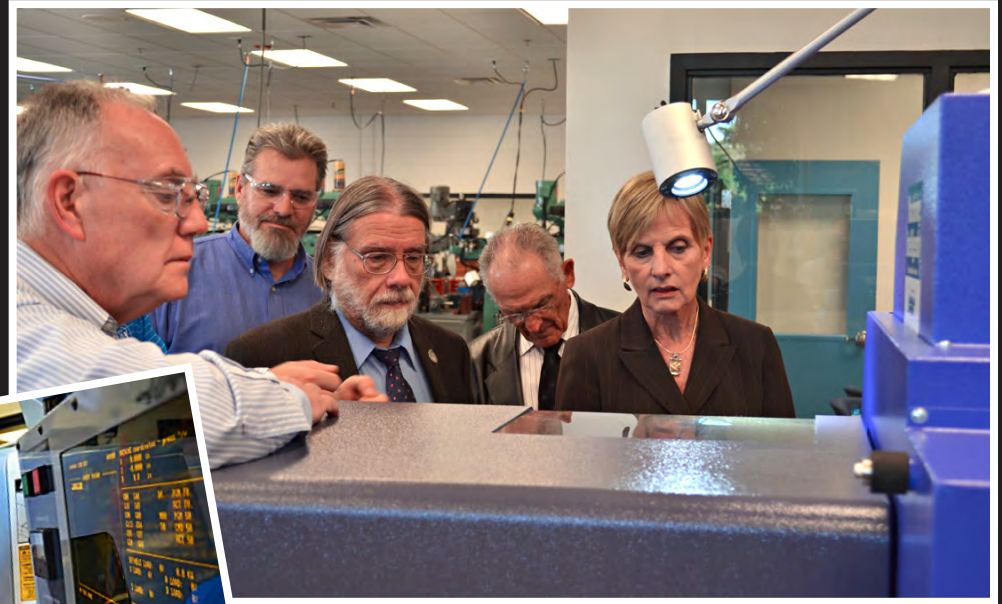
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Nashua Community College & River Valley Community College Open Houses

ABOVE and LEFT: Nashua Community College President Lucille Jordan, far right, students, faculty and visitors discuss extremely precise manufacturing capabilities of the lab's computer-controlled machines. BELOW: The Society for Manufacturing Engineers (SME) attended River Valley Community College's open house, along with its mobile manufacturing lab.



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For more information, visit www.ampednh.com



NH Manufacturing Week 2013



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11th Annual Governor's Advanced Manufacturing and High Tech Summit
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FAR RIGHT: Summit attendees took rides on a cooler that was transformed into a transportation device.



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Great Bay Community College's Open House at its Advanced Technology & Academic Center campus in Rochester

LEFT and BELOW: Great Bay Community College students lead tours of the advanced composites manufacturing lab, describing the functions of each piece of high-tech equipment.



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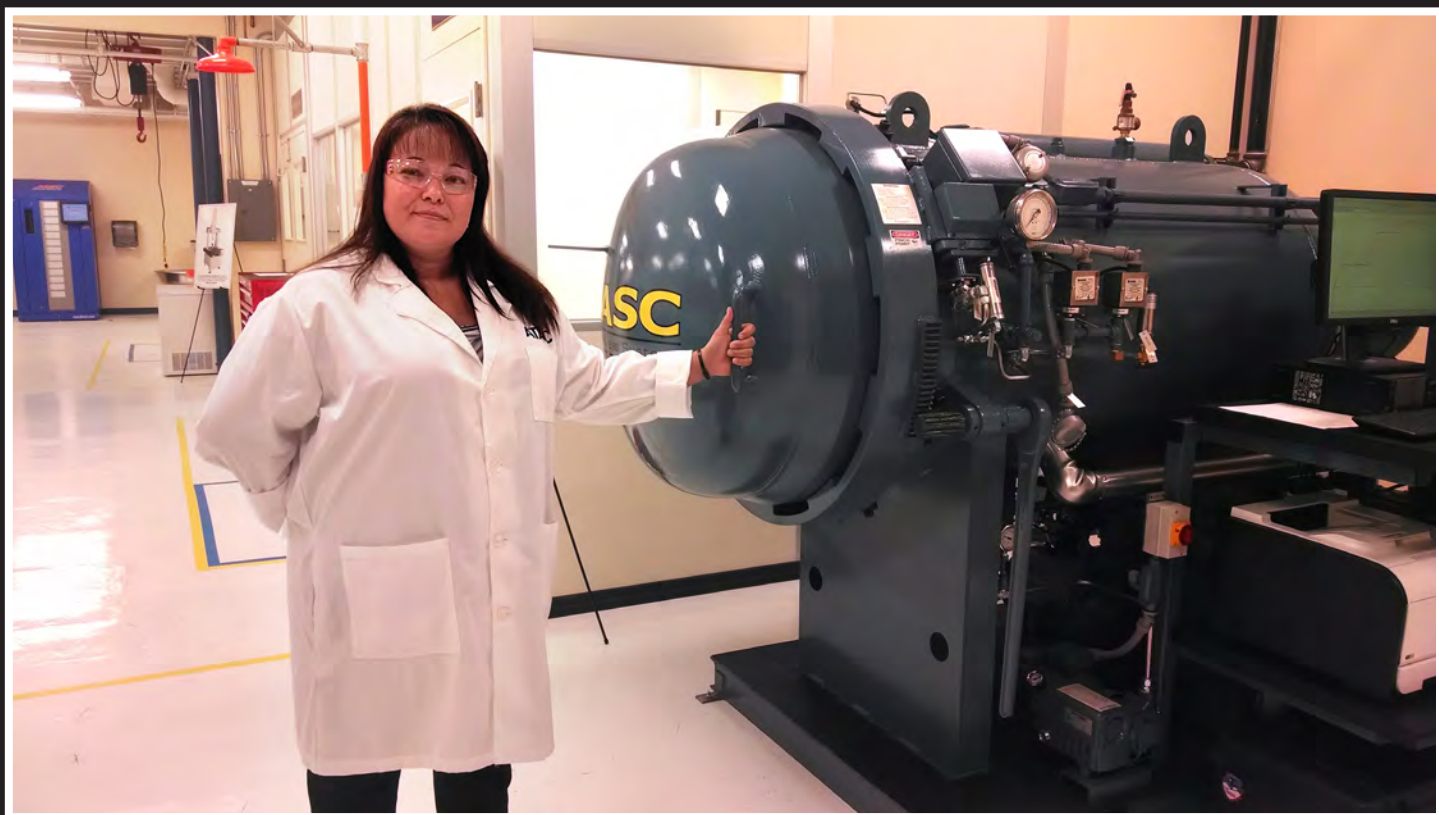
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NH Manufacturing Week 2013

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Great Bay Community College's Open House at its Advanced Technology & Academic Center campus in Rochester

Great Bay Community College students in the Advanced Composites Manufacturing certificate program receive a lesson in the state-of-the-art Metrology Lab at the college's Advanced Technology and Academic Center.

This program or product is sponsored by (or in part by) a \$19.97 million grant from the U.S. Department of Labor, Employment & Training Administration TAACCCT Grant #TC-22504-11-60-A-33. The Community College System of NH is an equal opportunity employer, and adaptive equipment is available upon request to persons with disabilities.



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White Mountains Community College Open House

CLOCKWISE FROM TOP: Members of the public, community college and industry try their hands at 3-D simulated welding and check out other advanced welding equipment in the lab.

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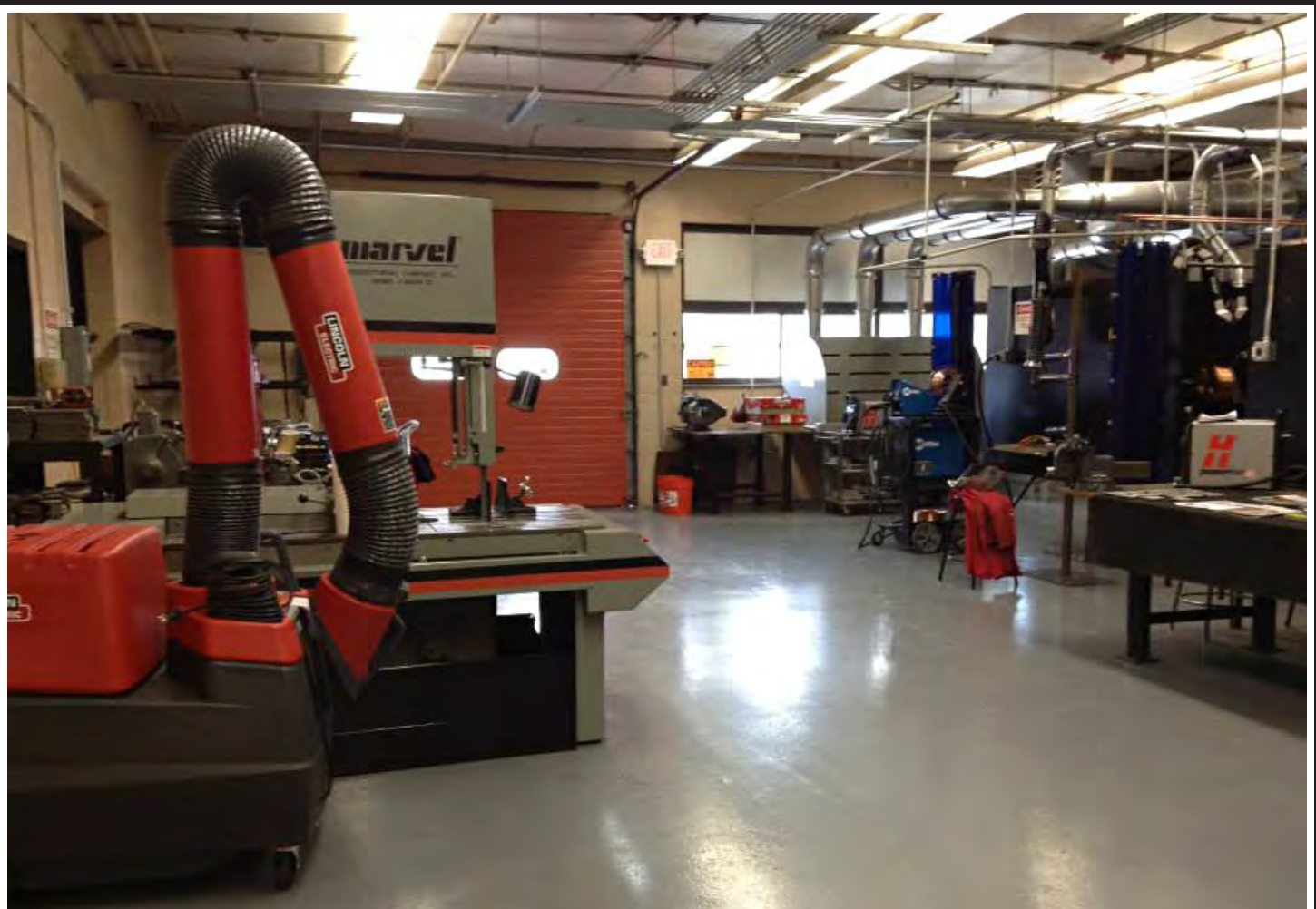
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White Mountains Community College Open House

TOP: 3-D virtual welding units illustrate the extremely precise and scientific nature of the job and measure students' aptitude using myriad benchmarks.

BELOW: The advanced welding lab at White Mountains Community College offers 24 welding learning stations featuring the latest technologies.



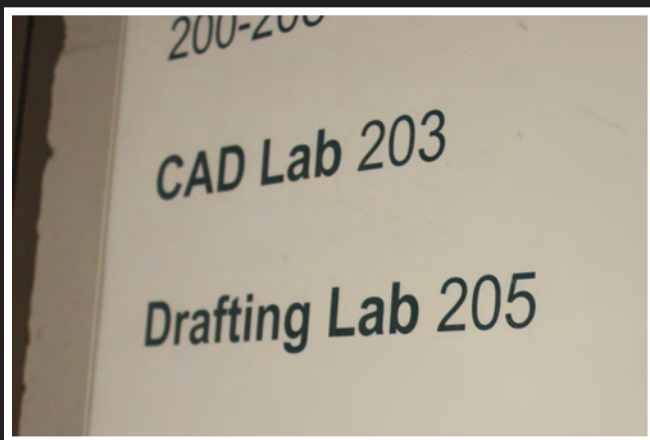
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Manchester Community College Open House

3-D printing equipment — on the cutting edge of manufacturing technology, especially where prototyping is concerned — was a popular stop for members of the public during Manchester Community College's open house. The college's 3-D printer produces fully functional parts based on designs that can be created using CAD software.

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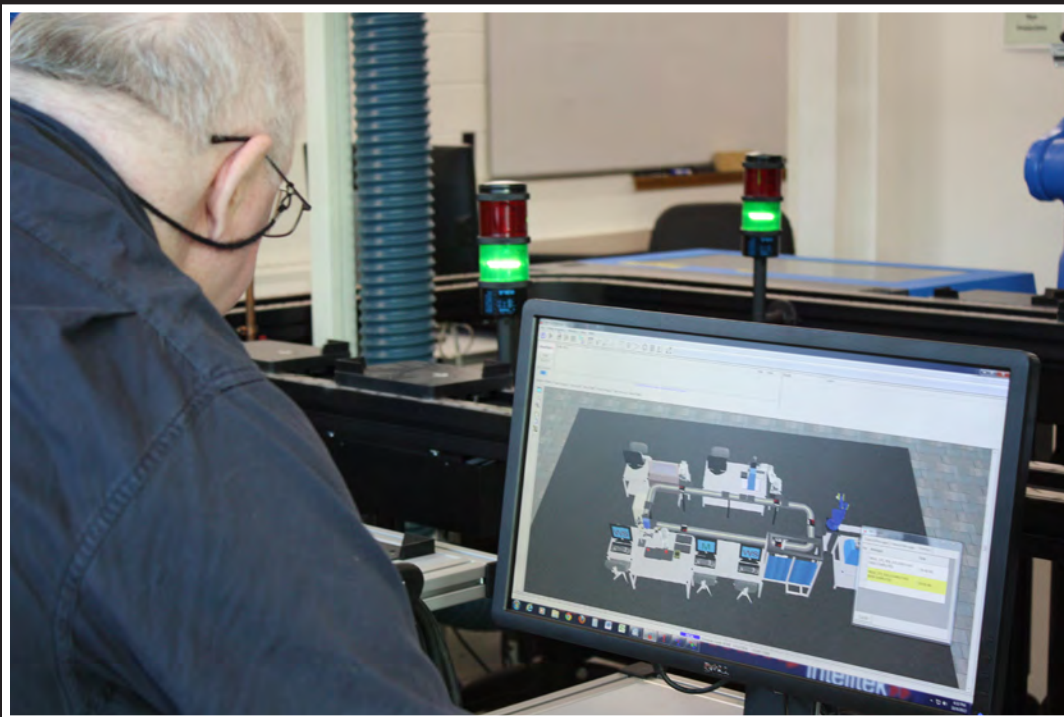


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Manchester Community College Open House

Phil Przybyszewski, AMPed NH project coordinator at Manchester Community College, shows groups from YouthBuild and the National Able Network, as well as NH State Rep. Linda DiSilvestro, how robots in the college's Mechatronics lab create, assemble and organize products made of materials like metal, plastics and resins.



Manchester Community College Open House

Advanced Technologies & CAD Professor Ed Ely prepares the mechatronics teaching system in a Manchester Community College lab to perform an advanced manufacturing demonstration during the tour.

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Manchester Community College Open House

CLOCKWISE FROM TOP LEFT: AMPed NH online student resource and networking programs are explained in a brochure featured at Manchester Community College's open house; (from left) NH State Rep. Linda DiSilvestro, AMPed NH Project Coordinator Phil Przybyszewski and National Able Network's Dan Hobbs talk about manufacturing career opportunities; and teens with YouthBuild NH tour the Mechatronics Lab.

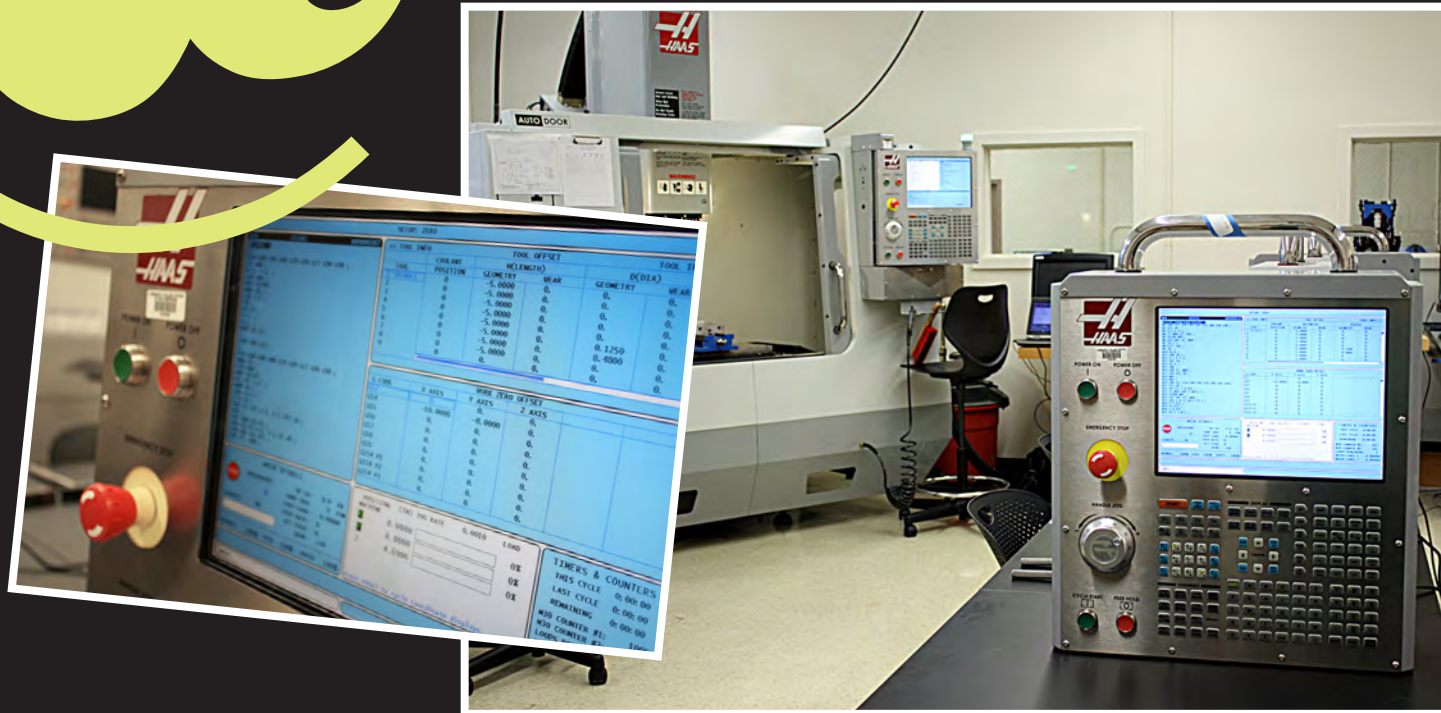


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NHTI's Robotics & Automation Engineering Lab Grand Opening & Open House

NHTI showed off its completely updated manufacturing and advanced robotics and automation engineering labs, including state-of-the-art CNC machines and simulation training units.

Great Bay Community College
 ADVANCED COMPOSITES MANUFACTURING

LAKES REGION
 ADVANCED MANUFACTURING & ELECTROMECHANICS

MANCHESTER COMMUNITY COLLEGE
 MECHATRONICS & AUTOMATION/ROBOTICS

Nashua Community College
 PRECISION MANUFACTURING

NHTI
 ROBOTICS & AUTOMATION ENGINEERING

RIVER VALLEY COMMUNITY COLLEGE
 ADVANCED MACHINE TOOL & PHYSICAL SCIENCES

White Mountains Community College
 PRECISION MILLING

GET THE SKILLS YOU NEED FOR THE JOB YOU WANT.

MFG DAY
 OCT 9-12

MANUFACTURING WEEK IN NH • OCT. 7-10

Manufacturing has been an essential component to the economy for generations and now it's becoming an even greater force. Greater than ever before, our manufacturing industry is growing & changing. To advance ourselves, we need the best talent available.

See for yourself Oct. 7-10 as New Hampshire's top manufacturers, their students and industry leaders meet for three of their best manufacturing facilities.

Learn about the latest green technologies, cutting-edge methods, cutting-edge manufacturing equipment and the industry's top talent. The skills you need.

HIGHLIGHTS

OCT. 7-8 - Attendees from 100+ leading manufacturing companies will meet with top industry leaders and experts in the field.

OCT. 9 - High school students and industry leaders will meet and network and enjoy a day of learning and networking with industry leaders.

OCT. 10 - Companies, suppliers, manufacturers and business leaders will meet to discuss manufacturing equipment and the industry's top talent.

Full schedule and more information go to www.AMPedNH.com

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 Let's Advance.

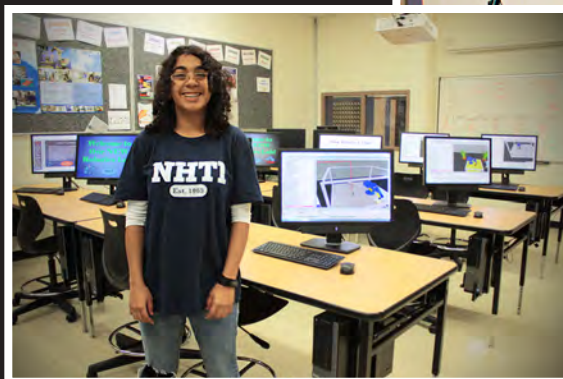
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NHTI's Robotics & Automation Engineering Lab Grand Opening & Open House

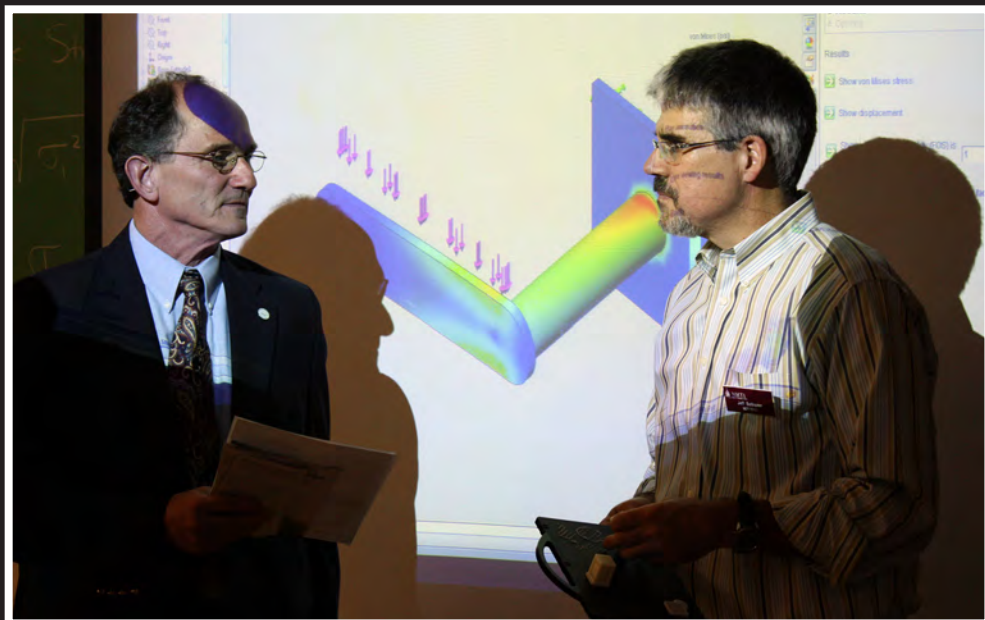
NHTI students Kevin Kezar and Tabitha Nieves, who is also president of the college's Vex Robotics Club, show off equipment in the robotics engineering lab and a few robots built by students.

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NHTI's Robotics & Automation Engineering Lab Grand Opening & Open House

ABOVE: Mechanical Engineering Technology/ Manufacturing Engineering Technology Professor Jeff Beltramo, right, talks about today's technologies in an NHTI classroom during the college's open house.

BELOW: One of the advanced manufacturing labs at NHTI features CNC simulators and machines in a clean, bright and safe learning environment.

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Lakes Region Community College Open House

Staff, students and members of the public examine high-tech manufacturing equipment. LRCC offers advanced manufacturing, as well as electronics and electromechanics, academic programs.

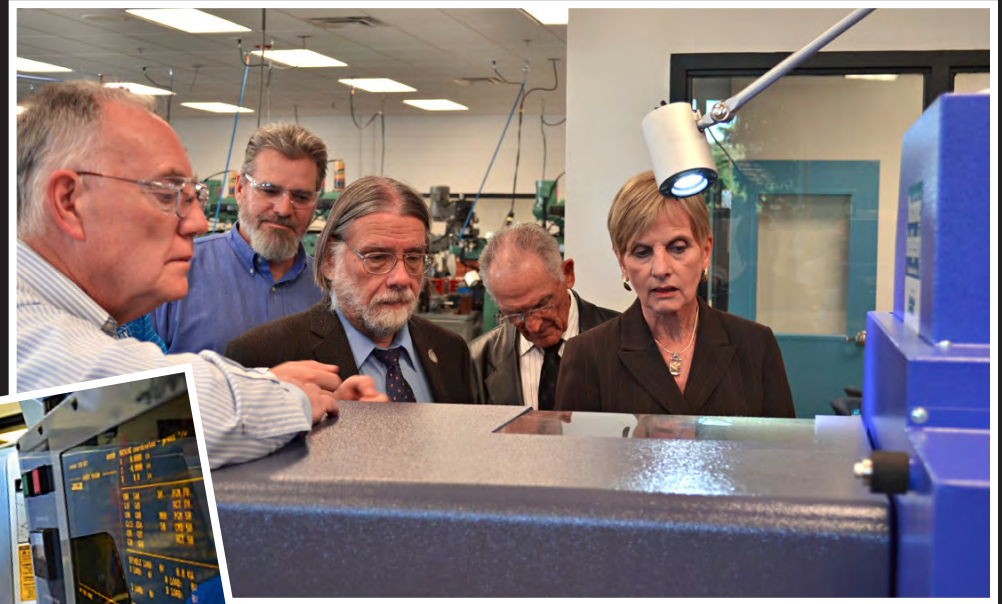
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NH Manufacturing Week 2013

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Nashua Community College & River Valley Community College Open Houses
ABOVE and LEFT: Nashua Community College President Lucille Jordan, far right, students, faculty and visitors discuss extremely precise manufacturing capabilities of the lab's computer-controlled machines. BELOW: The Society for Manufacturing Engineers (SME) attended River Valley Community College's open house, along with its mobile manufacturing lab.



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For more information, visit www.ampednh.com



Great Bay Community College

Business & Training Center

CNC Operator Instructors Needed!!

TITLE: Instructor - CNC Operator Training, Sig Sauer Portsmouth Location

SCOPE OF WORK:

The curriculum will provide competency development in:

Machine Tool Math

Blueprint Reading

Geometric Dimensioning and Tolerance

Metrology/Measurement

Inspection

CNC Milling & Turning Machining

Set-up and Operation

Tooling Selection

Basic Machine code

Speeds and Feeds

Offsets

Safety

Quality Control

Statistical Process Control

Metallurgy

Process Documentation

Core Lean Principals

Basic G&M Code Programming

Anticipated Class Schedule: (Subject to change. Class time to be divided among instruction staff.)

Monday, December 2nd, 2013 to Friday January 31st Monday-Friday - Shift One: 8am to 1pm. Shift Two: 12pm to 4pm. Second eight week schedule to begin approximately Monday, February 10th.

MINIMUM QUALIFICATIONS:

Experience: Two or more years of experience as a CNC Operator with some prior teaching experience in either an academic or industrial setting preferred. Experience with ToolingU and EMCO Concept online learning software a plus.

Contact Sean Hoeing, Rapid Response Training Manager, Great Bay Community College if interested.

Phone: 603.427.7727 Email: shoeing@CCSNH.edu

Rash of burglaries in Belmont this month

BELMONT — Police are reporting an increase in the number of burglaries reported in town, confirming they are investigating six of them since September 13 and eight since September 1.

Logs show that with two exceptions, all of the break-ins have been in the Union Road/Laconia Road (Rte. 3) area of town.

The two exceptions involved copper thefts from an abandoned house on Concord Street and from a bath-beach house near one of the seasonal parks.

Lt. Richard Mann said at least two of burglaries, one reported on September 26 and one reported on September 27 but that likely occurred the day before, involved homes where the residents had been gone for the day.

Mann said a burglary on Union Road reported September 26, the house appeared to be ransacked and a jar of change, among other things, was taken.

He said a home owner on Dutile Road returned home the night of September 26 and thought there was a drawer that was left open. He said the homeowner went to sleep but when he couldn't find his laptop the next morning, he called police.

He said police have no reason to think the two are related but said they are increasing patrols in the area.

Other burglaries reported include two on Laconia Road, one of Scenic Drive and one on Lakewood Drive.

Mann said anyone who sees any suspicious activity should report it to the police. He also said that if anyone has any information about any of the above burglaries they should call 267-8351. He said callers may remain anonymous.

He also said people should lock their doors when they are not home and make sure their cars are locked when not in use.

— Gail Ober

OBAMACARE from page 2

is going to look like for my family at the beginning of the year," Berge said. "That's a big unknown right now. I want to figure that out as soon as possible so we can begin planning."

In California, home to 15 percent of the nation's uninsured, officials pulled the enrollment portion of the Covered California site down overnight for emergency upgrades. It was restored midmorning Wednesday, and 7,770 people had started applications by then, spokesman Roy Kennedy said.

California is one of a handful of mostly Democratic states that opted to set up their own exchanges rather than let the federal government do it for them. In the 36 states being operated by the federal Department of Health and Human Services, consumer patience was still being tested.

Agency spokeswoman Joanne Peters said many Americans successfully enrolled on the first day, but she declined to put a number on it. She said the delays were due to "overwhelming interest" and high volume.

It's not as if nobody warned them. Just three months ago, the congressional Government Accountability Office said a smooth and timely rollout could not be guaranteed because the online system was still getting finishing touches and had not been fully tested.

The Obama administration shrugged off the evaluation.

The bumpy debut has the hallmarks of a technology project that may have rushed to meet the Oct. 1 deadline, said Bill Curtis, chief scientist at CAST, a software quality analysis firm, and director of the Consortium for IT Software Quality, which develops standards.

"When you are in a rush, you typically make a lot of mistakes and you don't have time to test them all out," he said.

High volume can also expose software flaws that were not detected in testing, Curtis said, like the recurring problem consumers encountered trying to set up accounts on the federal site. Drop-down menus that were supposed to provide security questions did not work.

MANUFACTURING MATTERS MONTHLY

Education | Skills | Technology | Industry | Careers | Success | Growth

Finding engineering talent & skilled, computer-savvy workers presents major challenge for NH Ball Bearings

NH Ball Bearings has locations nestled in the hills below Mount Monadnock and in the heart of the Lakes Region — idyllic scenes to be sure, and ones that evoke memories of a simpler past. But there's nothing simple about the technology being used by this advanced manufacturer, and if its staff is looking one way, it's toward the future.

The company produces precision components for industries like aerospace, defense, dental and medical, high-tech and racing.

NHBB was founded in 1946 in Peterborough, and purchased by Minebea Co. Ltd. in 1985. Headquartered in Tokyo, Japan, Minebea is the world's largest producer of miniature ball bearings and a major manufacturer of precision electromechanical devices.

NHBB operates under NMB (USA) Inc., the North American headquarters of the Minebea Group of companies.

NHBB Astro Division, located in the heart of New Hampshire's Lakes Region in Laconia since 1964, is Minebea's leading domestic supplier of spherical bearings, rod ends, lined and composite sleeves, slotted entry bearings and sub-assemblies for use in commercial and military aerospace applications, including rotary-wing aircraft (helicopters), fixed-wing aircraft, jet engines, missiles, actuators, landing gear, tanks, satellites, space vehicles, RPV and many others. Astro also produces a wide variety of self-lubricating liner systems for standard or custom applications. Four hundred sixty dedicated employees offer their talents at the Astro Division.

Here, we meet Gary Groleau, corporate manager of labor relations and organizational development.

Q. Describe a product you manufacture and the effect it has on consumers' lives.

A. All NHBB products are used in both commercial and military aerospace applications and therefore are truly life critical.

Q. What does the future have in store for the NHBB workforce?

A. Business is growing and job opportunities are available, but finding engineering, technical talent



Gary Groleau
(NHBB photo)

and skilled computer-numerical controlled labor continues to present a major challenge.

Q. How have you partnered with Lakes Region Community College to help build the workforce?

A. NHBB's relationship with LRCC is long-standing and strong. We have partnered on the delivery of custom trainings in diverse areas such as

leadership development, supervisory skills, machine maintenance, sustainability, shop math and, most recently, on the development of the curriculum for the recently offered certificate and associate degree program in advanced manufacturing.

Many NHBB employees are engaged in formal programs of study and choose LRCC, but moreover, NHBB is always eager assess LRCC talent in our recruitment efforts.

Q. Who should choose a career in advanced manufacturing in New Hampshire?

A. Do not hesitate to seize the opportunity! Advanced manufacturing is world class in every respect. Manufacturing facilities are clean, safe, efficient, technically innovative and monuments to sustainability. Products are cutting edge; careers paths are clear, diverse and high-paying; and opportunities for advancement are great.

To learn about advanced manufacturing training and academic programs at Lakes Region Community College, email AMPed NH project coordinator Don Brough at dbrough@ccsnh.edu. To learn more about CCSNH advancements under AMPed NH, e-mail outreach coordinator Desiree Crossley at dcrossley@ccsnh.edu. AMPed NH is sponsored by the U.S. Department of Labor Employment and Training Administration through a \$20M TAACCCT grant. CCSNH is an equal opportunity employer.

At right and below are pictured an array of precision miniature ball bearing products and precision electromechanical devices manufactured for commercial and military applications by NH Ball Bearings. (NHBB photos)



2013-2014

NEW HAMPSHIRE

next

Your Guide to Life After High School

Which path is right for you?

TECH SCHOOL

GAP YEAR

MILITARY

WORK

INTERNSHIP

UNIVERSITY

TRAVEL

COLLEGE

VOLUNTEER



A specialty publication of
Parenting New Hampshire,
sponsored by AMPed NH



ADVANCED COMPOSITES
MANUFACTURING



ADVANCED MANUFACTURING
& ELECTROMECHANICS



MECHATRONICS &
AUTOMATION/ROBOTICS



PRECISION
MANUFACTURING



ROBOTICS & AUTOMATION
ENGINEERING



ADVANCED MACHINE
TOOL & PHYSICAL
SCIENCES

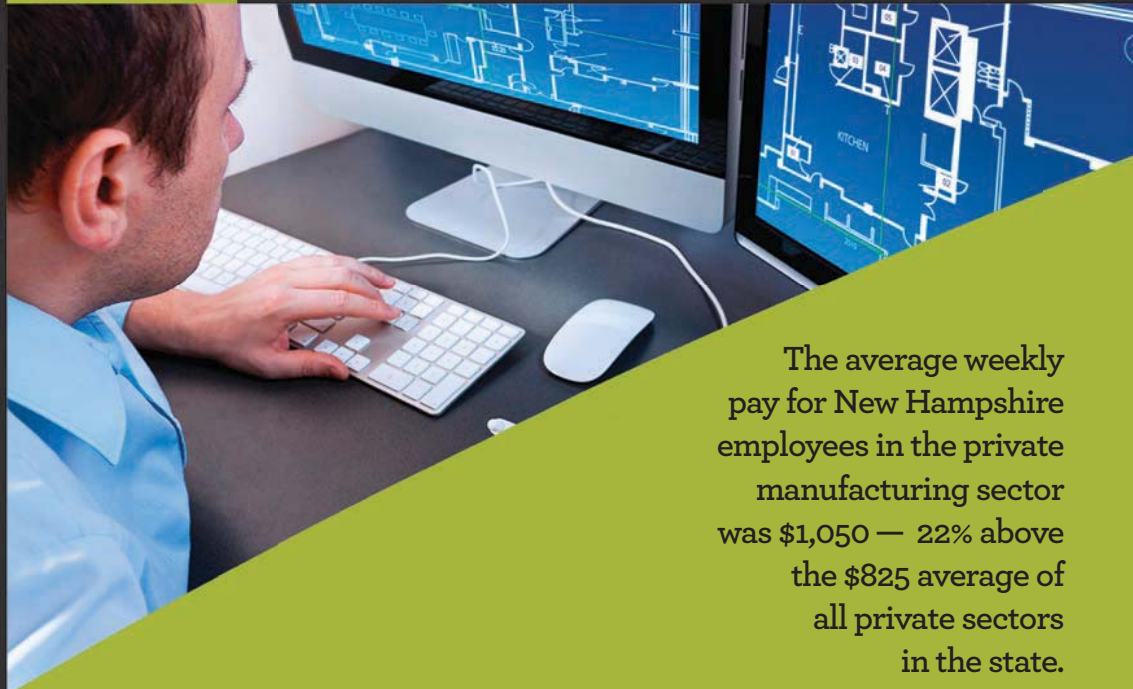


PRECISION WELDING

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GET THE SKILLS YOU NEED

FOR THE JOB YOU WANT.



The average weekly pay for New Hampshire employees in the private manufacturing sector was \$1,050 — 22% above the \$825 average of all private sectors in the state.

— Economic and Labor Market Information Bureau, Spring 2013

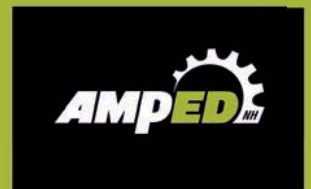
HIGH-TECH JOBS IN NH

Manufacturing has been a vital part of New Hampshire industry for generations — and now it's advanced. It's smarter, faster, cleaner than ever before, and demand is high for technically skilled employees.

New Hampshire's community colleges offer training and education programs designed to meet the needs of this cutting-edge industry.

Visit AMPedNH.com/NHNNext and get on a path to the coolest careers in the state.

ADVANCED
MANUFACTURING
PARTNERSHIPS
IN EDUCATION



Let's Advance.

AMPedNH.com/NHNNext

INDUSTRY-APPROVED TRAINING AND EDUCATION PROGRAMS

New Hampshire's community colleges have more than 100 industry partners supporting AMPed NH's mission in a variety of ways, including but not limited to, expressed support for the programs and hiring of CCSNH alumni and students and more. CCSNH makes no hiring or pay guarantees on the behalf of any supporting company. A small sampling of our participating partners: [Albany Engineered Composites](#) • [NH Ball Bearings](#) • [Hypertherm](#) • [Omni Components Corporation](#) • [Hitchiner Manufacturing](#) • [Freudenberg NOK](#) • [OSRAM Sylvania](#)

To see the entire list, visit AMPedNH.com/NHNNext





welcome!

Dear Students,

One of the most difficult and important decisions you will be faced with is figuring out what you want to do when you get out of high school. No doubt you've thought a lot about what you want to be "when you grow up." Whether you have a pretty good idea or aren't quite sure, this is the time to give consideration to what path you are going to take. How are you going to get there?

The goal of *NH Next: Your Guide to Life after High School* is to give you the information to help get you started. Perhaps you want to go to a four-year college or maybe you want to check out a career school. You may have even decided you want to go into the military. Wherever you want to go, you will find articles, and web and local resources in this publication to help get you on your way.

Also keep in mind that you don't have to go on this journey alone. Your high school guidance counselors, teachers and, of course, your parents are a great place to start as you look at life after high school. They can point you in the right direction and give you additional resources and support as you make that significant transition into adulthood.

I wish you the best of luck!

Melanie Hitchcock

Editor, NH Next: Your Guide to Life After High School



Community College System of NH
320 Corporate Drive, Portsmouth, NH 03801
www.ampednh.com

NH's community colleges, through their Advanced Manufacturing Partnerships in Education, are changing the game in education. By design, the dozens of smart manufacturing training and academic programs offered at every campus and online directly meet the needs of the high-tech industry. To accomplish this, the colleges worked hand in hand with leading employers in need of qualified employees. Under the partnership, the community colleges developed programs that provide seamless transitions from classroom to career – and it's not uncommon students are hired even before they graduate. A manufacturing career today means using highly automated, safe, green technologies to design and create products that change – and even save – lives. It means being part of the state's most economically influential sector. Bonus: Average weekly pay in manufacturing is more than 22% higher than that of all private industry. By focusing on building science, technology, engineering and math, AMPed NH can help you become a game-changer, too. To learn more, visit www.ampednh.com.

2013-2014

NEW HAMPSHIRE next

your guide to life after high school

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PRESIDENT:

Sharon McCarthy, x117 smccarthy@nh.com

VICE PRESIDENT/DIRECTOR OF SALES:

Steve Paré, x140 spare@nh.com

EDITOR:

Melanie Hitchcock, x157 mhitchcock@parentingnh.com

ADVERTISING DIRECTOR:

Kimberly Lencki, x154 klencki@mcleancommunications.com

MARKETING REPRESENTATIVES:

Barbara Gallaher, x156 bgallaher@parentingnh.com
Nashua, Amherst, Salem & Souhegan Valley

Debbie Birch, x133 dbirch@parentingnh.com
Concord, Manchester, Merrimack & Bedford

Cynthia Stone, x159 cstone@parentingnh.com
Derry, Londonderry, Portsmouth & Seacoast region

PRODUCTION MANAGER:

Jodie Hall, x122 jhall@nhbr.com

GRAPHIC DESIGNER:

Nancy Tichanuk, x116 ntichanuk@mcleancommunications.com

BUSINESS MANAGER:

Mista McDonnell, x114 mmcdonnell@nhbr.com

EVENT & MARKETING MANAGER:

Tricia Baker Schmitt, x125 tbaker@nh.com

ADMINISTRATIVE ASSISTANT:

Maria Aguirre, x110 maguirre@mcleancommunications.com

DIGITAL MEDIA SPECIALIST:

Morgen Connor, x149 mconnor@nh.com

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\$1.7 million grant buys WMCC an advanced welding lab & mobile lab

by Edith Tucker

[write the author](#)

September 18, 2013

BERLIN — The welding program at White Mountains Community College has been transformed, thanks to a \$1.7 million grant from the U.S. Department of Labor.

Three brand-new environmentally friendly "virtual" welding machines allow students to learn welding techniques "without any scrap and with no stick, no flux, and no plate," explained Trade Act Adjustment and Community College Career Training (TAACCCT) grant coordinator John Holt of Dummer during a Wednesday afternoon tour.

Twenty-four new state-of-the-art welding booths, each outfitted with its own flexible fume extraction arm, piped gasses from a central location, and brand-new equipment, were being used for the first time that afternoon by 19 students. Each welding student has his or her name written on the inside of a booth, making that person responsible for keeping it clean and work-ready.

New booths are also being set up for plasma cutting and grinding, a Computerized Numeric Controlled Plasma Cutting table, and an automated Oxy cutting and welding machine plus other modern welding equipment and additional software. "We were able to select the best equipment offered by the two major welding equipment manufacturers: Lincoln Electric and Miller," Holt pointed out delightedly.

A community Open House to show off the new equipment will be held from 4 p.m. to 7 p.m. on Wednesday, Oct. 9.

"Our three virtual welders are the cornerstone of our new advanced welding lab," Holt said. "Although nothing can replace 'hands-on' learning, research shows that using virtual welders improves students' technique and they learn both faster and better. Students can practice basic techniques with immediate feedback on speed, body position, angles and so forth. Virtual welders engage students and, if two students are working together, they're likely to stand around and talk about welding, analyzing their results. And there is really no time wasted in setting things up, as there is in a regular welding booth.

"When you flip down the virtual hood, the room around you disappears and you are in a simulated Motorsports Garage. It also scores your welds against American Welding Society (AWS) standards," Holt explained. "These units motivate students to stay engaged in their own learning." Safety is emphasized in all areas of welding, he added.

A new Mobile Training Lab is now being fabricated at Mobile Medical International Corporation (MMIC) in St. Johnsbury, Vt. (www.mobile-medical.com). "This unit will be housed in a 50-foot trailer that was custom designed by MMIC with six welding booths, its own generator, a fold-down table for cutting and grinding work outside, and a classroom area with a virtual welding machine.

"The mobile lab is designed for on-site custom training and will be used at our Littleton campus to offer a SMAW (stick) welding program on evenings and Saturdays," Holt said. "The program will start on Oct. 28 and run three nights a week for about four hours and on Saturday for eight hours." The shortened program will provide basic SMAW safety, theory and practical welding skills as well as an introduction to oxy cutting and beveling.

A second program will run in the spring 2014 and will expand upon those skills and prepare students for an AWS structural certification. These programs will be the same credit-bearing courses that students take in

Recent Edith Tucker

\$470,000 CDBG grant awarded to Riverside Park rehab project
2013-Sep-11

Daigle signs copies of "Berlin Mills on the Androscoggin River"
2013-Sep-11

Anthem responds to North Country concerns, adds AVH & LRH to network
2013-Sep-11

Selectmen will ask NHDOT Commissioner to abandon some RR tracks
2013-Sep-11

2 of 4 USDOE public scoping hearings on Northern Pass set in Coös
2013-Sep-11

Recent DRA & BLTA rulings raise red flags on PILOT agreement
2013-Sep-04

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the Welding Technology program spread out over a longer period in Berlin, Holt explained. Students can receive financial aid for these basic skills courses in a high-demand field in which many skilled welders are now reaching retirement age.

"Last summer (2012) we had 18 graduates, all of them passed the externally administered ASME Pipe Certification Test and 17 of them had welding positions within weeks of graduation," said lead welding instructor Michael Pike in a prepared statement. "And these are good jobs starting between \$17 and \$20 an hour, many with benefits." Two adjunct instructors also teach welding: Gerry Therriault and John Mullins.

The two-semester daytime Welding Technology Certificate program at the Berlin campus began on Sept. 3, requiring on-site attendance of between 20 to 25 hours weeks, in which students also take math, blueprint reading, and theory. Upon completion, students have the opportunity to take an AWS test for structural welding certification. Many of the students continue over the summer for the Pipe Welding Certificate.

For more information on the Welding Technology program or the shortened courses in Littleton, go to www.wmcc.edu or phone the admissions office at 752-1113, ext. 3000.

A 10-person NH Works tour held on Thursday, Sept. 12, included a MMIC tour in St. Johnsbury to see the mobile lab under construction and a tour of the new equipment at WMCC's Berlin campus.

The funds for WMCC's new welding lab came through a Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grant. The Community College System of NH as a whole was awarded nearly \$20 million through the TAACCCT grant to provide updated skills and training in Advanced Manufacturing. WMCC concentrated all its funds on the welding program, making it a "destination" program not only for area students but also for students from around the state.

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Robots, 3D-printing, virtual welding: Check out N.H. community colleges

September 13, 2013 3:49 PM

In New Hampshire, advanced manufacturing is such a big deal it's going to take a whole week's worth of events to celebrate the nation's second annual Manufacturing Day.

In addition to the annual Governor's Manufacturing and High Tech Summit and other regional events, advanced manufacturers statewide are inviting the public in for tours Oct. 5-8. The community colleges will host open houses Oct. 9 at every college, featuring state-of-the-art advanced manufacturing labs and innovative training programs. Participants will experience firsthand the high-tech, safe and comfortable nature of today's manufacturing environments.

With manufacturers across the state and New England reporting a shortage of well-trained, highly skilled employees, opportunities abound for exciting, challenging careers in the industry. According to Economic and Labor Market Information Bureau, the average weekly pay for NH workers in the private manufacturing sector was \$1,050, 22% above the \$825 average of all private sectors in the state.

New Hampshire's community colleges, advanced manufacturers, NH MEP, NH Works and others are joining forces to eliminate the workforce shortage. Under NH's Advanced Manufacturing Partnerships in Education initiative, industry guided and approved certificate and degree programs are offered at every community college in the state to directly meet workforce needs.

Work-readiness training and certification is available at each college under WorkReadyNH, as well as employee training programs that can be deployed on-site at advanced manufacturing facilities.

Those interested in pursuing a certificate or degree plan at CCSNH or employment training with an advanced manufacture may be eligible for assistance through NH Works partners which include; WIA, NHES, NHEP, Voc Rehab, Vet Programs, Youth Programs, Trade Act, SCSEP, WorkReady NH and others.

Community college labs feature the same cutting-edge equipment used in professional production facilities in order to provide a seamless transition from classroom to career — in sectors like robotics & automation, electronics & electromechanics, advanced machine tool technologies, advanced welding, advanced composites and engineering & programming.

AMPed NH Oct. 9 Tour Schedule:

- Great Bay CC's Advanced Technology & Academic Center, 5 Milton Road, Unit 32 (Room 138), Rochester, (603) 427-7700 - 4:30-7 p.m. Talk to students in the certificate program as they give live advanced composites demos.
- Lakes Region CC, 379 Belmont Road (Bottom floor, Center for Arts and Technology), Laconia, (800) 357-2992 - 5-7 p.m. Will be part of a celebration of STEM programs at LRCC's beautiful technology building
- Manchester CC, 1066 Front St., Manchester, (800) 924-3445 - 4-7 p.m. Say hello to the "Blue Man Group," which helps students learn about mechatronics and automation in an environment that models the full design and production process of an actual advanced manufacturer
- Nashua CC, 505 Amherst St., Nashua, (603) 578-8909 - 4-7 p.m. Check out the new 3-D printer and see the difference between the CNC machines of today and those of decades past.
- NHTI, 31 College Drive, Concord, (800) 247-0179 - 4-7 p.m. Check out NHTI's robotic arms and learn about the variety of engineering programs offered there.
- River Valley CC, 438 Washington St. (Room 107), Keene, (603) 357-2142, ext. 5727 - 4-7 p.m. Learn about the innovative STAR program, what the manufacturing "boot camp" is all about.

- White Mountains CC, 2020 Riverside Drive, Berlin, (603) 342-3008 - 4-7 p.m. Check out the virtual welding stations. A cross between immersive video game and professional training, they're serious business – but they're a lot of fun, too!


Check <http://www.ampednh.com/news-and-events> for industry tour information.

AMPed NH is funded by a \$20M TAACCCT grant provided by the U.S. Department of Labor Employment and Training Administration. Visit ampednh.com to learn more.

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[September 13, 2013]

Making manufacturing [New Hampshire Business Review (NH)]

(New Hampshire Business Review (NH) Via Acquire Media NewsEdge)
 The demographic dilemma facing U.S. manufacturers is simple: as older workers retire, many of whom are in the baby boom generation, the next generation of workers is unprepared, ill-trained or uninterested in taking their place.

At least in New Hampshire, an initiative is underway through the Community College System of New Hampshire to reach, inform and, it's hoped, recruit the next generation of workers for the advanced manufacturing sector. That initiative will eventually include online and social media outreach and an increased menu of online courses.

"These are not your grandfather's manufacturing jobs," said Desiree Crossley, marketing coordinator for CCSNH's Advanced Manufacturing Partnerships in Education, or AMPed, about the jobs available in the high-tech manufacturing sector - jobs that require a different skill set than in the past.

Reaching potential future workers through the media they use is one way to make considering a manufacturing career path a "cool" choice, she said.

"AMPed has really been about bridging any gaps that may have existed between educational institutions, industry and members or potential members of the workforce," Crossley said. "An interactive, assertive and diverse social media strategy is another way to bridge the gap - this time with outreach and marketing. Just as AMPed reached out to regional advanced manufacturers to ensure the curricula developed would be an effective, targeted solution to a dwindling pool of qualified job applicants, we can use social media to really connect with prospective students and their influencers." CCSNH programs focus on such advanced manufacturing sectors as computer-numerical controlled machining, composites, robotics, automation and mechatronics, welding and precision manufacturing.

CCSNH is working closely with entrepreneurs and manufacturing companies to design dozens of training and education programs that target development on science, technology, engineering and math skills.

At a recent event in Rochester, Gov. Maggie Hassan hailed the partnership between Great Bay Community College and high-tech manufacturers Safran and Albany Engineered Composites, which are

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manufacturers Saran and Albany Engineered Composites, which are working together to develop composites manufacturing curricula. Great Bay has opened a second campus, the Advanced Technology & Academic Center in Rochester, to meet the demand for worker training.

"It's really extraordinary, the capacity we have," Hassan said. "But advanced manufacturing requires skills that are high tech." Enlighten and engage Late last year, JoEllen Space assumed her role as director of online advanced manufacturing programs and career training for CCSNH. She has been focused on creating the largest online curricula the state education system has ever seen. If social media holds the promise of reaching a new generation of manufacturing workers, flexible educational offerings may be the key to helping them succeed.

It's necessary because, Space said, she is surprised that the public at large knows little about what's happening to enlighten and engage potential workers about the prospects of well-paying jobs.

"When I am out talking even with neighbors or family, they don't know," she said.

Space is overseeing a major shift to accommodate a new approach to learning that is anything but one-size-fits-all. There will be a wide range of online course offerings, hybrid classroom-online courses and programs designed for a fast-track certification, while others will lead to an associate degree and beyond.

"We want this to be accessible to all," Space said.

This includes not only younger workers, but unemployed people looking for a career shift and military veterans. "We are working on a core curriculum for a certificate offering for those who want to get to work ASAP." Such a curriculum, she said, could involve eight courses - science, math, computers, reading, writing, communications, critical thinking and informational literacy.

But, as they say in the movies, building it is no guarantee they will come. Crossley and the Portsmouth creative agency Saltwater are designing a long-term effort to engage not just potential students, but their friends, family, boyfriends and girlfriends, mentors and career counselors.

"We can have a dialogue, share ideas, answer questions," Crossley said. "Where traditional ads can sometimes fail to make meaningful, personal impressions on an audience, social media can succeed because of its interactive nature." The tools, said Mike Carella of Saltwater, will be a lot of video, an interactive website and a heavy social media presence when it's launched later this year.

"It's all about community. We are working with CCSNH to build a community around smart manufacturing and give people the tools to research and communicate," Carella said. "Obviously, we're going to use a Facebook page for this initiative. We are going to strongly encourage people who are in industry to talk about what they have learned and experienced to prospective students." Crossley said the research on social media is becoming quite dear. As many as 80 percent of regular Internet users use Facebook to connect with brands and almost 50 percent of people already utilize social media platforms such as LinkedIn or Facebook to enhance their careers.

"It's a perfect solution to the problem because you have to go where

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Ask the Expert

> The Evolving Role of Process Automation and the Customer Service Experience

the kids are," said Katie Paine, the New Hampshire-based chief marketing officer of Newsgroup International and an expert on 21st century digital marketing. "The average kid is switching media 27 times an hour, or every 2.2 minutes, from Facebook to Twitter to Instagram to

Pinterest. You can't just advertise at them. You need to be real and authentic and connected." Paine suggested using humor and interesting conversationalists to break through the clutter, because "most of these kids don't have a clue what they want to do." For a trend to go viral, she added, it will be crucial to show that "manufacturing isn't a dead and dying business. It's cool, and making things is cool." (c) 2013 Business Publications Inc.

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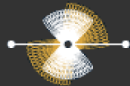
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U.S. Manufacturer Going Above and Beyond with Superior Energy Performance

You wouldn't think an energy-intensive operation like the Scranton Army Ammunition plant would be determined to become as energy efficient as possible, would you? But its Operating Contractor, General Dynamics Ordnance and Tactical Systems, is demonstrating its leadership in how U.S. manufacturers will operate in the future clean energy economy and is leading the way for U.S. Army contracting facilities to do just that. How? Through [Superior Energy Performance \(SEP\) certification](#)—a new business-based, internationally-recognized energy management implementation and certification process. With SEP, the Pennsylvania facility was able to improve its energy performance by almost 12%.

By using the globally recognized ISO 50001 energy management standard, as well as DOE measurement and verification tools that confirm energy performance improvements, SEP helped the Scranton facility integrate new forward-thinking processes into their business operations and create a rigorous energy management system.

Stephen Cannizzaro, Environmental Engineer at General Dynamics, and AMO's Paul Scheihing who leads the SEP program, recently discussed the benefits that the Scranton facility has discovered through SEP certification. Paul pointed out that what General Dynamics is doing is very important because the facility went out of their way to surpass typical energy efficiency implementation efforts. General Dynamics already had a foundation for using DOE resources—they've received two DOE-sponsored energy assessments in the past, "but now the SEP process was able to boost their energy efficiency to a much higher level of energy savings."

General Dynamics also used SEP to model energy intensity within the plant, as well as specific manufacturing processes, such as the plant's steam generation process. This allowed plant managers to analyze energy data around the plant's steam generation system in order to justify new and more energy efficient boilers. Steve explained, "With the SEP system in place, management is much more receptive to capital improvement proposals, and it is easier to defend new projects. SEP brought to light many energy intensity savings opportunities that were previously hard to identify and justify."

"ISO 50001 also provides the Scranton facility with an effective plan and framework to manage energy-intensive operations," Paul explained.

Overall, in the first year General Dynamics was able to identify an impressive \$536,000 in savings, with a payback period of just six months. The facility implemented operational and management processes—weekend shutdowns, coordinated production schedules, employee cooperative programs, and cooling tower temperature set points—that had a significant impact on Scranton's energy performance.

Even though the Department of Defense requires ISO 14001, the international environmental management system standard that contains some energy-related components, Steve advises that other manufacturing facility managers also use SEP and ISO 50001 to get the most comprehensive energy results possible—"Do not just do the minimum to become more energy efficient; as you start to think about pushing outside 'the box,' SEP can generate bigger energy savings than you first imagined."

DOE's Office of Energy Efficiency and Renewable Energy partnered with the U.S. Council for Energy-Efficient Manufacturing to develop SEP. Learn more by visiting the [SEP program website](#).

"We want to congratulate General Dynamics in Scranton, Pennsylvania for their hard work and leadership in improving energy performance by nearly 12%. They are the first Defense Department facility to receive a Superior Energy Performance certification."

**Robert Ivester, Acting Director, DOE
Advanced Manufacturing Office**



General Dynamics' Bliss Three Forge Furnace is a natural gas-fired rotary hearth furnace used to heat steel before forging. Refurbished with a new high performance refractory, high efficiency burner controls, and natural gas recuperators, the furnace improvements translated into a 25% reduction in natural gas consumption. Photo credit: General Dynamics.

What is SEP?

- SEP is a comprehensive energy management system for industrial and commercial facilities.
- SEP is based on a measurement and verification protocol for continual energy efficiency improvements.
- SEP uses ISO 50001 – an energy management system standard – to increase energy efficiency, reduce costs, and improve environmental performance.
- SEP can be used to set performance targets and quantify improvements at facilities that have adopted the ISO 50001 standard.
- SEP uses a third party verification process to provide credible data for company management and external stakeholders.

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ContiTech Thermopol gives credit to N.H. for expansion

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ContiTech Thermopol holds its first session on job training grant funds. Leading the presentation is company President Ed Cotter.

Courtesy photo

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By **Michael McCord**
business@seacoastonline.com
July 21, 2013 2:00 AM

SOMERSWORTH — The rapid growth of ContiTech Thermopol over the past three years has been one of the quiet manufacturing success stories in the region and the state.

Company President Ed Cotter said he believes the state's resource infrastructure has greatly assisted the firm, which was founded in 1992, to become one of the most efficient, profitable and envied divisions in Continental AG, the multinational German corporation.

"We are the crown jewel of ContiTech," Cotter said of his company, which makes convoluted and straight hoses in multiple rubber compounds, predominantly for the international auto industry.

Since Continental AG (which designs and manufactures the Continental Tire brand among its many products) bought the former Thermopol in early 2007, the Somersworth plant weathered the recession and expanded dramatically — it has almost doubled its employee base to 325 and expanded its manufacturing space by more than 100,000 square feet. It also had a record-breaking revenue year in 2012 at \$42.2 million.

"If you drive any Ford car with eco-boost, the hoses comes from Somersworth," Cotter said. Cotter said the competition in both the original equipment manufacturing and after-market sectors requires constant training. The company started a new and rigorous training program last week from a \$65,000 matching grant through the New Hampshire Job Training Grant program. It was the second such grant for ContiTech Thermopol, which used an earlier matching grant of \$19,000 to send employees to Germany for critical training in manufacture a few years ago.

"We have drawn on a lot great resources. New Hampshire has been great to work with and so has the city of Somersworth," Cotter said. "We worked closely with Gov. (John) Lynch, who was very supportive when he was in office. We are hiring drafting engineers from the University of New Hampshire and we've worked closely with the Community College System of New Hampshire."

More than half of the ContiTech Thermopol work force, 170 employees, have begun training from New Hampshire Manufacturing Extension Partnership and Great Bay Community College in LEAN (resource efficient) manufacturing, Value Stream Mapping (eliminating waste), Kaizen processes (a Japanese term for constant incremental improvement), team involvement, problem-solving and supervisory skills.

"New Hampshire's Job Training Fund is an important resource that has helped provide essential skills to thousands of workers," said Gov. Maggie Hassan recently about the grants for ContiTech Thermopol, Flexenergy Systems of Portsmouth and six other New Hampshire firms. Cotter agrees with Hassan. He

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supports the Job Training Fund because it creates committed partnerships and enhances the state's economy by creating a higher-skilled work force. The fund has awarded \$5.9 million in grants since October 2007, with employers contributing \$8.51 million toward new training for 17,643 New Hampshire workers.

"Our work force has to adapt and we have to get our people up to speed to give them the skills they need to succeed," Cotter said.

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July 18, 2013 8:46PM

New aerospace facility offers hope in Rochester

By JOHN QUINN

Union Leader Correspondent

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ROCHESTER — After seeing so many manufacturing jobs move overseas, many in the area are finding hope in the opportunities surrounding a new local facility producing engine parts for the aerospace industry.

By the end of the year, Albany Engineered Composites (AEC) and Safran Aerospace Composites (SAC) will be putting the finishing touches on a new 343,712 square-foot plant in the Granite State Business Park near Skyhaven Airport.

After the production line is established, about 150 employees — 60 from Safran and 90 from Albany — will relocate to the new facility in August, according to Michael Rigalle, vice president of composites and general manager at the plant.

As a result, Rigalle said production will begin in September. He added they designed the plant to have room for more people and equipment, which will be gradually introduced.

"It's definitely a big space," Rigalle said, adding they plan to have a total of 500 employees working at the facility by 2018.

To help prepare for the possibilities, Great Bay Community College's Advanced Technology & Academic Center (ATAC), a 17,000 square-foot facility at 5 Milton Road — Route 125 — in the Lilac Mall plaza, opened May 20 and advanced composites manufacturing classes began June 17.

Later this fall, area residents can enroll in classes to earn a degree in a variety of fields, including marketing, math, psychology and history as well as a six-month program to prepare students for a career in the aeronautics industry.

Composites expert Andre Cocquyt said he's impressed by how well the first class of 18 students — aged 19 to 59 — have picked up the techniques. He added some student who were unemployed, underemployed or discouraged by their previous careers had to take on a new learning environment.

"I think for a lot of people who lost their job, they lost their confidence," Cocquyt said.

Cocquyt, who is president of ACSM Inc. — a composites consulting and training company — works with advanced composites manufacturing students at ATAC.



Gov. Maggie Hassan, second from left, listens as Somersworth's Haley Corliss, right, explains how vacuum pressure enables resin to evenly coat flexible fiberglass during a grand opening for an aeronautics facility in Rochester. (John Quinn/Union Leader Correspondent)

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As an unemployed mother, Haley Corliss, 28, of Somersworth, said the program offers a very exciting opportunity.

"These are the skills that will get me a career," Corliss said.

At the end of the six-month program, Corliss hopes to find a job in computer numerical controlled manufacturing, which shapes the fiberglass molds to make engine parts at the new facility.

Peter Kimball, 59, of Ossipee, who previously worked in the printing industry, said the program is tough, but it offers him a chance of a lifetime.

"When I was laid off, I couldn't see myself getting into the hospitality industry," Kimball said, adding many of the jobs in his area involve tourism.

The advanced composites manufacturing curriculum was developed as part of a partnership between Great Bay Community College, Albany Engineered Composites and Safran Aerospace Composites. The venture will continue to grow and adapt as the new facility becomes operational.

During a grand opening ceremony earlier this month, Gov. Maggie Hassan praised the partnership that will bring high-tech manufacturing jobs to Rochester. She added the effort unified the Seacoast, which is becoming a draw for the aerospace industry.

"Our state is poised to make the Seacoast emerge as the composites location of the northeast," Hassan said.

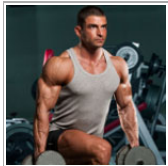
Hassan, who met with the first class of students, was impressed by their hard work and dedication.

Rochester Mayor T.J. Jean, who welcomed Safran executives in French, said the city is proud to host ATAC, which is a state of the art facility. He added this important partnership between businesses and the community will "not only share our talents, but our culture as well."

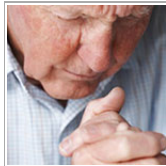
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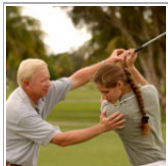
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Mid-Market Firms Prosper From Advanced Manufacturing Techniques

By National Center for the Middle Market Staff

July 17, 2013

The National Center for the Middle Market's latest report shows middle market firms have grown jobs and profits using advanced manufacturing approaches.

While some manufacturers have relocated operations abroad or reduced domestic capacity, the nation's 33,000 middle market manufacturing companies are emerging resilient as a result of a reinvigorated commitment to advanced manufacturing techniques. By implementing innovative processes into their existing operations, America's middle market manufacturers have demonstrated above average revenue and productivity growth and showcased their importance as critical players in the U.S. economy.

A new report released today by the [National Center for the Middle Market](#) (NCMM) and the [National Association of Manufacturers](#) (NAM) indicates that 47 percent of mid-market manufacturers have adopted advanced manufacturing techniques, with these firms reporting an average 20 percent increase in their profitability over the past five years with expectations to grow employment by 4.7 percent over the next 12 months. These techniques include automation, computer technologies, process technologies, information technologies and more.

The National Center for the Middle Market, a partnership of [GE Capital](#) and [The Ohio State University's Fisher College of Business](#), defines the U.S. middle market as companies with annual revenues between \$10 million and \$1 billion. This sector encompasses nearly 200,000 companies – including Jamba Juice, K-Swiss, Fat Burger and Tootsie Roll – and accounts for nearly one-third of U.S. GDP.

While widespread implementation of new advanced manufacturing techniques is a positive indicator of economic growth, the report also reveals a startling skills gap in the American workforce to fill these jobs. Ninety-five percent of companies utilizing

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advanced manufacturing technologies reported that innovation has changed recruitment and training techniques, and 81 percent of users say demand for skilled manufacturing is significantly higher now than in the past. Among users, 93 percent report a skills deficiency, which is most prevalent for science, technology and math.

This issue is not disappearing in the near future. According to Chad Moutray, NAM's chief economist, "Many Americans, especially the younger generation, have a preconceived notion of what a blue-collar worker is, and for that reason, we have very real challenges in changing perceptions about modern manufacturing. Manufacturing today is an extremely high-tech, high-skill endeavor that is always evolving, and the data tends to back this view up."

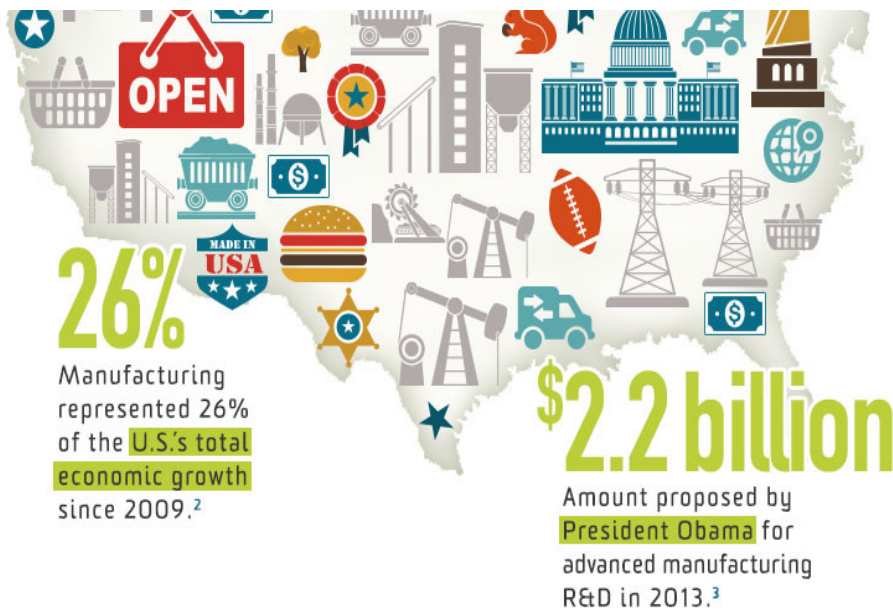
"Through a renewed emphasis on training and collaboration with education institutions, more middle manufacturers may be able to break past this skills gap, but there must be a concerted effort to close this void in specialized skill sets in order to fully reap the benefits that advanced manufacturing has to offer," added Dr. Anil Makhija, academic director for NCMM.

There is a glaring void that must be filled for us to remain thought leaders in modern manufacturing and continue producing the significant growth that this sector has experienced. "The manufacturing resurgence has garnered tremendous attention, spotlighting an industry that some had written off just a few years ago," Moutray said. "To stay ahead, however, we must stay focused on new innovations that keep us at the forefront of technology. This means continuing to invest in both human and physical capital and expanding research and development efforts."

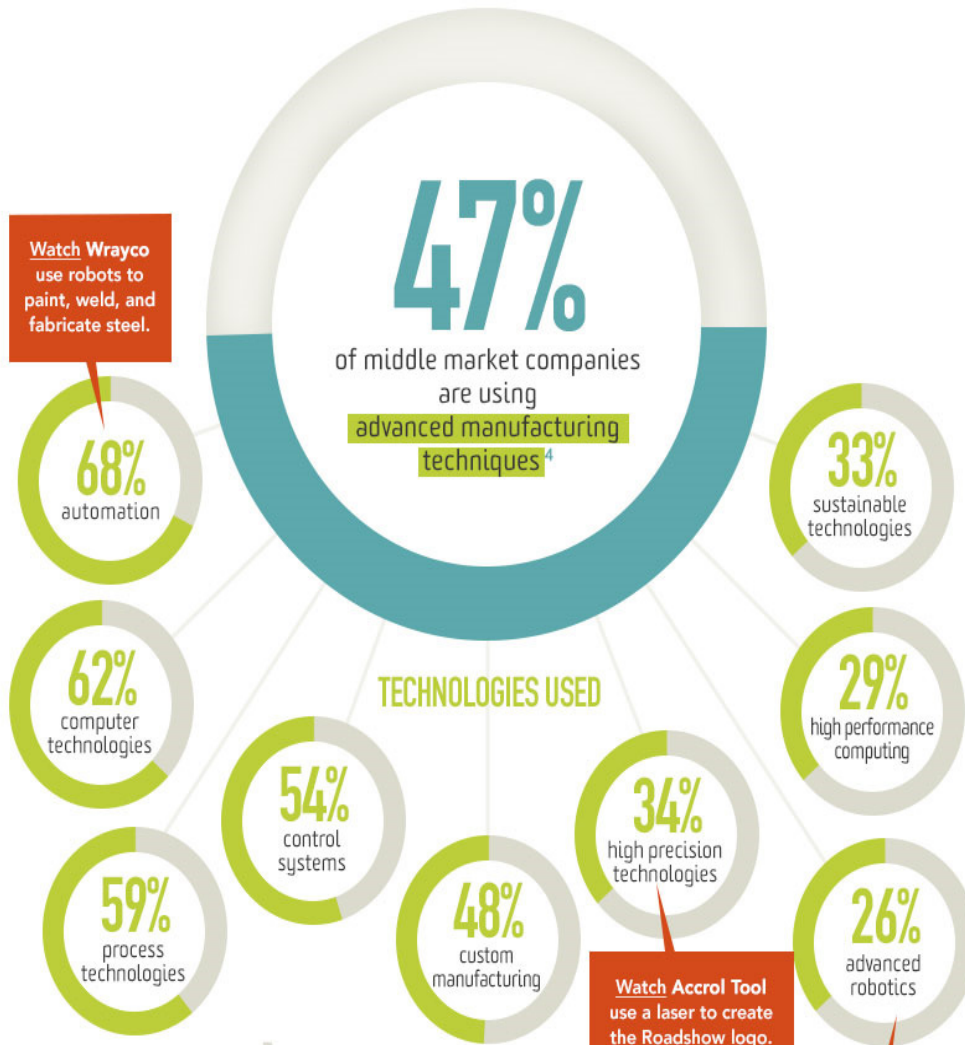
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How Advanced Technology Is Changing Manufacturing





Advanced Manufacturing and the Middle Market

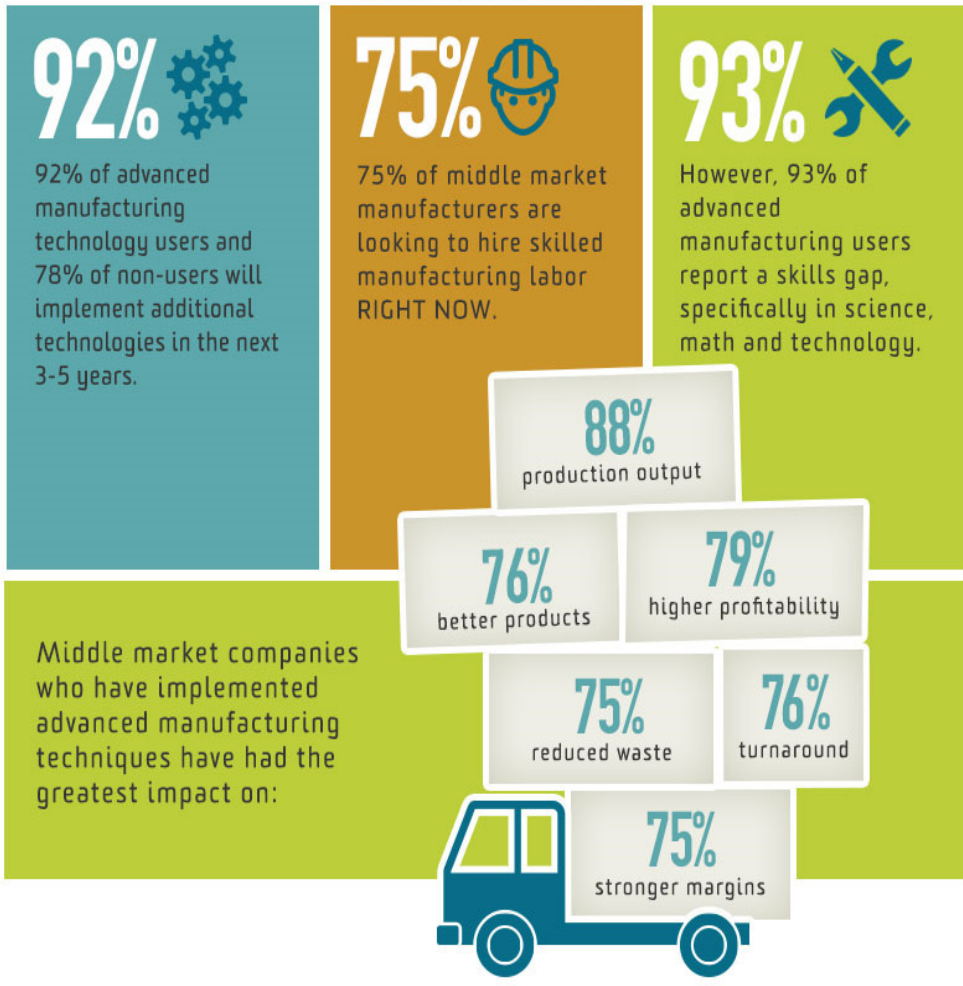




Middle market companies who have implemented advanced manufacturing techniques are seeing a

20%

increase in profitability.




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Our view: Seacoast is forging a new high-tech future

July 14, 2013 2:00 AM

With the opening of Great Bay Community College's Advanced Technology & Academic Center (ATAC) and a growing number of successful high-tech manufacturing companies, the Seacoast is poised to become an important economic hub for the aerospace and defense industries.

ATAC was created to meet the needs of Albany Engineered Composites and Safran Aerospace Composites, who have invested \$100 million to open a 275,000-square-foot facility in Rochester that will employ 400 workers, many requiring advanced manufacturing skills.

In layman's terms, Albany weaves carbon fiber strands into three-dimensional structures. Safran will take these structures, which are stronger and much lighter than steel, and finish them into jet engine blades and other components for LEAP 1A and 1B engines that will then be sold to General Electric and other jet engine manufacturers.

Great Bay Community College has designed a curriculum that will teach students what they need to know to do the jobs Albany and Safran have to offer. Some of these skills are specific to high-tech manufacturing such as composites milling/CNC set-up operations, coordinate measuring machine operations and high-performance composites fabrication. It will also teach foundational math skills such as algebra and geometry, computer literacy and "soft skills" such as customer service and effective work habits.

Will Arvelo, president of Great Bay Community College rightly notes, however, workers with these skills will also be valuable to other Seacoast high-tech manufacturers including Sig Sauer, Wilcox Industries, Turbocam, Pratt and Whitney and many others. New Hampshire Gov. Maggie Hassan expanded on this idea in her remarks at ATAC's grand opening on Thursday.

"This pipeline of skilled workers will help existing New Hampshire companies grow, attract new businesses and create good jobs that will lift all our people and define the economy of the future," Hassan said.

"With the region's high-tech availability, proximity to national and international markets, access to air, land and sea and state-of-the-art composite manufacturing centers like this one, our state is poised to establish the Seacoast as the emerging composites region in the Northeast," Hassan said.

While this economic growth is clearly good for the region as a whole, it is also extremely important for our friends, neighbors and family members who will benefit from work that is meaningful and pays well. Two students who spoke on Thursday, Jonathan Flannery and Kerry Uyeno, made this clear.

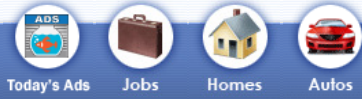
Flannery shared the recent loss of his grandmother and mother to cancer, his father's disability and his desire to give his younger brother a better life.

"This program offers someone like me the ability to start with nothing and to leave with the knowledge, hope and guarantee of a prosperous future," Flannery said. "I consider this program to be as significant to me as Neil Armstrong reaching the moon was to America," he said.

Uyeno is a single mother of three boys who lost her job three months ago and the state helped her enroll at Great Bay's ATAC center.

After meeting with the college faculty, Uyeno said, "I realized my dream of being able to attend college might actually be able to come true."

So many people from the state, Rochester, the community college system, Albany, Safran and other private-sector businesses worked to make the new Advanced Technology & Academic Center a reality. We truly value the lasting contribution they have made to the quality of life on the Seacoast. Congratulations.



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Governor welcomes new college to Rochester

By Mikaela K. Reynolds
Friday, July 12, 2013

ROCHESTER — Gov. Maggie Hassan joined Great Bay Community College President Will Arvelo, Community College System of New Hampshire Chancellor Ross Gittell, and City Mayor T.J. Jean at the grand opening of the Advanced Technology and Academic Center, Rochester's satellite location of GBCC.



Ryan McBride/Staff photographer
Kerri Uyeno, left and Jonathan Flannery pose for a photo with Gov. Maggie Hassan after the three spoke at the grand opening of Great Bay Community College in Rochester Thursday evening.

The list of distinguished speakers who spoke of the great opportunity the school will provide to local businesses and students, included two students currently enrolled in programs at the local college branch.

Jonathan Flannery spoke of his path to college. He discussed going through the hardest time in his life after losing his mother and grandmother to cancer in the last year and a half. He said at the time he never imagined his future unfolding the way it did.

"It offers someone like me the chance to start with nothing and build something," he said.

"This program is as significant to me as Neil Armstrong reaching the moon was to America," he added.

Then Kerri Uyeno, 39, spoke, discussing the significance of the program to her. The single mother of three told the crowd of how she found herself unemployed just three short months ago, after her employment with GE through a temp agency ended.



Ryan McBride/Staff photographer
Guests check out the new Great Bay Community College Thursday evening during the grand opening in Rochester.

"I realized my dream of attending college could come true," said Uyeno, who is now enrolled in the Advanced Manufacturing program.

She has been and in and out of the manufacturing industry for 10 years now, but said she's never been able to make it over that hump to a higher pay scale and steady work. She said this program will give her the skills she needs to succeed in the growing industry.

"I have companies already telling me to start applying and sending them my information in November," said Uyeno who is expected to earn her certificate in December.

"Great Bay provides the opportunity for students in

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high school, individuals looking to enter the advanced manufacturing field, and even the unemployed who are looking to get back in to the market," said Mayor Jean.

"This center is a wonderful educational resource for anyone interested in what Great Bay has to offer. Now residents of Strafford County and beyond can conveniently take a course at Rochester — whether it be a general education or liberal arts course, or something from a specific field — and those seeking training opportunities in advanced composites manufacturing now have a state-of-the art facility practically in their backyard," Arvelo told Foster's last week.

The college collaborated with several local companies, as well as state and local officials to build a strong center, located in the Lilac Mall Plaza.

Gov. Hassan told the crowd gathered at the plaza, "I understand the importance of your work that will develop the pipeline of workforce that will attract companies to the area."

She acknowledged the great growth this will provide for not only the city, but the entire area, even the whole state. "The cities of Dover, Rochester, Portsmouth, and Somersworth are all working together to make the seacoast the place to land," she said.

"N.H. is at its strongest when we come together," she said. "It makes a great story for us to be able to tell the Granite State. It's who we are, it's what we do," she added, speaking of the way the community, state, and businesses came together to make the new center so strong in its potential for both drawing business and providing beyond adequate education for students.

The Advanced Technology and Academic Center, which actually opened on May 20, is the largest project under the statewide Advanced Manufacturing Partnership in Education initiative, formed by the Community College System of New Hampshire, under the \$20 million federal TAACCCT-NH grant.



Ryan McBride/Staff photographer

Guests experience the new Great Bay Community College Thursday evening during the grand opening in Rochester.



Ryan McBride/Staff photographer
GBCC President Will Arvelo speaks to guests during the grand opening of Great Bay Community College in Rochester Thursday evening.

Mayor Jean welcomed the companies who have been and continue to work with the community and the college, Albany Engineered Composites and Safran. He even welcomed Safran, the France-based company in Parisian french.

"This is a very exciting day for Rochester," he said. "This is a project of regional impact."

Gittell agreed. "We're going to have a very successful fit here in Rochester," he said.

Gittell closed out the ceremony by stating the goal of the new center: "Ensuring we have a strong economy to provide quality jobs, and ensuring these students have the skills to fill those jobs."

The project began in the fall of 2012 and is expected to be completed, with all equipment, by early 2014. "When its completed, it will be a \$5 million center," said Arvelo.

The lab at the new center will house the newest equipment for high tech composites manufacturing, including an autoclave, RTM press, curing oven, a 3D weaving loom, a full range of CAD, CAM, CNC and CMM equipment, as well as other commonly recognized equipment used in manufacturing facilities.

"It's a state of the art facility," said Jean, who said he was impressed with what he saw.

"We are really so excited," said Arvelo, who said the staff shares his enthusiasm. Many staff members are new, but a few moved from the Portsmouth location to teach in the Rochester satellite location.

"We are lucky to have the faculty that we have with the knowledge that they bring," he said.

Registration is now open for the fall semester for both traditional courses, which start Sept. 3, and the advanced manufacturing program courses, which start Oct. 21.



Oct. 21.

"In many respects our work has just begun here," said Gittell.



**Ryan McBride/Staff photographer
Gov. Maggie Hassan speaks at the
grand opening of Great Bay
Community College in Rochester
Thursday evening.**



**Ryan McBride/Staff photographer
Rochester Mayor TJ Jean speaks to
guests at the grand opening of Great
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Getting the word out about manufacturing

Forum focuses the economic, educational need to focus on advanced manufacturing



'It takes a partnership approach between state, education and industry to build the workforce and create well-paying jobs,' says Ross Gittell, chancellor of the Community College System of New Hampshire.

If a workforce of highly skilled, well-paid advanced manufacturing employees and a robust state economy are the goals, partnerships involving education, industry and government are the ways to achieve them.

That was the consensus at a recent NH Works workforce development forum at New Hampshire Technical Institute in Concord. Staff from the Office of Workforce Opportunity and the New Hampshire Department of Employment Security joined representatives from vocational rehabilitation, adult

education, veterans support and other state agencies for the daylong event.

During a forum led by Ross Gittell, chancellor of the Community College System of New Hampshire and an economist, advanced manufacturing was the topic of choice.

According to economist Dennis Delay of the New Hampshire Center for Public Policy

Studies, the economic impact of smart manufacturing and high technology is five times that of one of tourism in New Hampshire. New Hampshire manufacturing took a debilitating hit decades ago, he said, but the sector has since undergone a major transformation. Delay said a 2011 study shows the industry has turned to higher-paying and higher tech markets like computers, electronics, defense and medical.

And now, said Gittell, "Employment is stabilizing and growth opportunities for manufacturers are adding up. This presents an exciting opportunity."

Poised for growth, manufacturers need more technically skilled workers, and under a Department of Labor grant, CCSNH has partnered with businesses and state agencies to form the Advanced Manufacturing Partnerships in Education initiative.

"It takes a partnership approach between state, education and industry to build the workforce and create well-paying jobs," Gittell said. Under the grant, "we met with manufacturers and asked them what they needed. We've been hard at work at all our colleges to build an advanced manufacturing curriculum with a focus on specialized industry sector training." With e-learning, hybrid and common core courses, CCSNH is building stronger and higher capacity training programs, he said.

Curricula were designed with the guidance of more than 100 business and industry partners, and the consortium aims to touch thousands of students and add as many jobs in the state, he said.

All told, numbers from a 2011 Smart Manufacturing High Technology study by the Center for Public Policy Studies show that, if the initiative reaches its full potential, it could have a positive economic impact measured in the billions of dollars in New Hampshire alone.

"We are well-positioned for success," Gittell said

'Vision and direction'

Key to that success is the partnership the colleges and business leaders share with agencies like DRED, OWO, NHES and NH Works, which support both businesses and job-seekers by helping to them with training opportunities, he said.

While large "anchor" industry partners are essential to the advanced manufacturing initiative, Gittell said, 96 percent of businesses in New Hampshire are small businesses. That means options like the Job Training Fund can give high-tech companies a boost as they work with

current and prospective employees to update skills.

Aid is also available through the Workforce Investment Act, an employment and training program funded by the U.S. Labor Department to help dislocated workers and other eligible adults and to help companies find skilled workers.

“To sustain ourselves, we need vision and direction, partnerships and skill-set development,” said Department of Resources and Economic Development Commissioner Jeff Rose.

“Aligning education and training programs to industry needs is very important. We do have the vision of how we want the workforce to look, based on industry need, and state agencies are looking forward to working with you.”

State Sen. Molly Kelly, D-Keene, called growing the economy through advanced manufacturing “one of her favorite subjects.”

“What I see is not the kind of memory I had of manufacturing,” she said. “These places are incredible. The precision is fascinating; the things we’re making are works of art. Our workers are very good – and they are making very good livings. But I don’t think that is the common perception.”

For example, she said, many people aren’t aware of the need for science, technology, engineering and math-skilled employees, and they are shocked to see the clean, high-tech environments in which those employees work. She herself was surprised when, in 2008 as the nation’s economy reeled, New Hampshire manufacturers were telling her, “We have jobs. We don’t have skilled workers.”

That’s the focus of the state Advanced Manufacturing Education Advisory Council, she said. “We step outside of our silos. Educators know education and manufacturers know what they need to grow.”

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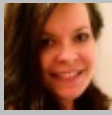


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A Great Day for Great Bay

by SHAYNA SYLVIA on JULY 12, 2013 in [PROJECTS](#)



On Thursday, July 11th, 2013 Great Bay Community College (GBCC) held a Grand Opening for it's second campus located in the Lilac City Mall Plaza in Rochester. Attendees

included Governor Maggie Hassan, business leaders from Albany Engineered Composites and Safran, GBCC President Will Arvelo, Rochester Mayor TJ Jean, as well as countless other community members, prospective students, GBCC teachers and staff, and local government officials.

This new facility, titled the **Advanced Technology & Academic Center**, offers 17,000 square feet of classroom, computer, academic support and technology laboratories. The majority of classes offered at this Rochester Campus are focused on advanced manufacturing.

Certification in these areas could prove extremely useful for graduates with Albany Engineered Composites and Safran's fall announcement to expand their operations in Rochester adjacent to their current location.

DID YOU KNOW?

Strafford County is the **fastest growing** county in New Hampshire as of 2010 Census.

Strafford County has the **youngest median age** (36.9) in the state.

SRPC, Central NH RPC, and Southwest RPC are all working collaboratively with NHDOT on developing a **Park & Ride Toolkit** to assist communities in the planning and design process.

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In her speech Governor Hassan remarked on Great Bay Community College’s new facility as well as the presence of Albany Engineered Composites and Safran in the region stating “I understand the importance of your work to develop the pipeline of skilled workers that will help New Hampshire’s existing companies grow, attract new innovative businesses, and create the good jobs that will lift all of our people and define the economy of the future.”

The kick-off which also included remarks from GBCC president Will Arvelo, Rochester Mayor TJ Jean, Community College System of New Hampshire Chancellor Ross Gittell, and current GBCC students taking classes at the new Advanced Technology and Academic Center, was well received by all attendees. This mission to educate and prepare citizens for the workforce in the region showcases the great work that Great Bay Community College has done, as well as the commitment from other companies such as Albany Engineered Composites and Safran to further encourage an educated workforce, and jobs to support economic development in the region. The speeches were followed by self-guided tours though the new campus, as well as explanations of courses and machinery. SRPC, along with many others in Rochester, the Region, and the State, are very excited for this new facility and are glad to welcome Great Bay Community College to the City of Rochester.

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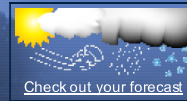
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State extends WorkReadyNH program

Tuesday, July 9, 2013

CONCORD — The WorkReadyNH program, which provides NH residents with skill-building and job readiness certification through the Community College System of New Hampshire (CCSNH), has been approved for an additional two-year period by the Governor and Executive Council.

WorkReadyNH is a partnership between CCSNH, the NH Department of Resources and Economic Development, and the NH Department of Employment Security to help job-seekers and career builders succeed through skill-building and certification of workplace skills. The program was created in 2011 to address the needs of NH employers for job applicants with strong basic workplace skills and "soft skills" including teamwork and problem-solving, communication, understanding employer expectations, workplace safety and more.

"WorkReadyNH helps people who are seeking employment, who may have been out of the workforce for a period of time, and could benefit from strengthening and updating their workplace skills," said Beth Doiron, who oversees the program for CCSNH. "Participants tell us the program not only helped them build their skills but also their confidence to apply for jobs, interview, present themselves to potential employers, and enter a new work environment. The program sets them apart from other job-seekers."

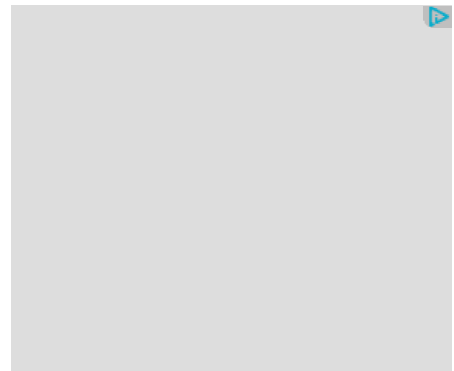
The program includes online self-paced instruction and assessment in the areas of applied math; comprehension of work-related materials from memos and technical writing to policy manuals and governmental regulations; and working with materials such as diagrams, floor plans, tables, forms, graphs, and charts. Completion earns participants a national career readiness certificate, a certification recognized by industry and employers across the country. Soft skills are taught through simulated work environments and are led by an instructor. Instruction and assessments are offered at the community colleges.

WorkReadyNH is offered at no cost to participants. NH residents, 18 or older who are not full-time students, are eligible. WorkReadyNH is funded through the NH Job Training Fund.

WorkReadyNH has been offered since 2011 at Manchester Community College, Great Bay Community College, White Mountains Community College (in Berlin, Colebrook, Conway, North Conway, Littleton), and River Valley Community College (Claremont and Keene). This year the program will be extended to all seven of the state's community colleges, including the new Advanced Technology & Academic Center in Rochester, Nashua Community College, and Lakes Region Community College in Laconia, with plans to open a program at NHTI in Concord starting this fall.

More information is available at www.ccsnh.edu.

The Community College System of NH consists of seven colleges, offering associate degree and certificate programs, professional training, transfer pathways to four-year degrees, and dual-credit partnerships with NH high schools. The System's colleges are Great Bay Community College in Portsmouth and Rochester; Lakes Region Community College in Laconia; Manchester Community College; Nashua Community College; NHTI – Concord's Community College; River



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June 25, 2013 6:47PM

WorkReadyNH helps people develop skills needed to get a job

By PAT GROSSMITH
New Hampshire Union Leader

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MANCHESTER — Donna Pettengill of New Boston was unsure of herself and her skills after being laid off in March 2012 from Cobham, a defense contractor where she was a configuration manufacturing specialist.

Newly unemployed, Pettengill felt she had no skills to get another job because her employment had been in such a specialized field, and she thought she had nothing to offer the community.

"I had low self-worth," she told the dozens of people gathered Tuesday at Manchester Community College for the annual WorkReadyNH Business Breakfast.

At the unemployment office, she learned of the free WorkReadyNH program geared to the unemployed, underemployed and veterans. At first, she was hesitant, especially when she learned a doctor went through the program and hadn't obtained the National Career Readiness Certificate (NCRC) awarded at the end of the program after passing an exam.

"I thought, 'Oh, no,'" she said. But Pettengill persevered, even though her math skills were weak, ranking at the third-grade level.

The program became her full-time job, so to speak, and at the end of it she earned her certificate with a gold ranking, one below the top Platinum which, so far, has been attained by only one of the 189 program graduates.

"I'm a proud graduate," said Pettengill.

She said without that certificate, she never would have been hired by the another company in a



DONNA PETTENGILL of New Boston, laid off last year from defense company Cobham, has found new employment in a higher classification at another defense company after earning a gold National Career Readiness Certificate at Manchester Community College. The WorkReadyNH program is cost-free and geared towards the unemployed, underemployed and veterans. (PAT GROSSMITH/UNION LEADER)

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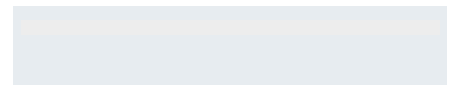
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higher classification than her prior job, or had the confidence to continue her education, enrolling in an associate degree in management program at the college.

The event opened with remarks from Gov. Maggie Hassan, who noted she launched her campaign for governor at the campus.

"All Granite Staters, regardless of circumstance, should have the opportunity to hold a good job, work hard, raise a family and share in the high quality of life we enjoy in New Hampshire," she said. "When they do, they become empowered, and our state grows stronger. And WorkReadyNH is an important part of our efforts to help our people achieve the goal."

She said the program is a critical initiative that, combined with other state job programs, is "strengthening our workforce, supporting growing businesses and helping us build a more innovative economic future."

WorkReadyNH consists of 72 hours of classroom work, which covers workplace behaviors including communication, conflict resolution, critical thinking, customer service, ethics, problem solving, self-discipline, teamwork, along with online training that's done at one's own pace.

The program is grounded in the WorkKeys National Career Readiness Certificate (NCRC) issued by ACT, the national college admissions test similar to the SAT.

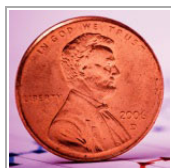
The program first assesses a participant's skills in applied math, reading for information and critical thinking. Based on test results, lessons are assigned online and are completed at the participant's pace.

Leesa A. Smith, president/regional representative of North America for Freudenberg, a German family-owned company with total global sales of \$6.5 billion, was among business leaders attending the breakfast. She said of interest and of importance to her company is the NCRC certificate.

Naomi Godfrey, regional human resources manager for Klüber Lubrication in Londonderry, one of Freudenberg's companies, said Klüber is interested in recruiting people with the certificate, but also is looking into having some of its employees take the classes

Since the program began two years ago, 189 people, ages 18 to 82, have graduated. Of those, 75 percent had been unemployed and 25 percent, underemployed.

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Tech programs worth saving

The goal at Nashua's high schools has been to make career and technical programs accessible to students of all kinds.

The graphic design lab connects directly Nashua High School North's main entrance. Next door is the school's cosmetology salon. The school's restaurant, the North Star Cafe, sits along the main corridor.

Despite these prominently placed programs, fewer and fewer students are taking part in them, and several will be shut down next year.

With sluggish enrollment, school district administrators have sidelined the school's hospitality management program – one of the district's 19 career and technical education programs – and they plan to suspend the graphic design program next year while they revisit the curriculum.

These moves are part of a larger effort to review each of the district's career and technical programs to make sure the courses match up with modern education and industry standards.

The temporary suspension of these programs is unfortunate – for the students and the school community as a whole. But, it could allow administrators the room and flexibility to update the programs and make sure they are meeting students needs.

"It's been 10 years. There are times when, due to rapidly changing environments or student interest, you need to step back and evaluate," Superintendent Mark Conrad told The Telegraph last week. "This is really the first time we started to do that in a serious way."

When Nashua North opened in 2002, administrators expanded the career and technical courses offered in an attempt to help students at all levels develop professional skills. Technical programs were considered by many at the time to be primarily for students who were not planning to attend college. But, the courses, which range from automotive technology to computer networking to video production, helped to dispel that notion, and the school's drop-out rate – a concern at the time – dropped in turn.

More recently, however, the programs have struggled to draw students due in part to staff turnover, as well as a lack of awareness. The graphic design program, for instance, included only six juniors this year – down from as many as 36 in the past.

Similar technical programs are taking off at the collegiate level. Nashua Community College, for instance, recently launched its Advanced Tool Machine Center, a public-private partnership, which teaches students, military veterans and other professionals new machinery skills.

President Barack Obama has spoken often in favor of such collaborations and has promised federal funding for 15 similar technical centers to be spread across the country.

Similarly, Nashua's school administrators plan to work with industry professionals to align the courses with current technologies and industry standards. They're also hoping to work with Southern New Hampshire University to allow students to earn college credits for the high school courses.

Perhaps most importantly, administrators plan to better promote the career and technical programs so younger students understand their true value.

These programs can be an essential part of the high school curriculum. In fact, they must be if the United States is to improve its standing in the engineering and manufacturing fields, among others.

For them to succeed, the courses must be well designed and taught.

Hopefully, school administrators will be able to revive these courses and make them a larger part of the curriculum moving forward.

For the students' sake.

The Telegraph

It's Your Community.

unday, une ,

ome Nashua high school technical education courses suspended while o icials re ocus

By AN ELLE T

ta Writer

Kelly Swan of Manchester works in the Nashua High School North kitchen during a hands-on class as part of the Nashua Community College Culinary Arts program on Wednesday, December 5, 2012.

Christine Mondoux wraps up banana chocolate chip streusel cake in the culinary program's kitchen at Nashua High School North Friday, October 4, 2012. The pies in front of her were some of the 40 created by seniors to benefit the Salvation Army through the Sullivan Farms festival this weekend.

Sean Mullaly has make-up applied by Senior members of the cosmetology program at Nashua North, Paradise Garrett, left, and Brianna Soucy, right, Friday evening before the start of a dress rehearsal for their production of Dracula.

Amanda Szorzan, a student at Nashua High School South, talks with Sakura Hicks in the Purple Panthers Preschool Tuesday, February 19, 2013.

Owen Roy, left, and Nathaniel Kangethe play during a break in activities at the Purple Panthers Preschool Tuesday, February 19, 2013, in Nashua High School South.

Amanda Szorzan, a student at Nashua High School South kids around with Sakura Hicks in the Purple Panthers Preschool Tuesday, February 19, 2013, at Nashua High School South.

Kelly Swan of Manchester works in the Nashua High School North kitchen during a hands-on class as part of the Nashua Community College Culinary Arts program on Wednesday, December 5, 2012.

NASHUA – If Lucien Jodoin hadn't enrolled in Nashua High School North's graphic design and printing program, he likely would have had nothing lined up after graduation.

But Jodoin decided to enroll two years ago, and now he's about to leave high school and start full-time work with a city printing company, ready to put the skills he learned to the test.

"If this program wasn't here, this wouldn't have happened," Jodoin said Wednesday, standing among the printers and other machines in the school's graphic arts lab.

Now, the program Jodoin that credits with his postsecondary success won't be offered next year while school officials review and revamp the technical education curriculum.

While some students in the program are worried, Career and Technical Education Director Michelle Papanicolau said it's all part of a broader effort to ensure career and technical education programs are aligned with higher education and industry standards, and to help boost enrollment in the programs.

"Change is tough, but we need to make sure that we're doing the right thing for our kids," she said.

Papanicolau and other technical education officials presented plans to upgrade several programs, beginning with graphic design, hospitality management and pre-engineering, to the Board of Education.

Assistant Superintendent Jen Seusing told board members that a group of high school students researched declining enrollments in the city's 19 CTE programs last year.

Seusing said those students found that enrollments were declining primarily because students were unaware of the programs offered.

The district launched an analysis of all programming last fall to look at the issue more closely, reviewing curriculum and meeting with program leaders. The reviews being done over the next couple of years, Papanicolau said, will involve industry leaders and representatives from higher education.

And while all of the programs will have to work to market courses to students better, Seusing said administrators decided to focus their efforts on the graphic design, hospitality and pre-engineering programs next year.

The hospitality management program isn't currently running, but if all goes according to plan, the program would return in the 2014-15 school year, working more closely with local businesses to get students into the field.

School leaders also hope to work with officials at Southern New Hampshire University to provide students with the opportunity to earn credits from the college for courses taken at Nashua North.

Changes to the pre-engineering program, offered at Nashua South, would seek to market the courses to students better and to create more partnerships with local businesses to show students the kinds of careers they could get in the future.

The updates to the graphic design program are still taking shape and will be determined with the help of an advisory committee of industry leaders and educators.

The program will be put on hold for a year, but school officials hope to have it updated and back for the 2014-15 school year.

Papanicolau said the program will most likely take on a more digital approach, perhaps updating student computers, using more digital printers and working to collaborate with the art department at the high school better.

"We do have to sometimes make tough decisions to make sure education is relevant and make sure students are ready for work or for higher education," she said.

But while students currently in the program said they know the graphic design industry is becoming more digital, they're worried a change in curriculum could keep future students from having the same access to the physical art of printing that they had.

"We worked with some younger students on printing and they loved it," Nashua South senior Megan Johnson said. "I hope they keep that part of it."

Johnson, a second-year graphic arts student, said she has learned a lot during her time with the program, particularly about the printing process.

And while Johnson said many students want to learn the digital skills of designing fliers, posters and other products, it was the skills she gained working with the printers that landed her a job.

Senior Gustavo Barroso agreed, saying he has been able to start his own small screen-printing company thanks to the skills he has learned.

Graphic arts teacher Jay Zaccone said the printing portion of the program is often a big draw for students. But while his students were worried that part of the program could be eliminated, Zaccone said he's hopeful it might be upgraded.

"Some of this equipment is 20 years old," he said Wednesday, standing in the graphic arts printing lab. "Ever since I've been in the printing industry, people have been trying to find ways to make printings without ink. Just five years ago, digital printers were still overpriced, but now there are some good options."

Zaccone has taught the graphic arts program for 14 years, beginning at Nashua Senior High School, and he said he believes it could be a good time for a change.

While the program has always accepted 18 students per course, enrollments have declined in recent years.

In past years, for example, the first-year course for juniors would often have two sections of 18 students, he said. This year, only six signed up.

While much of this likely has to do with the marketing of the program, Zaccone said he's hopeful an update to curriculum will help.

"I don't know what the vision is going to be yet," he said of the updated program, "but the hands-on aspect has always been what makes it fun for the kids. They like to get their hands dirty."

The city can expect to see a lot of work with the CTE programs in the coming years, Papanicolau said.

In addition to updating some programming, school officials will work harder to make students aware of the programs offered, bringing older students and teachers into the middle schools to take about the opportunities available and working to better align middle school courses with those taught at the high schools.

Danielle Curtis can be reached at 594-6557 or dcurtis@nashuatelegraph.com. Also, follow Curtis on Twitter (@Telegraph_DC).

NEW HAMPSHIRE UNION LEADER

une PM

in o sessions o ered on new manu acturing course

By HN NN
nion Leader orrespondent

ROCHESTER — Anyone hoping to get a jump-start to a career in producing parts for the aerospace industry can learn more about it this weekend.

Great Bay Community College is scheduled to host three free informational sessions at its new Advanced Technology & Academic Center (ATAC) at 5 Milton Road, Route 125, in the Lilac Mall plaza. The center will offer a six-month program in advanced composites manufacturing, beginning June 17.

The three 90-minute sessions are scheduled to begin Friday at 2 and 6 p.m. and Saturday at 9 a.m.

The ATAC facility is a result of a partnership between the college, Albany Engineered Composites and Safran Aerospace Composites, which operate and are in the process of expanding facilities in the Granite State Business Park near Skyhaven Airport.

The partnership is an opportunity for the entire region, as Safran plans to hire between 400 and 500 employees in the next five years, according to Michael Rigalle, vice president and general manager of the new facility.

Rigalle said the new facility will begin transition operations this summer in preparation to start manufacturing parts and materials for engines.

“We are working on a long-term project,” Rigalle said, adding this will bring more stability and success to the Seacoast and the region.

The new 17,000-square-foot facility includes classrooms, computers and academic support and technology laboratories. Students can take advanced composites manufacturing courses or take classes for other degrees offered by GBCC.

For more information or to register for the session, call 427-7700.



Community College Adjunct Professors Claim State Stonewalling Contract

By MHAEL B. N. LE

Adjunct professors working in New Hampshire's community colleges are asking the state's labor board to intervene in negotiations on a union contract.

The move comes after two years of failed negotiations.

Listen 0:49

The State Employees Association filed an unfair labor practice petition this week on behalf of the adjunct professors.

It accuses community college system officials of obstructing negotiations on a first contract with the union.

Craig Lange is an adjunct professor in Nashua.

"While we bring very well crafted, very well thought out proposals to the table, they seem to just give us stonewall. They give us the minimum kind of proposal on something that is peripheral, not a key issue."

The petition asks the state's labor board to order the community college system to bargain in good faith.

Community college system spokeswoman Shannon Reid says while negotiations have been challenging, she denied there have been any efforts to block an agreement.

The contract would cover roughly 500 of the state's adjunct professors.

CONCORD MONITOR

Businesses in the news June 1, 2014

Monitor sta

Monday, June 1, 2014

Published in print Monday, June 1, 2014

NHTI, CONCORD'S COMMUNITY COLLEGE, will offer a new, two-year associate degree in robotics and automation engineering technology starting this fall.

NEW HAMPSHIRE UNION LEADER

Goffstown officials want new Exit on

By AN LA

Union Leader correspondent

Published on , at am pdated on ,

FF T WN — Selectmen and the Economic Development Committee are keeping a close eye on Interstate 293 in Manchester, as the state addresses a plan to improve Exits 6 and 7 – and possibly direct access to the town.

The improvements are “absolutely vital to Goffstown’s future economic development,” said Selectman Collis Adams.

The state Department of Transportation’s fourth public meeting took place June 11 at Manchester Community College. The I-293 Planning Study addresses the possible reconfiguration of Exit 6 and a new full-access Route 7 North interchange to Route 3A, and to Dunbarton Road and/or Goffstown Road in Manchester.

The study and public input has brought to light several safety issues of which many drivers entering or exiting Exit 6 are aware — confusion, congestion and weaving at the Amoskeag Circle; queuing from the northbound exit ramp back onto I-293, high-speed weaving at the southbound entrance and exit ramps; and limited space for acceleration at all entrance ramps. Another issue, especially for Goffstown residents and businesses, is the lack of connections at Exit 7 heading into town.

The DOT has presented several scenarios. Traffic at the interchanges could be controlled by strategically placed traffic lights, having traffic controlled by roundabouts, or offsetting north- and south-bound entrance and exit ramps. Planners are also considering relocating the Exit 7 interchange with access to Front Street and Dunbarton Road, or access to Front Street and Goffstown Back Road.

Adams said relocating Exit 7 and providing direct access to Goffstown would better serve the town.

“Of the alternative’s presented by DOT at the public hearing, Goffstown has expressed its strong support for either Alternative 10a or 10b. These options would provide the most direct and efficient connections between the turnpike and Goffstown Back Road,” Adams said. “Alternative 10b is preferable as it provides connections to both Goffstown Back Road and Dunbarton Road, allowing for distribution of traffic to and from the northerly and westerly areas of town.”

Selectmen said direct access from the highway to Goffstown has to be taken into consideration.

Within the last 10 years, Goffstown approved a major industrial subdivision on Back Road near the Manchester line. Shortly after that project was approved, Manchester placed trucking restrictions on Back Road, Adams said.

“Prior to those restrictions, there were several parties interested in developing lots in the subdivision. Once the trucking restrictions were put in place, those parties pulled out and there has been no interest in the years since,” Adams said. “This demonstrates the importance of a direct connection to the turnpike so that Goffstown’s economic development is not held hostage by the actions of others.”

He said Goffstown will continue to pressure the DOT and solicit support from the town's elected officials to assure that the selected alternative adequately addresses access to Goffstown's developable lands north and west of the turnpike.

The Goffstown Board of Selectmen has identified economic development as their No. 1 goal for 2013, he said.

"At our meeting Monday night (June 17), we took the first important steps in developing plans to attract new industry and business to our town in order to help offset the burden placed on residential taxpayers. It will be a complex process that will focus on providing expanded infrastructure that is so critical to attracting new business. Included in that infrastructure expansion is improved access to major highways and a relocated Exit 7 is a perfect example and a good place to start," Adams said.

The DOT will now begin preliminary engineering, acquiring formal environmental documentation and project design. This stage of the process can take several years.

The plan's technical advisory committee includes representatives from the state DOT, the Federal Highway Administration, the Southern New Hampshire Planning Commission, the city of Manchester, the chambers of commerce from Goffstown, Hooksett and Manchester, Manchester Community College, and State Sen. David Boutin, R-Manchester.

For more information and a detailed description of the proposed plan, go to 293planningstudy.com.

June 14, 2014 1:00 PM

Women's leadership summit provides insight, inspiration

By MBE L H HT N
Union Leader correspondent



Hundreds of women participated in the New Hampshire Women's Leadership Summit on Friday at Nashua Community College. Here, some of the participants dance and applaud during the opening ceremony of the event. (KIMBERLY HOUGHTON/Union Leader Correspondent)

NA H A — Women stood united on Friday, eager to become more motivated and passionate about their personal and professional lives during the New Hampshire Women's Leadership Summit.

An estimated 350 women were encouraged to face their fears, not be afraid to fail and learn from their mistakes. They were also warned about other individuals who may attempt to bring them down — and more often than not, it may be a female counterpart, according to Nashua Mayor Donnalee Lozeau, who spoke during the opening ceremony of the event at Nashua Community College.

The single greatest challenge for professional women has always been other women who may try to begrudge another person's success, said Lozeau.

"Don't be that woman, and don't be afraid of that woman," she said, reminding those in attendance that they can succeed in spite of them.

A good leader, added Lozeau, can guide without stepping on others. It is alright to follow others and admit when mistakes are made, she stressed.

"You have the courage to say, 'I can do that much more,'" said Lozeau. Whether it is getting the kids to school on time, finishing the laundry, running errands, keeping a marriage strong, volunteering and of course holding full-time jobs, Lozeau said it is important to learn from other remarkable women also trying to manage it all.

Annabel Beerel, president and CEO of the New England Women's Leadership Institute, was one of the guest speaker's at Friday's summit.

Kicking off the festivities with a motivational speech about courage, and even a little dancing to Donna Loren's "We Are Woman," Beerel held up a nearly 800-page book on leadership theories

and practices.

The book, according to Beerel, has no references to courage or bravery. Not sure what to make of that, Beerel said leadership and courage must go hand in hand.

“Why do leaders need courage? Courage is the ability to act despite our fears,” she said, stressing good leaders must be courageous enough to face the fear of being humiliated, alone or unpopular.

While previously interviewing various women in different professional fields, Beerel said their greatest ethical concern — above all else — was whether they picked the right moral battle so that they will not lose their existing position of power.

Leaders, especially females, must focus on the inner work and “wrestle with the divine and the demon within,” she said, adding courage is a human virtue that is always appropriate.

While receiving messages of courage on Friday, female professionals received lectures on various ways to improve their success, including workshops on communicating effectively, fostering leadership, guiding careers, de-escalating tense encounters, creating a dynamic personal brand and more.

Other sessions focused on gender equality, fundraising, leadership roles in the financial services industry and the courage to become an entrepreneur.

“I really like the theme and the message of today’s event,” said Janelle Travers of Concord, a trust administrator at Cambridge Trust Company in Concord. “This is such a really good topic.”

Travers says she is fortunate to have a lot of positive female role models in her life and at her job.

Jennifer Jones, also of Concord, agreed. Jones attended the summit as an employee at Merchants Automotive.

“My company really supports education and further learning for women,” said Jones, adding she found Friday’s event to be quite inspiring.

Some of the keynote speakers included Jessica Jackley, a social entrepreneur, Chris Grumm, president of the Women’s Funding Network, and Liz Walker, a television journalist and humanitarian.

khoughton@newstote.com



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reat Bay opening training program in ochester

By Li Mar hle s aya
lmar fosters.com

HE TE — Great Bay Community College has recently opened a satellite location in Rochester, offering a six-month program in advanced manufacturing.

The 17,000-square-foot Advanced Technology and Academic Center (ATAC), located in the Lilac Mall plaza, coordinates its manufacturing training program with area manufacturers, particularly Albany Engineered Composites and Safran Aerospace Composites — two companies that will colocate in a new manufacturing facility at the Granite State Business Park later this summer.

The new plant, expected to begin operations by this fall, will bring in close to 500 new employees over the next several years, and training at the new Advanced Technology and Academic Center is expected to help provide the two companies prospective employment candidates already trained in the advanced manufacturing field.

At the new manufacturing plant, Albany Engineered Composites and Safran Aerospace Composites will produce composite components for the LEAP engine, developed by CFM International.

The full-time, six-month training program in advanced composites manufacturing at ATAC starts Monday, June 17. Registration for the manufacturing program, or traditional academic classes, is open now.

At the end of the six-month advanced manufacturing program, students earn a certificate in composites manufacturing and are ready for employment, according to Debra Mattson, advanced manufacturing program director and designer for Great Bay Community College. She said that at the end of the six months, students are qualified for positions as high-level machine operators, with options to continue their education by pursuing an associate degree in technical studies.

During the program, students will spend half their time doing hands-on work in the center's state-of-the-art lab.

On July 11, the public will have an opportunity to view the new center at a grand opening celebration, taking place 5 p.m. to 7 p.m. In addition to tours, the event will include information stations, and refreshments and entertainment provided by Rochester community partners.

Gov. Maggie Hassan and other dignitaries will be in attendance at the opening celebration, to officiate the formal opening of the center.

Those interested in joining in the opening celebration should RSVP to Bryan Godduhn by June 25, by calling 427-7602 or emailing bgodduhn@ccsnh.edu.

For more information about enrollment and class registration, contact Jeffrey Pruyne, outreach and enrollment counselor for Great Bay Community College, by calling 427-7735 or 1-800-522-1194, or emailing jpruyne@ccsnh.edu.

For more information on the Advanced Technology and Academic Center visit www.gbrochester.com.

unday, une ,

Education at issue Community colleges focus on hands on training

By **enni er ee e**
news **osters com**

E — For Tiffany Bisson, attending a community college made all the difference for her and her career.

The Lakes Region Community College graduate had started at a four-year college in Vermont for a degree in graphic design, but wanted more out of her education.

“I transferred to a tech school because I wanted to dive right in and get the education,” Bisson said, remembering a lot of her classes at the four-year school were lecture and textbook driven. “What set the two experiences apart was my teachers. They had all worked in the field for 15 or 20 years, so you’re getting real-life experience.”

That hands-on and real-life learning style is what the seven Community College of New Hampshire schools around the state strive to do, and the focus is on producing skilled workers trained to succeed at businesses around the state.

“We’re really aligning our training and programs with the needs of companies out there,” said Ross Gittell, chancellor of the New Hampshire Community College System.

Gittell, who also serves as vice president, forecast manager and board member of the New England Economic Partnership, said the state has had relatively slow recovery from the economic downturn relative to the nation.

“We usually come out stronger, but it isn’t happening this time, which is of concern,” he said. “And increasingly, when you visit with companies in different industries that should be adding jobs, like advanced manufacturing, there’s potential there to grow employment but there isn’t the skilled workforce available.”

That’s where CCSNH comes in.

For the past few years, CCSNH has been focused on fine-tuning programs to give students the training and education they need to be a desirable asset at these companies around the state that are looking for skilled workers.

The system’s seven colleges are all focused on an advanced manufacturing curriculum, and administration has worked with companies in each region to find out what they need for specific skills in their workforce, right down to the equipment.



A student wal s out o reat Bay ommunity ollege in Portsmouth Monday a ternoon
yan McBride ta photographer

And the schools then create pathways to bring students from the classroom to employment.

Each school has an advanced manufacturing curriculum that specializes in the needs of that region -- for instance, Rochester has companies such as Albany International Corporation and Safran Aerospace Composites, Inc. that specialize in composites manufacturing, used primarily within the aerospace industry.

"It's a very good program," said Phil Przybyszewski, project coordinator for the advanced manufacturing initiative at Manchester Community College. "It meets the needs of manufacturers. We want to see what they're going to need five years out and design the curriculum to meet those needs."

New Hampshire Technical Institute in Concord focuses on automation, Lakes Region Community College in Laconia offers courses in energy systems, River Valley Community College in Claremont has an advanced machine tools program, Nashua has a precision machining program that was recently expanded with grant money, and White Mountain Community College in Berlin focuses on precision welding.

Each advanced manufacturing program has an advisory board comprised of industry partners in the area around the college.

Przybyszewski said not only the advanced manufacturing programs but all of the courses offered in manufacturing draw all types of people from high school graduates to the unemployed and underemployed.

"The program is geared toward people upgrading their skill sets," he said. "People want to do something that can insure their career."

Through the program, students have the opportunity to do internships or job shadowing to get an idea of what that career is like.

"It adds a lot of value to the company and the individual," Przybyszewski said. "They can see the skill sets and whether they want to make an investment in that person."

"That's replicated within each college," said Shannon Reid, director of communications for CCSNH.

"It's a technical field and very much in demand," Reid said. "The strategy is a core manufacturing curriculum with specializations on top of that."

She said the colleges are working to develop more experiential learning by partnering with the companies in those regions so students can get a feel for what the actual job is like.

It was that kind of hands-on learning from which Bisson said she really benefited.

As a graphic design major, Bisson said she had the opportunity to run an actual print shop where they printed school calendars, T-shirts and the school's program of studies.

"It taught me to think more quickly on my feet," she said. "The thing that made a huge difference was that the teachers are there for the hands-on stuff. Their approach to you is very different."

Peter Francese, demographic forecaster for the New England Economic Partnership, released a report recently titled *The Vital Economic Contribution of New Hampshire's Community Colleges*, which highlights the "essential role" community colleges play in a state Francese says is facing a fast-aging population combined with very little workforce growth.

"If our state is to have solid economic growth, then it's imperative that New Hampshire's young adults coming into the future workforce have superior job skills to offset the adverse effects of their smaller

numbers,” Francese said. “The essential component of this concept is our community college system. It provides at a very modest cost the means by which individuals can obtain the skills they need to get one of the better paying professional or technical jobs, or get the preparation they need for successfully achieving a university degree.”

He cites the Census Bureau’s most recent American Community Survey that found a New Hampshire worker with an Associate’s degree earns on average about \$10,100 more than a worker with no education beyond a high school diploma. The same survey also found college courses can increase that income by nearly \$5,000.

One CCSNH program that has grown and evolved in a short time is WorkReadyNH, which was started by former Gov. John Lynch in 2011 to help the unemployed get back to work.

Since that time the program has seen great success and has expanded to include underemployed and full-time employed people.

Jennifer Scotland, director of WorkReadyNH, said the program is now open to anyone 16 or older who wants a national credential and a community college certificate on their resume.

She said the program focuses on math, reading, and critical thinking, which earns the national career-ready certificate that is used in all 50 states for the hiring process. But the program also teaches “soft skills” like workplace behaviors and conduct, with a 60-hour training that leaves students with an understanding of their learning styles and how they can work with colleagues who may have different learning styles without conflict.

“That’s actually the biggest skills gap,” Scotland said of the soft skills component. “You may have someone who is very skilled but doesn’t get along with the team. A company can’t train you to get along with the team.”

Scotland recruits students and also connects with businesses to explain the value in hiring someone who has gone through the WorkReadyNH program.

Just like the focus on certain manufacturing programs, WorkReadyNH was created in response to what businesses were sharing about their needs. Scotland said the program has evolved over the years to really teach people how to interview for a job and succeed at that position on several different levels.

“People really had no idea in the beginning,” she said. “They were coming from jobs they’d had their entire lives; never had a resume and never done an interview. They assumed they were going to retire in their business. Or, we had young people who just didn’t know anything about the business world yet.”

CCSNH is also partnering with the University System of New Hampshire to increase the number of graduates with degrees in science, technology, engineering and mathematics (STEM).

Reid said the goal is to double the STEM grads by 2025 and make sure there are strong transfer pathways for students in those fields, because “that’s something New Hampshire really needs.”

Gittell said the liberal arts education at CCSNH schools has also seen a boost in enrollment as many students take their first two years at a community college for convenience and affordability, and then take advantage of partnerships with the University System to apply their credits and obtain a bachelor’s degree.

With seven community colleges spread around the state and 98 percent of the New Hampshire population located within 25 miles of a campus, Gittell said there’s a high likelihood community college graduates will stay in-state for work and contribute to the state’s economy.

And 95 percent of students enrolled at colleges in the CCSNH network are from the Granite State.

"As we improve the quality of our programming and link more strongly with industry and our state's economy, it benefits our state and students and the industry because there is a skilled workforce," Gittell said. "It's a win-win for the students, the businesses that are employing them, and the state's economy."

Community colleges are also offering programs for high school students, like Running Start, which allows high schoolers to take college courses for credits that can be transferred to colleges in, and out of, New Hampshire.

Reid said the program has grown since it was created 12 years ago, with currently about 5,000 registrations annually.

The community colleges also work with high schools to increase the level of math skills of graduates with developmental courses for high schoolers who may not be fully prepared for college-level coursework.

Currently, the Community College System of New Hampshire serves about 27,000 students each year, which includes those in credit and non-credit programs and the Running Start program.

Gittell stressed the data shows New Hampshire needs to keep up the focus on providing a highly educated workforce.

"Research out of Georgetown (University) says that for New Hampshire to stay a low poverty state, we'd have to move from 46 percent of adults age 25 or older with some kind of degree to closer to 64 percent," he said. "The only way to really get that in a cost-effective way in a short period of time is through using community colleges in the state of New Hampshire. Their efficiency, geographic availability and ability to work directly with high schools across the state in that critical transition from secondary to post-secondary -- we want to improve student success, which are academic and labor market outcomes."

Thursday, June 11, 2015

New pact lets Great Bay students keep credits when transferring to new NH business school

By Andrea Bulinch
abulinch@fosters.com

HAM — A new articulation agreement between the University of New Hampshire Peter T. Paul College of Business and Economics and Great Bay Community College was called a win-win situation Wednesday afternoon during a ceremony to mark the collaboration.

Community College System of New Hampshire board of trustees Chair, Paul Holloway, said that while he wishes the state would support public higher education more aggressively, he was happy with this move.

“When you look at UNH and what they can offer to the state this is a wonderful opportunity for everybody,” he said.

The articulation agreement means there are specific courses identified at GBCC for students looking ahead at transferring into UNH or who decide at some point in their academic career that they have an interest in business they wish to pursue at UNH. Those courses identified means they would not have to be repeated once accepted into UNH and that they would fulfill requirements toward earning a bachelor's degree.

While course credits will transfer and students are required to hold an overall 3.0 grade point average to be admitted into the program, a student's GPA, however, will not transfer. That means students will start over to rebuild their GPA just as all transfer students do.

The agreement will broaden not only access to a degree, but affordability, UNH President Mark Huddleston said, naming those two things as the greatest challenges facing higher education.

And, poking fun at a current challenge facing UNH — revamping the Thompson Hall logo — Huddleston pointed toward the logo of GBCC displayed on a large screen before the group and asked, “Who does your logo?”

Getting back to the purpose of the ceremony, Associate Dean of the UNH Paul College Venky Venkatachalam, shared in his opening remarks that this agreement would provide access for more students to one of only two accredited business schools in the state.

The intent of the agreement is to provide students who have completed an associate degree at GBCC to continue their education at UNH in a field of business administration, economics, or hospitality management. Depending on the student and their progress, this can be accomplished within two to three



John Huddleston, UNH President, meets with business leaders and community college leaders to announce a new articulation agreement between Great Bay Community College system and the UNH Peter T. Paul College of Business for students who transfer.

years at the institution.

“This agreement reflects our shared priorities of student success, access and affordability as it provides an important pathway for students to achieve educational and career goals here in New Hampshire,” Ross Gittell, chancellor of CCSNH, said.

One of the anticipated benefits of this initiative is retention in the state with graduating students. Keeping more students in the state's workforce will strengthen not only the economy, but industry overall, officials said.

GBCC already has agreements with other colleges at the university such as the College of Liberal Arts and the College of Life Sciences and Agriculture.

GBCC President Will Arvelo said he was excited to be present Wednesday and said the agreement is a great opportunity to get the best business education possible to all students.

“I look forward to sending many of our students this way,” he said.



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NH, B celebrate Paul ollege partnership

By Elena Penati
news seacoastonline.com

HAM — Wednesday marked the beginning of a new relationship between Great Bay Community College and the Peter T. Paul College of Business and Economics at the University of New Hampshire.

The institutions signed an articulation agreement that will permit qualified GBCC students to transfer into the various four-year business programs offered at the Paul College. The agreement signed by GBCC President Wildolfo Arvelo and UNH President Mark Huddleston creates a plan for GBCC students can follow to achieve a bachelor of science degree from the Paul College. Huddleston emphasized the importance of working together to meet the difficulties New Hampshire faces with providing higher education to its citizens.

“The greatest challenges facing higher education are access and affordability,” he said. “This agreement will allow more New Hampshire business students the opportunity to transfer easily to UNH and continue their learning beyond the associate degree level.”

Those present celebrated the new agreement, which will offer GBCC students access to the faculty and infrastructure at the Paul College, which is one of two accredited business schools in New Hampshire.

For GBCC students who have completed their associate’s degree, the agreement allows them to continue their education in business administration, economics or hospitality management at the Paul College and earn their bachelor’s degree within two to three years. To transfer into the program, GBCC students must have at least an overall 3.0 grade point average and an academic record that would grant them acceptance.

Ross Gittell, chancellor of the Community College System of New Hampshire, hopes the agreement will be a model that will encourage other schools to collaborate as well. Not only will the agreement provide a more efficient path to success for GBCC students, it is also about the greater economy of New Hampshire, Gittell said.

“We have to push students’ success to push industry,” he said.

Paul Holloway, chairman of the CCSNH board of trustees, said it is in the best interest of the state and its economy to prevent students from leaving the state and working elsewhere after graduation.

Holloway and others behind the agreement said the partnership will help achieve this goal. "New Hampshire's community colleges, through partnerships with industry and within higher education with partners like the UNH Peter T. Paul College of Business and Economics, continue to expand opportunities for New Hampshire students to advance economically and be part of the state's innovation economy," he said.



une , AM

NH, Great Bay college sign transfer agreement

Path now in place for business students

By Elena Penati
business seacoastonline.com



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Project Safety helps protect teenagers

June 10, 2013 10:30 AM

June 10, 2013 To the Editor

The 5th annual Portsmouth Middle School Project Safety Conference was held recently at Great Bay Community College. Project Safety brings seventh-graders and their parents together for a day of workshops that focus on teen substance abuse, safe use of social media, peer pressure, bullying and other high-risk teen behaviors.

We are proud to say the 2013 conference was once again a great success. Students and parents all agreed that the day brought valuable information and insight to them about these difficult topics. The choices our teens struggle to make become more confusing, difficult and dangerous each day. Project Safety strives to provide our kids and their parents with effective tools that will help teens make the right decisions when faced with these issues.

We would like to extend our sincere thanks to Portsmouth school administrators and staff, who continue to have confidence in our efforts.

"We are very fortunate to have dedicated folks like you to step up and develop such a strong program," said Ed McDonough, Portsmouth superintendent.

We would also like to extend thanks to the following facilitators and conference sponsors. Facilitators: Ed Gerety, CSP; The Unity Project; Portsmouth Police Department; Newington Police Department; Jackie Valley, former Community Diversion executive director; Families First Health and Support Center; Keith Dominick, MD; Sara Lauren, Ph.D.; Hardy Girls Healthy Women; Phoenix House Students, Dublin; North Shore Recovery High School students; Chucky Rosa, Chucky's Fight; Dwight Davis; Erin Sharp, University of New Hampshire; Michael Kasztejana, pharmacist. Sponsors: Great Bay Community College; Fuller Foundation; Seacoast Rotary Club; Kennebunk Savings Bank; Pediatric Associates of Hampton and Portsmouth PC; Liberty Mutual Group; Portsmouth Police Patrolman's Union NEPBA Local No. 11. Also, thanks to Project Safety Road Race sponsors, All Slates Project donations and membership friends, patrons and sponsors.



une , AM

Transfers from local community college to UNH eased

By Elena Penati
news@seacoastonline.com

HAM — Great Bay Community College students will soon be able to transfer to the Peter T. Paul College of Business and Economics at the University of New Hampshire, due to a new articulation agreement.

A agreement was signed by UNH President Mark Huddleston and Great Bay Community College President Will Arvelo that permits qualified GBCC students to transfer credits to several bachelor of science programs at the Paul College. GBCC students accepted into the program would be allowed to pursue a bachelor of science degree in business, economics or hospitality management. To transfer into the program, they would have to meet certain academic criteria, including having a 3.0 overall GPA.

The Paul College of Business and Economics is the only undergraduate business program in New Hampshire that meets the Association to Advance Collegiate Schools of Business accreditation standards. According to its Web site, "AACSB accreditation is known, worldwide, as the longest standing, most recognized form of specialized/professional accreditation an institution and its business programs can earn."

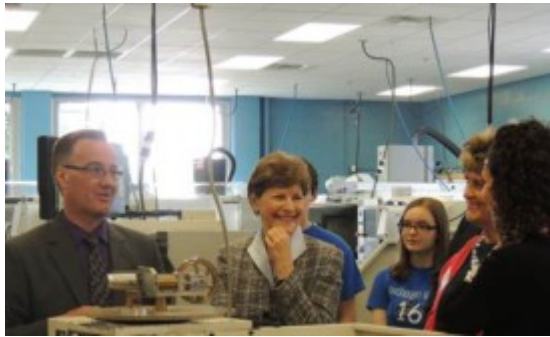
The goal of the articulation agreement between the Paul College and GBCC "is to have increased access to New Hampshire and Seacoast students to a bachelor's degree in business from UNH's Paul College," said A.R. "Venky" Venkatachalam, Ph.D., professor and associate dean of academic programs at the Paul College of Business and Economics.

A celebration of the new agreement between UNH's Paul College and GBCC will be hosted at 3 p.m. today at the Paul College, 10 Garrison Ave. in Durham.

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haheen Announces Launch o TEM caucus

U.S. Sen. Jeanne Shaheen, D-NH, is a co-chair of the Senate STEM caucus, a bipartisan coalition of senators focused on raising awareness on STEM education.



Sen. Jeanne Shaheen at Nashua Community College on June 3 to talk about STEM education Credit.

NA H A - U.S. Senator Jeanne Shaheen (D-NH) spoke at Nashua Community College this morning to announce the launch of the Senate STEM (Science, Technology, Engineering and Math) Education and Workforce Caucus and discuss her legislation to support STEM education in schools across the

country.

Shaheen is a co-chair of the Senate STEM caucus, a bipartisan coalition of senators focused on raising awareness on STEM education and advancing STEM opportunities to help maintain America's competitive edge in the global economy.

"Jobs in the STEM fields are projected to be the fastest growing occupations over the next decade, which is why it is so important that our next generation is prepared in the skills they need to improve our nation's economic prosperity and global competitiveness," Shaheen said.

"I have long focused on increased investments in education, particularly with respect to STEM, because these investments will allow us to develop a homegrown, high-skilled workforce for the future. The Senate STEM Caucus and my STEM legislation will build off of these previous efforts because we have a responsibility to prepare today's students to be future leaders of our economy." Shaheen recently introduced legislation, the Innovation Inspiration School Grant Program, to boost STEM education opportunities for students across America.

The bill would specifically establish a grant program within the Department of Education that school districts can apply for in order to support STEM education efforts, particularly those that are considered to be non-traditional such as robotics competitions.

The grant program also aims to broaden access to STEM education for women and girls. Shaheen has been a leader on STEM education efforts since her days as Governor and is a recognized leader by STEM Connector in their 100 Women in STEM publication. She has been a strong advocate of workforce training programs that give American workers the knowledge and skills needed to compete for quality STEM jobs, and has helped secure several grants for New Hampshire's community colleges to train workers.

Adjuncts file complaint against community college system

By MEL FLANAGAN
Monitor staff

Wednesday, June 15, 2011
Published in print Thursday, June 16, 2011

The State Employees' Association has filed an unfair labor practice complaint against the Community College System of New Hampshire, accusing it of obstructing contract negotiations with the system's nearly 1,500 adjunct faculty members.

The union filed the petition Monday with the New Hampshire Public Employees' Labor Relations Board after attempting since 2011 to negotiate an initial contract with the system. The adjunct faculty members teach about 75 percent of the courses at the state's seven community colleges.

The adjunct faculty first organized and sought representation from the union more than two years ago when they began to pursue a contract with the college system.

Shannon Reid, spokeswoman for the Community College System, said progress has been made in all steps of the bargaining process, and negotiators for the college system have been working to address the needs of adjunct professors, whose services they value.

"CCSNH goals have been to increase the compensation rate for adjunct faculty and to address adjunct faculty appointments and working conditions in a manner that does not result in a negative financial effect on students, employees or CCSNH," she said yesterday.

According to the complaint, the State Employees' Association and the Community College System began negotiations in October 2011. They were unable to reach an agreement and continued deliberating with third-party mediation in January. In April, the negotiators for the college system declared they had "nothing further to offer," and the parties reached an impasse. This pushed the process to fact-finding, where it currently remains. Both parties will now present their sides to a third party, who will review the facts and make recommendations for a contract.

According to the complaint, the parties have been unable to reach an agreement due to the system's "bad faith dealings" with the union. In the complaint, the union accuses the college representatives of regressive bargaining, or bargaining to lower benefits and pay, and changing their position on certain employment terms and conditions after an impasse had already been declared.

The complaint alleges that college representatives dealt directly with unit members instead of dealing with the members of the bargaining team. The union has also accused college representatives of failing to cooperate during the mediation process.

The complaint asks the state labor relations board to order the college system to stop "bargaining in bad faith" and to provide the union with data it has repeatedly requested to support several of the system's positions. The complaint does not identify the information the union is seeking.

Although the adjunct negotiations have been challenging, Reid said the college system is confident discussions will end in an agreeable outcome for both parties.

"The CCSNH will continue to make our best efforts in good faith to arrive at an agreement that addresses compensation, recognizes the fiscal sustainability needs of the colleges and honors our commitment to student access and affordability," she said yesterday.

The prolonged discussions have left many adjunct faculty members in a state of confusion regarding their future employment.

Rick Watrous, a state representative from Concord and adjunct English professor at NHTI, said he has heard varied accounts of the negotiations from different faculty members among the colleges. He said the most pressing question concerns the limit on the number of credit hours professors are allowed to teach. Many faculty are unsure whether they can teach up to nine or 10 credit hours, and whether they are allowed to teach over that limit if they split the hours between different colleges.

The uncertainty makes planning for next semester nearly impossible, Watrous said.

“Our supervisors, like my English department head and the person who supervises the tutors at the learning center, are trying to figure out just how many hours they can give us to teach or tutor,” he said. “Not even our supervisors know.”

In an effort to plan ahead, Watrous said he asked Sara Sawyer, director of human resources for the community college system, to clarify the credit hour limitations, but Sawyer said she could not answer because of the ongoing negotiations.

The college system’s unwillingness to address these concerns leaves some professors wondering whether they will be able to earn a livable wage, Watrous said.

“For many of us professors, this is our job, our livelihood, and if they’re limiting us to nine credit hours a semester, that means we’re only going to be making like 10 grand a year,” he said. “That’s not a sustainable lifestyle.”

The Monitor reported April 25 that the Community College System asked campuses to limit adjunct faculty members to nine credit hours per semester beginning in the fall. This translates to 27 hours of work per week, which keeps adjuncts from qualifying as full-time employees, who would be guaranteed health care benefits under the Affordable Care Act.

“The broader public good was helped by the Affordable Care Act, and we’re doing the best in the context of our limited budget and our focus on student success,” System Chancellor Ross Gittel told the Monitor. “Difficult decisions have to be made, and while we appreciate what the adjuncts bring to the community college system, we are focused on students, on our financial model, and in the context of decades of rising health care costs, you can’t just isolate this point in time and criticize what we’re doing without looking at what’s happening across the country.”

Watrous compared the move to a “Walmart corporation mentality,” in which employers reduce their employees’ hours to avoid providing them with benefits.

“I think the Community College System of New Hampshire should be better than that,” he said. “I just wish the administrators would treat their educators with respect.”

A pre-hearing conference is scheduled for 9 a.m. July 15 at the offices of the Public Employee Labor Relations Board. An adjudicatory hearing is scheduled for 8:30 a.m. Aug. 1.

(Mel Flanagan can be reached at 369-3321 or mflanagan@cmonitor.com)

Once downtrodden, Claremont is on the upswing

The revival has been slow and is by no means over, but it's definitely headed in the right direction

By Melanie Plenda



Claremont has always had a lot going for it, including an architecturally inviting downtown.

A drive through downtown Claremont three years ago was a sad experience. Architecturally, the downtown is a stunner, but if you were to head down any street at the time, you'd see more empty storefronts than occupied ones.

Today, however, downtown Claremont has almost done a one-eighty, with restaurants, spice shops, a community college and service businesses filling those formerly empty spaces.

After hemorrhaging businesses, particularly in the downtown area

earlier in the decade, the city of Claremont is on the upswing. City officials point to a combination of factors for the transformation, including infrastructure investments, policy changes, public-private partnerships and selling retail and industrial outfits on the idea of all that Claremont could be.

The process has been slow, coming in fits and starts, and is by no means over, but it's definitely headed in an interesting direction.

"We looked a little bit at Lebanon, but Claremont won better value," said David Lucier, co-owner of Claremont Spice & Dry Goods, which opened last year in downtown. "The overheads are not as high. But the other part of it was, it's a great old mill town. The way I looked at it, Claremont was at the cusp of coming back. It's a city that's got good bones."

Never stop shopping

Claremont has always had a lot going for it, with its old buildings and dual main streets, in the midst of the natural beauty of Mount Ascutney to one side, the Greens to the other and the Sugar River running right through the city.

Though the mills closed down in the 1940s, the city didn't really start to see its decline until the 1970s and '80s, after its mainstay employer, machine tool manufacturer Joy Manufacturing (followed by various successor firms) shut down.

"The company closed in one day and the city never recovered," said Guy Santagate, Claremont's city manager. "They're still trying to recover from that. And that decline hurt the city. At one time, you had 19,000 to 20,000 people here – now you have 13,000."

Santagate came to Claremont in 2001 and started making changes. His idea was to attract businesses, which would have a whole spinoff effect in the community.

He began by streamlining the process by which businesses get started in Claremont and put more resources into the Economic Development department.

"We made one-stop shopping," Santagate said. "Doing that was really important. Because the number one goal was economic development, and it still is."

At the time he arrived, city officials had approved and were in the process of demolishing three defunct brick mill buildings. Santagate convinced them not to. It was a huge gamble, he said. But in 2004, Santagate and the Economic Development department found developers willing to invest in the rehab and development of the properties.

Red River Computer Co. and the Common Man Inn & Spa now make the mills their home in newly renovated mill buildings. Other businesses followed suit, figuring if companies like Red River and Common Man could make an investment in Claremont, so could they.

Further, when Santagate heard that Granite State College was looking for a new home, he actively pursued officials of the college, ultimately wooing them to a central location downtown.

At the same time, things were happening elsewhere in the community. Main Street groups and local business owners started renovating the buildings downtown. When they got projects as far as they could go, they searched out grants, tax credits and, in at least one case, the help of the Monadnock Economic Development Corp. to finish them up. Over the past several years, The Brown Block, The Farwell Block, The Moody Building, and The Union Block have all been renovated, many through public-private partnerships.

"Private businesses have invested and continue to invest," said Nancy Merrill, the city's director of planning and development. "But some projects just look like they would not happen without some assistance."

The result has been the addition over the past few years of restaurants, a dental office, a hardware store, a health care facility, scads of new apartments and many other new businesses. Claremont has also developed a wood-based manufacturing cluster in Claremont, with businesses like Timberpeg, Davis Frame, Preferred Building Systems and Crown Point Cabinetry.

"(They are) positioned well for growth as the housing market improves," Merrill said.

In return, Merrill said, the city has tried to be responsive to businesses – which includes sometimes throwing money behind a renovation, helping with grants, improving sidewalks and lighting, building a new parking structure and generally accommodating them when it's feasible.

Neither Merrill nor Santagate had exact numbers on how much money the city has put into rehabbing the city. But Santagate was quick to point out the support has not raised taxes on residents. He said this was done by eliminating city positions, making budget cuts elsewhere and doing more with less during the recession – all the while continuing to invest and find funding wherever possible.

Location, demographics

One of the big reasons business owners are taking a chance on Claremont is its undervalued real estate. Entire buildings in Claremont go for anywhere from \$34,000 to a few hundred thousand. A gothic stone church in the Mill District, for example, is on the market for \$395,000, according to The Bean Group's website.

For other business owners, the city's proximity to the Upper Valley and Interstate 91 is attractive. And for business owner Robert Woods, it's the location to the entire Northeast corridor.

"I'm talking all of the territory of all New England, New York, New Jersey and Pennsylvania – all of the Northeast corridor. Claremont puts me within five to seven hours out in all directions of all the vineyards I would be dealing with," said Woods, owner of The Naughty Vine, a new wine, cheese and chocolate shop slated to open shortly in the city. He's also licensed to import wine from other states into New Hampshire and sell it.

He also said he likes the demographics of the Claremont area – some 138,000 people over the age of 21 live in and around a 60-mile radius on both sides of the river.

"I do understand that Claremont has had its ebbs and flows," Woods said. "But I do know that the community can change positively in a forward-moving direction, which would allow good things to happen. They just have to embrace the idea that they can do it. They have to make a conscious decision that it can be done. I think the local new businesses have embraced that."

Going forward, the planning department is simplifying Claremont's zoning ordinance, which divides the Euclidean zoning, forming districts (commercial, residential and industrial, among others) laid over a fully built historic city center. This has resulted in many properties not conforming because they don't fit the zoning pattern, Merrill said, which adds a layer of burdensome regulation. The new ordinance changes the zoning districts to allow mixed uses.

Santagate said the city is also going to continue to invest in renovating the downtown and in improved above- and below-ground infrastructure. The city is also working on projects that will improve traffic flow and might even increase traffic coming into Claremont from Vermont. He said he is in the process of working on more incubator projects and is encouraging more job training at River Valley Community College and the Sugar River Valley Technical Center at nearby Newport High School.

"Improving the local workforce will be the key to the future of Claremont," Santagate said.

Still, Santagate said, it has taken and will take salesmanship on the part of city officials to continue to attract businesses and the ability to show them what is possible in the city.

"It doesn't mean it's Camelot, but we're seeing some good signs," he said. "It's all about that long-range plan. It's not about short-term glitz or short-term sizzle. It has to be real."

THE B

Devitte is co-founder of Borealis Ventures in Hanover and Portsmouth and the Borealis Granite Fund, a venture capital fund.



Steve Lambert, general manager of the Red Jacket Mountain View Resort in North Conway, received the 2013 President's Community Partner Award from White Mountains Community College in Berlin for supporting the WorkReadyNH program at the college.

Dr. Ravi Pandit, professor of hospitality business, director of the Bachelor of Applied Science in Hospitality Administration, and program coordinator and chair of the Department of Hospitality Business at Southern NH University in Manchester received a full bright Scholar grant to work in Finland during the 2013-2014 academic year. Pandit will be teaching undergraduate courses in hospitality and tourism and pursuing research at HAA GA-HELIA University in Helsinki.

Howing Where Community Colleges Pass, Fail

August ,

By Tom Jacobs

As the fall semester begins, we look at some of the ways community colleges are meeting — or failing to meet — the needs of their students.

Community colleges are gaining some respect and, in terms of pop-culture cred, may be cool.



Community colleges, the often-overlooked workhorses of America's higher-education system, are finally getting some respect. Sure, many have been forced to cut their budgets due to shortfalls in state revenues. But President Obama has pledged his support to these schools, setting a goal of an additional 5 million students by 2020. Bill Gates' foundation announced a \$35 million grant aimed at boosting graduation rates. And NBC is about to premiere the third season of its hit comedy *Community*, which is set at one of these underappreciated institutions.

The official website of that fictional Greendale (Colo.) Community College boasts it offers students "straight As," which it defines as Accessibility, Affordability, Air Conditioning, Awesome New Friends and A Lot of Classes. While one can sense the effort it took to fill out that list, as satire, it's pretty gentle — even affectionate. In terms of pop-culture cred, community colleges are almost cool.

Enrollment in community colleges has been surging in the U.S., due in part to the economic downturn. With jobs scarce and university tuitions out of reach for many, these schools make an attractive alternative. According to the American Association of Community Colleges, approximately 8 million students enrolled in for-credit courses in the fall of 2010 — an increase of more than 20 percent over fall 2007 levels. But as the *Christian Science Monitor* complained last year, the graduation rate at these institutions is "dismal," with only about one-quarter of students earning a degree over three years.

Granted, not every community college student is aiming to get a degree. But Nancy Shulock, executive director of the Institute for Higher Education Leadership and Policy at California State University, Sacramento, released a study last year that tracked more than 250,000 California community college students who were working toward that goal. She found nearly 70 percent of them hadn't graduated from community college, nor transferred to a four-year university, within six years.

The first step in boosting that number has to be retaining first-year students. And the key to that, according to a 2008 report by David S. Fike of Texas Tech University, is remedial education. “The strongest predictor for retention is passing a developmental reading course,” he writes in the journal *Community College Review*. “College-level reading comprehension and reading strategies are essential for students to be able to read and understand their college-level textbooks.”

That may be a tad self-evident. But another 2008 report, this one from the University of Texas at Austin, finds many community colleges are reluctant to acknowledge this reality. Although “more and more students enter college academically unprepared,” the authors write, educators and state officials “have long been reluctant to acknowledge the depth of the challenge, or to take the steps necessary to overcome it.”

Fike, who analyzed data from an urban Texas community college, adds that taking a remedial math course also increases the odds of a student staying in school — “even if they did not successfully complete it.” (Apparently they learn something useful, even if they don’t make it to the finish line.) “Research-based best practices in developmental education should be implemented,” he recommends, “including mandatory assessment and placement.” In other words, build the foundation first.

Of course, retention rates vary from school to school. So, what characterizes those community colleges that graduate more students or transfer more of them to four-year institutions? In a 2007 paper, a research team led by Juan Carlos Calcagno formerly of Mathematica Policy Research surprisingly concluded that “tuition levels are generally not related to differences in the graduation probabilities.” But it did find an inverse relationship between school size and graduation rates. With community colleges, it seems, bigger is not better.

Another problem, according to a 2006 report in the *Journal of Higher Education*, is “the increasing proclivity of community colleges to hire faculty on part-time and temporary lines.” Daniel Jacoby of the University of Washington Bothell, writes that while this practice saves money, it comes at a price: “Community college graduation rates decrease as the proportion of part-time faculty employed increases.

Jacoby’s findings, which were based on data from the National Center for Education Statistics, were echoed in a 2009 study that focused on the California community college system. Audrey Jaeger of North Carolina State University reports that “the average California community college student spends nearly 50 percent of his or her classroom time in courses with part-time instructors. According to estimates from our models, this level of exposure translates into the average student being at least 5 percent less likely to graduate with an associate’s degree, compared to his or her peers who only have full-time instructors.”

Other factors predicting lower graduation rates, according to Jaeger’s study, include the decision to attend school part time, the need for financial aid and, for some reason, the student’s gender. At least in California, “women appeared to be 6 percent more likely to earn an associate degree than their male peers.” Perhaps at community colleges, the big men on campus are actually women.

Then again, an increasing percentage of community college students aren’t setting foot on campus all that often. Online education — that is, courses in which some or all of the content is delivered via the Internet — is growing rapidly. While there is much debate among educators as to whether this is a good thing, Fike’s research finds that, among community college students, “taking Internet courses is a strong predictor of student retention,” apparently due to the flexibility they provide. For a student with work and/or family responsibilities, the ability to log on and listen to a lecture at any time is a huge plus.

But researchers from Columbia College’s Community College Research Center raised red flags in two reports released over the past year. Looking at students who enrolled in the state of Virginia’s community college system in 2004, Shanna Smith Jaggars and Di Xu found that “students were more likely to fail or withdraw from online courses than from face-to-face courses,” and that

“students who took remedial courses online were less likely to advance to subsequent gatekeeper courses.”

That same pair of researchers reported similar results in Washington state. “We found students who participated in online courses had lower success rates on a variety of outcomes, even after controlling for a rich array of student characteristics, including prior academic performance and concurrent hours of employment,” they write. (Evidence from hybrid courses, featuring an online component, was more mixed.)

In both states, online learning proved increasingly popular; by 2008, nearly half of Virginia students and nearly 30 percent of Washington students had enrolled in at least one such class. “Online learning is an important strategy to improve course access and flexibility,” Xu and Jaggars conclude. But they add there is a clear need to address its shortcomings, including students’ “sense of social distance and isolation” and the “limited availability of online student support services.”

Much recent research has linked success in life with a high level of emotional intelligence. But can that sort of sensitivity be taught at a community college? In a special issue of the journal *New Directions for Community Colleges*, published in the fall of 2010, teachers from different disciplines share how they’ve incorporated concepts such as mindfulness and self-awareness into their curriculums.

Dan Huston of NHTI, Concord’s Community College in Concord, N.H., found the sort of self-awareness techniques promoted by Harvard University’s Jon Kabat-Zinn fit beautifully into an introductory communications course. “When students are nervous about giving a speech, which most of them are, they undoubtedly feel physical symptoms of that nervousness,” he writes. “Mindfulness can help students realize that experiencing those physical symptoms is okay, and that they don’t have to get wrapped up in the self-talk that often accompanies them.”

His students don’t just learn how to talk to a group: They learn how to pay attention to their emotions and observe them rather than be overwhelmed by them. That’s knowledge that will serve them well, even if they never approach another lectern.

NEW HAMPSHIRE UNION LEADER

June 06. 2013 11:49PM

Company-specific community college training helps all

oug Folsom and Lucille ordan

The national economy is starting to improve, and there are opportunities to expand employment nationally and in New Hampshire. The New England Economic Partnership recently forecast that manufacturing employment in the region will increase over the next four years. This is after over three decades of decline. This is good news for the region and New Hampshire.

Manufacturing jobs pay well, with average wages one-third higher than the state all-industry median and strong economic and job multiplier effects with local suppliers to New Hampshire manufacturers.

New Hampshire has a strong base of advanced manufacturing companies. Many of these companies are linking innovation and production, designing and producing new products and materials efficiently for global markets. The main limiting factor to employment and market growth for these companies nationally and in New Hampshire has been identified as the availability of an appropriately skilled workforce, with advanced machining and computing technology skills, using and controlling automated processes and robotic controls. States that develop the skilled workforce for advanced manufacturing will be able to increase employment and wages faster and stronger than those without appropriately skilled workers.

In New Hampshire, industry and education leaders are working in partnership to ensure the state is well positioned. One example is a recent partnership between Nashua Community College (NCC) and GE Aviation in Hooksett.

NCC and GE Aviation have developed a customized degree program that will be ready to enroll students beginning in the 2013-14 academic year. The new Associate of Science in GE Aviation Precision Manufacturing builds off of NCC's existing aviation and precision manufacturing

curriculum, incorporates paid co-ops for students at GE Aviation's facility, and integrates instruction by college faculty and GE Aviation technical instructors to create a seamless experience for students.

As General Manager of GE Aviation and President of NCC, respectively, we are very proud of this partnership. It represents a true win-win scenario for New Hampshire students, the aviation manufacturing industry in New Hampshire, and the state as we seek to add jobs and advance an innovation-based economy.

This partnership creates an education-to-career pathway that also addresses affordability — thanks to a series of paid co-ops and NCC's affordable tuition — and enables students to advance in their field by building concurrent educational and professional expertise.

GE Aviation and NCC were led to this partnership by several factors. One is the need within the advanced manufacturing sector for a pipeline of talented graduates with a solid foundation in precision manufacturing as well as industry-specific skills and knowledge. Another is GE Aviation's practice of assessing the technical skills of prospective employees through a hands-on approach.

NCC's recently enhanced advanced manufacturing curriculum and labs provide a strong foundation for the level of instruction the program requires, and NCC's willingness to customize its program to meet the specific needs of the aviation sector is key. And the ability to offer an affordable and accessible way for students to enter and advance within this field is essential. Our partnership meets all of these needs.

GE Aviation employs approximately 700 people at its Hooksett facility, many engaged in R&D and making parts for commercial airplanes, military fighter jets and Blackhawk helicopters. Like many other advanced manufacturers, GE Aviation has struggled to fill jobs as business expands and older, highly skilled workers retire. While GE expects to provide training for new hires, there is a tremendous advantage to hiring employees who come in with specific skills and

knowledge in addition to a college degree.

That is why the partnership between industry and education is so important, and why both GE Aviation and NCC were more than willing to invest the time and resources into creating a customized associate degree program. GE Aviation also has partnered with Manchester Community College, another of the state's two-year public colleges, to do training for new hires and incumbent workers in areas such as teamwork and other "soft skills" that are essential for success in the advanced manufacturing environment. The new customized associate degree advances the community college partnership to a new level, building off of NCC's program in aviation technology and its precision manufacturing curriculum.

Graduates of the Associate of Science in GE Aviation Precision Manufacturing will be career-ready and will have an academic credential they can build on for future career advancement. While this specific program will benefit GE and New Hampshire's aviation industry, the partnership also reflects a model New Hampshire's community colleges are embracing in partnering with industry to align curriculum and strengthen career pathways for students. Together, we are creating a strong and sustainable foundation for economic growth and the expansion of skilled employment in New Hampshire.

Doug Folsom is general manager of GE Aviation in Hooksett. Lucille Jordan is president of Nashua Community College.

NEW HAMPSHIRE UNION LEADER

June 22, 2013 8:16PM

Compromise State House Budget plan creates winners and losers

A A N

The budget battle ended when House and Senate negotiators signed their agreement to spend about \$10.7 billion over the next two years, of which \$2.8 billion would be from state general funds.

This is the first budget plan in some time that received bipartisan support, as both political leaders in the House and Senate have said they will be voting for the compromise budget on Wednesday.

But like any budget that involves compromise, there are winners and losers.

A good example is the Department of Health and Human Services. The beleaguered mental health system will receive a \$28 million boost if the plan gets final approval; the developmentally disabled wait-list for services will be eliminated; and much of the Children in Need of Services (CHINS) program will be reinstated.

However, Commissioner Nick Toumpas will have to find \$7 million in reductions across his department and \$9 million more to repay the federal government for misusing Medicaid dollars in 2004.

For state employees, the news is a little better than it might have been, but 200 to 350 layoffs are not pretty.

The Senate had proposed a \$50 million reduction in personnel costs - which would have meant between 500 and 700 layoffs - but in the final budget, the number was reduced to \$25 million.

But budget writers included \$17 million in state general funds and \$34 million in total funds to give state employees their first pay raise in five years. Yet the state's largest union voted last week to turn down the contract because of health insurance deductibles and changes in sick leave policy.

And then there is Gov. Maggie Hassan, who will see a budget very similar to the one she proposed in February return to her desk to sign, but it will not include \$80 million in gambling licensing revenues nor a \$40 million tobacco tax increase she wanted.

The Medicaid expansion she and the House backed is not in the budget, but there is a path to expansion.

There are some clear winners in this budget plan, and perhaps the biggest are the New Hampshire Community College System and the University System of New Hampshire, which combined would receive \$100 million more state aid than they did last biennium.

The additional money is intended to keep tuitions at current levels, which are among the highest in the country.

And state college students will be able to reapply to the UNIQUE scholarship program, which was suspended for the last two budgets when the money was used in other places.

The second-biggest winner will be hospitals, particularly the larger ones, which will again receive state help with uncompensated care - the services they provide to people who do not pay their bills. Two years ago, lawmakers ended the program for the larger hospitals while retaining it for the small critical access hospitals.

Both the House and the Senate increased state aid to hospitals, but the Senate put \$20 million of general fund money into the program, which will be matched by federal money. Under the House plan, hospitals had to pay more Medicaid Enhancement Tax to receive the federal matching funds.

The compromise used the Senate plan.

The New Hampshire State Police agency will grow with 10 new officers in the compromise budget. Also there will be money to hire civilians to free up five troopers who now do indirect law enforcement work. The increases will allow for more coverage in spotty areas, including the North Country, and a bigger presence in the southern half of the state.

Charter schools are also winners, with \$3.4 million for four new charter schools and the end of a moratorium on applications.

Schools districts - about 58 including Dover - whose growth in enrollment tops 5 percent, are also winners in the new budget. The current formula for education aid allows additional money for schools whose enrollments grow up to 5 percent, but the budget raises that to 8 percent, which will provide the growing districts with about \$3 million more in state aid.

Small businesses are also winners because they will be able to take business tax credits that Hassan and the House wanted delayed.

Also, conservationists will be pleased to know the new budget fully funds the Land and Community Heritage Investment Program at \$8 million.

Tri-County Community Action Program will receive \$1 million to help the organization back on its feet financially, along with a \$250,000 no-interest line of credit.

And new Attorney General Joe Foster will not have to find \$250,000 in his budget to send to towns in the Merrimack River and Connecticut River watersheds in lieu of Massachusetts' payment for lost property due to flood control areas.

Perhaps the biggest losers in the compromise budget are gaming interests that believed they had a real shot this year at finally seeing the House approve casino gambling in New Hampshire.

That was not to be.

Gaming interests will have to wait until next year after a dormant gaming commission - given the money to investigate the regulatory scheme necessary for expanded gambling - makes recommendations.

Another loser in the budget is the Interstate 93 expansion project, which will run out of money early next year unless lawmakers take quick action. The 12 cent gas tax hike the House approved but the Senate killed did not rear its head during budget negotiations.

Smaller state highways will not see major improvements, nor will the number of red-listed bridges decrease.

Money for renewable energy projects was the incredible shrinking kid in the compromise budget, as lawmakers raided the renewable energy fund for \$16 million to help balance the budget.

The Fish and Game Department did not receive any general fund help for rescues, which are now paid out of the money sportsmen hand over for licenses.

The needy high school robotics teams that compete in the FIRST competition will not receive any state help the next two years. Budget writers could not find the \$200,000 needed to fund the program.

And finally, Merrimack residents will have to continue to pay tolls to get on or off the F.E. Everett Turnpike at the town's three exits. Senate President Peter Bragdon was unable to persuade House members to eliminate one of the tolls.

Medicaid Expansion: Gov. Hassan and the House hung their budget negotiations on Medicaid expansion, and that did not happen.

The best they could do with the reluctant Senate was a study commission that has to report its findings by Oct. 15.

A special session is likely after the commission issues its report. Either Bragdon and House Speaker Terie Norelli will call back lawmakers, or Hassan and the Executive Council will order lawmakers to return.

Chances are Bragdon and Norelli will reach an agreement for a special session because that way they can control the rules, which won't be possible if Hassan orders lawmakers back.

So for the next four-and-a-half months, everyone, including the senators who claimed they needed more time to study the issue, will hear more than they ever wanted to know about Medicaid expansion.

But when the vote comes at the end of the study, it will most likely be for expansion.

The agreement on committee membership allows the Senate president to appoint three member and the House speaker to appoint three members. The governor, House speaker and Senate

president each name one person from the general public.

What that means is Democrats will control five appointees and Republicans four.

Is there any question how that vote is going to go?

grayno@unionleader.com

NEW HAMPSHIRE UNION LEADER

June 22. 2013 10:36PM

How lawmakers budget choices could affect you

By **A A N**
State House Bureau

CONCORD - College students, smokers, motorists, the mentally and terminally ill, the developmentally disabled, state employees and the parents of at-risk children could feel the most direct effect from the \$10.7 billion two-year budget plan and laws the House and Senate will vote on this Wednesday. Here is a brief rundown of what the Legislature has come up with this session:

-- Lawmakers will be asked to establish a commission to study Medicaid expansion. Proponents say expansion would add 58,000 people to the Medicaid rolls and provide about \$2.5 billion in federal money to pay health care providers. Senate President Peter Bragdon, R-Milford, and others want to hear recommendations from the commission before the state makes a decision. The deadline for those recommendations would be Oct. 15.

-- Budget negotiators approved \$100 million more in state aid intended to prevent tuition increases in the New Hampshire Community College System and the University System of New Hampshire.

-- A conference committee decided students can continue to use their college IDs to satisfy voter identification requirements. Without the change, college IDs and any others that were not government-issued could no longer be used to meet the photo identification requirement, meaning those people would have to sign a voter affidavit and have their photo taken.

City and town election officials fear that would create long lines at the polls during elections.

-- The state is being sued over its once model mental health system. The new budget provides \$28 million to upgrade the system, which officials say will mean fewer mentally ill languishing in emergency rooms waiting for a bed to open at New Hampshire Hospital.

Also the developmentally disabled who turn 22 years old and are no longer the responsibility of school districts would be able to access services they now wait for.

-- Lawmakers are expected to approve a medical marijuana program, which would make New Hampshire the last state in New England to adopt a program intended for those who do not respond to traditional medicines.

-- Charter school proposals awaiting State Board of Education approval will get the state financing they will need to open. The budget contains \$3.4 million over the next two years for four new charter schools and ends a moratorium on new charter schools. . Parents of at-risk children who are not a threat to themselves or others will again be able to access services with the reinstatement of the Children in Need of Services program. Two years ago, the program was

scaled back to serve only those who are a threat to themselves or others.

Lawmakers have changed the program so now parents can voluntarily participate, and children are required to be placed in the least restrictive setting, which will reduce the number of children at the Sununu Youth Services Center in Manchester.

-- State employees will receive their first raise in five years under new collective bargaining agreements, but will have to pay health care deductibles for the first time. About 200 to 300 employees may be laid off.

-- Smokers should not see the price of cigarettes increase dramatically because lawmakers defeated an attempt to increase the tax by 20 cents a pack. The tobacco tax will increase 10 cents automatically in August to return to the pre-fiscal 2012 level, which continues to be the lowest in New England.

-- Lawmakers also refused to increase the gas tax by 12 cents over the next three years, although the tax has not been increased since 1991. The money was intended to help finish the Interstate-93 widening project from Manchester to Salem and provide more money for the state and municipalities to fix their crumbling transportation infrastructure.

-- Ten new state troopers will be added to the force.

grayno@unionleader.com

NEW HAMPSHIRE UNION LEADER

June 20, 2013 11:07PM

Another view: James T. Brett and Ross Pittell **Advanced manufacturing can lead turnaround of NH economy**

JAMES T. BRETT and ROSS PITTELL

As New England's recovery from the Great Recession continues to progress, attention often turns to which sectors will be economic drivers in the future. The central question is: given New England's deep traditional manufacturing history and its demise in recent decades, what is the outlook now for a transformative revitalization of this sector?

In terms of an overall economic picture, the region is clearly recovering, although the pace of recovery varies significantly among the six states. Massachusetts and Vermont are experiencing the strongest economic performance, while Rhode Island and Maine lag. New Hampshire's recovery is behind Massachusetts and Vermont. This puts the state in the unusual position of not leading the region, as it has over the last three decades.

Looking forward, the region and New Hampshire are expected to continue to grow slowly, with overall employment growth for the region averaging 1.4 percent per year and regional gross product increasing 3.3 percent each year over the next three years.

Massachusetts has already recovered the jobs lost in the recession, and Vermont will soon follow. New Hampshire is not expected to recover jobs lost in the recession until the middle of 2014.

In New Hampshire and across the region, the resurgence of the manufacturing sector will have a strong impact on the economic outlook. Traditional manufacturing has been on the decline for the last three decades, both here and across the nation. However, New England lost approximately 60 percent of its manufacturing jobs over the last 30 years, while the U.S. lost 40 percent. The impact of these losses has been manifest in the lower total employment growth in New England over this period — fully 50 percent lower than the U.S. average.

On a positive note, the 30-year decline appears to have plateaued. From 2010-12, New England and New Hampshire's employment in this sector remained flat, rather than continuing to spiral downward. Even with the devastating trends in recent decades, three states in the region currently have a concentration in manufacturing well above the U.S. average: Vermont, New Hampshire and Connecticut.

From this stepping-off point, we have a number of opportunities to facilitate the reemergence of manufacturing as an economic driver for the region and New Hampshire. Throughout our six states there are educational institutions, nonprofits, companies, towns, cities and states focused on the efforts to revitalize the existing manufacturing base and pave the way for exciting new manufacturing capabilities to take root in the region. Some common themes emerge from their collective work.

New England can generate enormous manufacturing gains if the research and development capabilities are leveraged as a network to proactively support and drive new manufacturing capabilities. Home to high concentration of academic and private-sector research facilities, this region can bring together the talent needed to focus on manufacturing, particularly the emerging advanced and precision manufacturing that is replacing the traditional types of production.

The entire manufacturing sector would benefit from clear messaging about how different today's manufacturing environments are. They often are pristine, highly innovative and creative, involving challenging, complex processes. Given the reality of that emerging work environment, a particular emphasis on workforce development is required. These are high-paying jobs that require advanced computer and other technical skills. Given the high quality and abundant educational resources available in the region, including the robust community college networks, there is ample opportunity here to equip tomorrow's workers for the emerging manufacturing environment. If we do, we could dramatically change the region's economic prospects.

James T. Brett is president and CEO of The New England Council, the nation's oldest regional business association. Ross Gittell is vice president and New England forecast manager for the New England Economic Partnership and the chancellor of the Community College System of New Hampshire.

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Article published Jun 16, 2013

Education at IssueCommunity colleges focus on hands-on training

DOVER — For Tiffany Bisson, attending a community college made all the difference for her and her career.

The Lakes Region Community College graduate had started at a four-year college in Vermont for a degree in graphic design, but wanted more out of her education.

“I transferred to a tech school because I wanted to dive right in and get the education,” Bisson said, remembering a lot of her classes at the four-year school were lecture and textbook driven. “What set the two experiences apart was my teachers. They had all worked in the field for 15 or 20 years, so you’re getting real-life experience.”

That hands-on and real-life learning style is what the seven Community College of New Hampshire schools around the state strive to do, and the focus is on producing skilled workers trained to succeed at businesses around the state.

“We’re really aligning our training and programs with the needs of companies out there,” said Ross Gittell, chancellor of the New Hampshire Community College System. Gittell, who also serves as vice president, forecast manager and board member of the New England Economic Partnership, said the state has had relatively slow recovery from the economic downturn relative to the nation.

“We usually come out stronger, but it isn’t happening this time, which is of concern,” he said. “And increasingly, when you visit with companies in different industries that should be adding jobs, like advanced manufacturing, there’s potential there to grow employment but there isn’t the skilled workforce available.”

That’s where CCSNH comes in.

For the past few years, CCSNH has been focused on fine-tuning programs to give students the training and education they need to be a desirable asset at these companies around the state that are looking for skilled workers.

The system’s seven colleges are all focused on an advanced manufacturing curriculum, and administration has worked with companies in each region to find out what they need for specific skills in their workforce, right down to the equipment. And the schools then create pathways to bring students from the classroom to employment.

Each school has an advanced manufacturing curriculum that specializes in the needs of that region -- for instance, Rochester has companies such as Albany International Corporation and Safran Aerospace Composites, Inc. that specialize in composites manufacturing, used primarily within the aerospace industry.

"It's a very good program," said Phil Przybyszewski, project coordinator for the advanced manufacturing initiative at Manchester Community College. "It meets the needs of manufacturers. We want to see what they're going to need five years out and design the curriculum to meet those needs."

New Hampshire Technical Institute in Concord focuses on automation, Lakes Region Community College in Laconia offers courses in energy systems, River Valley Community College in Claremont has an advanced machine tools program, Nashua has a precision machining program that was recently expanded with grant money, and White Mountain Community College in Berlin focuses on precision welding.

Each advanced manufacturing program has an advisory board comprised of industry partners in the area around the college.

Przybyszewski said not only the advanced manufacturing programs but all of the courses offered in manufacturing draw all types of people from high school graduates to the unemployed and underemployed.

"The program is geared toward people upgrading their skill sets," he said. "People want to do something that can insure their career."

Through the program, students have the opportunity to do internships or job shadowing to get an idea of what that career is like.

"It adds a lot of value to the company and the individual," Przybyszewski said. "They can see the skill sets and whether they want to make an investment in that person."

"That's replicated within each college," said Shannon Reid, director of communications for CCSNH.

"It's a technical field and very much in demand," Reid said. "The strategy is a core manufacturing curriculum with specializations on top of that."

She said the colleges are working to develop more experiential learning by partnering with the companies in those regions so students can get a feel for what the actual job is like. It was that kind of hands-on learning from which Bisson said she really benefited.

As a graphic design major, Bisson said she had the opportunity to run an actual print shop where they printed school calendars, T-shirts and the school's program of studies.

"It taught me to think more quickly on my feet," she said. "The thing that made a huge difference was that the teachers are there for the hands-on stuff. Their approach to you is very different."

Peter Francese, demographic forecaster for the New England Economic Partnership, released

a report recently titled *The Vital Economic Contribution of New Hampshire's Community Colleges*, which highlights the "essential role" community colleges play in a state Francese says is facing a fast-aging population combined with very little workforce growth.

"If our state is to have solid economic growth, then it's imperative that New Hampshire's young adults coming into the future workforce have superior job skills to offset the adverse effects of their smaller numbers," Francese said. "The essential component of this concept is our community college system. It provides at a very modest cost the means by which individuals can obtain the skills they need to get one of the better paying professional or technical jobs, or get the preparation they need for successfully achieving a university degree."

He cites the Census Bureau's most recent American Community Survey that found a New Hampshire worker with an Associate's degree earns on average about \$10,100 more than a worker with no education beyond a high school diploma. The same survey also found college courses can increase that income by nearly \$5,000.

One CCSNH program that has grown and evolved in a short time is WorkReadyNH, which was started by former Gov. John Lynch in 2011 to help the unemployed get back to work.

Since that time the program has seen great success and has expanded to include underemployed and full-time employed people.

Jennifer Scotland, director of WorkReadyNH, said the program is now open to anyone 16 or older who wants a national credential and a community college certificate on their resume.

She said the program focuses on math, reading, and critical thinking, which earns the national career-ready certificate that is used in all 50 states for the hiring process. But the program also teaches "soft skills" like workplace behaviors and conduct, with a 60-hour training that leaves students with an understanding of their learning styles and how they can work with colleagues who may have different learning styles without conflict.

"That's actually the biggest skills gap," Scotland said of the soft skills component. "You may have someone who is very skilled but doesn't get along with the team. A company can't train you to get along with the team."

Scotland recruits students and also connects with businesses to explain the value in hiring someone who has gone through the WorkReadyNH program.

Just like the focus on certain manufacturing programs, WorkReadyNH was created in response to what businesses were sharing about their needs. Scotland said the program has evolved over the years to really teach people how to interview for a job and succeed at that position on several different levels.

"People really had no idea in the beginning," she said. "They were coming from jobs they'd had their entire lives; never had a resume and never done an interview. They assumed they were going to retire in their business. Or, we had young people who just didn't know anything about the business world yet."

CCSNH is also partnering with the University System of New Hampshire to increase the number of graduates with degrees in science, technology, engineering and mathematics

(STEM).

Reid said the goal is to double the STEM grads by 2025 and make sure there are strong transfer pathways for students in those fields, because “that’s something New Hampshire really needs.”

Gittell said the liberal arts education at CCSNH schools has also seen a boost in enrollment as many students take their first two years at a community college for convenience and affordability, and then take advantage of partnerships with the University System to apply their credits and obtain a bachelor’s degree.

With seven community colleges spread around the state and 98 percent of the New Hampshire population located within 25 miles of a campus, Gittell said there’s a high likelihood community college graduates will stay in-state for work and contribute to the state’s economy.

And 95 percent of students enrolled at colleges in the CCSNH network are from the Granite State.

“As we improve the quality of our programming and link more strongly with industry and our state’s economy, it benefits our state and students and the industry because there is a skilled workforce,” Gittell said. “It’s a win-win for the students, the businesses that are employing them, and the state’s economy.”

Community colleges are also offering programs for high school students, like Running Start, which allows high schoolers to take college courses for credits that can be transferred to colleges in, and out of, New Hampshire.

Reid said the program has grown since it was created 12 years ago, with currently about 5,000 registrations annually.

The community colleges also work with high schools to increase the level of math skills of graduates with developmental courses for high schoolers who may not be fully prepared for college-level coursework.

Currently, the Community College System of New Hampshire serves about 27,000 students each year, which includes those in credit and non-credit programs and the Running Start program.

Gittell stressed the data shows New Hampshire needs to keep up the focus on providing a highly educated workforce.

“Research out of Georgetown (University) says that for New Hampshire to stay a low poverty state, we’d have to move from 46 percent of adults age 25 or older with some kind of degree to closer to 64 percent,” he said. “The only way to really get that in a cost-effective way in a short period of time is through using community colleges in the state of New Hampshire. Their efficiency, geographic availability and ability to work directly with high schools across the state in that critical transition from secondary to post-secondary -- we want to improve student success, which are academic and labor market outcomes.”

Bloomberg Businessweek

Politics & Policy

Ask Bill Clinton: How Important Is Manufacturing to U.S. Job Growth?

Posted on June 13, 2013

<http://www.businessweek.com/articles/2013-06-13/bill-clinton-on-manufacturings-importance-to-u-dot-s-dot-job-growth>

Rarely short on advice, former President Clinton agreed to field questions on critical economic concerns from five U.S. civic and business leaders, including three CEOs. He replied in his unofficial capacity as consultant-in-chief



Illustration by Jaci Kessler *Paul Jacobs, chairman and CEO,*

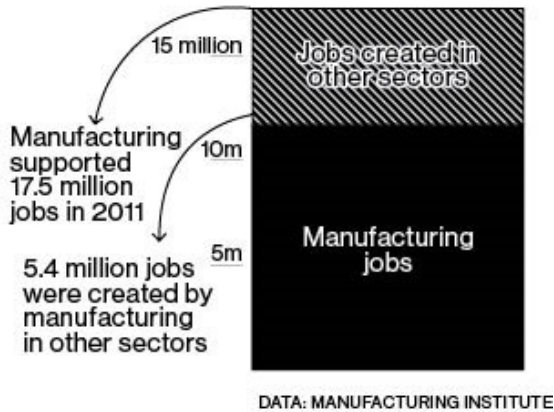
Qualcomm (OCOM)

“Advanced manufacturing doesn’t really generate a lot of operating jobs, and the jobs it does create are highly skilled. Manufacturing that requires a lot of lower skilled labor will likely continue to be located outside of North America. So how important, finally, is manufacturing to U.S. job growth?”

Manufacturing remains critical to our ability to build a balanced economy with good jobs. It accounts for over 80 percent of our exports and 90 percent of our patents and R&D spending according to the U.S. International Trade Commission and the Department of Commerce. As such, it’s a jobs multiplier: Every new manufacturing job creates an additional 4.6 jobs to support it. For high-tech manufacturing jobs, the multiplier effect rises to 16 additional jobs. Because of increased productivity, the cost of labor is becoming a less significant factor in siting decisions, while the costs of energy, materials, and transportation increasingly matter more. That bodes well for the U.S., where our workforce is huge, energy is plentiful and cheap, and labor costs are not that high compared with Germany and other countries with strong manufacturing sectors.

We do have continuing challenges. They include training our workforce to meet the needs of a 21st century manufacturing sector; developing and delivering new manufactured products to domestic and global markets; and maintaining and improving our innovation culture. To develop highly specialized products in industries like aerospace, renewable energy, and nanotechnology, our manufacturing sector needs workers with significant training and specialized skills.

Jobs Multiplier



Yet today just 7.1 percent of all bachelor’s degrees awarded in the U.S. go to engineering majors, compared with 18.4 percent internationally. Countries like Germany, Japan, South Korea, China, and Taiwan invest in engineering education at many levels. They build workforce pipelines from apprenticeships to university programs. That helps their governments and private-sector companies apply scientific breakthroughs and rapidly move products from concept to production. A robust manufacturing workforce gives economies a competitive advantage. When we fail to keep pace, we risk losing that advantage.

The U.S. also needs to finance and support entrepreneurs to deliver new products in key sectors. That will require networks of investors, entrepreneurs, designers, manufacturers, scientists, and government agencies. This year the new nonprofit Made in America Organization, together with seed support from the Stiefel Family Foundation, made a Clinton Global Initiative (CGI) Commitment to Action to launch a pilot program to identify, support, and scale 10 companies in advanced manufacturing industries. (Commitments to Action are unique to CGI; every member commits to a plan for addressing a significant global challenge.) The four-stage process of the Made in America program is scalable, replicable, and most important, sustainable.



Our nation’s 300,000 small and medium-size manufacturers, meanwhile, account for more than 50 percent of America’s total manufacturing employment and serve as a major source of technological innovations. U.S. research labs have the physical and intellectual assets to help smaller companies build a larger manufacturing sector. Lowering the barriers for small and medium-size companies to innovate is something I know you’ve

made a personal priority through the institute you are launching with U.C. Berkeley. The Jacobs Institute will greatly expand the role of design in engineering education at all levels and empower young engineers to design innovative solutions to society's biggest challenges.

More Questions for Bill

- Chicago Federation of Labor President Jorge Ramirez: [How do we close the skills gap in America?](#)
- NRG Energy CEO David Crane: [How can we help U.S. homeowners unlock the solar value of their property?](#)
- Baltimore Mayor Stephanie Rawlings-Blake: [Can we have a serious conversation about investing in infrastructure?](#)
- Cisco Systems CEO John Chambers: [Which country has the best model for government and business working together to solve problems?](#)



Cover Trail: [A look behind this week's cover](#)

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JOURNAL REPORTS | Updated June 10, 2013, 1:15 p.m. ET

A Revolution in the Making

Digital technology is transforming manufacturing, making it leaner and smarter—and raising the prospect of an American industrial revival

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By JOHN KOTEN

On a dark and stormy night two weeks ago in Schenectady, N.Y., Ken Hislop was relaxing at home when his cellphone suddenly began buzzing in his pocket. It was an urgent text message—from the [General Electric Co.](#) GE -0.34% factory where he works.

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Soon, a second message arrived. And then another, and another. The texts were being sent by tiny sensors embedded inside a series of machines, some of which look like enormous upside-down cement mixers. A violent thunderstorm passing through the area had caused something to go wrong.

"I knew right away we'd lost power at the

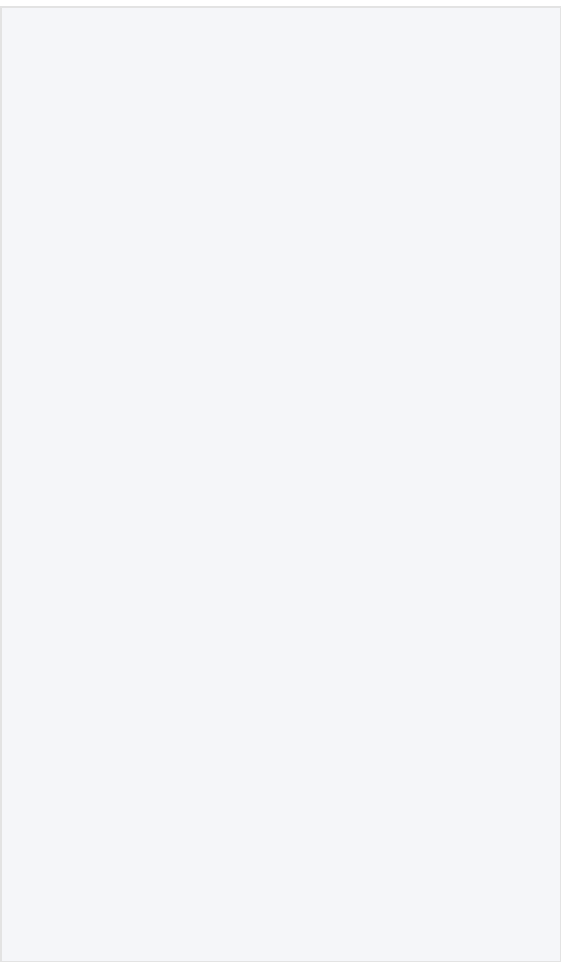
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engineer. He quickly switched on his iPad and accessed animated schematic maps that signaled everything happening at the \$170 million facility, which makes massive batteries for things like cellphone towers and power plants. Though the outage had been momentary, much of the equipment at

the factory had to, in effect, reboot, and any blip could mean costly lost production time.

"I was getting a first-person, real-time account," says Mr. Hislop, who also could watch video of the storm from the plant's roof. The information allowed him to ensure that the machinery restarted in proper sequence and that the sensitive battery material hadn't been damaged.

Welcome to the New Industrial



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Enlarge Image

Ryan Etter

Revolution—a wave of technologies and ideas that are creating a computer-driven manufacturing environment that bears little resemblance to the gritty and grimy shop floors of the past. The revolution threatens to shatter long-standing business models, upend global trade patterns and revive American industry.

Impacts Big and Small

For big companies, it means a swath of new tools to build smarter, leaner factories and explore innovative new

products, materials and techniques that weren't possible before. And thanks to plummeting prices, small companies have access to better, cheaper manufacturing equipment and design tools—giving even one-person startups the chance to create market-shaking innovations. Many people liken the era we're in to the early days of computing, where upstart hobbyists in their garages came up with huge advances that changed the industry. (See "Build a Better Mousetrap—Fast" on page R7.)

"Manufacturing is undergoing a change that is every bit as significant as the introduction of interchangeable parts or the production line, maybe even more so," says Michael Idelchik, who heads up advanced technologies at GE's global research lab, located about 15 minutes away from the battery plant. "The future is not going to be about stretched-out global supply chains connected to a web of distant giant factories. It's about small, nimble manufacturing operations using highly sophisticated new tools and new materials."

There's no question that a coinage like the New Industrial Revolution sounds magisterial, given the profound impact that the original Industrial Revolution had not just on business but on living standards around the world. And there's also no question that for all the big talk and big forecasts, many things will go on being produced using techniques that were all but perfected long ago.

But the big label is far from unwarranted. The upheaval, still in an early stage, is accelerating now thanks to the

convergence of a number of trends: the low cost and accessibility of Big Data associated with cloud computing; the plummeting cost of electronic sensors, microprocessors and other components that can be used to make machines more adept; and advances in software and communications technology that make it possible to manage manufacturing with a whole new level of precision and enable new forms of collaboration.

A new wave of supercheap electronic sensors, microprocessors and other components means that facilities like Mr. Hislop's need almost no human help to do their jobs and can collect huge amounts of data along the way. Managers can get instant alerts about potential problems or study the numbers to find ways to boost

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efficiency and improve performance.

Flexible Fabricating

At the same time, technological advances now allow manufacturers to invent new ways of fabricating things that represent an extreme departure from the classic production-line model. By far the most significant of these steps forward is additive manufacturing—a process of making a three-dimensional object of virtually any shape from a digital model.

These exotic machines can use a range of materials—everything from wood pulp to cobalt—and create things as varied as sneakers, fuel nozzles for airplanes and, ultimately, even human organs. And a single piece of manufacturing equipment, rather than being custom-designed to perform a single function, can be programed to fabricate a virtually limitless array of objects.

And, of course, that includes making more machines. On a tour of a laboratory of advanced manufacturing equipment that [Autodesk Inc.](#) ADSK -1.86% is building on a pier in downtown San Francisco, Chief Executive Carl Bass points to some masking tape on the ground that marks the spot where a sophisticated computer-controlled milling machine will be housed.

"The Japanese company Mori Seiki is making that in Sacramento in an automated factory," says Mr. Bass, whose company creates computer-aided-design software. "The factory is so advanced that you almost don't need to turn on the lights because the machines are doing everything, and what they are making is other machines." In fact, a 3-D printer has replicated itself at a university in England.

Still, manufacturers will have to navigate big new challenges in this era, too. For one thing, because additive manufacturing works from digital models of objects, companies are much more vulnerable to intellectual-property theft—the same way that easily copied music and movies have shaken the entertainment business.

The Sole of a New Machine

To get an up-close look at how the new technologies are already disrupting the old ways of doing things, consider [Nike Inc.](#)'s NKE +0.46% Flyknit shoe.



An upper for Nike's Flyknit shoe.

As high tech as some sneakers may be in materials and appearance, almost all of them are still made on assembly lines that put a shockingly heavy emphasis on human labor. Workers sit side by side in enormous facilities, cutting material and stitching and gluing shoe components together. But, starting last year, Nike began making the Flyknit a whole new way.

The company's engineers modified a machine used to make sweaters into a shoe-making contraption that knits the entire upper portion of the shoe in a single cocoon-like piece that is then

attached to the tongue and to the sole. As the shoe is stitched, proprietary software instructs the machine to alter the materials being used—a bit more polyester thread here, a bit more there—to add strength or flexibility where needed.

Most important, it makes all these refinements at no added cost. The technology allowed Nike to make a shoe with just a few parts instead of dozens and with up to 80% less waste. "The Nike Flyknit is the world's first mass-

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Enlarge Image

Bespoke Products

A Bespoke Products leg.

produced consumer product made using additive manufacturing," says Maurice Conti, director of strategic innovation at Autodesk, which worked with Nike on the Flyknit project. "It's a hugely significant advance, not the least because, once you start doing things this way it obviously takes a lot of the labor cost out of the equation."

The implications for this are as obvious as they are profound: Almost seemingly out of the blue, the reason for making shoes in low-wage countries begins to evaporate and the advantages of locating the machine closer to the customer—in part for faster delivery—begin to loom much larger. Already, [Adidas AG](#) ([ADDYY +0.50%](#)) is knitting a shoe, the Primeknit, in its home country, Germany.

Last year, Boston Consulting Group published a report predicting that as much as 30% of America's exports from China could be domestically produced by 2020. President Obama gave a nod to this hope in his State of the Union address in February when he said that the popular additive-manufacturing technique called 3-D printing "has the potential to revolutionize the way we make just about everything."

Last year the president proposed a \$1 billion addition to his fiscal 2013 budget to create a network of as many as 15 manufacturing-innovation institutes around the country. One is already up and running in Youngstown, Ohio, the setting of the Bruce Springsteen song about the rise and fall of the steel industry. Three more are in the works under the supervision of the Department of Energy and the Defense Department. Congress has yet to approve spending for the others.

Not So Fast

But the jury is out on whether a boost in manufacturing will create a resurgence in U.S. manufacturing employment, which peaked at around 19.5 million in 1979 and today totals around 12 million, according to the Bureau of Labor Statistics. (Economists attribute the recent modest increase in U.S. manufacturing employment to a rebound in the business cycle, and have found no evidence yet of an employment rebound connected to advanced manufacturing or the return of jobs from overseas.)

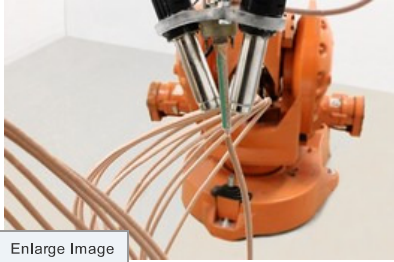
Almost certainly, it won't mean creating jobs the old way—building large factories that employ thousands of people. The real opportunity is in the growth of highly specialized, highly advanced microfactories and in legions of small entrepreneurial ventures making old things in new ways, as well as producing new products and custom-made items. An important sign of the times: the largest U.S. maker of 3-D printers, [3D Systems Corp.](#), ([DDD +4.16%](#)) introduced a slick push-button model for \$1,299 last year—putting it within range of the smallest businesses and home users. Kits to make a printer powered by software from the open-source RepRap project run as low as \$400.

Experts envision bike shops that print custom frames and assemble bikes on demand; made-to-order shops or websites that offer one-off or personally designed jewelry; and more sophisticated production shops that crank out all manner of high-end products. Already, a company called Bespoke Products, a unit of 3D Systems, is making artificial limbs. Another, [Organovo](#) ([ONVO +2.25%](#)) Holdings Inc., is using 3-D printing to create human tissue for use in medical labs. At a recent conference, the company showed off a piece of raw meat it had made in a printer. Over time, this "democratization of manufacturing," as some refer to it, is expected to accelerate, and

one day could mean that your local auto dealer or maybe even your neighbor (or you) will be able print out a replacement part for your car or make you a new cup holder sized perfectly for that enormous thermos you carry around.

New Ways of Making

Additive manufacturing may bring other changes that are just as dramatic as "factories" run out of somebody's garage. Additive manufacturing makes it possible to create designs or structures that weren't feasible using the two traditional ways of making things: milling (sculpting material out of a solid block) and casting (pouring liquid material that hardens into a mold). Both of these techniques are greatly enhanced by mass production because quality typically rises and costs fall as volume increases. Making a lot of something also means it's not so painful to discard defective units.



[Enlarge Image](#)

Advanced Architecture with Joris Laarman Lab

Mataerial, a prototype 3-D printer that can make curved objects.

But additive manufacturing enables the creation of materials with multiple parts and moving components without assembly. And because the process is entirely controlled by computers, following precise digital instructions, the very first piece that's manufactured is just as good as the last one. The incremental cost of producing a part becomes strictly a function of time and materials.

All of which means manufacturers can scan further afield for inspiration. Designers and engineers at General Electric have begun looking at ancient objects and prehistoric bird skeletons, and delving anew into topology, for inspiration on new forms of design. Their thinking: Centuries of making things under the constraints of old methods may have caused their predecessors to discard innovative structures simply because there was no practical way to produce them through milling or casting. But what was impractical in the past may be quite feasible today.

There's another big change playing out that isn't so obvious but could have a huge impact on the world of manufacturing. The rise of the 3-D printer has coincided with the digitization of the physical world through the use of 3-D scanners and, increasingly, two-dimensional photos that can be stitched together digitally using software to create precise 3-D renditions of anything made of atoms.

That affects everyone who works with manufacturers and who participates in the creative process: designers, engineers, materials specialists, machine makers and supply managers, among others. It's much easier to collaborate on a model if it is stored on a computer, because lots of digital hands can be working on it at the same time.

"The big untold story in all of this is the way the digitization of manufacturing compresses everything—from the early design of a product to its final assembly," says Ping Fu, who founded a company called Geomagic that makes 3-D modeling software and is now in charge of strategy at 3D Systems. "Everyone can now work together simultaneously. The software makes it possible, and you get much better results than when all of these activities were being done in different silos."

Still, this new environment leaves manufacturers facing big new challenges, as digital files of physical objects show up in huge numbers on websites like Thingiverse and Physibles, and manufacturing *instructions* appear online, too.

"I give a lot of speeches about this topic to manufacturing groups, and people are usually quiet during the Q&A," says Christine Furstoss, who oversees a staff of 450 engineers and scientists working on materials, energy strategy and processing technology at GE's research center. "But afterward, they come up to me in private and want to talk about how frightened they are. People get a glimpse of how this could

change the game in their business, and they are just not sure what to do about it."

The Road Forward

For an idea of how the New Industrial Revolution might play out on a large scale, look at GE. Its footprints are everywhere in the advanced-manufacturing community. It is a highly visible participant in the federal government's efforts to boost additive manufacturing, as well as university programs focusing on the topic. Partners include the Massachusetts Institute of Technology, Amazon.com's [AMZN +1.52%](#) Web-services department and the Defense Advanced Research Projects Agency, which are collaborating with GE on a new crowdsourcing platform for product design and development.



High-tech batteries from GE.

General Electric

The company also is latching onto the technique in-house. For instance, it is making a big bet on additive manufacturing as a way to create engine parts that weigh less, cost less and employ more intricate designs. Last year, it bought one of the largest additive manufacturers in the U.S., Morris Technologies, and plans to use the company to make the sophisticated fuel nozzle for its next-generation jet engine,

the LEAP. (The Morris family has a long industrial pedigree: It once supplied steel tubing to the Wright Brothers' bicycle shop.)

The new nozzle will be 3-D printed as a single part rather than assembled from 18 pieces, and it will be up to five times more durable. GE is also running its own 3-D metal printers, testing the procedure out on as many parts as possible for both the LEAP and the GE 9x, its next-generation 777 engine. This week, GE plans to announce a major investment in another new additive-manufacturing factory that will mass-produce ceramic engine shrouds.

All told, the company projects it will spend \$3.5 billion on aviation-related advanced manufacturing in the next five years and will produce 100,000 end-use parts for its engines annually by 2020 using additive techniques.

One of GE's most creative initiatives is an arrangement that will begin to make its more than 30,000 patents available to inventors and entrepreneurs who use the website Quirky—which employs crowdsourcing to evaluate ideas for products. "It's a whole new paradigm for innovation," says Ben Kaufman, the founder of Quirky, an industrial-design company in New York.

Starting this month, inventors and their ilk will be able to sift through the first 200 of GE's patents posted on Quirky, with more than 1,000 expected to be available by the end of the year. People who think they can use the technology without infringing on GE's own use will be able to click a button and begin a process enabling them to license use of the patent for whatever application they've dreamed up.

GE's efforts also offer a look at how data can be leveraged in this new era. One of the take-aways from a visit to GE's battery plant back in Schenectady, located adjacent to a parcel that housed Thomas Edison's machine works, is the sheer volume of data it generates—information that allows plant engineers to continually improve the production process and head off problems before they become serious.

The company can trace a product's entire genealogy, from containers of dirt, sand and salt to a bank of high-tech batteries supporting a nation's electric grid. The data not only improve quality control—if a defect shows up at any point, GE can trace it back to its original source—but in the end give GE a powerful competitive weapon that's virtually impossible to duplicate.

The Schenectady plant, nestled in a valley alongside the Mohawk River, is so

extensively networked and connected, in fact, that it might just as easily be thought of as a single machine rather than a collection of them. And, of course, because it is so automated, it doesn't require a whole lot of human assistance. GE's Schenectady campus once had so many employees it was given its own ZIP Code, 12345. Yet even when it reaches full production—GE expects its output to exceed \$1 billion in annual sales by 2020—the showcase battery plant won't employ more than 450 people.

Mr. Hislop, who confesses to using his iPad to check in on the factory during a recent camping trip, describes his experience on the night of the storm in the tones of an anxious parent. Yet in the midst of the howling winds and thunderclaps, the technology meant he could remain intimately in touch with everything that was happening across town. Despite the beating the plant was taking, he says he felt "reassured."

Mr. Koten is a columnist for WSJ.Money magazine in New York. He can be reached at reports@wsj.com.

A version of this article appeared June 10, 2013, on page R1 in the U.S. edition of The Wall Street Journal, with the headline: A Revolution In the Making.

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Friday, June 7, 2013 - 11:35



Program Prepares Students for Advanced Manufacturing Jobs

CONCORD — Starting this fall, NHTI, Concord's Community College, will begin offering a new 2-year

Associate's Degree in Robotics and Automation Engineering Technology (RAET).

Manufacturing is coming back strong using robotics and automation. As a result, low skilled workers are being replaced by high skilled technicians and engineers. Building upon NHTI's long standing reputation in engineering technology education, the new RAET program has been carefully constructed with the assistance of industry partners to provide students the skills and knowledge to qualify for these high paying careers.

Joining NHTI's prestigious staff is Program Coordinator and Professor Joe Cunningham. He brings a long career of industry experience and engineering education, along with involvement as a Master Teacher with the national Project Lead The Way engineering program, and many years in FIRST and VEX robotics. Professor Cunningham is also a co-founder of NH TechFest.

Students in the RAET program will master engineering fundamentals by taking courses in engineering design, manufacturing processes, computer programming, circuit theory, and digital electronics. Emphasis is also placed on the study of mathematics and physical science, while English and social science courses broaden and improve the student's communication skills.

A series of more advanced/specialized courses focuses on the integration of new and existing technologies and their application to product design and fabrication. Topics include robotics, machine vision, process automation, programmable logic controllers, motion control, and the use of computers for design and manufacture.

The program is designed to prepare engineering technologists for employment in advanced manufacturing. Positions such as electro mechanical technician have an average salary of \$54k/year with a great employment outlook. Graduates will also have the foundation necessary to pursue a bachelor's degree, and to take advantage of opportunities for life-long learning and professional development.

This program is sponsored by (or in part by) a \$19.97 million grant from the U.S. Department of Labor, Employment & Training Administration TAACCCT Grant #TC-22504-II-60-A-33, awarded to the New Hampshire Community College System in 2011. This grant is helping to build capacity in the state's hi-tech manufacturing sector by advancing the skills of students to meet workforce demands.

NHTI, Concord's Community College, is a fully accredited, public community college serving students, businesses and the community by providing excellent academic, technical and professional education. NHTI offers 67 academic programs to more than 4,500 students. NHTI is a member of the Community College System of New Hampshire. CCSNH is an equal opportunity employer and educator, and adaptive equipment is available upon request to students with disabilities.

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The Telegraph

It's Your Community.

Tuesday, June 4, 2013

Shaheen: Getting students excited about science, technology, engineering and math early on, pays off

By DANIELLE CURTIS
Staff Writer



NASHUA – Isabelle Beauregard knows that many of her female friends just aren't interested in building a robot.

But after a little convincing, she managed to get six of them to sign up for the Merrimack High School FIRST team this school year. Next year, the high school sophomore said, they're all hoping to have an even more hands-on role.

"I think a lot of girls just don't realize what opportunities are available for us," Beauregard said. "But FIRST really helps us see what's available."

Now, Sen. Jeanne Shaheen is hoping she can help get more young women interested in science and technology, sponsoring legislation to create a grant program for innovative initiatives, like FIRST, in the STEM (science, technology, engineering and math) fields.

Shaheen visited Nashua Community College Monday morning, meeting with local students, school and city officials, to talk about the proposed Inspiration Innovation School Grant Program, and introduce the new Senate STEM Education and Workforce Caucus.

The grant program would target nontraditional programs, such as robotics competitions, and efforts that would broaden access to science and technology education. The caucus, co-chaired by Shaheen, will raise awareness of STEM education to improve the country's economic prosperity and competitiveness around the world.

"This is really an opportunity to get the Senate more focused on what we need to do to create an educated workforce," Shaheen said, standing in the community college's advanced manufacturing lab. "We need to be supportive of initiatives at the local level, for schools to have hands on learning. Students are more likely to get

excited about STEM subjects, and go on and work in those fields if they have these opportunities when they're young."

The work being done by the Community College System of New Hampshire, she said, is a good example of the work needed throughout the country: providing high-quality facilities for students to learn and working together with local businesses to inform curriculum and find jobs for graduates.

The NCC manufacturing laboratory was updated over the past year with the help of a federal grant provided to the community college system. The new lab, officially re-opened in February, features 3D printers and other manufacturing equipment used in today's factories.

The updated facility, said NCC President Lucille Jordan, has changed the kind of education the college is able to give students. And by showing them what a job in the manufacturing field will actually be like, the college has attracted more individuals to the program.

Still, Shaheen said the work done at the college level isn't enough to ensure the state has the educated workforce it needs for a strong economy in the years to come.

New Hampshire is expected to need about 43,000 STEM workers by 2018, she said. Without doing more to interest young women – who currently make up only about 23 percent of the nation's STEM workforce – reaching those numbers won't be possible.

To do that, Shaheen said, the education world needs to start getting students excited in science and math at an earlier age, using programs like FIRST and other initiatives, which could be funded under her proposed legislation.

Nashua Superintendent Mark Conrad said the city has been working hard to do just that.

One of the major obstacles facing the advancement of STEM education, Conrad said, is students' math skills. Too many students are going into high school without the basic skills they need to move on to more advanced studies in science and math, he said.

City schools have been focusing more on math education to combat that issue, taking part in a national pilot this year that creates math instruction based on students' natural learning progressions. And it's clear that the district's work is paying off, Conrad said.

Not only did a Nashua girl win the 3M national Young Scientist Challenge in 2012, for her work using solar energy to purify water, a group of Nashua North students were one of only 16 teams across the country to win a grant from MIT, letting them create a bacteria-powered battery that could provide electricity to impoverished villages.

"We have young people already doing amazing work in our schools," Conrad said. "We just need a lot more of them."

Nashua students Brittany Lacy and Kyle Bergeron, seniors involved in FIRST at Nashua South, said they're glad to see state and national leaders interested in getting more students involved in STEM activities.

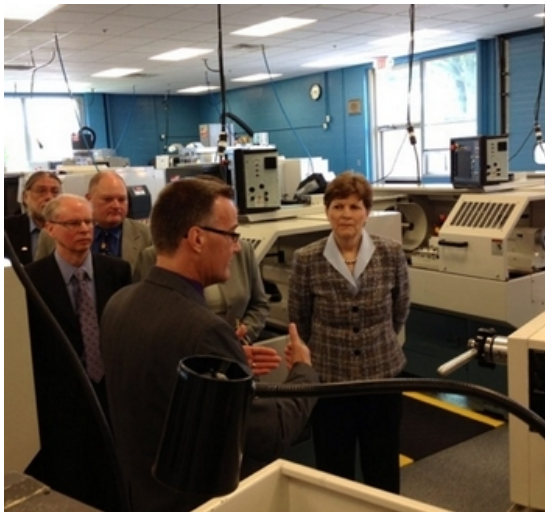
They've both learned a lot from their participation in FIRST, gaining the experience that comes with hands-on learning, Lacy said, and are hopeful Shaheen's grant program will help make the same experiences available for more young people.

"There's so many jobs available that people just don't know about," she said. "You hear people talking about a lack of jobs, well, a lot of those are low-paying jobs. There are a lot of engineering opportunities out there that people don't realize. There are so many ways to improve our economy and our country."

Danielle Curtis can be reached at 594-6557 or dcurtis@nashua telegraph.com. Also, follow Curtis on Twitter (@Telegraph_DC).

Sen. Shaheen announces push for young women to focus on engineering

By **KIMBERLY HOUGHTON**
Union Leader Correspondent



Doug Howe, professor of precision manufacturing at Nashua Community College, provides a tour of the school's Advanced Manufacturing Center to U.S. Sen. Jeanne Shaheen and others on Monday. (KIMBERLY HOUGHTON PHOTO)

NASHUA — Announcing the launch of the Senate STEM Education and Workforce Caucus, U.S. Sen. Jeanne Shaheen said Monday that more females should be pursuing engineering fields.

"We have got to get more young women involved in STEM subjects," Shaheen told a small crowd gathered at Nashua.

Shaheen has become a strong supporter of STEM education, an acronym for science, technology, engineering and mathematics. She will be co-chairing the Senate's new STEM caucus, which

will attempt to raise awareness of STEM education and workforce issues to improve the nation's economic prosperity and global competitiveness.

In order to do that, Shaheen said more females must begin to show an interest. While women make up about 48 percent of the nation's workforce, only 24 percent of the jobs in STEM fields are occupied by females, according to Shaheen.

If New Hampshire hopes to have 43,000 STEM graduates by 2018, women need to get excited about the opportunities in various STEM careers, the senator said.

"We have got to change the stereotypes," Shaheen said, adding groups such as Merrimack High School's Chop Shop 166 robotics team are setting new pathways for young women interested in engineering jobs. Shaheen told a small group of local and state officials about her legislation, the Inspiration Innovation School Grant Program, to boost access to STEM educational opportunities.

Mark Conrad, Nashua's superintendent, stressed the importance of introducing young students to hands-on opportunities in these fields when they are still at the elementary level.

The more opportunities students have to think about their future careers, the better chance they will have at being successful, Conrad said.

"Watching those kids, it is amazing how excited they get and how talented they are," he said of various programs such as the FIRST robotics initiative.

It is also critical to make the STEM subjects fun and interesting so that young students are excited rather than afraid of math and science. The Nashua School District is currently a part of a national pilot program designed to rethink how teachers instruct math to elementary students.

"We have a real commitment here in Nashua," he said of boosting grades and interest in STEM subjects. Conrad mentioned Deepika Kurup, a city student and winner of the 14th annual Discovery Education 3M Young Scientist Challenge, the nation's premier science competition for middle school students.

Kurup has found an innovative solution to harnessing solar energy for water purification, a technology she believes has the power to save millions of lives throughout the world.

While there are several amazing students like Kurup doing work in STEM areas, Conrad maintained that Nashua and New Hampshire still need more.

Mayor Donnalee Lozeau agreed that it is important to begin promoting STEM jobs at an early age. Companies hoping to relocate or expand into Nashua are searching for a skilled workforce, she said, commended BAE Systems' mentor program.

"Unless you start early, this is not going to have an impact," she said.

Brittany Lacy, a senior at Nashua High School North, will enter college this fall with a major in aerospace engineering.

"Up until this year, I was the only girl in my engineering classes," said Lacy, acknowledging she has always had an interest in building things. "People often think of mechanical engineering as dirty work, but there is a lot more to it than getting your hands a little dirty."

khoughton@newstote.com



Home » News » Business

June 02, 2013 4:16PM

New Rochester center expands pool of advanced technology workers

By JOHN QUINN
Union Leader Correspondent



ROCHESTER — A partnership between Great Bay Community College and two international manufacturers will help ensure the workforce is prepared to produce a variety of parts for the aerospace industry.



Later this month, area residents can get a foothold into the advanced composites manufacturing industry by taking classes at Great Bay Community College's Advanced Technology & Academic Center (ATAC) in the Lilac Mall plaza along Route 125 in Rochester. (JOHN QUINN PHOTO)

While some classes have begun at the Advanced Technology & Academic Center at 5 Milton Road (Route 125) in the Lilac Mall plaza, students can enroll in a six-month program for advanced composites manufacturing, which is scheduled to start June 17.

Gov. Maggie Hassan and other officials are expected to be on-hand for a grand opening celebration, which is scheduled for July 11 from 5 to 7 p.m.

The new 17,000-square-foot facility includes classrooms, computers and academic support and technology laboratories. Students can take Advanced Composites Manufacturing courses or take classes for other degrees offered by GBCC.

ATAC was created through the statewide Advanced Manufacturing Partnership in Education initiative, formed by the Community College System of New Hampshire using a \$20 million federal grant.

"This is a perfect example of a public-private partnership, all parties working together for mutual benefit and for the benefit of the overall community," said Susan Siegel, vice president of Investor Relations and Corporate Communications for Albany International Corp.

After taking a few courses — including an Introduction to Advanced Composites, Applied Math & Measuring for Manufacturing and Technical Blueprint Reading — students receive an introduction to working in the aerospace industry.

The training program helped expand the base of qualified highly skilled workers to Albany Engineered Composites and Safran Aerospace Composites, which operate and are in the process of expanding facilities in the Granite State Business Park near Skyhaven Airport.

Safran's new plant, which is expected to begin operations this summer, should bring about 500 job opportunities to the area.

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Siegel said the new training center, which will have some Albany employees as instructors, "plays a critical role in the success of the Albany Engineered Composites LEAP program and the overall company."

Additionally, Siegel said the partnership will ensure both Albany and Safran, which developed the program with GBCC, have the personnel to manufacture about 100,000 parts a year when the facilities are in full production by the end of the decade.

"We can have a world-class plant and the most innovative technology, but nothing happens without talent," Siegel said.

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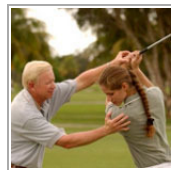
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NEW HAMPSHIRE UNION LEADER

June 02. 2013 4:16PM

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By JOHN QUINN

Union Leader Correspondent



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For details or to register, visit www.gbrochester.com.

jquinn@newstote.com

The path to a new career

Thursday, May 30, 2013

Imagine what it must have been like to work on the early stages of the space program that took up President Kennedy's challenge to put a man on the moon in less than a decade. Or to work with cutting-edge computer technology which has redefined the way we live and work.

In both cases, good wages and hi-tech careers awaited those with training and ambition.

Such is the opportunity being offered today through Great Bay Community College in conjunction with Albany Engineered Composites and Safran Aerospace Composites.

Great Bay is in the process of renovating and outfitting a new 17,000-square-foot center in Rochester's Lilac Mall plaza. While the college will offer an array of academic courses, as it does elsewhere, a primary focus once up and running next month will be to train workers in advanced manufacturing.

The facility is named Great Bay Community College Advanced Technology & Academic Center ... essentially a specialized satellite of the main school located at Pease International Tradeport in Portsmouth.

Once trained over an initial six-month period, more than 400 jobs await graduates at Safran. These jobs will offer a unique career track, one much needed by today's state-of-the-art manufacturing companies. As a result, program graduates have a rare opportunity to get in on a new and burgeoning career field from nearly the ground floor.

Albany and Safran combine to offer what is known as composite manufacturing. Imagine being able to easily pick up one of those huge jet engine blades that must be made to withstand a bird strike while flying at more than 180 miles an hour. That's the kind of composite materials in which these companies specialize.

And while the training program is being geared to the special needs of Albany and Safran, college officials are quick to point out their program is broad enough to prepare graduates for work at other manufacturers in the region — Pratt Whitney, TurboCam and SIG Sauer, just to mention a few.

What also makes the opportunity at Great Bay's Rochester facility exciting is the state of the art equipment on which students will train.

While smaller in size than those at Safran, students will learn in a "clean room" — white doctor's coats and all.

Students will be working with equipment such as an Autoclave, RTM press, curing oven, a 3D milling loom, a full range of CAD, CAM, CNC and CMM equipment as well as other commonly recognized equipment used in manufacturing facilities.

And while some may find the notion of a new high-tech career intimidating, Great Bay officials seem to have gone out of their way to make applying anything but.

To be accepted into the program, students must first apply, supplying a high-school transcript or official GED scores, as well as any college transcripts that may be evaluated for transfer credit. They are then contacted for a formal interview with outreach counselor Jeffrey Pruyne, in which they will learn more about the industry and program. The interview also assists in determining the path the student needs to follow for completion of assessment testing.

"To enter the program there are math, reading, writing and computer competency requirements," said Pruyne. "However, we have supports in place for anyone that might not initially meet the entry level requirements needed to enter the program."

On June 7 and June 8, those interested in exploring a new career can attend free informational sessions. Andre Cocquyt, an internationally known composites expert, will provide information on the composites industry. Representatives from SAC and AEC will also be on hand to talk about their companies, the aircraft engine components they are manufacturing in Rochester, and the job opportunities at their new plant opening this summer. To register, call 603-427-7700.

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Industry News

New composites training facility to open in New Hampshire

Albany Engineered Composites and Safran Aerospace Composites will co-locate a new manufacturing plant at the Advanced Technology & Academic Center, in Rochester, N.H., which will provide training in composite materials and fabrication.

Posted on: 5/28/2013
Source: [CompositesWorld](#)

 12

Great Bay Community College (Portsmouth, N.H.) announces the opening of its new campus in Rochester. The 17,000 square-foot Advanced Technology & Academic Center (ATAC) will provide programs in advanced composites manufacturing starting June 17th. Great Bay's new Advanced Technology & Academic Center is the largest single project under the statewide Advanced Manufacturing Partnership in Education initiative, formed by the Community College System of New Hampshire under a \$20M federal grant.

The College's new Advanced Composites Manufacturing curriculum has been developed to fit the needs of area manufacturers, among those, Albany Engineered Composites (AEC) and Safran Aerospace Composites (SAC), who will be co-locating a new manufacturing plant in Rochester at the Granite State Business Park. The plant is being built by SAC and is expected to add about 500 jobs to the local market. It is scheduled to start operations later this summer.

Debra Mattson, Advanced Manufacturing Program Director and Designer for Great Bay describes the training as structured around a six month tiered program. "At the end of the six months, full-time students earn a certificate in Composites Manufacturing and are qualified for positions as high level machine operators with options for continuing into an Associate Degree in Technical Studies. It's a great way to get into the aerospace industry." Students first take three courses: Introduction to Advanced Composites, Applied Math & Measuring for Manufacturing and Technical Blueprint Reading. At the end that term, they identify an area of interest and start training for positions as high level machine operators/technicians in one of eight areas of specialization. These include: paint operator; 3D weaving and preform finishing technician; resin transfer molding technician; bonding/finishing operator; quality inspection and coordinate measuring machine operator; and composites milling/CNC set-up operator. In addition, training for aerospace composites repair technician and high-performance composites fabrication technician career tracks or positions will be offered.

During the program, students will spend half their time doing hands-on work in the center's state-of-the art composites lab. According to Mattson, the lab will house the newest equipment for high tech composites manufacturing including a clean room, autoclave, RTM

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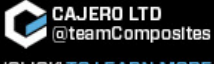
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press, curing oven, a 3D-weaving loom, a full range of CAD, CAM, 3D printer, CNC and CMM equipment as well as other commonly-recognized equipment used in aerospace manufacturing facilities. The lab is slated for completion by the end of this summer.

A full-time instructor, a lab technician as well as five adjunct faculty have been hired for the new training program. During the course development phase and lab installation, they will be supported by internationally recognized composites expert Andre Cocquyt. In addition, the program will take advantage of on-line course content such as that offered by SME-owned ToolingU, an on-line education provider. This will provide future alignment with the SME certification program. To make the public more aware of the composites industry and aerospace composites manufacturing at Safran and Albany, as well as job trends, Great Bay will be hosting free informational session on Advanced Composites Manufacturing on June 7th and 8th at the new ATAC Center. At the event Andre Cocquyt will provide information on the composites industry and representatives from SAC and AEC will be on hand to talk about their companies, the aircraft engine components they are manufacturing in Rochester, and the job opportunities at their new plant opening this summer. To register, those interested can call (603)-427-7700.

The public will also have an opportunity to view the new ATAC Center at a Grand Opening celebration scheduled for July 11th from 5:00-7:00PM. In addition to tours, the celebration will include information stations, and refreshments and entertainment provided by Rochester community partners. Governor Maggie Hassan and other dignitaries will be on hand to officiate the formal opening of the center.

"We can't lose young people (to other states) or fail to grow the work force," Governor Maggie Hassan said at the Tri-Chambers State of the State breakfast earlier this year where she praised Great Bay, AEC and SAC for doing a great job nurturing industry/education partnerships. "We must unlock the talent and energy in every person and ... come together, solve problems and move our state forward. "Let's seize this innovative moment, invest in critical things and remind the world we are the best state in the best country in the world."

Registration is now open for the Fall semester for both traditional academic courses (starting September 2nd) and the Advanced Manufacturing program courses begin on (June 17th and September 3rd.) For more information, students can contact Jeff Pruyne, Enrollment & Outreach Counselor, 603-427-7735 or 1-800-522-1194 or email: jpruyne@ccsnh.edu. For more information on the ATAC Center visit www.gbrochester.com.

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Lakes Region Manufacturing Week, Part II

Posted on March 15, 2013
by [Carmen Lorentz](#) in [Lakes Region](#), [Working in NH](#)

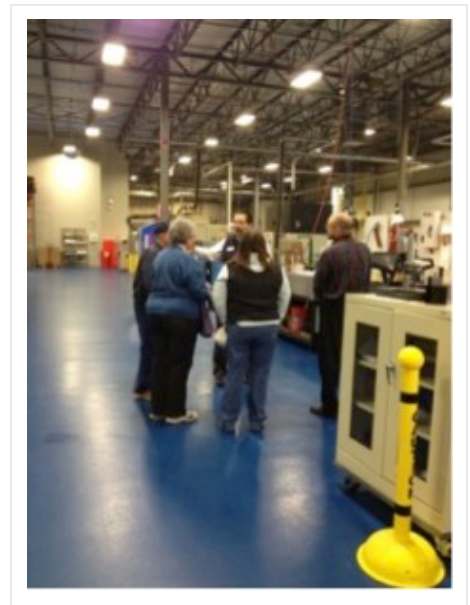
Wow, what a fun week it has been. I've gone on tours of six of the eight plants participating in [Lakes Region Manufacturing Week](#). My head is spinning. So many cool, high-tech products made right here in the Lakes Region. So many amazing jobs available! I just want to repeat something from my last post: if you are young and un/under-employed in NH, you need to check out the manufacturing industry. Even if you majored in fine art or English, seriously, you should take a look at these companies!

Here are the major points I walked away with:

- ⊕ You can go through [WorkReady NH](#) at your local community college FOR FREE and get your skills rated to help make you look more attractive to a manufacturing company if you don't have experience in the industry and your education is in something totally unrelated.
- ⊕ You can start in an entry-level position with nothing more than a positive attitude, a demonstrated desire to learn, and some decent (but not advanced) math skills. Entry level jobs in manufacturing in the Lakes Region seem to pay anywhere from \$15 to \$20 an hour and provide good benefits.
- ⊕ You can work your way up quickly by showing initiative and ability to acquire new skills. All of the companies I visited said they pay for their employees to continue their education. Many of them will pay 100% of your tuition if you maintain good grades. So even if you have an anthropology degree that is proving somewhat useless in this economy, you could get another degree at no cost if you are a hard worker. These companies invest heavily in their employees.
- ⊕ The work environments are really nice. Some of the production floors are kind of noisy, but other than that, I didn't see anything that would make me not want to spend my eight hours a day in any of these plants. They were cleaner than my house (but that's not saying much).
- ⊕ It's gratifying to make stuff. I mean, really, these people are very proud of what they do. They make parts for military aircraft, commercial jets, cars, medical devices (like fake joints used in hip replacement surgery), heat sinks for all kinds of electronic devices, large format printers, the list goes on and on. And those are just the products made by the six companies I visited this week! There are tons more all over the state.

I learned so much this week! I'm excited to continue talking about what an exciting industry advanced manufacturing is and encouraging young people in my community to explore it. Spread the word!

On the production floor at EPTAM Plastics in Northfield with our tour group. Way cleaner than my house!



About Carmen Lorentz

Carmen grew up in Gilmanston, NH. After going to college in Washington, DC and roaming the world for a few years, she and her husband Jonathan recently moved to Carmen’s hometown with their four year old son Julius. Carmen is the Executive Director of the Belknap Economic Development Council. In her spare time, she has epic pretend sword fights with Julius and supports her husband in bringing top-shelf jazz music to unexpected places through his new company, NH Jazz Presents.

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MANUFACTURING MATTERS MONTHLY

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Eptam Plastics works with CCSNH to make a difference

Ask entrepreneurs across the state and they'll agree: Advanced manufacturing is an unsung hero of the N.H. economy. Add just 100 jobs in the state's largest economic sector, according to a 2011 report by N.H. Center for Public Policy Studies, and you could see a total economic boost of \$102 million a year, far exceeding the impact of other private industries.

The story is good for individual workers, too; federal, state and private reports show average total annual compensation for advanced manufacturing jobs beats other NH industries at a robust \$75,000.

With that in mind, it might be a surprise to hear companies are struggling to meet hiring demands. The challenge? Over the last two decades, manufacturing in New Hampshire has morphed into a high-tech economic giant, but the science, technology, engineering and mathematics skills of job seekers have not kept up, hiring managers say. And they need help.

That's where the Community College System of NH, under the Trade Adjustment Assistance Community College and Career Training grant, has stepped in. Working in partnership with advanced manufacturers, each of the system's colleges is expanding or developing new advanced manufacturing labs, equipment and curricula to directly meet the needs of the industry. Focus areas include advanced materials and composites, advanced machine tools, precision welding, mechatronics and robotics, precision manufacturing, automation and process control, and energy, processes and controls.

"It is clear from our research that manufacturing, together with high technology, drives New Hampshire's economy," wrote NHCPPS officials.

EPTAM Plastics Ltd. and Lakes Region Community College are working together to keep it that way.

EPTAM Plastics, established in 1981, is located on Route 149 in Northfield. Its 115 employees have produced precision machines plastic components for over 30 years. EPTAM's president has served on LRCC's Advisory Board for six years and EPTAM's quality manager sits on LRCC's Manufacturing Training Program Advisory Committee.

Here, we talk with Tom Seymour, EPTAM quality manager and LRCC graduate.

Q: Describe a product you manufacture and the effect it has on consumers' lives.

A: EPTAM produces a number of orthopedic surgical components and implants used for knee, hip, spinal, hand, wrist and shoulder repair or replacement. Working with the top orthopedic companies in the country, EPTAM uses cutting-edge technologies to produce highly complex components that improve the quality of life for thousands of people every year.

Q: What does the future have in store for the EPTAM workforce?

A: EPTAM has experienced 8 percent compound annual growth over the last six years, including the recent recession. Last year, EPTAM hired 22 new employees. We project steady continued growth over the next five to eight years.

Due to the complex requirements of the industries we serve and the local talent drought, EPTAM is always looking for well-

qualified employees. We struggle finding candidates with a strong manufacturing background and experience. Without such a background, the steep learning curve and high training expense can be a major hindrance when considering

adding staff. We are hoping LRCC will yield qualified interns and employees to fulfill our business growth strategies.

Q: How have you partnered with Lakes Region Community College to help build the workforce?

A: With EPTAM's president sitting on LRCC's Advisory Board and my participation on LRCC's Manufacturing Training Program Advisory Committee, EPTAM hopes to provide the assistance and guidance to assure the health of advanced manufacturing in the Lakes Region. We are excited about LRCC's updated lab and advanced manufacturing curriculum and what it will do for local manufacturers.

EPTAM employs a graduate and an intern who took advantage of the Huot Technical Center in Laconia. Each of these employees found they needed to complete their education by going to southern Maine because no courses were available in this area. With the changes at LRCC, we believe it will be more of an incentive for advanced manufacturing students to complete their education locally, be hired locally and contribute to our local communities.

Q: Who should choose a career in advanced manufacturing in New Hampshire?

A: Not everyone moves on to a four year college after high school. For some, it is because they never had the opportunity; for others, it is because they were not sure what career track to take. A career in advanced manufacturing is a great option to consider. Manufacturing is not what it used to be. Today, manufacturing is in clean, environmentally controlled facilities where excellent salaries and benefits can be found for those with the skill sets manufacturers seek. As an example, EPTAM employees have taken advantage of our benefits package to advance their education at every level. We have associate, bachelor's, and master's degree candidates and graduates throughout our organization.

Next month, Manufacturing Matters Monthly will feature Freudenberg NOK in Northfield.

To learn about advanced manufacturing training and academic programs at Lakes Region Community College, email TAACCCT project coordinator Don Brough at dbrough@ccsnh.edu. To learn more about CCSNH advancements under the TAACCCT grant, e-mail marketing coordinator Desiree Crossley at dcrossley@ccsnh.edu. To learn more about EPTAM Plastics Ltd., visit www.eptam.com or email kdubois@eptam.com.



Tom Seymour

Meredith board gives final approval to plans for new Rite-Aid store next to Irving

By MICHAEL KITCH
THE LACONIA DAILY SUN

MEREDITH — The Planning Board this week conditionally approved the Rite-Aid Corporations plan to construct a 15,000-square-foot drugstore on a 2.77 lot on Route 25, between the Irving travel plaza and the Trinity Episcopal Church.

Originally proposed in January, 2012, the project was dogged by concerns about traffic, initially the location of the entrance to the drugstore and later the question of a pedestrian crossing. After several false starts, Rite-Aid and Cobalt Properties, owner of the Irving lot, reached agreement on a shared driveway. However, the driveway will be directly opposite Abbey Lane, the entrance to Meredith Bay Village, whose residents warned that the project would exacerbate already dangerous traffic conditions on the heavily travelled highway.

To address the safety issue, the plan includes extending the 30 mile-per-hour speed limit further eastward and installing an elaborate signaled crosswalk. Two beacons will be placed on Route 25, one at the crosswalk near the shared entrance to the Rite-Aid drugstore and the Irving travel plaza and another 400 feet up the hill to the east. When a pedestrian seeking to cross Route 25 presses the button to activate the beacon at the crosswalk, both beacons will flash yellow for four seconds then turn yellow for six seconds, warning oncoming vehicles before turning red to stop traffic and signaling walk to pedestrians.

Planning Director Angela LaBrecque said the New Hampshire Department of Transportation has accepted the plan, but has yet issue to formally issue the driveway permit the project requires.

2 for 1 from page one

Abbott said the reason she wanted back into the fray is because she is "very concerned about what I am seeing with the management of our town."

She said she the current town leaders are not following proper personnel policies, town procedures and ordinances. Abbott also said she is seeing a lack of respect for some of the town's department heads but declined to say which ones.

After the last budget sessions, Abbott said she also is concerned about the lack of funding for many of the capital reserve accounts the town has traditionally contributed to annually.

"It's like raiding the future to pay for the present," she said.

She also said she was upset that the selectmen originally weren't going to put the warrant articles they didn't support before the SB-2 deliberative session until she and some others who attended the public hearing on the budget raised concerns about not presenting them to voters.

She said that the town's credit rating could be affected by its lack of saving for things the town's leaders know they will need in the future.

Guarino said he supported what he called the temporary cessation of some of the capital account funding. He said with insurance and fuel costs continuing to rise and the the property taxpayers shouldering the taxes that they needed a break until the economy turns around.

With an eye to residential property tax relief, Guarino also wants to encourage development of the business corridor along Route 106.

"I want to be more proactive about bringing more businesses to Gilmanton," he said.

Describing himself as the more experienced candidate, Guarino said he also wants to meet with the Belknap County Commissioners about the dues paid to Lakes Region Mutual Fire Aid and the new proposed Belknap County House of Corrections.

As for recycling, Abbott said she favors some kind of plan to get more people to recycle.

"We've tried for years to get some plan in place but it's never passed at town meeting," she said, noting over the years to town has had numerous recycling committees that have gone nowhere.

She said she is aware that it costs the town money to throw away garbage and recycling saves the town money but she's not sure the residents are ready for some kind of mandatory program.

"We'll see what happens to Article 38," she said.

Article 38 on this years warrant, if it passes, will ask selectmen to set up some kind of system that requires the separation of garbage and recyclables.

Guarino described himself as an "avid recycler" who recycles
see next page

Question of the Month

Why is New Hampshire's aerospace industry soaring?



Karen Pollard
City of
Rochester

recruitment team being small, talented and committed, and support from the State Department of Resources and Economic Development, the N.H. Business Finance Authority and Governor John Lynch.

Today Rochester hosts the construction of a state-of-the-art aerospace composites facility more than 8 acres in size and not just utilizing technology, but creating new technology for the composite engine components in the LEAP Engine, a disruptive next-generation product. The engine components as well as this 343,000 s/f facility are the result of a unique partnership between Albany Engineered Composites, a division of U.S. Albany International Corp., and Safran Engineered Composites, a division of the French firm Safran, global leader in jet engines and aerospace components.

The new facility will employ at minimum 400 skilled and semi-skilled employees by Albany and Safran USA with a payroll of more than \$40 million annually. In anticipation of the shared facility, Albany International Corp. announced the relocation of their corporate headquarters from Albany, N.Y. to Rochester, N.H. in 2010, and acquired a second building



Albany and Safran LEAP Engine Composites Facility - Rochester, NH

in the Granite State Business Park reaching 250 employees and 325,000 s/f. Indirect employment includes 1,349 new jobs across the state from the many suppliers and vendors working with Albany and Safran, and from the economic impact of the salaries and purchasing of these companies and their employees.

One of the greatest challenges to be addressed during the selection process was the demand for 400 skilled and semi-skilled employees to be trained. The recruitment team worked with Great Bay Community College, the University of New

Hampshire and others to work to meet this requirement. The plan called for a 17,000 s/f Advanced Technology and Academic Center in Rochester with a composites lab and classroom space to train the skills needed. During the most difficult state budget during the recession the N.H. legislature funded a \$4 million investment in an effort many thought was impossible. The Community College System also successfully leveraged this fund to successfully apply for a U.S. Department of Labor Grant for \$19.9 million. Today the Rochester Advanced Technology and Academic Center is

under construction and set to open January 2013, creating another 30 support positions.

"Larger states can offer financial incentives that vastly overwhelm what the Granite State can offer, but New Hampshire's smallness was its strength," said Joseph Morone, Albany International president and CEO in an interview in February 2011. "In Albany International's case, personally committed leaders, an innovative and willing educational system, and a unique quality of life outweighed enormous tax breaks."

This project represents a "new normal" in business attraction, where a sophisticated team strategy delivers on current and future business demands. Workforce with relevant skills is the critical component for site selection and long-term location success, and can be delivered by non-traditional locations with powerful partnerships – including Rochester, N.H.

Karen Pollard, CECD, EDP is the deputy city manager/director of community development for the City of Rochester, N.H., and leads their business attraction strategy.
www.thinkrochester.biz

A STRATEGY TO FOSTER ADVANCED MANUFACTURING NETWORKS IN THE UNITED STATES

by Fred Block, University of California, Davis; Matthew R. Keller, Southern Methodist University; Andrew Schrank, University of New Mexico; and Josh Whitford, Columbia University

Many voices are calling for the United States to rebuild its manufacturing strength – pointing to advanced technologies that American entrepreneurs and workers could develop to fashion needed products in highly automated factories. Innovative efforts dot the country in sectors such as clean energy technologies, robotics, and advanced battery production. But in a fast-moving, competitive world, America needs to speed the pace and increase the scope of promising new undertakings in order to keep up with other nations in further rounds of innovation.

What can government do? Are there precise, effective steps the U.S. federal government can take to help rebuild and update the nation’s manufacturing capacities? President Barack Obama’s

“Marketable technological advances now depend on networks among firms and require strong links between manufacturers and researchers. Government can provide ongoing help to build such ties.”

administration has taken some constructive steps. However, many in the administration are wedded to old-fashioned blueprints that presume government can do little more than fix market failures, fill gaps left by reluctant private investors, or jump-start new ventures and simply hand them off to businesses left to proceed on their own. This seriously underestimates what can be done by government in ongoing partnership with entrepreneurs, engineers, and scientists.

A better and bolder way forward takes off from the spreading recognition that marketable technological advances now depend on networks among firms and require strong links between manufacturers and researchers. Government can provide ongoing help to build such ties and thus spur ongoing innovative efforts to discover, manufacture, and market cutting-edge products. In this strategy brief, we make the case for using government resources to foster innovative networks – and lay out the specific next steps in public policy that could make the United States a world leader in advanced manufacturing for decades to come.

Why Bother with Manufacturing

It is not obvious that the United States should try to reinvent manufacturing. Decades ago, America was a manufacturing giant, to be sure. But shuttered steel plants, crumbling textile towns, and abandoned shoe factories now litter the land; and it has been a struggle to preserve the U.S.-owned automobile industry. Maybe the time for domestic manufacturing has come and gone, and Americans should focus instead on health care provision, computer software development, and financial operations – plus the provision of local personal and hospitality services that are not readily outsourced to distant countries.

There is something to these arguments. It would be futile to push against the tides of history and try to compete with foreign countries such as China, Vietnam, and Bangladesh to recreate low-wage, mass production industries whose time on our shores is past.

But there are several good reasons to consider a strategy to encourage new advanced manufacturing development in key areas. Clean energy is one promising area, including solar and wind power and the production and deployment of advanced batteries. Additional frontiers include robotics and the production of new composite materials that draw on nanotechnology. Flourishing ventures in these areas could become a vibrant part of the U.S. national economy and help to revitalize many regional economies as well.

- **New manufacturing businesses create jobs that pay decent wages** – and workers who spend those wages allow other businesses to flourish in surrounding communities. In today’s cutting-edge industries, when manufacturing firms are located in the same place as companies or agencies doing research and development, there can be fruitful back and forth between researchers and production engineers. But when big firms move either their manufacturing or their research overseas, as many are now doing, the United States loses both production and R&D jobs. We need to bring both research and development and manufacturing capacities back to America.
- **Advanced manufacturing improves the U.S. trade balance.** The U.S. trade deficit currently stands at about four percent of gross domestic product – dangerously close to the five percent level considered “cautionary” by economists. The growing trade deficit is in large part driven by growing imbalance between exports and imports of manufactured goods like computers, cars, and cell phones. Our merchandise trade deficit with China alone has undergone a threefold increase in little more than a decade, and is fast approaching \$300 billion a year. Because imports of manufactured goods are responsible for approximately two-thirds of all U.S. imports and exports, our nation’s efforts to recreate competitive manufacturing will necessarily play a key part in determining whether America’s balance of trade improves or deteriorates further in future decades.
- **National security will benefit from new manufacturing skills and capacities at home.** Just as access to critical raw materials (such as petroleum or rare earth elements) has become a focus of geopolitics, reliable access to computer chips and other sophisticated manufactured products will become an increasingly important aspect of inter-state rivalries on the world stage. Even if major wars do not break out, it is easy to imagine international scenarios in which governments try to control trade in advanced products to exert leverage on other nations. We don’t want the United States to become entirely dependent on importing advanced technologies from, say, China.

Promising Starts and False Premises

Even if there are good reasons to encourage advanced manufacturing, how will it happen?

Government almost certainly has a role to play – but doing what?

The Obama Administration has pursued a series of initiatives that are designed to strengthen U.S. manufacturing capacity.

- Starting right after Obama moved into the White House, his administration oversaw the successful rescue and reorganization of General Motors and Chrysler. This not only ensured

the continued viability of those companies, but also saved hundreds of thousands of jobs at automotive suppliers across the country.

- The administration committed funds in the American Recovery and Reinvestment Act – the “Stimulus” – to jumpstarting the development of manufacturing capacities to produce clean energy products ranging from advanced batteries to electric cars and technologically superior solar panels.
- Following the advice of the President’s Council of Advisors on Science and Technology, the Obama administration has launched an Advanced Manufacturing Partnership designed to link government, universities, and the private sector together in efforts to foster new manufacturing capacities.

“Money is not the only issue. Obama administration officials are not yet thinking creatively enough about government’s role in fostering advanced manufacturing.”

But there are important limits to the Obama administration’s efforts to date. The automobile industry bailouts and stimulus appropriations were one-time outlays. Government funds are not being allocated on the scale needed to sustain new domestic manufacturing efforts. True, the Obama administration is now calling for the Advanced Manufacturing Partnership, but the proposed funding is far from sufficient.

Money is not the only issue. Obama administration officials are not yet thinking creatively enough about government’s role in fostering advanced manufacturing, because they are wedded to an outmoded viewpoint about what government can usefully do. The Advanced Manufacturing Partnership is justified by arguments about “overcoming market failures” – that is, having government step in only where private actors are reluctant to get started or lack capacities to carry on. This way of thinking is excessively timid and misses the positive and sustained ways in which nimble and well-designed government efforts can spur economic innovation.

From Fixing Market Failures to Fostering Networks

Government works best when it does more than just patch things up. It can more effectively foster economic innovation – in this case, advanced manufacturing – by encouraging and supporting new ties among thousands of creative and entrepreneurial actors. Government can facilitate links among companies and build bridges between companies and researchers.

Recognizing the most proactive possibilities requires moving beyond inherited ideas. From Adam Smith onward, economists have recognized that there are certain things markets alone cannot provide. For example, it is very hard for private entrepreneurs to make a profit by providing clean air, tree-lined urban parks, or schools that teach even the poorest children. Such “market failures” have long been accepted as a justification for government to provide important public services.

In addition, the modern U.S. federal government has recognized that, if left to its own devices, the market would support less scientific research than society needs to continue making big productivity advances. That is why Congress created funding agencies – like the National Science Foundation and the National Institutes of Health – to cover much of the cost of basic research. For the same reason, the government invested in the Human Genome Project, a huge research undertaking that has already generated new products and new businesses.

Perhaps understandably, Obama administration officials are relying on such longstanding models to propose programs to revitalize U.S. manufacturing. But market failure notions limit the range of possibilities policymakers should entertain. The trouble with inherited market failure conceptions is that they imply a clear and fixed dividing line between the public and private sector. Government and private businesses are each supposed to stay on their own side of a fixed boundary and perform tasks that are clearly demarcated and separate. Hand-off metaphors are often used to make the point: government does some initial work or performs a useful task on the side, and then hands off the results to the private sector to make economic hay on its own.

But this isn't how many effective government policies to support economic innovation actually work. In many cases, there is no clear dividing line between government and private efforts; and one-time hand-offs almost never occur. Rather, innovations flow from ongoing partnerships in which government and private firms – and sometimes nonprofits, too – work together to overcome technological barriers in a sustained, back and forth, fully collaborative process. The idea that the government should just fix market failures assumes that those networks somehow just "happen." But that isn't really so. In fact, there is lots of evidence that governments can and should focus their energies both on establishing such ongoing partnerships and on making them work optimally.

Throughout economic history, but especially in today's fast-moving global economy, many effective industries work on a network basis, relying on repeated collaborations among multiple firms of various sizes to invent, produce, and sell products. The days when Henry Ford could build a giant plant to make everything needed for an automobile under one roof are mostly long gone. Firms need to be nimble networkers. But particular firms, no matter how imaginatively run or initially well-financed, often have difficulty finding partners who are trustworthy, competent, and able to offer critical new skills and capacities. And networks do not function well when firms are unable to find the partners they need, or when those partners prove to be untrustworthy or incompetent.

“In innovative advanced manufacturing – as in many sectors of agriculture, health care, and other industries where uncertainty is high – producers... need to be part of vibrant networks, and promising ventures can be undone if such networks are not available... Here is where positive government action can make a difference.”

We are not claiming that networked production is or should be universal, even today. Some items are still efficiently produced by single firms acting largely on their own. But in innovative advanced manufacturing – as in many sectors of agriculture, health care, and other industries where uncertainty is high – producers find it hard to translate their ideas into products by their own efforts alone. They need to be part of vibrant networks, and promising ventures can be undone if such networks are not available or fall apart. Here is where positive government action can make a difference. Various government agencies and actors have proven track records of coming in and helping firms and sister organizations overcome network dysfunction. Government efforts can foster the innovative network connections firms so badly need to succeed.

A Telling success story from America's Past

The U.S. federal government was in fact a global pioneer in fostering innovative production networks – to help millions of American farmers achieve the advances in productivity that fueled national economic growth from the Civil War into the twentieth century.

The Smith-Lever Act of 1914

“An Act to provide for cooperative agricultural extension between the agricultural colleges of the several states... and the United States Department of Agriculture.... giving of instruction and practical demonstrations of existing or improved practices or technology... to persons not attending... colleges in the several communities....”

Farming is a sector fraught with unpredictability. Amidst inevitable uncertainties about weather, insects, plant diseases, and other threats to harvest, farmers must, each year, make difficult decisions about which crops to plant and which seeds, pesticides, and fertilizers to use. To make good decisions, farmers are critically dependent on getting good information. They often turn to agricultural suppliers and the merchants who will purchase their crops. But are these reliable sources? Not necessarily, and commercial sources may not spread information evenly to all producers.

Starting in the 19th century, the U.S. federal government stepped in to help farmers gain access to state of the art knowledge:

- Subsidized by the Morrill Act of 1862, land grant colleges sprung up in dozens of states and included research and instruction in “useful arts” relevant to agriculture.
- Under the auspices of the U.S. Department of Agriculture, government laboratories sponsored research and the 1914 Smith-Lever Act created a nationwide network of locally rooted agricultural experiment stations and extension agents to ensure that all farmers would get ongoing access to trustworthy scientific information tailored to local crops, soil conditions, pests, and weather conditions.
- Extension agents worked with farmers in each area to gather information about what worked and what didn’t – and then funneled data back to laboratories at state universities and the U.S. Department of Agriculture, where scientists did ongoing research to improve agricultural productivity.

Not only did this system boost farm incomes and support America’s rise to global economic power, it ended up being emulated by other nations to encourage manufacturing. For example, to offer small and mid-sized manufacturers a variety of independent services, Japan’s 180 *kohsetsushi* centers were self-consciously modeled on U.S. agricultural extension services. These centers employ more than 6,000 investigators and engineers who offer technology demonstrations, technical assistance, and training. Like U.S. agricultural extension agents, they also help firms to collaborate with each other and with their larger counterparts. Japan’s centers helped to boost the country’s manufacturing sector, as did similar centers in Germany.

Twenty-first-century U.S. leaders looking for new ways to foster economic innovation would do well to keep these powerful examples in mind. Today, there is a temptation to think only in terms of mega one-off projects – such as the big-boom investments in new research about robotics, bio-manufacturing, and materials design supported by members of President Obama’s Council of Advisors on Science and Technology. Big bets may well be worth making, but we need to combine a focus on the technologies of the future with sustained strategies for assisting firms to make optimal use of cutting-edge technologies that already exist, so that firms are able to innovate continuously.

Networked Production Now

Networked production has made twenty-first-century manufacturing more like traditional U.S. agriculture. Just like family farmers in the U.S. past, tens of thousands of decentralized firms, scientists, and entrepreneurs face considerable uncertainty as they collaborate with various network partners to transform ideas into products. Well-designed and targeted government programs can help reduce the uncertainty and make these networks more productive.

Certain U.S. programs along the lines we advocate are already proving their effectiveness at encouraging marketable innovations:

- Innovations in the internet and the computer industry have been spurred by **the Defense Advanced Research Projects Agency**, launched in 1958 under President Dwight Eisenhower to encourage new technologies with military applications. This agency works in significant part by helping firms make the connections with one another that they need to crystallize innovations. Public sector technology officers from the Defense agency help firms locate other actors with relevant competencies. They also validate the competence of firms that have potentially exciting new ideas, raise the skill levels of firms within networks, and serve as honest brokers helping firms to negotiate cooperative agreements on intellectual property or subcontracting arrangements.
- On the civilian side, the federal government does have a small but effective manufacturing effort similar to the one that Japan developed after learning from U.S. agricultural extension programs. America's **Manufacturing Extension Partnership** was started in 1989 and has developed 56 state and local centers to help small and mid-sized manufacturers make connections and share knowledge. Results are promising, but President Obama's 2012 budget request asked only for very modest funding, just enough to support 1,400 field staff. At this size, the agency can work with only a tiny fraction of the 262,000 small manufacturing firms in the U.S. – and under its current mandate, it is not allowed to work with larger firms at all.

The costs of doing too little are well-illustrated by the recent difficulties of the U.S. advanced battery industry. In 2009, the stimulus legislation included funds to help U.S. firms produce advanced lithium-ion batteries to run electric vehicles. But the relevant scientific and technological knowledge has been monopolized by firms in East Asia, with limited access for many American producers.

“Our proposal calls on the United States to move beyond ad hoc, patchwork solutions – to take a proactive approach to fostering advanced manufacturing networks that connect firms to one another and ensure access to the latest research, trained workers, and scarce materials.”

If the United States had already created a stronger Manufacturing Extension Partnership with the resources and mandate to provide services to large as well as small firms, it could have been mobilized to assist the battery companies and make the stimulus investments work better. As it happened, federal authorities scrambled to find another, ad hoc way to help. In 2010, the Argonne National Laboratory teamed up with the state of Kentucky to launch a specialized facility called the Kentucky-Argonne Battery Manufacturing Research and Development Center in Lexington, Kentucky.

A Five Step Agenda for Advanced Manufacturing

Our proposal calls on the United States to move beyond ad hoc, patchwork solutions – to take a proactive approach to fostering advanced manufacturing networks that connect firms to one another and ensure access to the latest research, trained workers, and scarce materials.

Following historically successful examples, we need programs and structures that combine the best aspects of decentralization and centralization. **Here are five specific steps that can and should be taken right now.** Singly and together, they address concrete barriers to maximizing innovative production in America's nascent advanced manufacturing sectors – and all of these steps, wherever possible, build upon and extend efforts that have already proven their worth and promise.

(1) Expand the Manufacturing Extension Partnership.

Specifically, we should increase this proven program's budget by tenfold over the next five years. Even as the program retains a primary focus on small and medium-sized firms, it should also be mandated to work with larger firms struggling with advanced technologies. The Manufacturing Extension program already has 56 regional centers, and the most successful should be expanded two or three-fold. The total number of centers should be doubled. The goal should be to ensure that every U.S. city with more than 150,000 people would have a Manufacturing Extension center nearby, so that state-of-the-art data and information can be shared among well-networked firms.

(2) Fund advanced laboratories run by the National Institutes of Standards and Technology.

Each of these facilities would have a somewhat different specialty – for example, one would focus on robotics, another on continuous process technologies, and a third on nano-scale production. These laboratories would assemble scientists and engineers from government and industry together to solve actual production problems. Teams from the Manufacturing Extension Partnership working with particular firms in their regions would be able to get advice on the most intractable problems – and the practical experiences of local firms could be conveyed to the laboratory scientists and engineers.

(3) Create a network of smaller, specialized manufacturing laboratories.

These can be along the lines of the National Science Foundation's Engineering Research Centers. Following the example of agriculture, these labs should be located on university campuses and maintain ongoing connections to the larger national laboratories and the regional manufacturing extension agents. A plan to launch twelve of these collaborative manufacturing institutes is already part of the Obama administration's advanced manufacturing strategy.

(4) Establish a National Center for Advanced Manufacturing Skills.

The Manufacturing Extension Program already works with community colleges and other local institutions to provide the up-to-date training and skills that workers must have in today's advanced manufacturing. These efforts would be greatly enhanced by setting up a National Center for Advanced Manufacturing Skills, with professionals who could work with the various laboratories and manufacturing extension agents to develop teaching material and curriculums for local institutions. Over time, this agency would be able to anticipate emergent industry needs, so that innovative skills and production facilities could be developed at the same time.

(5) Ensure access to scarce materials needed in advanced production.

In recent years, U.S. manufacturing firms have faced shortages in key supplies – as, for example, when the Chinese limited exports of rare earth elements vital to several advanced production processes. A new National Center for the Analysis of Supply Chains could develop the expertise to track key inputs needed for the advanced manufacturing sector. The agency would focus on analysis and dissemination of findings, yet it could also serve as an early warning system for industry and government alike, anticipating possible bottlenecks and helping find strategies to address bottlenecks.

Taken together, the five steps we recommend would spur entrepreneurialism and creativity in U.S. advanced manufacturing, and enable America's producers to keep pace with savvy competitors abroad. Government would play a sustained and active role in the strategy we outline, but investors, manufacturers, engineers, and skilled workers would provide the inputs and energy.

Big Benefits at Modest Cost

How much would our agenda cost? Overall, we estimate that the five steps we outline would require about \$5 billion in additional federal funds per year, when the efforts are fully up and running. The ramp up over several years would start at a lower level and move to that full-funding plateau. The price-tag may seem hefty, but it is tiny in relation to the size of America's overall manufacturing production – and the new investments we suggest would pay for themselves many times over.

The current total of U.S. manufacturing gross domestic product is about \$1.6 trillion each year. That means that our five-step program would only need to lift manufacturing productivity by four-tenths of one percent each year to fully pay for itself. But the potential annual productivity gains for advanced manufacturing – appropriately spurred forward by well-tailored U.S. government support – would surely be much larger.

Research on historical increases in U.S. agricultural productivity has determined that agricultural extension agents were able to have very dramatic impacts on productivity rates – by diffusing best practices even to relatively small and out of the way farms.

Similar possibilities to boost productivity beckon today in advanced manufacturing. Many studies show that productivity varies hugely across enterprises. Fostering innovative networks and providing extension services as we propose would help many of the less productive firms speed up to at least industry averages. This would give a big boost to overall U.S. economic productivity while at the same time creating good new jobs and strengthening America's national security.

The time has come, in short, for America to do once again for firms in advanced manufacturing what it earlier did for farmers and scientific agriculture. At modest cost for big benefits, our government can play a positive role by fostering and sustaining the vital networks from which growth and innovation flow.

Selected Sources and Further Reading

** Fred Block and Matthew R. Keller, eds., *State of Innovation: The U.S. Government's Role in Technology Development*. Boulder, Colorado: Paradigm Publishers, 2011.

Provides an overview of the extensive initiatives in the U.S. that help firms move technologies from the laboratory to the commercial space.

** Susan Helper and Marcus Stanley, "Creating innovation networks among manufacturing firms: How effective extension programs work," pp. 50-62 in *Economic Development Through Entrepreneurship: Government, University and Business Linkage*, edited by Scott Shane. New York: Edward Elgar, 2007.

Explains how manufacturing extension programs can make significant contributions to manufacturing productivity.

** Andrew Schrank and Josh Whitford, "The Anatomy of Network Failure." *Sociological Theory* 29, no. 3 (2011): 151-177.

Explains why networks have become so central and why they fail on a routine basis when network partners fail to meet their partner's expectations.

** Philip Shapira, "Putting Innovation in Place: Policy Strategies for Industrial Services, Regional Clusters, and Manufacturing SMEs in Japan and the United States." *Prometheus* 26, no. 1 (2008):69-87.

Contrasts Japan and the United States, and shows how Japan provides a broader range of services to established small enterprises in manufacturing.

** Josh Whitford, *The New Old Economy: Networks, Institutions, and the Organizational Transformation of American Manufacturing*. New York: Oxford, 2006.

Documents the reorganization of heavy manufacturing in the Upper Midwest and discusses the role that manufacturing extension can play in helping subcontractors deal with big firms.



THURSDAY, NOVEMBER 1, 2012

GILFORD, N.H. - FREE

Opera comes alive in competition

BY ERIN PLUMMER
EPLUMMER@SALMONPRESS.COM

GILFORD — Singers from across the US and Canada showed off their talents in Just Love to Sing's Sixth Annual Opera Competition this past weekend.

More than 40 singers gathered at the Gilford Community Church on Saturday for the daylong competition, with 17 finalists going before an audience at a performance that evening. Singers belted out selections from various operas, from classical pieces to more contemporary composers.

Just Love to Sing! is a non-profit organization dedicated to vocal performance and education throughout New Hampshire. Just Love to Sing! Co-Director Jane Cormier said this year's competition saw a good sized turnout, with more people coming from out of state.

Cormier said the economy had major impacts on this year's competition. The competition was initially a two-day event, with participants

staying in hotels for its duration. Cormier said the first three or four years saw a steady rise in participants, though the numbers have gone down a bit in the past few years. The reason for this was found to be the length of the competition, with fewer people able to afford the lodging. The decision was made this year for the competition to be a one-day event.

The event has usually been held at the Concord City Auditorium, though the cost of the venue was difficult for the competition this year, especially with the loss of two top sponsors. Instead, the competition was brought to the Gilford Community Church. Meredith Village Savings Bank and Opera NH provided generous sponsorship.

Singers from across the US and Canada came to the competition. Around 50 signed up, and 42 competed at the all-day event at the Gilford Community Church. Performances began around



Jessica Jacobs performs with David Collins on piano. Jacobs won second place in the competition.

PHOTO BY ERIN PLUMMER

9 a.m. on Saturday and lasted through 4 p.m. At the end of the day, 17 finalists were chosen to perform in front of an

audience that evening.

The 15 female singers and two male singers performed selections from operas from

classical composers such as Mozart and Handel to more current American composers, including Leonard

Bernstein and Samuel Barber. Final performers came from across New Hampshire, the Boston area, and other New England points to Florida, Michigan, Alberta and many places in between.

David Collins accompanied most of the performers on piano, one exception being Julie Olsson of Jamaica, Vt., whose husband Ken played accompaniment.

Each final performance was reviewed by three judges, who scored the singers in several areas including vocal quality, diction, expression, and many others. Audience members also cast their votes for the Audience Favorite award given in memoriam of Norma L. Harrison.

The winners were announced at the end of the show.

"It was a very, very tough decision," said judge and Just Love to Sing! Co-Director Carlos Martinez, who said the top three differed by two points each.

The first place winner was Amy Oraftik from Boston. Oraftik, a soprano, performed "Composer's Aria" by Richard Strauss from the opera "Adriane auf Naxos." She received a prize of \$750 provided by Just Love to Sing!

"It was such an honor, I can't believe it," Oraftik said right after her win was announced.

Oraftik has been singing since she was eight, starting out in children's choir. This was her first time performing in Just Love to Sing's competition.

Oraftik said she was amazed by the talent she saw from her fellow performers. She said she worked hard for this competition and was amazed with her win.

SEE OPERA PAGE A11

Selectmen set payment schedule for Gilford Meadows sewer bill

BY DAN KANE
CONTRIBUTOR

At the Oct. 24 selectmen's meeting, the board once again took on the issue of whether to give an abatement to the Gilford Meadows Condo Association for their sewer bill.

The town had been underestimating the bill for the past two years, so the most

recent, cumulative bill came out to be higher than expected.

"They were actually conserving water, but we weren't high enough in our estimates," Selectman Kevin Hayes said.

Gilford Meadows Treasurer Ray Boelig argued that the town was at fault, and ought to at least lower the cost of the bill.

"We made a good faith payment of \$2,300, but the remainder of \$3,000 is a significant number," he said. "We're looking at a very sizeable dollar amount for something that was totally unplanned for. Who puts that kind of money aside for a sewer?"

Hayes offered a compromise in which the town would split the most recent bill into four payments, due each quarter.

"In my mind, this money is due," Hayes said. "We're giving you an interest free loan. You used the sewer services. You need to pay for them."

Selectman John O'Brien concurred, adding, "How

SEE SELECTMEN PAGE A11

ford, Picnic Rock Farm of Meredith, and Walmart. The pumpkins were given to each of the 46 advisors for each of their classes to decorate.

The pumpkins could not be carved, and the groups could not seek supplies and assistance from the art room. The project was entirely in the hands of students, and teachers were not allowed to decorate the pumpkins.

The pumpkins were put on display in the front hallway, grouped by class.

Independent judges were tasked with picking the four best pumpkins, and the student body could vote for their favorites. Students could pay 25 cents to vote, with proceeds going toward the student council.

Sessler said the activity seemed popular with the kids, with the students coming up with clever designs.

"It was a huge hit; the kids were excited," Sessler said.

The hardest part of the project was making sure the pumpkins did not rot while on display.

Sessler said the Student Council will try to do the event every year.



MARTHA KANE — COURTESY

View from the Mount

Reader Martha Kane submitted this photo of the Gilford shoreline as seen from the deck of the M/S Mount Washington during a recent Sunday cruise.

GHS students turn out creepy, creative pumpkins

BY ERIN PLUMMER
EPLUMMER@SALMONPRESS.COM

GILFORD — Pumpkins, paints, and other decorations recently provided a fun team-building activity for students at Gilford High School.

This past week, 46 pumpkins lined tables at the front of the school, showing an ar-

ray of creative designs. All of the pumpkins were decorated by students under the different advisories in the school.

The project was organized by the Student Council as a team building exercise with the different advisors.

"We always try to do something that helps improve the students' outlook here at Gilford," said Student Council advisor Sally Sessler.

The Student Council purchased a number of pumpkins, and many were donated by Beans and Greens of Gil-



PHOTO BY ERIN PLUMMER

Gilford High School students decorated pumpkins in many creative styles as part of a Student Council team-building activity. The pumpkins were on display in front of the school this past week.



Make your voice heard

Gilford residents are encouraged to cast their votes in the 2012 General Election Tuesday, Nov. 6 from 7 a.m. to 7 p.m. in the Gilford Middle School gymnasium.

Inside Fiddlehead Farms Marketplace

**WILD
COD
\$5.99
lb.**

**Wine Tasting
Fridays at 4 pm**

CHEESE • PASTRIES
SEAFOOD • MEAT • DELI
FRESH PASTA • FLOWERS
WINE & BEER

Gourmet Grocery - Fresh Produce
**FIDDLEHEAD FARMS
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www.fiddleheadfarmsmarket.com

77 Main St., Alton, NH
603-855-2006

**Winter Hours:
Open Thurs. - Sun. 8 am - 6 pm**

Notes from the Gilford Library

BY ABI MAXWELL
LIBRARY CORRESPONDENT

"I'm interested in the romance of the Lakes Region and the White Mountains," said historian, writer, and professor Bruce Heald, who has written numerous history books and articles about the area, and who has worked as Senior Purser aboard the M.S. Mount Washington for 46 years. Heald will be at the Gilford Public Library on Thursday, Nov. 8, from 6:30 to 7:30 p.m. to talk about his most recent book, "New Hampshire and the Civil War: Voices from the Granite State."

Heald, who teaches military history at Plymouth State University, wrote "New Hampshire and the Civil War" after he gained access to hundreds of "original, personal" letters written by soldiers during the Civil War. The letters came from many places, but most from New Hampshire. They detail camp life, battles, imprisonment, and hospital

stays, offering first-hand knowledge of what the war was like for New Hampshire men. In addition to these letters, Heald also had the privilege of reading one complete diary that belonged to a soldier from Sanbornton, which details day-to-day life during the War. The letters and portions of the diary are in the book, along with Heald's introductions to each volunteer regiment the letters originated from.

"I have fun doing this," Heald said of his research. "And this topic"—the voices of New Hampshire men in the Civil War—"had never been done before."

That's one criterion for Heald, who has written 37 books so far.

"If I get an idea," said Heald, "I ask myself, 'Is this interesting to other people?'"

From there, he considers whether or not it has been done before, and if the answer is no, he drafts a proposal for his publisher.

Heald's career as a writer began in 1968, when he realized while working about the Mount that the boat had no travelogue.

"I wrote one," he said, "and then I became interested in the lake, the old boats, the mail boat, and the railroads."

His books include "A History of the Boston and Maine Railroad," "Railways and Waterways Through the White Mountains," "A History of Dog Sledding in New England," "Steamboats in Motion," and many more.

During his visit to the Gilford Public Library, Heald will show copies of the original letters, talk about the impact New Hampshire had upon the Civil War, and answer questions. His visit will take place on Thursday, Nov. 8, from 6:30 to 7:30 p.m. If you're interested in our past, this is an excellent opportunity to meet an expert on New Hampshire history. The program is co-sponsored with the Thompson-Ames Historical Society and is free and open to the public; all are welcome and encouraged to join!

Programs & Special Events

Thursday, Nov. 1
Toddler Time (18 months - three years), 10:30 - 11 a.m. Help foster early literacy skills in your toddler. We'll sing songs, read stories and create a craft. Sign-up is required in

the Children's Room.

Conversational French, 3 - 4 p.m. You don't want to lose your French language skills, so sign up to converse with a fun-loving group led by Trudy Hastings. Space is limited to 8 people, so sign up soon.

Crafter's Corner, 6 - 7:30 p.m. Needle arts coordinator Dawn Lemay will facilitate all interested crafters who love knitting, crocheting, and other needle work projects. Bring your latest design and work in a relaxed corner of the library.

Friday, Nov. 2
Social Bridge, 10:30 a.m. - 12:30 p.m. Do you love to play bridge and just can't get enough? Come play 'social' bridge at the library!

Storytime (three to five years), 10:30 - 11:15 a.m. Help foster early literacy skills in your preschooler. We'll sing songs, read a story and create a craft. Group size is limited to enhance this special time for toddlers and their caregivers. Sign-up in the Children's Room is required. The theme for this 6-week session is Nursery Rhymes, Fairy Tales, and Fables.

Knit Wits, 1:30 - 2:30 p.m. All knitters welcomed!

Monday, Nov. 5th
Mahjong, 12:30 - 3 p.m. One of the oldest board games in the world - Mahjong - depends on skill, strategy, and a certain degree of luck. Join us!

Lego Legion (Ages seven & up), 3:30 - 4:30 p.m. Got Lego fever? We've got the cure! We'll host a Lego club on the first and third Mondays of each month. Come tap into the magic in your mind! Sign-up in the Children's Room.

Tuesday, Nov. 6
Drop-In Rug Hooking, 10:30 a.m. - 12:30 p.m. Carol Dale will lead a 'hook-in'!

Storytime (three to five years), 10:30 - 11:15 a.m. Help foster early literacy skills in your preschooler. We'll sing songs, read a story and create a craft. Group size is limited to enhance this special time for toddlers and their caregivers. Sign-up in the Children's Room is required. The theme for this six-week session is Nursery Rhymes, Fairy Tales, and Fables.

Babygarten (Birth - 18 months), 11:30 a.m. -

noon. Help foster early literacy skills in your baby. We'll sing songs, move to music, share stories and make a craft. The theme for the six weeks is Nursery Rhymes, Fairy Tales, and Fables.

Gilford Clickers, 6:30 - 8 p.m. The Clickers meet monthly to improve their photography skills. New members welcome.

Wednesday, Nov. 7
Check-Out-An-Expert!, 10 a.m. - noon. Do you have basic questions about what to do with your computer or need help with downloading audio books or using our telescope? Come Check - Out - An - Expert! and receive the assistance you need. You must have a Gilford Library card. 20 minutes max if someone is waiting.

Social Bridge, 10:30 a.m. - 12:30 p.m. Do you love to play bridge and just can't get enough? Come play 'social' bridge at the library!

Gilford Write Now Writers' Group, 3:30 - 5:30 p.m. This group, led by Chris Roderick and Bonnie Carnivale, is open to all Gilford Library cardholders. Writers of all ability levels are invited at any time.

Gilford Public Library Top Ten Requests

1. "Gone Girl" by Gillian Flynn
2. "Following Atticus" by Tom Ryan
3. "A Casual Vacancy" by J. K. Rowling
4. "The Panther" by Nelson Demille
5. "NYPD Red" by James Patterson
6. "The Racketeer" by John Grisham
7. "Mad River" by John Sandford
8. "Killing Kennedy" by Bill O'Reilly
9. "Winter of the World" by Ken Follet
10. "The Kitchen House" by Kathleen Grissom

Gunstock Ski Club prepares for annual sale

Gunstock Ski Club is holding their annual ski & snowboard sale again this year at Gunstock Mountain Resort Saturday, Nov. 3 from 9 a.m. to 3 p.m.

More than \$1 million of inventory will be spread over three floors from 14 local area ski shops. Experts will be on hand at the sale to help you get booted and suit-

ed for the winter. In addition to alpine racing skis, twin tips, snowboards, boots, helmets, poles, the sale includes hats, mittens, jackets, cross-country skis, snowshoes, hockey skates and gear, figure skates, and more.

Consignment drop off for a small fee is available on Friday, Nov. 2 from 4 to 8 p.m.

Cash, credit card, and check payments are accepted at the sale.

Gunstock Mountain Resort has generously donated a Prime 2012/2013 season pass for one lucky raffle ticket holder.

Go to GunstockSkiClub.com for more information, or call Ruth at 528-5553.

GILFORD POLICE LOG

The Gilford Police Department reported the following activity from Oct. 22 to Oct. 29.

Kayla C. McCarthy, age 20, of Gilford was arrested on Oct. 22 in connection with a bench warrant.

Heidi L. Williams, age 49, of Gilford was arrested on Oct. 24 for Possession of Controlled/Narcotic Drugs and Manufacture of Controlled Drug.

Brandon R. Pestana, age

24, of Franklin was arrested on Oct. 28 for Driving While Intoxicated.

Kathy E. Gonyer, age 51, of Tilton was arrested on Oct. 29 for Reckless Conduct; Placing Another in Danger.

A juvenile, age 16, was arrested on Oct. 29 for Unlawful Possession of Alcohol.

4 suspicious vehicle checks
15 alarms

78 traffic checks

8 motor vehicle complaints

16 motor vehicle checks
15 calls for an ambulance
4 motor vehicle accidents
2 reports of suspicious persons

7 larceny
8 reports of existing conditions

6 lost/found items
6 abandoned vehicles
6 service of paperwork
8 animal complaints
5 calls for the fire department

3 lost/missing/wanted person

8 requests for motorist assistance

3 pistol permits
2 burglaries in progress
13 checks of road & weather conditions

4 escorts
1 fingerprints requested
2 town ordinance enforcement

1 stolen/wanted automobile

3 see complainant
9 domestic disturbance
1 drug case
5 civil matter

1 DWI
1 request for additional help

1 report of criminal mischief

1 juvenile incident
2 attempt to locate
1 untimely death

3 reports of shots fired
2 reports of harassment
1 yard sale permit issued
3 requests for contracted services

Holiday Open House November 9, 10 & 11

Refreshments - Door Prizes

Enjoy special offers for three days only at our Holiday Open House on November 9, 10, & 11. Find fresh twists on your favorite traditions and discover new ways to create Christmas memories.



Bridges' Hallmark Shop
35 South Main Street • Wolfeboro, NH
Open 9-6 Daily • 9-5 Sunday

6th Annual Holiday Fair

Saturday, November 10th

9am - 3pm at Belmont High School

Over 100 crafters and vendors!

- Wide Assortment of Hand-crafted & Holiday Items
- Hand-quilted & Embroidered Items • Woodcrafts
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Pumpkin carving fun for kids at Gilford Library

BY ERIN PLUMMER
EPLUMMER@SALMONPRESS.COM
GILFORD—Kids had creative and messy fun while carving pumpkins at the Gilford Public Library last week.

On Wednesday, children from toddlers to older students gathered at the library to carve their own creative designs into pumpkins.

"We try to do different projects about once a month," said Children's Librarian Tracey Petrozzi.

This was the first pumpkin carving event for children and teens. Petrozzi said the library usually does pumpkin decorating, but this was the first year children actually carved the pumpkins.

"I always did carving with my kids," Petrozzi said. "I always thought it would be a great idea with the teens. My kids always enjoyed it."

A number of children, from three-year-olds to older kids, carved open their pumpkins and scooped out the insides, some by themselves and some with help from parents.

Jillian Palisi and Nick



Ron Lien and Laura Shute help their kids, Jax and Ava Lien, carve their pumpkins.

PHOTO BY ERIN PLUMMER

Hinds said they liked eating the seeds while Jillian also likes pumpkin bread. Alexis Dorman said she liked the feeling of the pumpkin as she was scooping it out.

A few said they wanted to bring the seeds home to roast, while a few nibbled on seeds when they were right

out of the pumpkin.

Children then carved different designs into their pumpkin, some designs drawn out on paper that was taped onto the pumpkin and carved them out.

Ava Lien was taking part in the event on her sixth birthday.

"I like carving them," she said.

Her three-year-old brother Jax said he likes carving the face.

More Halloween events were scheduled at the Gilford Library, including a party and parade on Halloween.

Opechee Garden Club hosting "Round Robin" workshop

The Opechee Garden Club (OGC) welcomes its members to participate in a round robin of holiday workshops demonstrated by its own members at their Nov. 5 meeting at 1 p.m. at the Gilford Community Church, Potter Hill Road, Gilford.

Following light refreshments and the business meeting, five members will be presenting demonstrations: Sally Doten will show how to plant spring bulbs in containers to "winter over" for either indoor or outdoor spring flowers; Carolyn Temmallo will demonstrate holiday arrangements in oasis cages for either a hanging swag or table centerpiece; Sandy Gove will show how to use greens in candlestick inserts for table or mantle displays; and Jane Rollins' demo will be on attractive winter containers using greens and other materials.

Groups will rotate to each of the demonstrators while the fifth demonstrator, Donna Vernon, will instruct on the art of bow making to all members. Members who wish to follow along will need their own wired ribbon (up to two and a half inches wide and 10 yards would

make up to three bows).

Judy Nelson will take orders for holiday wreaths and greens. Other orders will be taken for the oasis cages, candle ring forms, etc. used in the demonstrations. These will be available at the Greens Workshop on Nov. 27 at the Weirs Community Center, where members may create a variety of arrangements for their homes to be beautifully decorated for the holidays.

Chairs Jessie Lacombe and Sandy Stafford and hostesses - Cindy Anderson, Elaine Gagnon, Christina Halstead, Barbara Harris, Trudy Hastings, Sandra Hickok, Mary Jane Hoey, Betty Hovey, Mary Lou John and Pati Litchfield will serve refreshments.

The Opechee Garden Club meets the first Monday of the month at 1 p.m. (unless otherwise noted) at the Gilford Community Church, Potter Hill Road, Gilford. New members are always welcomed to join in time to celebrate the 75th Anniversary in 2014. Write PO Box 6025, Laconia, NH, call 293-7357, email opecheegardenclub2012@gmail.com or visit www.opecheegardenclub.com.

Gilford Rotary Club sets it in stone!

The Gilford Rotary invites local residents and businesses to create a lasting memory to honor or remember family & friends with an engraved paver at the newly restored the Rotary Flagpole Garden.

Perfect to commemorate special occasions, such as a birth, anniversary, wedding, or to send a positive message, each personalized engraved four-by-eight-inch paver stone will become part of the permanent Gilford Rotary Flagpole Garden. Funding will help support the Gilford Rotary Club's ongoing local fundraising efforts and to help pay for the restoration of the Gilford Rotary Flagpole Garden, built this past summer by local Belknap Landscape Company with Belgard paver stone donations from Gilford Home Center and cobblestone edging donated by Gilbert Block. The garden was restored to help the Town of Gilford commemorate their Bicentennial and turned out to be a central point for a variety of celebrations.

Included in the Rotary Flagpole Garden restoration was a circular paved patio hemmed by semicircular hand-laid stone wall. Now flanking the Town of Gilford's Flagpole are matching granite markers commemorating both the 175th and the 200th Anniversary of the town. Attractive raised planting beds with native species planting now greet visitors to the public park.

Extracting the existing pavers and setting engraved pavers was easier than Club members had anticipated. All 28 engraved pavers in the first batch were installed in an afternoon; more to go in as orders are received. Charter Club Members Alley & Charlie Boucher were on hand to assist and to see how the process works first hand, extracting the existing paver stones and carefully setting commemorative stones in place.

To order an engraved paver, print out the Paver Order Form from the Club's Facebook page, complete and mail, enclosing a \$50 check, payable to Gilford Rotary; Mail Check & Paver Order Form to P.O. Box 7091, Gilford NH 03247. Residents & visitors are asked to order early as only 150 pavers may be sold! A terrific way to



DALE SQUIRES - COURTESY

Gilford Rotary Club Charter Member Alley Boucher helped extract the existing paver stones and carefully set the first commemorative paver stone in place. To left is the Bicentennial granite marker commemorating both the 200th Anniversary of the town installed by Belknap Landscape's Masonry Supervisor Rich DuBreuil.

leave a lasting impression.

Gilford Rotary is an organization of business and professional men and women who have accepted the ideal of service as a basis for attaining fulfillment in our business, personal, and professional lives, and by serving our community. The

Club meets every Friday morning at 7 a.m. at Patrick's Pub in Gilford. More pictures and more information of the Club's charitable activities were uploaded on the Gilford Rotary Facebook Webpage, a Webpage anyone may see at: <http://www.facebook.com/GilfordRotaryClub>.

Gilford Youth Center to host Turkey Trot 5K

The Fifth Annual GYC Turkey Trot 5K Race and Family Walk will be held on Thanksgiving morning at 9 a.m.

This race will help benefit future programming at the Gilford Youth Center, as well as fund scholarships and financial aid for their summer and school vacation camps.

The course runs through Gilford Village and is considered flat and fast. All family members are encouraged to attend, including pets. Reg-

istrations can be found at gilfordyouthcenter.com, or can be picked up at the Gilford Youth Center or Gilford Village Store. \$24 per person/\$65 Family rate (up to five people).

Register before November 5th and receive a free long sleeve Turkey Trot shirt.

The Gilford Youth Center is located at 19 Potter Hill Rd., in Gilford.

Questions? Contact Scott at 524-6978.

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COMMENTARY

United Way looks to make an impact... collectively

Editor's note: The following guest commentary was submitted for publication by Alan Robichaud, Community Development Director for the Lakes Region United Way.

There has been a lot of talk lately about Collective Impact as a new way of conducting business. Think tanks from business, education, politics and social services are using the concept to suggest a new iteration of working together that, with thorough understanding and implementation of core elements, sets the conditions under which communities can realize significant change in the issue they hope to change. While on the surface, some may feel this is just another word for collaboration, Collective Impact has been given focus of late by John Kania and Mark Kramer of the FSG consultants, particularly through their seminal article published in the Stanford Social Innovation Review by the same name.

The authors point to how non-profits all-too-often find themselves working in isolation to identify and apply a solution to complex social issues only to find them impossible to resolve. Social problems are often the by-product of government, business or other decision making authorities which cause varying levels of complexity that ultimately rely on cross-cutting coalitions to resolve. Social services are not singularly equipped to impact the change required to move the individual, group or community forward. In looking at initiatives across the country and other places around the globe, Kania and Kramer's work has identified five conditions that, if properly implemented, seemingly make the difference in what others call needle-moving initiatives (those which improve positive outcomes or decrease negative impacts by a minimum of 10 percent in the favored direction). The conditions include that those engaged in the change process formulate a common agenda, establish systems of shared measurement, engage in mutually reinforcing activities, practice continuing communication strategies, and are supported by what they refer to as backbone support organizations—those which require a dedicated staff separate from the

participating organizations who perform roles as project manager, data manager and facilitator.

The Lakes Region United Way has been involved in this change process over the past few years, bringing people from various community sectors together to mutually address broad, complex social issues. In its latest and most complicated area yet—that of reducing poverty in Belknap County by 20 percent by 2020—the United Way plans to apply some of this latest research to this initiative. To that end, the Lakes Region United Way will host a national conference at Waterville Valley featuring the Tamarack Institute for Community Engagement in Ontario, Canada. Tamarack has been addressing poverty reduction and many other socio-economic issues for several years, with great success. Working closely with Paul Born of Tamarack to plan this conference, key presenters, including John Kania (FSG Consultants), Anne Kubisch (Aspen Institute's Roundtable on Community Change) and Paul Schmitz (Public Allies and the White House Council on Community Solutions) will be joined by more than 160 participants representing 80 agencies and organizations from 18 states. Through participant fees and support from the New Hampshire Charitable Foundation, the Endowment for Health, and Granite United Way, the Lakes Region United Way has made this timely topic, provided by internationally renowned thought leaders who are leading the country in collective impact research and application, accessible to nearly four dozen Lakes Region agency representatives and over 100 attendees from across New Hampshire. Experiencing learning with those who are setting the pace and those who wish to apply collective impact strategies in communities across the country will give New Hampshire and the Lake Region a leg up on tackling broad social issues that impact our children, families and communities.

For more information about Collective Impact or how to become involved with the Lakes Region United Way's Poverty Reduction initiative, please call 524-6864 or visit the Web page at <http://www.lruw.org/index/fsp.asp>.

Pet of the Week: Anthony

Anthony is the perfect mix of Black Labrador-German Shepherd-canine Einstein. Yes, you read that right, he is an incredibly intelligent dog who will outsmart the average owner every time.

Ergo, we are looking for the exceptional dog owner.

So far Anthony has showed he can steal food off low lying surfaces, but at the same time look at you with those wonderful brown eyes sitting immediately and waiting for your next command. Smart, so smart, and devilish to boot.

He knows how to make good

decisions, he just doesn't always feel like doing so.. kind of like the smartest kid in school sitting at the back of the class throwing spitballs!

Anthony is very companionable with other dogs. We'd like to see him in an adults only home. He will assume cats are play toys so best to stick with a dog friendly household.

Come and see Anthony, take him out on our woodland trail he walks beautifully on leash. You will fall in love.

Call 524-3252 or check www.nhhumane.org



FROM OUR READERS

Election common sense

To the Editor:

For the past 100 years, no president has ever been re-elected to office with unemployment above 7.2 percent. When you vote next Tuesday, unemployment will be about 8 percent. It has been 8 percent or higher almost every day since Obama was elected. There are still more people unemployed today than the day Obama took office. He says he created millions of jobs, while forgetting to mention he lost just about the same number. Unbelievably, some people are still considering a vote for Obama, defying the common sense precedent set by our mothers, fathers and grandparents over generations. I ask them, and I ask you, if what we have seen under Obama for the last four years does not represent complete and total

failure of the highest order, what in God's name does? Obama has been a one man wrecking ball of destruction to America on every level, economically and socially. Intransigent unemployment is just one negative side effect of what has been failed policy, failed decision making and failure to be the leader America so desperately needs.

Economy: It survives anemically on Fed life support, requiring 24/7 money printing stimulus in order to breathe. 2012 average economic growth is 1.7 percent. This year's economic growth lower than 2011. 2011 economic growth lower than 2010. In baseball, this would be like striking out 50 times in a row. During the same time period, Ronald Reagan created \$1.2 trillion more in

GDP output than Obama has, which supported brisk employment activity. The failure of Barack Obama is simply mind boggling. That anyone would still consider voting for such failure I find even more mind boggling.

Hiring: Our country's corporations and businesses are paralyzed from Obama induced tax uncertainty, and the impact of employee health care costs. Companies readily admit they are holding back hiring given the economic threats, political dysfunction and unknowns that hang above their heads like the sword of Damocles. Capital spending is on hold, while global investment in America dries up with concerns over lack of leadership to resolve roadblocks to progress. A record 42 million Americans are eating beans

tonight on food stamps for one reason. The President of the United States refuses to lead, negotiate and problem solve. He has been on the road for a year, fundraising, flip flopping, demonizing and dividing America consumed with what deodorant Mitt Romney uses. All as America teeters on the brink of financial disaster eight weeks from a fiscal cliff of spending cuts and tax increases Jan. 1 that every economist guarantees will put us back in recession if not reversed. Obama refuses to talk about the cliff, the future insolvency of Medicare & Social Security, or the now bankruptcy of the U.S. Post Office. Could presidential failure be any clearer.

Tony Boutin
Gilford

Support your democratic candidates on Nov. 6

To the Editor:

To the voters of Gilford and Meredith, I'm asking for your vote for one of the Belknap County District #2 State Representative seats on Nov. 6, and your support of my Democratic colleagues running for the other three seats - Lisa DiMartino of Gilford and Kate Miller & Sandy Mucci of Meredith.

I offer you a candidacy with the deepest and most varied experience. In terms of government service, I have served previously two terms in the New Hampshire House of Representatives, and I am currently an Incorporator of the Belknap County Economic Development Council. I have been a small business owner, managed

numerous local non-profits, and held various management positions in private business since the 1960's.

I served in the US Marine Corps. I have been an educator on the college and high school levels in New Hampshire, holding graduate degrees in Political Science. I have shown my dedication to Lakes Region communities and its citizens through my volunteer work with the St. Vincent de Paul Society, Ozanam Place and the Neighbors in Need fund. I was honored to share with my wife, Erika, the 2006 Norm Marsh Award for "exceptional leadership" in the Lakes Region. Erika and I will celebrate our 45th wedding anniversary in February, have raised four

children, and now enjoy our eight grandchildren. We have lived in the Lakes Region for 21 years

I pledge to represent all of the voters of the two towns in every way I can – through communication and attention to our community needs. I promise to listen to your views and ideas and communicate my thoughts on the various issues facing state government. You will always know where I stand on important legislation. As I've proven in the past, I will do this with regular newspaper articles, telephone conversations, emails and public appearances.

I have been honored to run with Lisa, Kate, and Sandy in this election. They are can-

didates of outstanding experience, dedication, and perception. As a team, we offer the voters candidacies of moderation, practicality and bipartisanship. We look to find practical solutions to the problems of the state and our district, return civility and openness to Concord, and to deliver government services in an effective and efficient manner

We would appreciate your votes on Election Day. Regardless of how you vote, please vote on Nov. 6. The issues couldn't be more important. Thank you for your support.

Bill Johnson
Gilford

Time to throw the rascals out

To the Editor:

The system is broke, and the voters are now overdue in throwing the rascals out.

To open with my qualifications with respect to evaluating the system as being

broken: In my 63 years of voting, I have only missed one election due to having relocated, and thereby missing the residency requirement in our new state. Which is to say that I am boasting that I

have a 100 percent attendance record for all the elections in which I was qualified (even without a photo ID!).

Consider my position on why the voters should be turning all the rascals out ...

In the nation's Capital, the Republicans had only one objective in mind, which was to make Barack Obama a one-term president. That translated into the non-actions of the House of Representatives whereby they opposed any of the President's proposals to improve the economy. Mind you, the nation's population was caused to suffer longer than need be all in order for the electorate to be unhappy with the President's "non-performance" and vote for the other guy on Nov. 6.

Those rascals are overdue for being thrown out.

In Concord, it is a different, but also worthwhile, reason for turning the rascals out. The New Hampshire legislature became the juicy fodder for all the late-night TV comedians to poke fun at the latest stupid — and hilarious — action that the majority party had performed by following their leader, Speaker O'Brien. One can only be reminded of the song "Bring In The Clowns."

Which is my second case in point: the New Hampshire legislature is even more evidence that the rascals deserve to be thrown out.

Fellow voters, think about your agreement or disagreement with what I have written above. And then vote accordingly.

Respectfully submitted,
Bob Longabaugh
Alton Bay

Send us your letters!

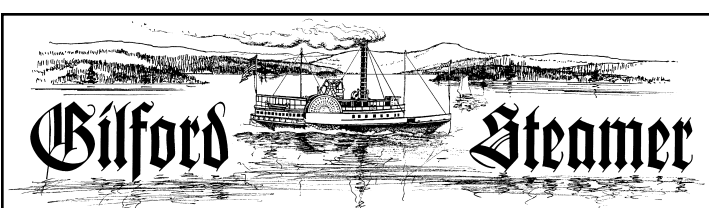
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Frank Chilinski, President & Publisher

Brendan Berube, Editor

Erin Plummer, Reporter

Josh Spaulding, Sports Editor

Jeff Lajoie, Sports Reporter

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Judy Manning, Classified & Circulation Manager

Jim Hinckley, Distribution Manager

Ryan Corneau, Information Manager

Email: steamer@salmonpress.com

Classifieds: jumbo@salmonpress.com

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FROM OUR READERS

O'Brien will have one of my votes

To the Editor:

Well, Election Day is fast approaching, and I have been evaluating the candidates for the House of Representatives from the Gilford-Meredith district. Since there is no sure way of assuring that two representatives will come from each town, I will have to choose four of the candidates to vote for. To begin with, I have always voted for the candidate I thought would do the best job repre-

senting me. In other words, I vote for individuals, not parties.

I have been disappointed in the partisan behavior and lack of civility in politics in general in Washington and Concord. I believe that government doesn't work as well when it comes from the extremes of left or right as it does when it comes from the middle. I expect that people elected to represent me will try to improve the state for

the benefit of its residents, and will be prepared to compromise to get the job done.

With that in mind, one of my four votes will go to John O'Brien. As an Independent candidate, he can represent our interests, not those of any particular party. He will not take his marching orders from either party boss. John has shown his devotion to the Gilford community by serving and continuing to serve as a Gilford Selectman. He

has also shown his loyalty to our country by courageous service in Viet Nam for which he was awarded a Silver Star, a Bronze Star, and the Viet Nam Cross of Gallantry. He obviously has the courage to stand up for his beliefs. John is one of the four candidates I am going to vote for.

Peter Millham
Gilford



PHOTO BY BONNIE CARNIVALE

Monument Valley from Goulding's Lodge.

The Four Corners of the Southwest

Editor's note: The following journal entry chronicles contributing writer and Gilford resident Bonnie Carnivale's journey through the Southwest from Aug. 28 to Sept. 9, 2012.

Day Six: Culture Shock, A Day of Contrasts

We left Monument Valley this morning driving east. We had been in Navajo country for days; the land that seemed so forbidding was soon reflected in our rear view mirror. It difficult to explain what it was like. Strikingly beautiful but desolate; the Navajo friendly but wary. Poverty appears to be their way of life. Is it a choice? Is cultural simplicity and respect for the environment the reason they live so simply? Monument Valley is a tourist destination; a drive-by to gape at the iconic monoliths, spectacular no doubt but once experienced it was time to move on.

As we drove, the landscape began to change. Sandstone became limestone, not as visually aesthetic; Ute Territory. As we approached Cortez, Colo., the views abruptly changed to green fields, shade trees and distant mountains. We had opted to drive to Telluride, a ski town and host of a film festival taking place this very weekend. The drive was at first lovely

along the Delores River, then eye popping as the mountains arose. As far as beauty is concerned Telluride, tucked away from the interstate, surpasses Aspen and Vail, in our opinion. But the culture shock, from stark Navajo country to opulence, was disturbing.

The town is charming with upscale stores and restaurants. Oh yes, the bank in town was the site of Butch Cassidy's first bank robbery. We enjoyed mountain vistas from the free gondola built solely for easy access to Mountain Village, a ski resort. The Village is home to hotels, condos, restaurants, shops, and banks designed around a central plaza, very European. \$\$\$\$\$

We drove 72 miles back to Cortez, then 9.5 miles down County RD G, then three quarters of a mile on a dirt road to Kelly Place B&B, adobe, rustic, set on 100 acres of land, including a canyon with numerous Pueblo ruins and artifacts. We checked in and settled and before we could say Anastazi, our hosts were gone and we had the place to ourselves. It was a delight to have a comfortable outdoor space for cocktails and a picnic dinner on the patio followed by a stunning sunset. I stayed out until I there was no more light by which to journal.

The right candidates no longer represent the Democratic party

To the Editor:

Can you imagine if we had a state law that forced you, as a homeowner, to pay to join an organization just because your neighbors have voted to join that organization? The rationale for this organization would be that it's for the good of the entire neighborhood, and protects your property values. I think we would

all scoff at that idea. How could there be a state law that would force us to do this?

Well, that is exactly what the Right to Work issue is all about. If workers want to unionize, they should not have a state law that forces their co-workers who do not want to join to pay anyway. It is just plain wrong.

Our Democratic House

and Senate candidates favor a continuance of this flawed philosophy. Why? Because they have taken money from these same organizations, and they want to win those members' votes. It is just wrong for politicians to favor this kind of role for the state government. It just goes to show, you we don't have the right candidates represent-

ing the Democratic Party anymore. How far they have fallen from the time when the Democrats favored the rights of the individual. As a registered independent, I will be voting for our Republican House and Senate candidates.

For liberty,

Barbara Aichinger
Governor's Island
Gilford

Honest budgeting and living within our means has created jobs in NH

To the Editor:

Rather than highlight their goals and their plans to improve life in the Granite State, New Hampshire Democratic hopefuls continue to try to cloud, mislead, slander, and distract voters who should instead be evaluating the efforts of the current Republican Senators and Representatives, as they have successfully addressed budget deficits, practiced fiscal responsibility, succeeded in creating jobs and in welcoming new businesses to New Hampshire.

The budget submitted in the past term by the Republicans—one which few Democrats supported—has created New Hampshire jobs and encouraged job growth;

it lowered taxes and fees; it balanced a budget facing a near billion-dollar deficit. Facts are facts, so what is the real truth?

Let's look at the numbers: in June 2011, according to the U.S. Department of Labor, 696,375 New Hampshire residents were working. In February 2012, the report showed 704,283 employed New Hampshire residents. That's an increase of 7,908 jobs since Republicans' state budget took effect in July 2011. 7,908 jobs equates to an average of almost 1,000 new jobs every month for the past eight months. Democrats can scream about social issues and try to take the focus off the economy but they can't argue facts. The Republican

budget has worked—without requiring the increase or addition of a single tax or fee.

Now, let's take a walk down memory lane: remember the fiasco that was the Democrats' LLC and campground taxes of 2009. Let's remember how the Democrats raised many different taxes and fees that took hard-earned money from your family and wasted it on a bloated, over-spent budget. Let's remember SB 500, which paroled violent criminals early. Let's remember that in the midst of a recession, Democrats were debating transgender bathroom bills and trying to find more ways to spend your money on non-essentials at a time when money was short and

each family had to stretch their income to put food on the table, gas in the car, heating fuel in the tank, and keep their mortgage payments current.

When the Democrats are slinging mud in an effort to distract you from the New Hampshire Republicans' job-creating success and our honestly balanced budget, don't forget their track record and their failures.

Please support your Republican candidates to keep New Hampshire moving forward. We ask for your vote on Nov. 6.

Respectfully submitted,

Colette Worsman
NH House of Representatives
Gilford & Meredith

Make your voice heard on replacement of GES playground

To the Editor:

According to the long range strategic plan, the Gilford Elementary School playground is due to be replaced in 2015-16. However, a number of staff and community members have expressed their desire to expedite the process, due to safety concerns and difficulty supervising the area. I have been approached by a number of parents who have offered to fundraise and write grants to help fund this project. I understand that this is a

sensitive issue, and that there are community members and staff on both sides. Before any fundraising can occur, we will need to come up with a playground design. I believe an extremely important part of the process is to obtain ideas, suggestions and feedback from students, staff and community members before moving any further with this project.

I would like to invite you to join us in the GES library on Nov. 13 at 6:30 p.m. for an open discussion to share

ideas and address concerns regarding construction of a new playground. We have solicited a third party, Karen Welford, Director of the Family Resource Center, to help facilitate our discussion, ensuring everyone's voice is heard regarding this important topic.

I look forward to hearing your thoughts and ideas.

Thank you,

Danielle Bolduc
Principal
Gilford Elementary School

We support Bill Johnson

To the Editor:

Bill Johnson of Gilford is passionate about supporting families. His credentials include experience as a New Hampshire legislator, educator, successful businessman, dedicated community servant and family man. He is always open to hearing our viewpoints and communicating about key community issues. That's why we are voting for Bill for state representative for District #2!

Butch & Judi Taggart, Gilford
Erin MacNamara Friedman, Gilford
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Dennis & Sally Doten, Gilford

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OBITUARIES

Gerhard Robert Hassler, 84

LACONIA — Gerhard "Jerry" Robert Hassler, 84, of Gilford, died at Laconia Rehabilitation Center-Genesis on Friday, Oct. 26, 2012.

Mr. Hassler was born Sept. 7, 1928 in Austria, the son of the late Luisa Born.

He was a long time resident of Framingham, Mass. before moving to Gilford. He had been employed as a travel agent for Crimson Travel for 25 years.

Mr. Hassler was a communicant of St. Joseph Parish in Belmont.

Mr. Hassler traveled extensively around the world, and spoke seven languages. He was an avid sports enthusiast and played profes-



COURTESY PHOTO

Jerry Hassler

sional hockey.

Survivors include his wife, Rose Lucy Hassler of Belmont; two sons, Rick Hassler and his wife Jolie of Gil-

ford and Gary Hassler and his wife Karen of Switzerland; and seven grandchildren (Danielle, RJ, Mike, Mark, Max, Nick and Janelle).

There will be no calling hours.

A prayer service will be held on Sunday, Nov. 4, 2012 at 10:30 a.m. at St. Joseph Parish, 96 Main St., Belmont.

Wilkinson-Beane-Simoneau-Paquette Funeral Home & Cremation Services, 164 Pleasant St., Laconia, is assisting the family. For more information and to view an online memorial, go to www.wilkinsonbeane.com.

Bernice E. Sears, 80

NEW BERN, N.C. — Bernice E. Sears, formerly of Gilford, passed away on Oct. 2, 2012 at Carolina East Medical Center in New Bern, N.C. after a brief illness. She was 80 years old.

Bernice was born in Abington, Mass. to the late Wesley and Ethel Sears. She graduated from Rockland High School, Rockland, Mass. and Westfield State Teachers College, Westfield, Mass. Ms. Sears was involved in elementary and

middle school education for 41 years. Her teaching career started in Massachusetts; she then spent seven years in California, and finally returned to New England and taught at Gilford Middle High School from 1980-1994. There, she loved to share her appreciation of reading and language arts with her sixth grade students.

Bernice was instrumental in keeping the Friends of the Gilford Library going during the 1980's and 1990's, and pub-

lished their newsletter. In 2005, she moved to Grantsboro, N.C. to be near her family.

She is survived by her sister, Janice S. Davis and brother-in-law, Arlen "Dave" Davis of Grantsboro, and several nieces, nephews, and great nieces and nephews.

In her memory, donations can be made to: The Friends of the Gilford Public Library, 33 Potter Hill Rd., Gilford, NH 03249.

NH's Lakes Region to be featured in Essentially America magazine

TILTON — Amy Landers, Executive Director of the Lakes Region Tourism Association, has announced that the international publication Essentially America will feature the Lakes Region of New Hampshire and its autumn glory in their "North America's Best Fall Foliage Towns and Villages" article.

The issue is packed full of excursion ideas for "leaf peepers" in the Lakes Region of New Hampshire, including cruising with the M/S Mount Washington as the best fall foliage viewpoint and taking in views from Castle in the Clouds.

"We are so honored to have

the Lakes Region of New Hampshire recognized by Essentially America magazine for our beautiful fall foliage," states Landers. "Many people think of the Lakes Region in New Hampshire as a summer destination, especially with Wolfboro being the 'Oldest Summer Resort in America,' as the article states. While this is certainly true there's truly nothing like an autumn day touring our lakes and mountains!"

The Autumn 2012 Essentially America issue is on stands now, and would be a great collector issue for anyone who lives and loves the Lakes Region of New Hamp-

shire. The Lakes Region Tourism Association is the official tourism board of the region, representing close to 100 communities, 273 lakes and ponds, and more than 400 businesses in central New Hampshire, including area attractions, restaurants, retail establishments and accommodations. For more information or visitors guides, visit LakesRegion.org or follow on Facebook or Twitter. The LRTA office and Visitor Center is located at 61 Laconia Rd., Tilton, just off Exit 20 on I-93 and can be reached by calling 1-800-60-LAKES or 286-8008.

SCORE Lakes Region to offer QuickBooks workshop

PLYMOUTH — SCORE Lakes Region is offering a QuickBooks Workshop for Small Businesses on Wednesday, Nov. 7 in Plymouth.

It is well known that the vast majority of small businesses utilize QuickBooks accounting software to satisfy their bookkeeping needs. Often, however, to become proficient in the use of this tool an introduction to basic financial management and how the software operates are needed.

During this interactive session key discussion topics will include: Financial Management Introduction, Essential Concepts & Terms, Why Accounts are Important, QuickBooks setup & operations, Using Reports within

QuickBooks, and Managing Essential Tasks.

The co-presenters are Kandi Edson, C.P.A. Edson possesses a wide variety of audit, tax and consulting experience in many industries including construction, real estate, service and non profit organizations. Her practice covers tax issues and strategies, tax planning for businesses and servicing high net-worth clients.

Marsha Felder, co-founder of a successful cable system company, managed a wide array of small business operations. Her extensive experience with various accounting and manufacturing business software provides her with a real world perspective. She

has been a QB user for 20 plus years and currently provides QuickBooks consulting to small business owners

The workshop will take place from 5-8 p.m. at Pease Public Library, located at 1 Russell St., Plymouth, NH, NH 03246. For more details and to register, call SCORE Lakes Region at 524-0137, or preferably visit www.lakesregion.score.org. A \$25 tuition paid upon registration or \$30 at the door is required. Veterans and students may attend free. SCORE counselors will be there to answer your business question. Also, attendees may register for one-on-one business mentoring for the life of your business.

Lakes Region Chordsmen hosting spaghetti dinner

The Lakes Region Chordsmen Barbershop Chorus having completed another successful summer season in Weirs Beach, and is offering a spaghetti and meatball dinner/concert with quartets and silent auction.

Dinner will be catered by Patrick's Pub & Restaurant Nov. 11 at 5 p.m. in the Gilford

Community Church hall in basement. The church is located at 19 Potter Hill Rd., Gilford. Tickets are \$8 adults, \$4 children 15 years and under. Contact Ed Farmer, 253-8523, Harvey Beetle 528-3073 or any chordsman for tickets.

Those having items to donate for silent auction, please contact Bob Burke at 875-

0022.

For those who have attended our last two Christmas dinner cabarets, this dinner replaces it.

We continue to look for men who enjoy singing.

We meet Monday nights in the same location as above from 7:15 to 9:30 p.m.

Quilters Guild to host wallhanging workshop

LACONIA — The Belknap Mill Quilters Guild will be holding a workshop to complete a "Woven Sunflower" wallhanging on Thursday, Nov. 29, at the Laconia branch of the Meredith Village Savings Bank from 9 a.m. to 3 p.m.

The workshop will be led

by Sue Collier of Michigan, an experienced quilter who visits the Lakes Region annually. She will teach the technique of weaving strips together, fusing and stitching with a raw edge applique. The project does not have to be quilted after completion.

Cost for the class is \$20 for

members and \$35 for non-members. A kit which includes all materials except the backing and border can be purchased for \$45 in advance.

Quilters should contact Linda McCloskey at 293-2975 to register.



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New Urban Farmers to speak at GMS

On Thursday, Nov. 8 at the Gilford Middle School, Gilford, starting at 6:30 p.m., the New Urban Farmers, a successful project based inner city agricultural organization operating in Rhode Island, will present an overview of their group, its mission, and success stories.

A few of the projects of note for the New Urban Farmers are the start up of a mobile farmers market, a one acre intensive growing operation within a housing develop-

ment, the use of geodesic dome greenhouses, and incorporating aquaponics into their production methods. This organization believes that "through a small system of satellite farms within the city - not only can we grow food but we can rebuild our community - Growing minds is our job - what grows from there is limitless!" Also part of the presentation will be John Lash, Food Service Director for the Gilford School system and Kevin Halligan of the Local

Eatery in Laconia to discuss how they find and incorporate locally grown foods into their menus.

Locally grown/produced refreshments will be served at this event. There is a small fee to attend this program and the registration deadline is Nov. 5. For more information on the program, please contact the Belknap County Conservation District at telephone 527-5880 or visit the Web site, www.belknapcccd.org, to download the registration information.

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Humane Society in search of local foster families

BY DONNA RHODES
DRHODES@SALMONPRESS.COM

LACONIA — October was Adopt a Shelter Dog Month, and while 14 of the New Hampshire Humane Society's friendly canines found a forever home, many more are still looking for love.

That's why NHHS director Marylee Gorham is looking to develop a bigger pool of foster families to help some of her four-footed friends still living at the shelter.

"We have quite a few dogs who would do much better in a home situation until they get a permanent home," Gorham said.

Currently, 40 dogs are still in residence at NHHS, and good foster care, Gorham said, is very much in need. Whether for socialization or to recuperate from minor medical problems, many of those dogs would do better in a comfortable home environment.

Fostering is usually limited to two months per household so people don't grow too attached to an animal they volunteer to temporarily care for. Gorham said she also gives plenty of notice when a dog will either return to the shelter or move on to a permanent or new foster home.

"Personally, I feel it's just good to have a cut-off time for fostering. We'll even send someone out to help people detach because it's easy to fall in love with an animal in a short time," Gorham said.

Those willing to take a dog, or even select members of the facility's cat population into their household find many rewards for their generosity. Besides enjoying the animal's company, foster homes help develop well-rounded, socialized pets.

While some people may eventually decide to adopt the animal they harbor, that is not the purpose of the program however. NHHS simply hopes to make these animals feel comfortable and valued as they await an adoptive family.

"Dogs are adaptable creatures who live in the moment, and are so appreciative of anyone who cares for them. You can help pay it forward to the people who eventually adopt these pets by having

them in your home for a short time, and helping them become a terrific part of a household," she said.

In the meantime, veterinary needs of all fostered dogs are provided by NHHS, and foster families may also be asked to bring the animals to the shelter to visit with anyone interested in adopting them.

"None of that is up to the foster homes. These are our dogs, and we'll handle their medical needs and the adoption process, if that arises," said Gorham.

Many people see photos of dogs up for adoption in the Humane Society's Pet of the Week columns, and would like to select the dog they foster, but in actuality, she explained, that dog may not be suited for their home or the fostering program. NHHS staff members decide which dogs are most in need then fit them with appropriate foster homes.

"If people wish to work with particular breeds, though, we do keep that in mind as needs arise," she said.

Interested parties are asked to fill out an application for the program and need to be willing to have a brief safety and security check of their residence. Friendly, well-mannered pets already in a home are not an issue but ideally NHHS would like someone who will be around throughout the day to work with any dog they take in and provide them with proper instruction and companionship.

"These dogs have a real need to be part of a home, so it's important for people to spend a lot of quality time with them," she said.

Beside the foster program, NHHS also has Pet Therapy programs at several locations in the region. Shelter dogs with good manners and a real love for social settings get the opportunity to "get their face out there" in public to help people.

Through Pet Therapy, both humans and canines reap the benefits of "puppy love." It has been shown that interaction with a dog can relieve stress and anxiety and bring a smile to the infirm and eld-

erly, as well as having a calming effect on people of all ages.

As an added benefit, that occasionally results in these dogs finding a permanent home.

"We've had a few nurses and families adopt the dogs we've brought in for Pet Therapy so that's been wonderful, too," said Gorham.

NHHS brings their dogs to visit places such as the New Hampshire Veterans' Home, Forestview Manor, Meredith Bay Colony, Golden View Healthcare Center, Genesis Behavioral Health and the Belknap County Nursing Home.

"We could always use outside certified therapy dogs to join us though on these trips if anyone owns one and is interested," Gorham added.

To apply for the fostering program or inquire about signing a certified therapy dog up to join the Pet Therapy program, people are asked to contact NHHS at 524-3252, stop by their facility at 1305 Meredith Center Rd. in Laconia, or visit their Web site, www.nhhumane.org to learn more on how they can help.

Youth Basketball registration deadline is Nov. 13

The Gilford Parks and Recreation Department is currently accepting registrations for the Youth Basketball Program for Gilford children in grades one through six. The registration deadline for all divisions is Tuesday, Nov. 13. Any registrations submitted after the 13th will be accepted on an availability basis only.

For more information, please contact Parks and Recreation Director Herb Greene at 527-4722.

Gunstock Ski/Snowboard Program registration deadline Nov. 15!

The Gilford Parks and Recreation Department is once again sponsoring a six-week learn to ski/snowboard program to be held at Gunstock Ski Area for Gilford children in grades K-6. This program will be running from 4:30 - 8:15 p.m. every Tuesday from Jan. 8 - Feb. 12, 2013. There is also rental equipment available to those who need it. Registration deadline is Thursday, Nov. 15. No registrations will be ac-

cepted after this date!

For more information please contact Parks and Recreation Director, Herb Greene at 527-4722.

Senior Moment-um Dinner and Theatre Night, Nov. 15!

Gilford Parks and Recreation, in conjunction with the GHS Interact Club and GHS Performing Arts, is sponsoring a Dinner and Theatre evening for participants of the Senior Moment-um Program. This activity is scheduled for Thursday, Nov. 15. Participants will meet in the Gilford High School Lobby at 5 p.m. to enjoy a nice pasta dinner put on courtesy of the High School Interact Club. Following dinner we will head into the Auditorium to watch the High School's performance of "Into the Woods." There is no fee for this program, but space is limited and reservations will be accepted on a first come basis. Participants must RSVP no later than noon on Friday, Nov. 9.

For more information or

to RSVP, please contact the Gilford Parks and Rec. Department at 527-4722.

Celtics Bus Trip tickets now available!

The Gilford Parks and Recreation Department is sponsoring a trip to watch the Boston Celtics play the Orlando Magic at the Garden on Friday, Feb. 1. Travel to and from the game will be provided aboard a Coach Company Luxury Coach fully equipped with climate control, DVD video system and lavatory. This trip is open to Gilford residents only; however, any tickets unsold as of Nov. 15 will be made available to residents of other communities. The cost of this trip is \$80 per participant, and includes your ticket to the game and travel aboard the coach bus. This trip is limited to 27 participants, so register early!

For more information, please call the Gilford Parks and Recreation Department at 527-4722.

Welcome the season at UMC's Glad Tidings Christmas Fair

Enjoy a wonderful start to the Christmas season by attending the Glad Tidings Christmas Fair Saturday, Nov. 10 at First United Methodist Church in Gilford.

The festivities begin at 9 a.m., when there will be plenty to see and do. Browse through various tables to pick out Christmas gifts for everyone in your family. Among the many selections will be handcrafted knit and sewing items, antiques and collectibles and a wide array of jewelry items. There will be a room filled with books, a flea market room and many items of holiday décor.

In the Fellowship Hall, you will be treated to a large bake sale and cookie walk, house plants, jams and jellies, and many items provided by local crafters who set up their tables year after year at this popular fair. In toyland, Santa and Mrs. Claus will be on hand to greet young children and take



COURTESY PHOTO

Enjoy a wonderful start to the Christmas season by attending the Glad Tidings Christmas Fair Saturday, Nov. 10 at First United Methodist Church in Gilford.

their wish lists. Bring a camera to save this special moment.

In addition, chairperson of this event Jane Reep tells us, "We are always adding new things. This year, we are offering an Arts and Crafts

Gallery, under the direction of well-known local artist, Marlene Witham, showcasing local art. SEE GLAD TIDINGS PAGE A11

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Officer Orton of the Laconia Police Department and Laconia High's SRO (School Resource Officer) works with Amy Burke, Career Support Specialist at the Huot Technical Center to finalize the list of guest speakers for the event.

COURTESY PHOTO

200x2020 Initiative to host career exploration panel

LACONIA — A career exploration panel for high school students will be offered by the 200x2020 Initiative on Thursday, Nov. 8 at the Huot Technical Center to provide information about careers in Law, Public Safety, Corrections and Security.

The panel will run three times over the course of the day. Students from any Huot Center sending school may attend during their school's regularly scheduled block at the Huot. Permission slips are required for this event and may be obtained through each high school guidance department. The schedule is as follows:

9:03 to 10:33 a.m. (Franklin High School & Gilford High School)

10:36 a.m. to 12:06 p.m. (Laconia High School & Belmont High School)

12:34 to 2:04 p.m. (Winnisquam Regional High School & Inter-Lakes High School)

The list of panelists includes Superintendent Ward from the Belknap County

Jail; Chief LaChapelle of the Franklin Fire Department; lawyer Emily McLaughlin of McLaughlin Law Office; lawyer Matt Huot of Wescott, Dyer, Fitzgerald & Nichols; Leslie Cartier, Hazardous Materials Coordinator with New Hampshire Department of Safety; Park Ranger Traci Shorb with the National Parks Service; Allen Coen of the Fire Technology Program at Lakes Region Community College; and Captain Canfield of the Laconia Police Department, who is also involved in the Huot's Law Enforcement Program.

This event is the first of four career exploration panels organized by the 200x2020 Initiative for the 2012-13 academic year. The panels are designed to provide information and guidance to high school students seeking to learn more about local career options. The other panels this year are:

Architecture & Construction on Jan. 11, 2013

Science, Technology, Engineering & Mathematics

and Advanced Manufacturing on March 15, 2013

Arts, Audio/Video Technology & Communications on May 3, 2013

The 200x2020 Initiative is a workforce development partnership between Lakes Region United Way, Lakes Region Chamber of Commerce, Belknap County Economic Development Council, Lakes Region Community College, the Huot Technical Center, Greater Meredith Program, NHWorks, and many school-to-career coordinators and guidance counselors from our local schools. The goal of the partnership is to get a minimum of 200 businesses signed on by 2020 to provide local students access to a full range of vocational, technical and occupational experiences throughout the school years to support our region's long-term workforce development needs. In addition to the career exploration panels, 200x2020 is currently developing an on-line database of high school internship and job shadow opportunities in the Lakes Region which will be available starting in the 2013-14 school year.

Regional manufacturing leaders support LRCC curriculum

LACONIA — Lakes Region Community College received unanimous support Friday from more than 20 regional advanced manufacturing leaders of the curriculum it is designing to prepare New Hampshire workers and job seekers for success in high-skill, high-tech positions.

The voice vote was taken during a meeting of LRCC's "business advisory committee" to update entrepreneurs on progress the school has made under the \$19.9 million federal Trade Adjustment Assistance Community College and Career Training grant, approved in 2010 and awarded to Great Bay Community College in Portsmouth and its six consortium colleges. Funds from the grant are being used to develop or update advanced manufacturing curriculums and laboratories across the Community College System of New Hampshire.

The initiative has been embraced by manufacturers across the state, who have struggled to find enough qualified people to keep up with demand for their products, which are used by companies in industries as diverse as aerospace, medical and automotive.

The call for help was repeated Friday, with Gary Groleau, corporate manager of labor relations for New Hampshire Ball Bearings, based in Laconia, saying the discussion of how to create a pipeline of qualified job applicants for companies desperate for workers began years ago and "the hiring problem is not going away."

"We need an orderly way to bring new people in," he said. "We need a program like TAACCCT to do it."

Carl Daniels, energy services and technology head at LRCC and former Aavid Thermalloy employee,

agreed, and added that the workforce need is nationwide.

"These are good people," he said of the hordes of job seekers, from recent high school graduates to veterans returning from military service, to workers displaced due to layoffs, to currently employed people whose skills have fallen behind current technologies. "But they just don't know how to do the work."

The curriculum being developed at LRCC and the six other colleges in the consortium was developed to align directly with the needs of regional manufacturers. Business leaders were brought in to guide the development process and have even donated thousands of dollars in equipment to ensure a smooth transition from training and education programs at the community colleges onto the manufacturing floors of their companies.

The curriculum approved by manufacturers Friday includes courses as part of an advanced manufacturing certificate; an associate's degree program is in the works. Courses cover machine processes, blueprint reading and solid modeling, computer numerical controlled machining and machine tool math.

Math, in particular, is a concern of employers looking to make hires, but going to college to brush up or learn it "doesn't have to be scary," according to Jennifer Scotland, director of the WorkReadyNH site at Great Bay Community College in Portsmouth. The program, free to people ages 18 and over who are unemployed or underemployed and who are not full time students, provides professional assessments to participants in technical and soft skill competencies, pro-

vides 60 hours of training and then awards tiered certifications, which job seekers can cite as part of the application process and which can help employers quickly sort resumes.

A gateway program aimed at decreasing unemployment, it is considered an accessible first step of sorts toward earning a full degree.

WorkReadyNH sites, funded in part by the TAACCCT grant, are up and running at four of the seven community colleges, and a location is expected to open soon at LRCC.

The words "urgent" and "need" were used repeatedly during the meeting, and are no surprise to Don Brough, TAACCCT project director at LRCC.

Excited about the unanimous vote of support for the new curriculum, he said as he showed off space that will house a new manufacturing lab at LRCC that the college's industry partners are crying out: "You must do this!"

And as he plans the layout of the lab, purchases computers and other equipment and adds to the growing list of industry supporters, he's happy to oblige.

After all, he said, Laconia has a lively history of manufacturing, and he wants to take it into the next generation.

To learn more about the TAACCCT grant in New Hampshire and advanced manufacturing programs at Great Bay Community College, Nashua Community College, Manchester Community College, NHIT - Concord's Community College, Lakes Region Community College, River Valley Community College and White Mountains Community College, email TAACCCT marketing coordinator Desiree Crossley at dcrossley@ccsnh.edu.

Lakes Region Tourism Assn. awards scholarship

MEREDITH — The Lakes Region Tourism Association announced the winner of their two scholarships at their annual meeting held on Oct. 17 at the Lyons' Den in

Meredith.

Anca Muresan of Transylvania, Romania was awarded the Mildred A. Beach Hospitality Scholarship. The award has been given annually since 2001 to a student majoring in the hospitality field. Muresan is a student at Lakes Region Community College, where she is president of the Hospitality Club. In addition to studying Hospitality management, she works at the Common Man Family of Restaurants part-time managing Lago and full-time serving at the Lakehouse Grille.

The LRTA also awarded the first annual Mel Borrin Scholarship in honor of Melvin "Mel" Borrin, a past president, board of directors member and treasurer of the association, to Sarah Man-

zoni of Italy. Manzoni is a BA Honors Student at Plymouth State University studying in the Business Administration Program. She has worked in the hospitality industry in Italy, Spain and England and modeled for Abercrombie & Fitch. Currently she works as a tutor at Plymouth State University and plans to start work in the Center of Global Engagement Office at the University soon.

The Lakes Region Tourism Association is the official tourism board of the region, representing close to 100 communities, 273 lakes and ponds, and more than 380 businesses in central New Hampshire, including area attractions, restaurants, retail establishments and accommodations. For more information or visitors guides, visit LakesRegion.org or follow on Facebook or Twitter.

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Adrian Anantawan began studying violin at age nine. In 1999 and 2000, Anantawan earned positions with the National Youth Orchestra of Canada, becoming one its youngest members both years. He is currently a student at the Harvard Graduate School of Education. Throughout his musical career, Anantawan has won many music awards and has received numerous recognitions. He received the Starling Award for promising young soloist from the Meadowmount School of Music and the International Rosemary Kennedy Award. In 2005, he debuted at the Kennedy Center, Washington D.C. In September 2006, he performed at the White House to help launch the President's Global Cultural Initiative.

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It's not my back yard, it's everyone's, as a get-rich scheme goes haywire



By JOHN HARRIGAN
COLUMNIST

The people pushing the Northern Pass proposal, the gigantic for-private-gain transmission line that would cut a whole new gash down through 40 miles of some of northern New Hampshire's most scenic landscape, have been telling loggers and truckers and contractors, local scuttlebutt says, that the project is a done deal — that the proponents have nailed down the last pieces of property and the project is now a "Go."

Not true. A friend of mine in Pittsburg, where the line's 180-foot-wide right of way and 85-foot towers would cross from Lower Quebec into the United States, caught me at the office the other day.

"Hey, everybody's talking about Northern Pass finalizing its route," he said. "They've bought the last pieces of land, and it's a done deal."

No, it's not, I replied, and anyone who reads the newspapers, both local and statewide, would know it. There are four landowners whose properties are now under conservation contracts with the Forest Society, and no way is Northern Pass getting through there.

"Well, they're still saying that it's a done deal," he repeated.

"Well, they're not reading the newspapers," I said again.

Meanwhile, Northern Pass staged two dining events, one at the Inn at Whitefield and the other at Log Haven on Route 26 in Millsfield, at which it laid out what kind and number of jobs might be created and what materials might be purchased locally. Churlish cad that I am, I wondered, considering the rumor all along that Northern Pass promoters had a war chest of \$16 million to throw around as sort of chump change, what the menu might look like. Steamship round of beef seemed a good bet, and maybe lobster stew, but I haven't heard from my spies yet.

People who were at the events confirmed what many observers already knew, that the best-paying jobs would be going to workers and companies that specialize in building a big powerline, which only makes sense. This was the case, after all, with the pipeline and wind tower projects. The workers and companies that specialize in these narrowly focused endeavors literally travel all over the nation to take up temporary residence while applying their specialized skills to the task at hand.

Any and all employment on the project would be temporary, of course, and I give the actual effect on local employment a grade of "F" or, really, three F's — flipping burgers, folding sheets, and waving flags.

It's amazing to me that after all these months — nearly two years, actually, of the David-Goliath struggle over Northern Pass, so many people are still unaware of the scope of the project or the



PHOTO BY JOHN HARRIGAN

No huge towers would mar the view from my rooftop deck, with Vermont's Mount Monadnock and the ranges of the Northeast Kingdom in the distance, but that other big piece of wild and beautiful landscape over my left shoulder, out of sight, in East Columbia, Bungy and Stewartstown, well, that's sort of my back yard too.

devils in the details:

-Quebec's surplus hydro power, which it is desperate to sell, is not for the benefit of New Hampshire rate-payers. All along, it's been aimed at the Boston-Hartford-New York markets. What little is diverted to New Hampshire is projected to save rate-payers less than one cent per kilowatt hour.

-Even if some of the power were intended for New Hampshire, the state doesn't need it. New Hampshire exports almost 80 percent as much power as it uses.

-The line could be buried, largely along existing rights of way for highways and perhaps other transmission line corridors or railroad beds. Other companies' proposals and actual job sites — Maine, for instance — are showing that this can be done, and is indeed being done. The fact is that Northern Pass planners picked the shortest and least expensive and most profitable (for Public Service) route through a state it figured would roll over and play dead. Big mistake there. Instead, it got a fierce, vis-

ceral, grassroots reaction that swiftly turned into a populist land-based groundswell movement unlike anything in the North Country's history. It's a movement with no real leaders, no real structure, and not even a single name for itself. Someone stands on a hilltop and blows a bugle, and everyone comes on the run, to the State House, to another rally, to yet another strategy session, or to another march along Main Street. Think "Attack of the Mushroom People."

-How, by any stretch of the imagination, can Quebec's hydro-power be considered (or touted as) "green"? It has had disastrous and far-reaching effects on millions of acres of landscape, its wildlife, its vegetation, and its native peoples. Hundreds of thousands of acres of wildlife habitat have been drowned. Thousands of people have been displaced, their fishing and hunting sites and villages and burial grounds buried underwater. Billions of carbon-sequestering, oxygen-producing trees have been inundated, not even cut

and salvaged for use before the waters rose. Huge amounts of mercury are being released by decay, a little-known side-effect that takes 35 years to dissipate.

-Property owners abutting or overlooking the right-of-way corridor from Groveton to Franklin are in for a real shocker when crews start cutting trees to widen the swath to accommodate the huge new transmission line. It'll be like ramming I-93 down a two-lane country road. Wait 'til Channel 9 finally recognizes the full impact of Northern Pass and its blow straight to the state's mid-section. Film at 11.

-If Northern Pass planners were caught off guard by the fierce opposition from property owners and lovers of the landscape in the North Country, they ain't seen nothing yet, as the old saying goes. If the planners manage to find a route around the blocking tactic currently thwarting it in the Bear Rock valley in Stewartstown, it'll still have to have a special permit to enlarge its right of way through ten miles of the

White Mountain National Forest. And will there be uproar from local, state, regional and nation-wide conservationists over its horrendous visual impact? You bet.

-Finally, we all need to put this NIMBY garbage to the sword. This supposition that opposition to Northern Pass is just another "not in my back yard" example of people's selfishness is utter rot. We are not the Kennedys and other rich and privileged cottage owners in Hyannis griping about wind towers far out to sea. The vast majority of people opposing Northern Pass would not even be able to see if from their land, and I'm one of them.

No, I say whenever and wherever I have the chance, it's not NIMBY, it's EBY — everyone's back yard.

(This column runs in 13 weekly papers covering the northern two-thirds of New Hampshire and parts of Vermont's Northeast Kingdom and northwestern Maine. John Harrigan's address: Box 39, Colebrook NH 03576, or hooligan@ncia.net)

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Business is growing on Gilford East Drive

Gilford East Drive appears to be the hot new business avenue in the Lakes Region.

With the recent move of MacDonald Veterinary Clinic from Union Avenue in Laconia to the former Wainwright Insurance building, there has been a wave of business growth on this small Gilford corridor. Kevin Sullivan of Weeks Commercial was a driving force in helping Dr. Robert MacDonald and his wife Susan, select a location and space needed to expand the growing business of four years. The building located at 43 Gilford East Drive is positioning Dr. MacDonald with a future to double his business.

"Treating small companion pets (cat, dogs, small rodents) on Union Avenue in Laconia allowed for a great foundation for our business; however, the need for more space and a quieter environment for our pets was crucial to keep moving forward," stated Dr. MacDonald. "The building in Gilford was a great fit from the start, one that happened to be closer to the majority of our patients, as well as creating room to expand."

Dr. MacDonald also offers the exclusive veterinary clinic that treats chicken and other farm poultry in the State of New Hampshire; the peaceful environment of this location is perfect for their animal patients.

"The properties, land, and business spaces available on Gilford East Drive lent a perfect match for MacDonald's Veterinary needs," offered Sullivan. "Dr. MacDonald has certainly carved a niche for his practice in the Lakes Region, and this acquisition will assist him in meeting



Dr. Rob McDonald of MacDonald Veterinary Clinic, alongside office his team, Barbara Cavalley, De De Haley and Robin Fernald, give a warm welcome to their new location on Gilford East Ave. with Weeks agent Kevin Sullivan.

his goals for the future. The building is also home to Gator Signs and The Talon Hair Salon."

Additional Gilford East Drive activity and business growth can be seen with Bill Seed's, another Weeks agent, coordination of the former Gould's Garden Center ('Agway'), owned by Jeff and Tracy Gould, sale to Bill Finethy of Gilford Home Center recently opening Gilford True Value; and Sullivan's work with Rich Vickery on the acquisition of 29 Gilford East Drive, where Weldfab and Watermark Marine Construction are currently housed. Catherine Crear Owner, Esthetician at Skin Care Plus Day Spa opened her new business this year alongside Budget Tax Ser-

vice and More, LLP, a full-service accounting and tax services firm, where partners Shelli Boucher, CPA and Karen Winkelmann, CPA are dedicated to providing individuals and small businesses with professional accounting services of the highest integrity. These women entrepreneurs worked with Weeks agent Warren Clement and signed leases with MRRB - Real Estate Ventures at 57 East Gilford Drive. Five new businesses, one great location, and direct accessibility highlight a stable economic and business growth for 2012. There are still a couple of other opportunities on Gilford East Drive, for those looking to capitalize on this energy in the Lakes Region.



COURTESY PHOTO

After a couple of years of higher use than anticipated, the Morrill Street entrance road to Ramblin' Vewe Farm's trail system badly needed a face lift. Fortunately, several local corporations stepped forward and donated the material, transportation, heavy equipment and expertise to construct a new surface on our entrance road.

Local companies pitch in to repair Ramblin Vewe Farm entrance road

After a couple of years of higher use than anticipated, the Morrill Street entrance road to Ramblin' Vewe Farm's trail system badly needed a face lift.

Fortunately, several local corporations stepped forward and donated the material, transportation, heavy equipment and expertise to construct a new surface on our entrance road. Ramblin' Vewe Farm wants to publicly

express our gratitude to these local companies so members of our community who use our recreational trails will know who helped us out. Thanks to the following companies who donated the following services:

- Pike Industries donated the material, both ledge pack and asphalt.
- GMI Asphalt, Nutter Enterprises, Cormier Corporation and Belknap Landscap-

ing Co. hauled the ledge pack from Pike Industries facilities to Ramblin Vewe Farm.

· John H. Lyman & Sons did some of the initial construction.

· Breton Construction provided the equipment, time and expertise to fill, level and pack the new surface and pave the first 50 feet at the entrance.

Laconia Antique Center announces creation of Artisans Depot

LACONIA — The Laconia Antique Center has announced that plans are underway to convert the Depot Station featured within their 22,000-square-foot retail space as a venue for regional artisans.

The mock railway station will be renamed "Artisans Depot," and will feature an eclectic mix of fine art and handcrafted items offered for sale directly by the artisans.

According to Joan Hill, manager of the Laconia Antique Center; approximately 40 artisans will initially be accommodated. A committee of the Laconia Antique Center, which includes several local artisans, will have selected all artisans leasing exhibit/sales space. To ensure a diversity of work, a limit on the number of artisans working in a particularly medium/category has been established. The categories include, but are not limited to, clay, glass, wood, metal, photo, fiber, jewelry, and mixed media.

Any artisan interested in leasing sales/exhibit space can request an application form at the Antique Center's Customer Service Counter or by phone at 524-9484.

The Laconia Antique Center, which is now in its third



COURTESY PHOTO

Joan Hill (right), manager of Laconia Antique Center, admires the necklace designed by artisan, Sue Andrea, owner of Bella Beads in Center Harbor. Artisans Depot plans to feature Sue Andrea Designs along with the work of another thirty plus area artisans.

year, is one of New Hampshire's largest multi-dealer shops. More than 150 dealers offer a wide array of quality antiques and collectibles. The center also delights visitors of all ages with their restored soda fountain, Connie's Ice Cream Counter. The Laconia Antique Center is lo-

cated at 601 Main Street in downtown Laconia and is open daily except in the winter when it is closed on Tuesday. To learn more, call 524-9484 or visit their Web site at www.thelaconiaantiquecenter.com. Artisans Depot will open in mid-November.

Ford test drives net \$1,480 for Lakes Region United Way

LACONIA — The Lakes Region United Way's annual fund drive received a \$1,480 boost from Ford Motor Company on Wednesday, thanks to a "Drive 4 UR Community" event hosted by Irwin Automotive Group.

The fundraising event invites members of the public

to visit the dealership to test drive a new Ford. For each drive, Ford donates \$20 to the organization of the dealership's choosing. Up to \$6,000 could be raised at each event.

Betty Ballantyne, used car sales manager, said the dealership chose the United Way because, "we felt that touched

on many community organizations — we wanted to make the biggest impact."

This was the third such event hosted by the local dealership. The first two benefited the Laconia High School Band and Drama Club.

By the end of the day, 74 people participated in the event. Organizers reported that most-requested vehicles to test were Focus, Edge, F-150, and the new C-Max Hybrid, which the dealership first received only 10 days prior.

Dave Burnham, from Alton Bay, asked to take an Explorer for a spin. He said he came to the event because of the way Irwin does business.

"They do a lot for their community, they do a lot for their customers," he said. "If I'm around, I'll try to stop in."

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OPERA (Continued from Page A1)

"It's just fantastic to feel you're moving in the right direction, and you're being recognized for hard work," Oraftik said.

She received support from her boyfriend at the performance, though there was one person in particular she couldn't wait to share the news with.

"I can't wait to tell my mom," she said.

Jessica J. Jacobs of Boston won second place for her performance of "So anch'io la virtu magica" from Gaetano Donizetti's opera "Don Pasquale." Jacobs received \$500 from Meredith Village Savings Bank.

Third place of \$250 from Opera NH went to Robyn Lamp of Boston for her performance of "Depuis le jour" from Gustave Charpentier's opera "Louise."

Stephanie M. Benkert of Salem won the Audience Favorite in memoriam Norma L. Harrison Award of \$100 for her performance of

"Kommt ein schlanker Bursch gegangen" by Carl Maria von Weber. She was presented the award by Morris Harrison.

The show also included vocal performances by two students who have taken lessons as part of Just Love to Sing.

Cormier said competitions like this one are important for upcoming performers. Singers can put competitions on their resume and singers could be offered contracts from this event.

"We are here for these young performers who need to build a resume," said emcee Sue DeLemus. "Tonight, you're here to support them in that ballot to get in their resume 'You have a competition win.'"

Plus it gives the singers an audience to witness their talents.

"I think it's important to offer the kids a way to sing," Cormier said.

Tommy Turkey gearing up for Eighth Annual Turkey Plunge

LACONIA — Tommy Turkey wants to remind everyone that the Eighth Annual Salvation Army Turkey Plunge will take place at Opechee Cove Beach on Saturday, Nov. 17, starting at noon. Gates open at 10 a.m.

This family-oriented fun time features folks in bathing suits or costumes plunging into the balmy waters of the lake while raising funds for the Salvation Army. Once again, Nassau Broadcasting DJ Pat Kelly will handle the announcing tasks, and urge the crowd to cheer on the participants. The public is also invited to the delicious chili, chowder and turkey soup luncheon provided by well-known area restaurants and catered by the Culinary Arts students of Lakes Region Community College immediately after

the Plunge at the Laconia Middle School cafeteria. Last year's Plunge featured numerous teams from area high schools and businesses including the I-L Lakers, the Laconia Sachems, the Belmont Red Raiders, Patrick's Pub & Eatery, Meredith Autohaus, Fratello's and T-Bones Restaurant.

Salvation Army Commander Captain Steve Warren urges sports teams, businesses, church and school groups to start assembling their team of intrepid Plungers to help raise awareness of, and financial support for, the local Salvation Army. Last year's Plunge generated more than \$15,000, but the needs are great in this economy, said Captain Warren. He has offered to have Tommy Turkey visit your business or group to personally collect pledge



COURTESY PHOTO Dr. Rob McDonald of McDonald Veterinary Clinic, alongside office his team, Barbara Cavalley, De De Haley and Robin Fernald, give a warm welcome to their new location on Gilford East Ave. with Weeks agent Kevin Sullivan.

cards for the November Plunge. Contact Captain Warren at 524-1834 if interested in a Tommy visit. You may register on-site the morning of the Plunge as an individual or as a team. You've heard about the Plunge, come on out and join the fun. See you at the Beach.

SELECTMEN (Continued from Page A1)

can we justify giving a different rate of payment for these sewer services to you all?"

Boelig continued his rebuttal after the selectmen gave their input.

"It really doesn't just come down to the dollar amount," he argued. "We run the condo association as a business. We're trying to improve the buildings, but this bill is putting significant cost issues on our members."

The board ultimately approved a no-interest, four part payment for the remainder of the bill. Hayes also recommended that Public Works Director Sheldon Morgan look online for a new sewer meter reader because there have been mistaken readings at other properties, as well.

The town saw a good return in property taxes for the second month in a row, and at this point, 96.7 percent of taxes have been paid.

"Year-to-date revenues are up, and I expect they should stay up for the rest of the

year," Finance Director Geoff Ruggles said. "Expenses are down, specifically in vehicle expenses and in the fire department building and grounds."

The Appraisal Department has set the final 2012 property values. The town is still waiting on the Department of Revenue to set next year's tax rate because they are having trouble with new, online forms. The tax rate is expected to drop due to the excess in schools from the previous year.

"We should have a tax rate, hopefully, within the next two weeks," Ruggles said.

In other financial matters, the board is looking at what to do with its roughly \$46,000 surplus. Much of the money will likely go to the fire department, which is in need of a new roof because the old one is outdated at roughly 16 years of age. Any savings that the town has this year will roll over into next year without impacting the tax rate formula.

GLAD TIDINGS (Continued from Page A7)

ing Gilford Methodist Church's creative painters, photographers and crafters for your viewing pleasure."

After browsing all these wonderful and distinctive items, lunch will be in order, and will include Ruth Gill's famous corn chowder, Chicken noodle soup, sandwiches, hot dogs and sweet treats.

The church is located on Route 11A near the Laconia-Gilford by-pass. Hours are 9 a.m. to 2 p.m. Church office phone number is 524-3289.

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FROM OUR READERS

A highlight of community involvement

To the Editor:

One of the many wonderful projects that Beans and Greens Farmstand shares with the community it serves is its collaboration with the children of Temple B'nai Israel religious school.

Toward the end of the harvest, Farmstand owners Andy and Martina Howe invite the children to practice the biblical injunction to "glean" the four corners of the fields for charitable purposes. The children, in turn, take their share of the harvest back to the temple kitchen and make gallons of vegetable soup to be served

at Salvation Army lunches.

This fall, the children braved a cold rainy day and harvested carrots, cabbages, kale, zucchini, green beans and tomatoes. They took their harvested vegetables back to the temple kitchen and, under the tutelage of parents and teachers, washed, chopped and seasoned the food, turning it into delicious vegetable soup. The first batch was served at a Salvation Army lunch a few days later. The rest was frozen for future Salvation Army lunches - although a batch was sampled by the children who deemed it "de-

licious."

One of the most important lessons taught in Sunday School is that of Tzedakah, acts of charity. The collaboration of Beans and Greens' contribution, the work of the children and the gift of sustenance to those in need, is a vivid demonstration of community at its best.

This project is an annual activity and is appreciated by all those involved, those who give and those who receive. The Temple community thanks Beans and Greens for continuing to make this possible.

Marsha Ostroff
Gilford

My vote will be for Ed Philpot

To the Editor:

I'll be voting for Ed Philpot for Belknap County Commissioner. Ed is an enlightened fiscal conservative with a proven track record on the County Commission. Under his leadership, the commission has wisely overseen county operations spending money to save money to increase efficiency and cutting costs wherever possible by eliminating duplication of

services and consolidating operations.

Ed has good ideas for the future. He is working with his fellow commissioners and the criminal justice system to develop workable solutions to deal with drug related crimes and criminals with drug problems in our area. Ed has a history of volunteer service to our community in a variety of ways in addition to his work with

the commission. As a volunteer basketball referee for LAYBL, he's helped out for years even long after any of his kids could have been playing. He's a model of honesty and integrity and a great role model for our kids. He's also a proud parent, doting husband, successful local businessman, and heckuva nice guy. Why fix what ain't broke?

Dave Pollak
Laconia

Leadership at the county level

To the Editor:

Ed Philpot has been County Commissioner for the last four years, and I think other commissioners during that time would agree that he has provided vision and leadership while collaborating on a bi-partisan basis with his colleagues.

Ed puts the well-being of the county up front, and has helped develop a new strategic plan for the county, look-

ing at the long term needs of Belknap County and balancing them with the financial constraints and challenges of today. We need his voice again at the table.

Continuity of leadership is critical. During Ed's tenure, relationships with the local towns have improved, thanks to the regular County Conversations that have been held each year. Understanding the role and con-

tribution made by each level of government in Belknap County has been clarified so that there are good working partnerships between them all. We need to continue to foster good working relationships, effective and transparent conversations that are in our mutual best interests. Please support Ed, and vote for him on Nov. 6.

Elizabeth "Liz" Merry
Laconia

Sen. Forrester well prepared at forum

To the Editor:

Having attended the Home Builders sponsored Forum in Meredith last week, I was amazed at how District 2 Senate Candidate Robert Lamb and Senate District

7 Candidate Andrew Hosmer were un-informed when responding to questions from the audience.

A question posed from a person in the audience asked Senate candidates: how would you address the increasing health insurance premiums for individuals and businesses in New Hampshire? Mr. Lamb took the easy way out and stated, "More federal regulation is the answer." Mr. Hosmer did not do any better, parroting Mr.

Lamb's position. Both skirted the issue, and never addressed the question of increased health insurance premiums.

Sen. Forrester, on the other hand, clearly had a grasp of the question, and formed her response with sensible solutions. She quickly outlined a few remedies that would be beneficial to both consumers and insurance companies alike. She remarked:

First: New Hampshire must develop more competition in the market stating: "contrast the current market place with just six insurance companies and prior to 1994 the state had 26 health insurance companies, clearly not a competitive market for the consumer." Sec-

ondly: legislation must be crafted in allowing consumers and insurance companies alike in offering plans that cater to individual and businesses needs. And Three: permit consumers and businesses to purchase insurance across state lines, similar to what is currently allowed in purchasing life and automobile insurance.

From my perspective, Sen. Forrester clearly understands what the citizens of New Hampshire expect of our senators and in my opinion, is eminently qualified in representing District 2.

George Hurt
Former representative
to the NH House
Gilford

Taxes, fiscal discipline and prosperity

To the Editor:

How does it help you if your "rich" neighbor's taxes go up? Does it put any money at all in your bank account? Does it make your next fill-up more affordable? Let's stop the class warfare, shall we, Mr. Obama & Ms. Shea-Porter? Our country has a mushrooming budget deficit because this administration in Washington continues to borrow & print money it doesn't have, not because we aren't taxing "the rich" enough. Besides, how does raising taxes fix the underlying problem that created this deficit? That being our government spends more money than it takes in. If we simply raise taxes rather than control spending, then we have no day

of reckoning, and will only be discussing this issue again at an even higher deficit level. In the history of the world, no country has ever taxed its way to prosperity.

We need principled representatives in Washington to fix our spending problem. Mitt Romney has a mile-long track record of balancing budgets while Governor of Massachusetts and closing deficits like he did in the 2002 Winter Olympics in Salt Lake City. Frank Guinta has shown similar leadership as Mayor of Manchester, when he cut spending and reduced the city's borrowing, all the while, working with 11 Democrats and just two Republicans on the Board of Aldermen. Carol

Shea-Porter has claimed "I'm not going to pretend to work with Republicans." This divisive attitude just won't get us where we need to go. She has no economic vision for our country nor our State and is following in the path of class warfare put forth by our Divider-in-Chief. She supports more blind loans to companies like Solyndra, that have squandered billions under Obama's failed vision of green energy now.

Our path forward is clear: Fiscal discipline and prosperity with Rep. Guinta or more of the same as we sink deeper into the Shea-Porter Swamp of international bankruptcy.

David Strang
Gilmanton

When regulations make no sense

To the Editor:

When you listen to local business owners and hear the really erratic regulations that have been set upon them by the state, you wonder who's running the ship? It's amazing to realize that as a logical person, who would want to make up these laws.

As one example, a local business has given their waste engine oil to the town so that the town can heat their large DPW garage al-

most for free - what a great plan! And this was a large quantity that benefits both that business and the town as it did not cost anything to get rid of the waste oil and the town has a great reduction in heating costs. But, a new law requires that the town can accept only 10 gallons or less (primarily from a household), and guess who loses - both the business and the town! However, an additional concept was added to help

(?). The business can give the oil to a middleman and the town can buy it from the same middleman. That's a great idea! Let's add another distribution layer, and add some costs so the town will pay more for the same waste oil that they have received for free in the past...

And you wonder why I want to go to Concord...

John T. O'Brien
Independent Candidate
for State Rep., District 2
Gilford

Asking for your vote

To the Editor:

My name is Lisa DiMartino, and I am a candidate for New Hampshire State Representative for the towns of Gilford and Meredith. Over the last several months, I have attended numerous forums, public events, and have knocked on many doors in Meredith and Gilford, getting to know many of you and listening to your concerns. I would like to thank all of you for your engagement, candor and patience with the election process on both the local and national level. I would also like to thank everyone that embraced my candidacy and supported me to date.

Now that the elections are finally upon us, I would like to ask for your vote on Nov. 6. As I indicated in a letter several months ago introducing myself, I decided to run for State Representative because I am concerned about the current political climate in Concord, and I want to ensure that New Hampshire is moving forward in the right direction, and meeting the needs of New Hampshire citizens now and into the future.

For those of you that I didn't get a chance to meet, I have lived in Gilford with my family for many years, have been actively involved in community affairs, and was a Children's Librarian at the Gilford Public Library. I also worked for Lakes Region Community Services as a Family to Family Coordinator and a Legislative Liaison, where I advocated for the special needs community. I

currently serve on numerous statewide committees to include the New Hampshire Governor's Commission on Disability, the New Hampshire Medical Care Advisory Committee, the New Hampshire Coalition of Caring Committee, and the Brain Injury Association Legislative Group, among others.

I was born and raised in Brooklyn, N.Y., earned a B.A. from Rhode Island College, attended the Master's in Social Work Program at the University of New England, and I am a graduate of the New Hampshire Leadership Program through the Institute on Disability at UNH.

Besides my experience as an advocate, I also have experience in business, having held management positions in both health care and retail. My husband and I are small business owners, so I understand the importance of a strong economy, job growth and tourism in New Hampshire and the Lakes Region. I am also a strong supporter of local businesses. My other priorities include quality education, fiscal responsibility with priority spending, quality community services, protecting women's health issues, effective and efficient government, and protecting our environment.

New Hampshire has one of the lowest overall tax burdens in the nation, and our goal should not be to see how low we can go, but rather, how we can continue to maintain the New Hampshire advantage of low tax burdens while still re-

taining our quality of life, and a strong economy. I do not believe in an agenda of making cuts to the state budget just for the sake of cutting. Thoughtful consideration must be given to the ramifications it has on people's lives, and the cost shifting that occurs to our local communities which affects property taxes and local town budgets.

We need to balance strategic revenue intake with priority expenditures in order to keep us moving forward in the right direction. That means investing in our future in areas like education, energy and infrastructure, but also ensuring that safety nets are in place for our most vulnerable citizens to include those with special needs, mental health issues, seniors and our veterans. I believe we can accomplish these goals and still keep the New Hampshire advantage of low taxes, quality of life, and a strong economy by applying a common sense, balanced approach to our budget process.

I know that you have many choices on Nov. 6, and I respectfully ask for your vote. It is important that you have a strong, committed and sensible advocate representing you in Concord. If elected, I will work tirelessly and passionately on your behalf, and I will always put you and your family ahead of politics. You deserve no less! Thank you for your consideration.

Respectfully,

Lisa DiMartino
Candidate for NH State
Representative
Gilford and Meredith

Moving New Hampshire FORWARD

Let's change the tone, the temper, and the direction in Concord. We need to work together, make smart decisions, and move New Hampshire forward.

Unlike my opponent, I won't let outsiders, like the tea party or special interest lobbyists, tell me how to vote. I will represent hard-working citizens who only want better opportunities for themselves and their families.

- NO** Sales or Income Tax
- NO** Northern Pass as it's now proposed
- NO** Downshifting state costs to property taxpayers
- NO** Cuts in state spending for community colleges, UNH, and Plymouth State University
- NO** Government restrictions on women's health care choices
- NO** Reduced health care funding for senior citizens
- NO** Special tax breaks for private and religious schools



Your District 2 State Senator
Bob Lamb

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* Paid for by Bob Lamb for Senate, Todd Elgin, Fiscal Agent

Early PK sinks Gilford

Golden Eagle soccer girls drop 1-0 quarterfinal decision at Raymond

BY JOSHUA SPAULDING
SPORTS EDITOR

RAYMOND — It's not too often that a soccer game is decided in the first two minutes.

And while there were plenty of anxious moments and good chances at both ends of the field, Saturday's

Division III quarterfinal tilt between the fourth-seeded Raymond Rams and the fifth-seeded Gilford Golden Eagles was indeed decided in the first two minutes.

Just about a minute and a half into the game, Gilford was called for a takedown in the box, resulting in a Ray-

mond penalty kick. Gilford keeper Paige Laliberte guessed correct and dove to her right, but the ball just missed her fingers and settled into the bottom corner of the goal for a 1-0 lead. That lead never disappeared and never increased, as the Rams earned a return trip to the Final Four.

"She came about as close as she could have to saving that," coach Becky Zumbach said of her senior keeper. It was Laliberte's saves on penalty kicks against Prospect Mountain in the opening round that allowed the Golden Eagles to move on.

"If that was not decided in the way it was, I think we'd be in overtime right now," Zumbach said, noting the evenness of the two teams.

All day long, right from the start, the Gilford girls were stymied by strong defense from the Rams. Gabi Defregger had a good chance on a corner but couldn't convert. The Rams had chances at the other end as well, with Abby Harris and Molly Dietrich providing good defense, while Sarah Veazey came up with a great clear to keep things out of the zone.

Gilford had a couple of chances again, this time with Dietrich making a nice cross to Cassidy Bartlett that the defense cleared out and Veazey launching a long shot that the keeper corralled for a save.

Laliberte, meanwhile, did her part, making a nice save on a deflection, while Veazey also stepped up with some more solid defense in front of the Gilford net. Katherine Rice just missed on a corner and the Rams turned things around and got a couple of corners at their end, only to see Veazey and Emily Parker boot the ball out.

Dietrich just missed connections with Sydney Strout and then had another shot saved. Strout had one go wide and then had a cross cleared out of the way. On the defensive end, Laliberte made a couple of nice saves, including one on a great cross. Dana Ruchti also helped out with a solid clear and the teams went to the

SEE SOCCER PAGE B5



PHOTO BY JOSHUA SPAULDING

Abby Harris goes up strong against a Raymond player for a header chance in playoff action Oct. 27 in Raymond.



PHOTO BY JOSHUA SPAULDING

Lisa Osborne controls the ball during first half action in Raymond on Oct. 27.

Fighting on through

Gilford volleyball overcomes early deficit for quarterfinal win

BY JOSHUA SPAULDING
SPORTS EDITOR

GILFORD — Though the Gilford volleyball team doesn't have tons of experience playing from behind this year, the team is always prepared for just about anything thrown its way, including an early deficit.

"We do a lot of mental preparation, it's been our forte," coach Joan Forge said. "So they've been there before, even if they really haven't been there before."

The mental preparation paid off in a big way against upstart Somersworth in the Division II quarterfinals on Saturday, Oct. 27, as the Golden Eagles found themselves down 1-0 after the opening set.

The defending champs calmly pulled it together and came battling back, winning the next three sets to take a 3-1 win and earn another trip to the Final Four, where they faced off against Oyster River after deadline on Tuesday.

"It was a terrific game," Forge said. "There were long volleys and both teams played defense like crazy."

"It was great stuff," she continued. "We were ready for it, excited for it and we got what we wanted."

Gilford opened up an 8-2 lead in the first game, with a nice tip from Jessa Crites and a kill from Jordan Dean helping the hosts get that lead, but the "Toppers didn't back down in the face of adversity, instead fighting back."

Jessa and Kira Crites and Charleyne Panner all had nice plays at the net for the Eagles to keep them in the lead, but the "Toppers kept chipping away and eventually caught the hosts, tying the set at 16-16.

From there, the squads went back and forth, with Jessa Crites getting a big kill, but Somersworth pulled ahead by a 22-18 score. A kill from Kira Crites after a volley that included a great play at the net from Kirsten Dionne helped the hosts cut the lead to three at 22-19 and an ace from Sophie Brunt made it 23-22, but the "Toppers got the next two points and took a 25-22 win.

The Crites sisters and

Panner helped Gilford get out to an early lead in the second set, but again Somersworth fought back and tied the game at seven. A Dean kill put Gilford back on top and a Panner kill and an ace

from Kira Crites allowed the hosts to slowly build on their lead. Jessa Crites had another big kill and an ace from Mikaela Mattice and a pair of aces from Jessa Crites

SEE VOLLEYBALL PAGE B5



PHOTO BY JOSHUA SPAULDING

Charleyne Panner sets the ball for a teammate during playoff action Oct. 27 in Gilford.



PHOTO BY JOSHUA SPAULDING

Kirsten Dionne goes up for a kill during action against Somersworth on Oct. 27.



PHOTO BY JOSHUA SPAULDING

Mikaela Mattice punches the ball over the net during playoff action against Somersworth on Oct. 27.

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Offense explodes as Eagles open playoffs with 8-0 win

BY JEFF LAJOIE
JLAJOIE@SALMONPRESS.COM

GILFORD – It wasn't supposed to be that easy. But it sure looked that way for the Gilford boys' soccer team on Oct. 25.

The sixth-seeded Golden Eagles scored four goals in each half, dominating their Division III preliminary round playoff game against number 11 Pelham in an 8-0 rout.

"Everything we've been told about (Pelham) is that they were a strong offensive team but they come out and are vulnerable to long balls over the top," said Gilford coach Dave Pinkham. "And I do think that we can really score goals. We've got a lot of offensive capable players."

It certainly didn't have the feel of a postseason game in the usually balanced Division III. Bertalan Marias got the scoring started for the Eagles just 7:47 into the first half, as a deflection off a Pel-

ham defender landed on his foot. Marias dribbled past the last line of defense, flicking the ball into the back of the net for a 1-0 lead.

Sam Prescott doubled the lead with 23:08 left in the half thanks to a little bit of luck and some poor goalkeeping. Prescott's cross from the right side was mishandled by Pelham goalie Brian Gettings, and the ball trickled across the line and in for a 2-0 advantage.

Ryan Brown added a pair of goals before halftime to extend the lead to 4-0, with Anthony Diamantoplos picking up a smooth assist on the first one when he dribbled through the Pelham defense and laid the ball off for an easy Brown tally.

Gilford goalkeeper Brett Hanson didn't even touch the ball for the first time until the final five minutes of the half, as the defense of Matt Saulnier, Jackson Hills-grove, Alex Simoneau and



PHOTO BY JEFF LAJOIE
Gilford's Sam Prescott (left) battles with Pelham's Raphael DeCampos during the Eagles' 8-0 win in the Division III preliminary round on Oct. 25. Prescott scored a goal in the victory.



PHOTO BY JEFF LAJOIE
Bertalan Marias of Gilford scored the first goal of the game to help the Eagles rout Pelham, 8-0, on Oct. 25.



PHOTO BY JEFF LAJOIE
Gilford's Chris Medlin keeps the ball away from a Pelham defender during first half action on Oct. 25.

Prescott shut down a Pelham offense that was shut out just twice in the regular season (Hopkinton, Windham).

"We've changed an awful lot of things since the beginning of the year and you can see how some of those things have made us a better team," Pinkham said.

Gilford (14-3) continued its dominance right away in the second half, as Diamantoplos was taken down in the penalty area after beating a Pelham defender. The junior midfielder was awarded a

penalty kick, and he snuck a shot by Gettings for a 5-0 lead.

Colin Hildreth, Tim Ryan and Caleb Orton all added second half goals for the Eagles, as they pulled away for the convincing 8-0 win.

"If we play like this, I think we can beat anyone," said Pinkham of the win. "We've played well the last six or so games and this was another good effort."

Pinkham did refer to the injuries that have plagued his team however; most notably the absence of forward

Dan Dormody (appendix). All told, five players missed the game against the Pythons. Fortunately, they weren't needed in the blowout win.

"Losing Danny has hurt a lot but it's given opportunities for some other players to step up," the veteran mentor explained.

Pelham finished the season 9-8 overall, though the team's record was a bit deceiving. The Pythons opened the year 6-1 overall but finished 3-7 over their final 10

games. Gilford and Pelham had no common opponents during the regular season.

The Eagles could move on no further however, as a trip to third-seeded Bow (16-2) saw Gilford fall, 5-0, in the D-III quarterfinals on Oct. 28.

The host Falcons scored a pair of goals a minute apart at the halfway point of the first half and didn't look back, as Bow coach George Pinkham won the matchup of coaching brothers on this particular afternoon.

Comeback falls shy for Eagles in loss to Newport

BY JEFF LAJOIE
JLAJOIE@SALMONPRESS.COM

GILFORD – In a year where not much went right for the Gilford High School football team, the Golden Eagles nearly pulled out what would have been their best win of the season on Oct. 27 in the finale.

Gilford (1-8) fell just shy of what would have been an excellent comeback, as visiting Newport left the Meadows with a 27-20 win in Division VI action.

"It was a microcosm of what the season was for us," said Gilford coach Brad Archer of the loss. "We kept coming back, kept overcoming adversity. It would've been easy for the kids to put their heads down but they just kept staying with it and that's all we can ask for as coaches."

The Eagles played well early on, jumping out to a 12-0 lead thanks to rushing touchdowns from Malcolm Benavides and Jack Athanas.

Newport came back and cut the lead to 12-7 with a score, and the Tigers took advantage of a pass interference call in the end zone to score the go-ahead TD just before halftime for a 14-12 ad-

vantage at intermission.

Newport (5-4) extended its lead to 21-12 in the third quarter and the Tigers took a two touchdown advantage with less than five minutes left in the fourth quarter when they went ahead 27-12.

Down but not out, the Eagles responded. Athanas connected with sophomore Beck Stecher on the first play of the ensuing drive for a 65-yard touchdown pass, bringing Gilford within 27-20 after a successful two-point conversion.

Newport tried to run the clock out and hold on for the win, but senior Malcolm Benavides forced a fumble on the next Tiger possession. Jason Hayden pounced on the free ball, recovering for Gilford at its own 42 yard line.

With time ticking away, Athanas appeared to connect with Hayden for what would've been the game-tying score, but the ball just glanced off his fingertips and the Eagles fell short.

"It was a great game with some great football on both sides," Archer said. "The kids played unbelievably well. I'm just so proud of this group. With what we went through with our injuries and everything, these kids

just never quit."

Benavides led the offense with 116 yards rushing on 13 carries and a TD, including a big 51-yard run early in the first quarter. Athanas completed seven of his 22 passes for 135 yards, while Gunnar Stecher had five catches for 64 yards.

Arrington signing autographs Nov. 9 in Tilton

TILTON — New England Patriots cornerback Kyle Arrington will be participating in a personal appearance and autograph opportunity on Sunday, Nov. 9, between 2 and 4 p.m. at Green Monster Sports at the Tanger Outlet Center in Tilton.

Arrington joined the New England Patriots in 2009 and earned the starting cornerback position after week two in 2010. Arrington led the NFL with eight interceptions last season and is on track for another great year. He has played 259 of his team's 273 defensive snaps, or 94.9 percent, through the first four games this season.

Tickets are \$25 per autograph and advance purchase

"We're a young team and we didn't have much depth this year," began Archer. "It was a new year for me and coaching staff, having the kids get used to our coaching styles. We'll hopefully be a team to contend with in the next two to three years."

is recommended. Tickets may be purchased at Green Monster Sports or online at <http://www.notjustpins.com/Signings>. An assortment of photos, mini helmets and footballs will be available at the event to purchase for autographing. For more information or to order tickets call Green Monster Sports at 528-2622 or e-mail Terri Weeks at terrigeo@yahoo.com.

Green Monster Sports stocks the largest selection of autographed items to be found between Concord and Canada from labels such as Steiner Sport, Mounted Memories, Tri Star, Major League Baseball, Grid Iron Authentics and more.



PHOTO BY JEFF LAJOIE
Gilford's Anthony Diamantoplos dribbles through the midfield during his team's 8-0 win over Pelham on Oct. 25.



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LaFrance, Danby pace Eagles at state championship

BY JEFF LAJOIE
JLAJOIE@SALMONPRESS.COM

MANCHESTER – A pair of youngsters showed the future of the Gilford High School cross country teams are in good hands on Oct. 27, as the Golden Eagles competed in the NHIAA Division III state championship meet held at Derryfield Park.

Freshman Ryan LaFrance led the boys' team to an 11th-place team finish in D-II with a 12th-place showing overall, as his time of 17 minutes, 34 seconds led his team of five racers.

Sophomore Matthew Young was 58th overall for Gilford in 19:08 while freshman Justin Bellissimo took 87th overall in 19:53. Cody MacLeod (90th, 20:01) and Charles Jenot (169th, 22:37) were the other Eagles to race.

Gilford amassed 342 points, good enough for 11th place as a team with 28 D-III squads registering team scores. Hopkinton High School won the title with 65 points while Fall Mountain was the runner up with 81 points.

The girls' team saw sophomore Kendra Danby come through with another strong performance, as she finished 13th overall with a time of 21:18. Classmate Sophie Cz-



erwinski was next across the line for the Eagles with a 62nd place showing in 24:47, while Olivia Palmiter (112th, 27:43) and Brooke Poll (147th, 35:44) also competed for Gilford.

LaFrance and Danby both

earned the right to compete at the Meet of Champions, which is held on Saturday, Nov. 3, at Nashua South High School. The girls start at 2:30 p.m. and the boys start at 3:20 p.m.

PHOTOS BY JOSHUA SPAULDING

Left, Gilford's Ryan LaFrance finished in 12th place to lead the Gilford boys' cross country team at the Division III State Championships on Oct. 27 at Derryfield Park in Manchester.

Right, Sophie Czerwinski of Gilford completes the course at Derryfield Park en route to a 62nd place finish on Oct. 27.

Below, Gilford's Michael Czerwinski and Justin Bellissimo traverse the course at Derryfield Park on Oct. 27.



This long journey officially begins with one big step

So, what does anyone know about Sochi? All I can tell you is that it's in Russia and it's the host of the 2014 Winter Olympics.

And there's a good chance I will be there when the "youth of the world" gather for those 2014 games.

Consider it the best news I've ever gotten in a Burger King parking lot.

First and foremost, my resolution of a few years ago was not broken, I still have not eaten at any fast food restaurant in a few years. However, my big news did come while I was in the Burger King parking lot in North Conway.

Let's go backward a bit. In late August, I stumbled upon the media credential request for the 2014 Olympic Games in Sochi. Knowing that I had a chance of having a number of athletes with local ties competing, I figured I might as well fill out the application and send it in.

It was obvious from the application that weekly newspapers were down on the list of priority for credentials. I understand that, with major networks, newspapers and magazines covering the games, there's only so much room. But again, I figured it wouldn't hurt to fill out the

SPORTING CHANCE



By JOSHUA SPAULDING

application.

A few weeks ago, as I was leaving a game at Kennett High School, my cell phone rang and it was an editor from a newspaper in Buffalo. I pulled into the Burger King parking lot to be sure I didn't lose my cell connection. She asked me a number of questions about our papers and what my plans were if granted credentials. While she wasn't making the decisions, she was submitting the interview information to the US Olympic Committee.

For some reason, the 3G wireless service on my iPad doesn't work at Kennett High School, but at the bottom of Eagles Way, it works just fine. So, after every Kennett game I make it a point to pull into the Burger King parking lot to check all my e-mails and update the sports section Facebook page.

Friday night was no exception and coincidentally, in the same spot that I did the interview with the woman from Buffalo, I got the letter confirming that I had been

granted credentials for the Winter Olympics in 2014.

Needless to say, I was more than shocked. I figured it was a long shot at best. But I have a letter on my desk with the words "we are pleased to inform you that we were able to grant the requested credentials." That's good enough for me.

The next major step in making this a possibility is the funding, but step one is complete and that in and of itself is a huge foot forward.

I also really need to cheer on the Olympic hopefuls with local ties to make the trip make sense for me. I'm looking at you Leanne Smith, Julia Ford, Sarah Hendrikson and Hannah Kearney. And for that matter, anybody out there with Olympics dreams.

Finally, have a great day, Mike Whaley.

Joshua Spaulding is the Sports Editor for the Granite State News, Carroll County Independent, Meredith News, Gilford Steamer, Winnisquam Echo, Plymouth Record-Enterprise and The Baysider. He can be reached at sports-gsn@salmonpress.com, at 569-3126, or PO Box 250, Wolfeboro Falls, NH 03896.



COURTESY PHOTO

Winning team

Clear weather and warm sunshine on a beautiful autumn day made for a great day of golf for the second annual Holy Trinity Catholic School Golf Tournament on Monday, Oct. 15, at Lochmere Country Club. The event was presented by Hynes Communications and AutoServ NH was the hole-in-one sponsor. Their generosity was supported by many local businesses and HTS families that sponsored, played, donated and/or provided raffle prizes and goody bag items. Congratulations to this year's winning team, Team Garrity, featuring (l to r), Father David Steffani, Nathan Garrity, Tom Garrity and Armand Bolduc.

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PHOTO BY JEFF LAJOIE
Gilford's Dana Ruchti gets her head on the ball during the Eagles' win over PM in penalty kicks on Oct. 24.



PHOTO BY JEFF LAJOIE
Lisa Osborne looks to clear the ball out of the zone during first half action against Prospect Mountain.



PHOTO BY JEFF LAJOIE
Senior Sydney Strout heads the ball towards a teammate on Oct. 24.

Laliberte, Dietrich lead Eagles to victory in PKs

BY JEFF LAJOIE
JLAJOIE@SALMONPRESS.COM

GILFORD – Composure. The Gilford High School girls' soccer team had plenty of it when the game was on the line on Oct. 24. As a result, the Golden Eagles got their postseason off to a great start.

After 120 minutes of soccer wasn't enough to settle the difference, seniors Sydney Strout and Molly Dietrich scored penalty kicks, and fellow senior goalkeeper Paige Laliberte made three saves as the fifth-seeded Eagles earned a 2-1 win over number 12 Prospect Mountain (2-0 in PKs) in the Division III preliminary round.

With the game tied 1-1 after regulation, Gilford (11-5-1) wasn't able to convert one of its several chances in either of the two 20-minute overtime periods. That sent the game into penalty kicks, with each side sending five players to the line one-on-one with the goalkeeper.

"I know that we were really confident in Paige," explained Gilford coach Becky Zumbach of Laliberte, the reliable senior keeper. "I knew that confidence was going to keep her in it mentally."

While the regular season doesn't feature penalty kicks to decide ties, playoff soccer presents a different beast.

Laliberte felt ready to go when she was called upon however:

"What's going through your head is trying to keep everything out of your head," the keeper admitted. "It's hard not to let the scope of the situation get to you but I think over four years, you've kind of learned what works for you."

PM's Kelly Jones led off in PKs, and her shot on Laliberte was turned away nicely. Strout followed for the Eagles, and her shot rang off the inside of the post and in to give the hosts a 1-0 advantage.

"I think we felt prepared but once we got that first save and first goal, we were feeling even better about things," Zumbach said.

Laliberte made another save on Kali Gadomski, and when Abby Drouin failed to convert in the third round, Dietrich made it 2-0 Gilford with a shot that also ricocheted off the post and went in.

"For me, all I did was go in there with 100 percent confidence," said Dietrich. "I told everybody 'We are going to win this, you are going to make your shot.' There's no way you can miss this. You practice this. You're ready to go."

Laliberte sealed the win in the fourth round, as she turned away Lexi Brown and was mobbed by her teammates immediately after.

"You can tell that they were really uptight just by their confidence level," admitted PM coach Matt Locke. "It was down. They rip (PKs) in practice. It was just a matter of nerves, I think."

The T-Wolves (8-9) got the start they were looking for in the first half, as Jones took advantage of a failed Gilford clearance and broke in alone on Laliberte. The speedy forward found the back of the net, putting PM up 1-0 just 6:53 into the game.

"They got a great break-away off a small mistake on our part," said Zumbach. "It cost us big and we spent the rest of the game trying to make up for it."

Gilford would try and get the equalizer in the first half, but PM goalkeeper Shannon Meyer was more than up to the task. Meyer made several diving saves, turning away Dietrich on three different occasions to allow the T-Wolves to keep the 1-0 advantage into halftime.

"I thought Shannon did a fabulous job in the goal, made some fantastic saves," Locke said. "She's improved so much. She really kept us in the game. It could've been 3-1 or 4-1."

Despite trailing, the Eagles stayed focused. While Cassidy Bartlett's shot on a breakaway went wide after a

terrific pass from Lisa Osborne, Dietrich finally got the goal Gilford had been waiting for with 20:55 remaining. The center midfielder corralled a long throw in just inside the 18-yard box, and she dribbled in a bit before blasting a shot that beat Meyer to the near post to make it a 1-1 game.

"We know just don't give up, keep fighting," explained Dietrich. "Just stay in the game until the whistle blows. Just keep your composure."

Gilford had the best chance of the overtime periods with 15:45 left in the first OT, as Gabi Defregger's shot off a corner kick from Katherine Rice hit the un-

SEE EAGLES PAGE B5



PHOTO BY JEFF LAJOIE
Gilford senior goalkeeper Paige Laliberte is mobbed by her teammates after making a save in penalty kicks that secured the victory over Prospect Mountain on Oct. 24.

NRA Foundation dinner and fundraiser is Nov. 3

HOLDERNESS — The fifth annual Tri Rivers Friends of NRA fundraising banquet and auction will be held at the Franklin Elks Lodge at 5:30 p.m. on Saturday evening, Nov. 3, 2012.

If you missed the event at Waterville Valley this spring, here is another chance to take home one of the many limited edition firearms, prints, auction items and other merchandise. If you attended this event or any other of the

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These events raise money for the NRA Foundation, which offers grant funds to support youth and adult firearms safety and education, wildlife conservation, range development, law enforcement as well as other related programs. The foundation has contributed nearly 200 million dollars nationally to the promotion of the shooting sports and firearms safety just in the past 20 years with over \$400,000 being raised in NH and \$70,000 being granted locally to the Pemi Fish and Game Club in Holderness and additional

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Convincing win for Eagles in sweep of Pelham

BY JEFF LAJOIE
JLAJOIE@SALMONPRESS.COM

GILFORD—The defending champion Gilford High School volleyball team opened up its 2012 postseason in convincing fashion on Oct. 25, as the second-seeded Golden Eagles swept number 15 Pelham, 25-10, 25-12, 25-4 in the Division II preliminary round.

Senior setter Charleyne

Panner dished out 22 assists to pace the Gilford offense, which finished with 25 kills. All told, Gilford made just three errors on its 71 spike attempts.

"This is as close to perfect as we can get," said Gilford coach Joan Forge. "Plus one out of three attempts was put down for kills. This is a very nice start to the tournament."

Sophomore Jessa Crites led the offense with 10 kills while sister Kira Crites totaled seven kills. Other hitter that contributed to the offense were Jordan Dean (three kills), Mikaela Mattice (three kills), Panner (one kill) and Maddie Harris (one kill).

The Eagles broke a school record from the service line by serving 29 aces on the night. The previous record

was held by the 2008 team with 28 aces in one match.

Jessa Crites led with 12 aces while Mattice (five aces), Kira Crites (four), Kelly Gallant (four), Danica Gelotte (three) and Panner (ace) all joined in the fun.

Defensively, Gilford was paced by Gallant and Gelotte, as the duo combined for 12 digs. Dean finished with a pair of blocks in the win.

VOLLEYBALL

(Continued from Page B1)

pushed the lead to 20-13.

Two nice plays by Dionne helped upped the lead to 24-15 and Kira Crites sealed the win with perfect placement on a shot for the 25-15 win.

Panner, Jessa Crites and Mattice helped the hosts to a 5-0 lead to open the third game and the Golden Eagles led 10-3 at one point, but again, despite the work of Jessa and Kira Crites and Dean at the net, Somersworth came battling back, cutting the lead to 13-12. Panner picked a nice spot to get the next point for Gilford, but Somersworth came back and tied the set at 14.

Gilford didn't fall behind, as a Jessa Crites kill and an ace from Mattice opened the lead up a bit. A big kill from Kira Crites and some perfect placement from Panner gave the Eagles the 25-18 win and a 2-1 lead.

The Crites sisters got Gilford out to an 8-1 lead in the fourth game and a Jessa Crites ace and kills from Dean and Kira Crites helped the Golden Eagles open up a 15-3 lead. A pair of nice shots from Jessa Crites quelled a "Topper rally a bit and the champs closed out the 25-16 win and a 3-1 quarterfinal victory.

Forge gave Somersworth credit for coming out strong and noted her team needed time to adjust.

"We hadn't played them since the first game of the season," Forge said. "It takes a defense time to read what the other team's doing.

"You really have to study the other team and analyze and figure things out," she added. "It took a while, but that's going to happen

against a great team."

For Panner, it was just good to be back in the lineup. The senior setter missed the entire month of October with an injury, returning in the team's first round win over Pelham.

"We didn't know if I was going to come back or not," she said. "But it's really nice to be back. I missed it so much, I can't explain it."

Panner finished with 32 assists and seven kills, the latter impressing Forge from the setter position. Jessa Crites had 19 kills, one block and 11 digs, while Kira Crites had 10 kills and 20 digs. Dean had five kills and Kelly Gallant had 25 digs. Danica Gelotte had 10 digs on the night and the team finished with 43 kills on the night.

"I'm proud of the girls for their composure," Forge said.

The Golden Eagles moved on to the Division II semifinals, held after deadline Tuesday at Pinkerton Academy, with sixth-seeded Oyster River on the other side of the net.

"We had to push through tonight and it just gets harder and harder from here," Panner said. "But I know we'll give it our all and never ease up."

Should the Eagles be victorious in their semifinal tilt, they will play in the finals on Saturday, Nov. 3, at 7 p.m. at Pinkerton Academy in Derry.

Joshua Spaulding can be reached at sportsgsn@salmonpress.com or 569-3126.

SOCCER

(Continued from Page B1)

half with the Rams up 1-0.

Both teams had early chances in the second half, with Dietrich and Bartlett sending shots wide, while Harris, Veazey and Parker were solid on defense and Laliberte made a couple of solid saves in the net.

The two teams went back and forth, with Rice, Defregger and Ruchti all turning in solid defense, while Bartlett had a shot stopped by the Ram keeper.

Perhaps Gilford's best chance of the day came on nice passing from Dietrich to Strout to Bartlett, who put a nice shot on the net, but the Ram keeper made a big save to preserve the shutout.

Gilford continued with some good pressure, with Bartlett just missing Dietrich on a scoring bid and Defregger sending a shot wide, but the Rams were solid on the defensive side, turning away Gilford's advances.

Laliberte made a nice save on a header to keep her team's hopes alive, but the offense couldn't break through.

In the final minutes of

play, the Golden Eagles had a corner kick chance that provided one of the best opportunities of the night. With everyone (including Laliberte) crowded into the offensive zone, Rice lifted a kick into the middle of the box, looking for a Gilford foot or head. However, the Raymond keeper came up with a big save in traffic and the Rams took the 1-0 win and advanced to the semifinals.

"They defended very well," Zumbach said of the Rams. "When they went up, they knew they needed to just stay there and they did a good job holding the lead."

The Golden Eagle coach also noted that the Rams were able to mark up Dietrich very well and keep her from getting lots of good scoring chances.

"They were definitely aware of her talent," Zumbach said. "She only had a few chances."

Despite the disappointing end to the season, Zumbach noted that the Eagles had nothing to hang their heads about after a 10-5-1 regular season and a thrilling penal-



PHOTO BY JOSHUA SPAULDING
Gabi Defregger beats a Raymond defender to the ball during playoff action in Raymond Oct. 27.

ty kick shootout win over Prospect Mountain in the opening round of the tournament (see separate story).

"They had a great season," she said. "I am really

proud of what they accomplished this year."

Joshua Spaulding can be reached at sportsgsn@salmonpress.com or 569-3126.

EAGLES

(Continued from Page B4)

derside of the crossbar and bounced straight down. Prospect Mountain's Ella Montminy was able to clear the zone however, keeping the visitors alive for the time being.

"They played their hearts out," said Locke of his club. "Gilford's a good team and we had some chances but we were out of gas. No doubt about it, we were hurting. But we played better than the previous two times we played them (a pair of 2-0 losses)."

Stamina was indeed at a premium late in the game, as both teams struggled to keep plugging along for both overtime frames.

"It got to the point where it was just adrenaline. And luckily my team had a lot of it," Zumbach said. "As the game went on, I felt like we were able to keep up our momentum."

That momentum carried into penalty kicks, where Laliberte and company saved their best for last.

"Having confidence in a shootout is one of the biggest advantages that you can

have," the keeper said. "Having that mindset of 'I'm not going to be beat' can help make the difference."

The loss saw PM's season come to an end with an 8-9 record. The T-Wolves were one of the hottest teams in Division III entering the post-season, as they won their final three games of the year:

That included wins over Belmont and White Mountains, two of the top seeded teams in the draw.

"I thought we peaked at the right time," said Locke. "We had won three in a row against some ranked teams. I thought we played decent. Just not decent enough."

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PHOTO BY JOSHUA SPAULDING

Final stretch

Olivia Palmiter rounds the final turn in the Division III State Meet on Saturday at Derryfield Park in Manchester. See the story and more photos on page B3.

Try Hockey for Free Day is Saturday

PLYMOUTH—The White Mountain Youth Hockey invites boys and girls ages four to 10 years old to the PSU Hanaway Arena on Saturday, Nov. 3, at 9 a.m. for a Try Hockey for Free clinic to experience ice hockey for the first time and learn the basics of the sport in a fun, safe environment.

Try Hockey For Free Day is part of Come Play Hockey Month. This program, designed to provide youth hockey associations a national platform to introduce new kids to the sport, is a joint effort between USA Hockey, the National Hockey League and NHL member clubs. With Total Hockey and Liberty Mutual Responsible Sports, the official sponsors of Try Hockey For Free Day, USA Hockey has 500 locations offering kids between the ages of four and 10 years old this unique opportunity.

“We look forward to introducing new families to our sport,” said Scott Cathy, president. “To help keep costs reasonable for parents, we’ve incorporated programs to provide first-year players with equipment for the season. This year we are offering an eight-week Learn to Play Hockey program for free.”

To register for one of the 500+ Try Hockey for Free opportunities, please visit www.TryHockeyForFree.com or contact Cathy at 252-0947.

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HISTORIC STORM

NEW YORK (AP) — Stock trading will be closed in the United States today for a second day in a row as Hurricane Sandy wreaks havoc along the East Coast. Bond trading will also be closed. The last time the New York Stock Exchange was closed for weather was in 1985 because of Hurricane Gloria, and it will be the first time since 1883 that the exchange will have been closed for two consecutive days because of weather. The cause then was a blizzard that left drifts as high as 40 feet in the streets of New York City. The New York Stock Exchange and Nasdaq said they intend to reopen Wednesday and would keep investors updated. Much of the East Coast was at a standstill Monday as the storm approached. Areas across New York's Financial District were part of a mandatory evacuation zone Monday.

Granite State gas prices fall

CONCORD (AP) — The average price of gas has dropped nearly a dime in New Hampshire in the past week. The price averaged \$3.62 on Sunday. Nationally, the price fell 9.6 cents per gallon to average \$3.56. The Web site Newhampshiregasprices.com reported prices in the state were 21.8 cents per gallon higher than the same day a year ago, and 23.9 cents per gallon lower than a month ago. The national average has decreased 23.1 cents per gallon in the past month and stands 10.2 cents per gallon higher than a year ago.

Camden Bank, BOA cut deal

CAMDEN, Maine (AP) — Camden National Bank has completed its purchase of 14 Bank of America branches across Maine. The Camden-based bank announced Monday that it completed the acquisition over the weekend. The purchase expands Camden National's network to 50 branches and adds \$300 million in customer deposits. The company says the conversion of the Bank of America branches gives it more than 30,000 new customers and 100 new employees. With the acquisition, Camden National has expanded into Auburn, Augusta, Brewer, Gardiner, Old Town, Newport and Waterville, and increased its presence in Bangor and Lewiston.

New dean at medical school

BIDDEFORD, Maine (AP) — Maine's only medical school has a new dean. The University of New England reported Dr. Douglas Wood will take over as dean of its College of Osteopathic Medicine on Friday. Wood most recently served as senior vice president of academic affairs at A.T. Still University in Arizona, where he was dean of the School of Osteopathic Medicine from 2005 to 2010. He served as president of the American Association of Colleges of Osteopathic Medicine from 1995 to 2005, and earlier served as dean of the College of Osteopathic Medicine at Michigan State University. Wood is succeeding Marc Hahn, who left UNE to assume the provost position at Kansas City University of Medicine and Biosciences.

FISHERMEN MUST STAY IN TUNE WITH WEATHER



N.H. SEAFOOD NEWS
ERIN ANDERSON

With the seasons in definite change, so changes many aspects of the local fishing fleet. Being weather-dependent, the fall and winter months make for challenging conditions, a close eye to weather forecasts, and reading between the lines of those forecasts to determine whether there is a window of opportunity to get out and do their business. Seasoned experience is always a plus but making the right call on the weather is hard to perfect. Trying not to put yourself in harm's way and getting home safely is the best intention and strategy.

As I write this column, Hurricane Sandy is making its turn for landfall. Even though it will come ashore well to the south of us, the effects will raise some havoc for our local fleet. Much of the lobster fleet has been busy all week moving traps to deeper water, but depending on the size of the

groundswell and the amount of wind, the gear can get up and move. The complications begin with it tangling into itself and other gear as it moves with some coming ashore in a horrible mess. With the hype of Sandy predominating the news, it was interesting to listen to the marine radio to some of the "old timers" talk about past weather events and the distances that fishing gear traveled. They were talking about recovering gear miles from where it was set before a storm. It's definitely not an upside to the business and a difficult job to put things back together once the weather subsides. We'll definitely know the results at the end of the week, as everyone is hunkered down and ashore until Sandy does her thing.

While fishermen contend with changing conditions above sea level, the environment below the surface is adjusting to a variety of ingredients such as water temperature, changes in sunlight and other factors that have been taking place since Moby Dick

was a guppy. Many of the local fish species and lobsters go through seasonal transitions that trigger different movements to "fall and winter grounds."

While we humans adjust with heavier clothing or turning up the thermostat, the marine environment seeks out tolerant conditions with movements to areas conducive to their life cycle and adequate forage. The complexity of it all is immense, and when anyone thinks they've got it figured out they stand to learn more because everything swims and moves in a manner for its best interest and without a fisherman's concern.

Without a lot of detail, 2012 has been an unusual year in regard to what has taken place with traditional movements of lobsters and fish. Some say it started with the unusual warm March, but few have ever seen a year like this when tallying up everyone's institutional memory. The local groundfish fleet is trying to close out their season with cod, hake, monkfish and a traditional target on pollock, and the lobster fleet is

following the migration of lobsters to deeper water. All are hoping to finish up on a high note to get them through the harsh and lean winter months.

I'll close out this week with a little discussion and facts about seagulls.

While all might agree that there are plenty of them and collectively they perform a worthy task of cleaning up anything of edible value, they are individually distinctive. Just ask my crewman, who has identified and named a group of regular winged visitors that arrive daily to fetch the remnants of bait thrown over. Even though hundreds arrive, he caters his attention to a certain few he's named Kenny, Uncle Leo, Joe Dirt and Jimmy. With distinctive features and habits, they receive special treats for their well-being, along with a little discussion akin to the same type we all give our pets. I never took much notice but he's kept me informed of their daily arrival through the season, and it pleases him to give an "old bird" a little help in the tough world of being a seagull.

Building up work force

Community colleges boost manufacturing course offerings

BY DESIREE CROSSLY
dcrossley@ccsnh.edu

NASHUA — "Manufacturing creates wealth," said Jane Oates, the U.S. Department of Labor's assistant secretary for Employment and Training Administration. She checked in Friday at Nashua Community College on progress made statewide under a \$19.9 million federal Trade Adjustment Assistance Community College and Career Training grant awarded to Great Bay Community College in Portsmouth and the six other schools in the Community College System of New Hampshire.

"Health care, education — they're great, but manufacturing simply creates more wealth," she said. "We need to make sure we keep it out front."

William "Rick" Holka, president of Omni Components Corp. in Hudson, agreed. "There's nothing we touch every day that hasn't been machined," he said, adding the community colleges have made "absolutely fantastic advances in infrastructure" under the grant for advanced manufacturing programs.

During her visit, Oates toured NCC's advanced manufacturing laboratory and met with school officials, advanced manufacturing business leaders and students positively impacted by the community college system.

A newly renovated teaching laboratory, its floors quite literally sparking underneath computer-controlled precision machining equipment, was called not only proof of the early success of an educational partnership between local manufacturers and the school consortium, but also evidence to support a stigma-busting mission taken on by the colleges on behalf of the manufacturing industry.

In one month buster, advanced manufacturing is healthy in New Hampshire, representing nearly 20 percent of the state's entire economy,



Employment and Training Administration Assistant Secretary Jane Oates, right, of the U.S. Department of Labor, speaks with Nashua Community College President Lucille Jordan, center, and NCC Associate Professor Mark Dodge earlier this month.

COURTESY PHOTO

according to the N.H. Center for Public Policy Studies. Employers poised for growth report a main challenge they face is not a lack of demand, but a shortage of qualified applicants for high-tech, high-skill jobs.

Reasons for the labor shortage are varied, but two main concerns of employers and the community colleges are the misperception that manufacturing is an unstable industry of low-skill jobs, and low enrollment in core science, technology, engineering and mathematics academic programming.

Contrary to widespread beliefs about manufacturing, Oates said, "It's not enough to have a strong body. You need a strong mind and a skilled hand."

James Jacobs, president of Nashua-based Rapid Machining, said of his 27,000-square-foot facility, "It's not a dark, sily, dirty place. It's a high-tech environment, it's a good wage."

Jacobs said partnering with community colleges in the state will help ensure a pool of qualified machinists will be available in the future.

Oates called the qualified-employee shortage "a national crisis."

"You can't wait," she said of employers seeking qualified applicants. "We need to make sure everyone's working together to eliminate the workforce slowdown. It's amazing, you could grow if you (just) had the people."

And that, in Oates' view, is the importance of the federal grant. She said community college training programs were in need of a paradigm change. The new measure for success would need to be employment

and, thus, employer input would need to be a central part of an updated and expanded advanced manufacturing curriculum.

Congress agreed, and in 2010, President Obama signed off on \$2 billion to be used over four years for the nationwide TAACCCT grant program.

The parol's are already obvious, Oates said, citing examples in which community college initiatives have benefited entities from large manufacturers such as Pratt & Whitney, Toyota North America and Johnson & Johnson to individual students like Orlando Morales, who is working full time for Rapid Machining while enrolled in the advanced manufacturing program at NCC.

Morales said he'd been working retail jobs for years when he decided he wanted something more. With the support of his wife, he enrolled at NCC and took part in a tour of Rapid Machining.

Now, Jacobs jokes Morales is "not going anywhere." He's a valued employee who came to the company already prepared with skills necessary for success, Jacobs said.

"The math classes were valuable," Morales said about the education he's receiving at NCC. "I'd been eight years since I'd been in (advanced) math, and it refreshed my memory."

When he started at Rapid Machining, Morales said, the work was exactly the type he'd been trained for in the community college system.

The seven community colleges in the New Hampshire consortium are designing and implementing expanded programs. Offerings run the gamut from fast-track job preparation

and certification services from WorkReadyNH, to short course and reentry programs, to associate degrees.

As part of the grant, state-of-the-art equipment and technology upgrades are being made at colleges across the state, with direct input from regional manufacturers who will be relying upon the program to help create a qualified work force for hiring.

While progress is quickly being made at all sites, NCC had a leg up, according to its president, Lucille Jordan.

"When other colleges were closing their machining programs, we never did," she said. "We were ready to run as soon as we got the grant."

Other advanced manufacturing program milestones on the horizon include the opening of Great Bay Community College's Advanced Technology and Academic Center in Rochester, which will educate and train students in composites manufacturing ahead of the opening of a 340,000-square-foot production facility being built in that city by Sufraan Aerospace Composites and Albany Engineered Composites. The project is expected to generate more than 400 jobs.

At Manchester Community College, computer and machining equipment is purchased and ready to be installed in a newly renovated student laboratory as the school works to expand its advanced manufacturing courses.

For information about the advanced manufacturing initiative of the Community College of New Hampshire consortium, contact marketing coordinator Desiree Crossley at 427-7733 or e-mail dcrossley@ccsnh.edu.

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Freudenberg North America Hiring More Employees, Building Partnerships in New Hampshire to Help Win War on Talent

MANCHESTER, N.H., July 13, 2012 . Freudenberg North America Limited Partnership (FNALP), one of New Hampshire's largest families of industrial companies, anticipates hiring up to 100 new employees and investing millions in capital expenditures over the next two years to maintain a robust commitment to manufacturing in the Granite State.

Freudenberg operates three companies, seven industrial facilities and employs 1,300 associates in New Hampshire. The organization provides seals and vibration control technology components, filters, nonwovens, release agents and lubricants to myriad industrial sectors from automotive and aerospace to pharmaceutical, construction and energy. TrelleborgVibracoustic, a joint venture of Freudenberg with Trelleborg, also operates in New Hampshire.

Klüber Lubrication, a world market leader of specialty lubricants and part of Freudenberg Chemical Specialties, and Freudenberg-NOK Sealing Technologies, a leading producer of advanced sealing and elastomeric products, plan to hire additional workers and pursue potential building expansions at their Londonderry, Bristol and Northfield locations by 2014.

But in a region challenged by an acute shortage of qualified industrial workers, FNALP President Leesa Smith is simultaneously pursuing collaborative strategies with the state of New Hampshire that will help make the planned investments reality. The global active Freudenberg Group provides innovative products and solutions to customers in industries ranging from automotive, aerospace and medical to chemical, oil and gas, construction and renewables.

Smith will meet in July with officials from the New Hampshire Department of Resources and Economic Development and state's college technical training system to discuss strategies and partnerships that will enhance worker training programs and encourage broader adoption of state incentives benefiting manufacturers.

"Over 25 percent of Freudenberg's North American workforce and sales are located and generated in New Hampshire," Smith said. "We are committed to this state; we feel at home here, we appreciate the New Hampshire advantage offered to our employees."

But we are also keenly aware that competition for corporate investment is fierce and global, and we need strong public-private partnerships to overcome perceived challenges such as talent shortages and limited subsidies for industrial operations.+

Smith recently met in Manchester with Hanno D. Wentzler, CEO of Freudenberg Chemical Specialties and Freudenberg family member, to consider all of the opportunities and challenges New Hampshire offers the Freudenberg organization.

It's important to remember that New Hampshire was the cradle where Freudenberg started in the United States 60 years ago,+Wentzler said. It's always been our home base. You wouldn't expect a fine chemicals manufacturing company to locate in New Hampshire, but we have made it here, and we have excellent, competent, loyal staff on which we can build our future if there are parameters in place to support that growth.+

Both Smith and Wentzler acknowledged that while New Hampshire offers its residents excellent income opportunities as well as education and lifestyle advantages, other challenges . limited funding for job training, inequitable credits for economic revitalization, and a high corporate tax structure . must be addressed in light of today's competitive business climate.

We are looking to partner with the state to help us develop technical resources, apprenticeship and internship training programs and a level playing field,+Smith said. Our competence and business in New Hampshire has grown, and we need to establish meaningful partnerships in order address challenges and leverage opportunities across the state's manufacturing base.+

About Freudenberg North America Limited Partnership

Freudenberg North America Limited Partnership, the North American holding company for Freudenberg & Co. of Weinheim, Germany, owns a family of companies that operate 15 unique businesses. Together, these companies provide innovative products and solutions to customers in industries ranging from automotive, aerospace and medical to chemical, oil and gas and construction. Freudenberg North America companies develop and manufacture custom-engineered seals, vibration control technology, filters, nonwovens, release agents, lubricants, expansion joints, household products, and IT software and services. The Freudenberg North America companies have almost 7,000 employees and a sales share of 19 percent of the total turnover of the Freudenberg Group.

The Freudenberg Group specializes in seals and vibration control technology, nonwovens, filtration, lubricants and release agents and other specialty business areas. The Freudenberg Group generated sales of more than U.S. \$7.8 billion and had 37,000 global employees in 2011. For additional information, please visit www.freudenberg.us

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**“They Never Told Me What to Expect, so I Didn’t Know What to Do”:
Defining and Clarifying the Role of a Community College Student**

Melinda Mechur Karp and Rachel Hare Bork

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Address correspondence to:

Melinda Mechur Karp
Senior Research Associate, Community College Research Center
Teachers College, Columbia University
525 West 120th Street, Box 174
New York, NY 10027
212-678-3091
Email: mechur@tc.columbia.edu

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Abstract

Increasing the number of young people who attain postsecondary credentials has become one of the primary educational objectives of the 2010s. While low college success rates are typically linked to students' lack of academic preparation for college and their subsequent need for developmental or remedial instruction, research suggests that even many students who are deemed "college-ready" by virtue of their placement test scores or completion of developmental coursework still do not earn a credential.

This paper builds on previous work arguing that community college success is dependent not only upon academic preparation but also upon a host of important skills, attitudes, and behaviors that are often left unspoken. Drawing on role theory and on a qualitative study conducted at three community colleges, this paper aims to clarify the role of community college student and the components of that role that must be enacted for students to be successful. Using data from interviews at the study sites, we provide a concrete, actionable description of the community college student role. We also present a framework that practitioners can use to help students learn how to be successful community college students.

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1. Introduction

Increasing the number of young people who attain postsecondary credentials has become one of the primary educational objectives of the 2010s (Bill & Melinda Gates Foundation, n.d.; Lumina Foundation for Education, 2009; The White House, Office of the Press Secretary, 2009). In order to realize the nation’s ambitious “achievement agenda,” students need to not only find their way into college but also be successful once there. Only about 60 percent of first-time, full-time degree-seeking college students at four-year colleges actually earn a degree within six years, and only about 30 percent of first-time, full-time students at two-year colleges earn a certificate or associate degree within three years or within 150 percent of the normal time required to complete such credentials (Aud et al., 2012). Rates of degree completion are particularly low for non-traditional, minority, and economically disadvantaged students (Choy, 2002; Provasnik & Planty, 2008; Aud et al., 2012).

Low college success rates are typically linked to students’ lack of academic preparation for college and their subsequent need for developmental or remedial instruction (Bailey, Jeong, & Cho, 2010; Jenkins, Jaggars, Roksa, Zeidenberg, & Cho, 2009). However, research suggests that even many students who are deemed “college ready” by virtue of their placement test scores or completion of developmental coursework still do not earn a credential (Jenkins et al., 2009). The fact that even academically proficient students have trouble continuing in college suggests that college readiness encompasses more than just academic skills.

In this paper, we build on previous work arguing that community college success¹ is not only about academic preparation but is also dependent upon a host of equally important skills, attitudes, habits, and behaviors (cf., Attinasi, 1989; Karp, 2011; Rosenbaum, Deil-Amen, & Person, 2006). Community college students are held to certain behavioral standards—often unspoken and unwritten—by their professors and peers. Successfully meeting the expectations associated with these standards by

¹ The data upon which this paper is based are from community colleges, so we limit our discussion to this type of institution. However, it is reasonable to suggest that this paper’s conclusions are applicable to students in four-year institutions as well, particularly students who are attending commuter or open-access four-year institutions.

demonstrating appropriate skills and attitudes are fundamental to student success. Potential and new community college students are often unaware of these expectations, nor do they recognize their import for academic success (Venezia, Kirst, & Antonio, 2003). In large part, this is because these expectations are not made clear to students. The mismatch between faculty expectations and student knowledge about those expectations disadvantages students and contributes to their low success rates.

We contend that this lack of clarity is unfair to students and is detrimental to the nation's goal of increasing postsecondary attainment. How can students live up to behavioral expectations that they do not know exist? Moreover, such lack of transparency is particularly detrimental to students from families that do not have college-going backgrounds. These students are less likely to be in contact with knowledgeable adults who can help guide them toward normatively appropriate college behavior, and they are less likely to possess the cultural repertoires that could help them understand the "unwritten rules" of the community college. Practitioners need to more clearly articulate their expectations for students so that students are provided guideposts for performing the nonacademic tasks and activities of collegiate life appropriately and successfully. To do this, practitioners and policymakers must first come to consensus about what, exactly, they expect of community college students.

The goal of this paper, then, is to articulate the largely unspoken behaviors, attitudes, and expectations to which students must adhere if they are to be successful. Drawing on sociological theory and on a qualitative study conducted at three community colleges, we aim to provide a clear definition of the role of community college student and a better understanding of what is expected of those who enter such a role. We also provide distinct strategies that can be used by community college students to meet these expectations. Using data from interviews at three community colleges, we provide a concrete, actionable description of the community college student role. As a result, we not only clarify a piece of the college success puzzle that has heretofore been underexamined, but we also set forth a framework that practitioners can use to help students learn how to be successful community college students.

2. Background

This section provides a framework for understanding the role of the community college student. We examine the literature surrounding the expectations of college students, including the sociological concept of roles and role-related behaviors. This section also introduces a set of terms and concepts that are used to frame the findings presented in the remainder of the paper.

2.1 Role Theory

We base our contention that students need to better understand the non-academic expectations of college in sociological theory of roles and role change. Role theory purports that people play *roles*, or parts, throughout their lives (Goffman, 1961; Blumer, 1969; Turner, 1990). Each role—parent, spouse, student, worker, friend—has a comprehensive set of behaviors, attitudes, values, and ways of interacting that other people expect from those who enact these roles (Turner, 1990).

Roles are fundamentally social in that we as a society work together (albeit in typically unspoken ways) to define what is and is not acceptable from individuals in a given role. People act in ways that are in accordance with the socially understood behaviors of the roles they assume (Blumer, 1969); if they do not comply, they are likely to receive negative feedback from others. Take, for example, a new driver. We—others in society—expect that this individual will obtain a license, drive carefully, responsibly and on the correct side of the road, and obey all traffic rules. If the new driver does not do this, she will be sanctioned, through traffic fines and, possibly, the revocation of her license.

Behaviors and attitudes that are linked to the definitions and expectations of a specific role are called *role-related behaviors*. The role of motherhood, for example, is characterized by nurturing behaviors directed toward one's children. Those who inhabit a specific role are referred to as *role incumbents* and those with whom they interact are called *role alters* or *role others*. Role others for a mother, for example, may include a father and children.

As individuals move through life, they take on new roles and must learn to enact appropriate role-related behaviors and attitudes. Enacting these new behaviors is a signal

to others that a person has taken on a new role. For instance, demonstrating responsibility for one's financial health by paying bills on time and behaving independently by getting one's own apartment can signal that a young person has taken on a new role as an adult. Importantly, because *not* learning how to enact a new role leads to negative feedback, a key element of entering a new role is learning how to play the part appropriately.

How do people learn the expectations of new roles? Sociologists have identified a process of socialization, whereby those already in a given role or who are familiar with it teach potential entrants the normative attitudes and behaviors related to that role (Merton, 1957; Simpson, 1979; Ebaugh, 1988; Olesen & Whittaker, 1968). Socialization can occur within formal organizations, such as a professional school or apprenticeship, or more informally, such as when parents teach young people how to behave appropriately. Throughout this process, individuals learn about three key aspects of a given role: its technical demands, such as the actual skill entailed in doing a job; its normative expectations, including habits and values of successful role incumbents; and its desirability, which provides motivation to enter the role.

2.2 Poor Definition of the Community College Student Role

The above description of roles and role-related learning is accurate for many social positions, but it assumes that all roles are clearly defined.² But what happens when the confines of acceptable role-related behaviors are not clear-cut? Some roles are less well defined than others, and it is much harder for new entrants to learn to “play the part” in these situations (Ibarra, 1999).

In many respects, the normative expectations of the role of college student—particularly those of community college student—are ill defined (Collier & Morgan, 2008). Efforts to improve the alignment of high school and college academics have gone a long way toward generating a clear set of technical or academic demands of the college student role, and increased awareness of the need for post-high school education for success in today's workforce has helped to motivate individuals to enter the role. Yet,

² It should also be noted that roles and role-related behaviors are ideal types. Individuals do not adhere to every aspect of a role's definition in every situation, though as noted, if they veer too far from the expected behaviors they will be sanctioned.

although a generalized set of expected student behaviors exists, how these change as one moves from high school to college is not well articulated. Moreover, specific expectations likely vary between institutional types, as well as between colleges of the same type, or even among different disciplines or specific faculty members.

Interviews with high school students indicate that potential community college students have little understanding of what will be expected of them in terms of their behaviors and attitudes once they enter college (Karp, 2006; Venezia et al., 2003; Venezia, Bracco, & Nodine, 2010). In addition, interviews with college students reveal that students enter postsecondary education with a vague sense that college is different from high school, but without awareness of the specific ways in which it is different (Collier & Morgan, 2008; Cox, 2009). The mismatch between expectations and students' understandings is particularly pronounced among first-generation college students (Collier & Morgan, 2008).

Conceivably, potential community college students could learn about the expectations of the role from high school teachers and counselors. But a range of research has shown that this is not the case: high school staff often do not know about or understand the community college student role and cannot or do not communicate it to their students. Venezia et al. (2010) found that while community colleges almost universally claim to participate in outreach to neighborhood high schools, students feel that they are given little information prior to enrollment. Rosenbaum, Stephan, and Rosenbaum (2010) illustrate the confusion held by those we might expect to be in a position to help:

Counselors often say that students can enter college even with low achievement in high school, but they rarely warn that low-achieving students cannot enter college-credit classes or certain programs. Avoiding these details keeps students optimistic and encourages their college plans. However, it also gives students insufficient information to make sound decisions. (p. 5)

Moreover, many community college students do not enroll in college directly after high school, making any information provided via this route available to only a subset of the community college student population.

Popular images of college might be another source of information, but they too provide little guidance to potential community college students. Many portrayals of college on television, for example, such as on *Greek* or *Gossip Girl*, take place at residential four-year institutions and focus on the social aspects of college rather than on academic coursework. Even the rare show set on a community college campus is minimally helpful: While the NBC sitcom *Community* portrays the intergenerational relationships that can be fostered on a community college campus, it focuses on the hijinks of the group and not on their academic pursuits. Certainly, it is not the intention of *Community* or any other popular entertainment to provide students with a realistic image of college, but for students without any other college-going landmarks, it may be all they know.

News outlets also paint an inaccurate picture of what college is really like for millions of students. The *New York Times*, for example, in its “Education Life” section, defines *college* as a four-year, residential experience and rarely refers to other forms of postsecondary education. The prevalence of these images both reinforces the notion that college is a homogenous institution and provides little information for the many students attending two-year and commuter institutions.

Though potential and new community college students may not be explicitly told about the expectations to which they will be held, the faculty who await them on campus certainly hold such expectations. Researchers such as Collier and Morgan (2008), Attinasi (1989), Shields (2002), and Dickie and Farrell (1991) found that new college students must learn to navigate a complex system of bureaucratic requirements, learn new study habits and time management strategies, and engage in new kinds of social relationships, among other things. Students who do not have this knowledge—often referred to as college readiness skills—are unlikely to be successful in college, even if they have the required academic skills.

Although recent research has attempted to clarify the non-academic knowledge, skills, and behaviors necessary for college success (see, for example, Conley, 2005; 2007a; 2007b; 2010; Roderick, Nagaoka, & Coca, 2009; Collier & Morgan, 2008; Byrd & MacDonald, 2005), the existing body of work on this topic has two drawbacks. First, it provides little concrete guidance for community college students who are seeking to

understand, or community college faculty who are seeking to communicate, the expectations to which students are held. For example, Byrd and MacDonald (2005) defined the role of the college student by noting that successful community college students have strong time-management skills and goal-orientation, can advocate for themselves in order to get help, and understand college systems and procedures. They did not, however, provide clear strategies for enacting these expectations. What specific time-management skills do successful community college student possess, and how are those skills different from the ones required of high school students?

Second, much of the work is not necessarily applicable to the particularities of today's community college student (Conley, 2005; Roderick et al., 2009; Roderick, Nagaoka, Coca, & Moeller, 2008; Collier & Morgan, 2008). Conley, for example, assumes that most students will attend residential institutions, stating,

The great majority of [potential college students] hold the rather unsophisticated view that college is some sort of extension of high school, albeit without the same restrictive rules. They are naturally concerned about roommates, dorm food, and the like, but few have really digested what it is that college is going to do to them or expect from them. (Conley, 2005, pp. 117–118)

Such assumptions neglect the many students who live at home while attending college, not to mention adult students for whom high school is in the distant past and is not something to be extended into college. The college preparation literature also tends to focus on preparation for liberal arts programs (Conley, 2007a; Collier & Morgan, 2008) and assumes that college readiness comes after completion of developmental education (Byrd & Macdonald, 2005; Conley, 2007b)—neglecting the many students whose first encounter with postsecondary education occurs within the context of developmental coursework, as well as those students who are pursuing career and technical or terminal associate degrees.

The non-specific conceptualization of the role of community college student creates challenges for individuals seeking to enter that role. Those who do not learn the unwritten rules of a social role are more likely to receive negative feedback, to be unsuccessful, and ultimately to leave the role. For community college students, this

means that a lack of clarity about what is expected of them and how to achieve those expectations is likely to lead to negative feedback in the form of poor grades or discomfort on campus, and—in many cases—college dropout. Interviews with high school students indicate that the lack of understanding of normative expectations contributes to low levels of college success (Venezia et al., 2003; Venezia et al., 2010). Students who are unfamiliar with college, who fear failure, or who are tenuously connected to higher education are particularly likely to struggle in college as a result of unclear expectations (Cox, 2009; Collier & Morgan, 2008).

The bottom line is that, without clear guideposts helping students to understand what is expected of them in community college, student success is inhibited. Only if the expectations are clearly defined, in actionable and meaningful ways, can students live up to them. The remainder of this paper attempts to provide a data-based conception of the community college student role. We articulate the various behaviors and attitudes that college faculty and staff expect community college students to demonstrate. Moreover, we provide specific strategies used by college students to meet those expectations. The goal is to provide practitioners with a way to frame a conversation about college readiness that goes beyond academic skills, providing them with specific details that can be clearly communicated to potential and new community college students so as to put them on a more certain path to postsecondary success.

3. Methods

This study uses qualitative data from semi-structured interviews conducted in 2010 with community college students ($n = 96$) and faculty and staff ($n = 72$) for a study of student success courses at three colleges in the Virginia Community College System.³ Of the faculty and staff, 46 percent had taught a student success course, with the remainder consisting of administrators, student services staff, and other academic

³ For more information on the larger study, see the forthcoming CCRC paper, *College 101 Courses for Application and Student Success* (Karp et al., 2012).

faculty.⁴ The students interviewed were predominately attending college full time (75 percent), although many were also working. Overall, 55 percent of the students were women, 67 percent were White, and slightly more than half (55 percent) were between 18 and 20 years old. At the time of the interview, each student interviewee was currently enrolled in or had recently completed a student success course; the course provided students with an orientation to college, including guidance on skills and student services useful for achieving college success. In Virginia, these courses are required for graduation, and colleges encourage students to take them in their first semester (Cho & Karp, 2012); therefore, our sample population is relatively representative of the larger set of incoming and new students in these community colleges.

Interviews focused on student success course implementation, campus contexts, instructional expectations, and student experiences during the transition to college. Our analysis draws on a subset of questions included in the interview protocols about expectations of students, expectations of the institution, and student needs. All interviews are included in this analysis.

Data were analyzed using NVivo qualitative analysis software. The research team developed a detailed set of codes to analyze each transcript for a range of “big bucket” topics related to the overall research questions of the larger study. Coding validity was ensured through a series of validity checks, where every 10th transcript was coded by multiple researchers. The research team also met weekly to discuss discrepancies in the coding, challenging passages, and areas of the coding scheme in need of refinement.

Upon completing the big-bucket coding, the research team identified the nodes “expectations of students” and “student needs” as potentially useful for further exploration to aid in understanding the role of a community college student. We examined these data thematically, in the tradition of analytic induction (Le Compte & Preissle, 1993; Ragin, 1994). Through our close reading and re-reading of the data, we sought to categorize disparate expectations into manageable and actionable chunks.

⁴ Given the nature of staffing student success courses in Virginia, many student success course instructors also served in other professional capacities. The forthcoming CCRC report, *College 101 Courses for Application and Student Success* (Karp et al., 2012) goes into more detail regarding the staffing configurations of these courses.

During the analytic process, we created matrices outlining the various categories that emerged from the data. We also used a “memoing” process (Bernard, 2002) to describe and clarify our proposed model of the role of community college student. We discussed the matrices and memos with the research team, refining them until they best represented the data in the dataset. Throughout the analysis process, our goal was to clarify the role of a community college student and identify strategies used by students to enact that role.

4. Findings

What are the expectations to which community college students are held? Our data indicate that the community college student role is fundamentally different from the non-college roles that community college students often play in two important ways. These differences cut across a range of community college student expectations and consequently make the role challenging for new students to enact. First, community college students are expected to be *self-aware*, assessing their progress and needs in largely unaccustomed ways. Second, the community college student role is more *fluid* than other roles, in that there are more strategies that might lead to successful role enactment.

Our data also reveal four specific areas of knowledge and behavior that make up the community college student role. We call these the four components of the role. Community college students are expected to engage in new *academic habits* or approaches to school-related activities that support their academic success. They must exhibit *cultural know-how* in order to understand and adhere to unwritten institutional norms. Next, students must *balance the multiple roles* that they may play in their life. Finally, community college students are expected to engage in self-directed and timely *help-seeking* behavior. Together, these four components represent the core elements of the role of the community college student. The remainder of this section reviews the community college role in more detail.

4.1 Fluidity and Awareness in the Community College Student Role

In two important and cross-cutting ways, the community college role is characterized by new forms of thinking and new strategies for enactment, particularly when compared with other roles with which students are often familiar. First, respondents noted that the community college student role was more fluid than other roles—meaning that the role was less structured, more flexible, and included fewer forms of clear feedback than other roles. Second, and largely due to the fluidity of the role, community college students must exhibit high degrees of reflection, such that they can cognitively evaluate their actions in order to modify them if necessary in order to meet the expectations of the community college student role. The newness of the community college role is therefore particularly problematic, because students have fewer frames of references or experiences to draw upon, and they cannot rely on their knowledge of other roles for guidance.

The fluidity of the community college student role is most evident when comparing the role to others with which students are often familiar. These comparisons are illustrated in Table 1. Analyses of interviews revealed “fluidity” to be made up of three composite parts or dimensions: structure, feedback, and variability. The first dimension, structure, relates to how clearly defined and prescribed the role is. For example, high school students are typically given a course schedule, whereas community college students must create their own schedules and select among multiple sections (and even instructors) for any given course they want to take. High school students must adhere to a strict schedule that dictates when they engage in academics and when they take breaks, while community college students have no such constraints on their time. One student explained,

When you’re coming straight out of high school, you have somebody telling you what to do and how to do it and when to do it. And then you get to college. ... When I went the first time, they never told me anything to expect so I didn’t know what to do.

The second dimension of role fluidity, feedback, relates to how often role incumbents are told by others whether or not they are meeting expectations. Employees

typically have clearly defined tasks to complete and are likely to get immediate feedback on their performance. In contrast, a common refrain among the community college students we spoke with was the infrequency of assignments and of subsequent opportunities for feedback from professors on their academic progress. Instructors emphasized that if students wanted regular feedback, they must seek it out, as it is not automatically given, and they also emphasized that community college students are expected to develop their own sense of whether or not they are making progress toward their academic goals. One instructor alluded to the lack of explicit feedback received by community college students when describing the way that students need to—on their own—examine their work: “[A student should] look at what [he] missed and why [he] missed it ... [and a student should consider,] if I didn’t do too well, what do I need to do differently?”

Finally, as compared with other roles, the community college student role is highly variable, in that there are many ways to meet a given role-related expectation. For example, community college students are expected to pass exams with little guidance or instruction on how to study—they can achieve a passing grade using any number of strategies, including flash cards, rewriting their notes, or reading the text multiple times. Instructors frequently emphasized that a key element leading to success in the community college is students’ ability to figure out “their own learning style, how they study best,” implying that there is no one right way to study. High school students, in contrast, are often given discrete study-related tasks, such as creating flash cards for a vocabulary quiz or a timeline for a history test. Employees are also given concrete guidelines for their tasks.

Taken together, these three dimensions indicate how rigid or fluid role-related expectations are for a given social location. As compared with other roles, the community college student role leaves more room for individual interpretation and action, even when students must adhere to socially defined and understood standards of behavior. Students still must meet those expectations, but how they get there (course schedule, study approach, and so forth) is left to them to a greater extent than in other roles.

Table 1: Fluidity of Various Roles

	High school student	Employee	Community College student
Structure	High <i>daily homework</i>	Clear <i>discrete job tasks</i>	Little <i>student-designed schedule and time management</i>
Feedback	Frequent <i>unit tests</i>	Frequent <i>supervisor feedback</i>	Sporadic <i>few graded assessments</i>
Variability	Minimal <i>discrete assignments</i>	Minimal <i>specific approaches to doing work</i>	High <i>independent study</i>

Such fluidity then raises the question: How does one figure out how to enact a role that has less structure and clarity than one is used to? While the flexibility of the community college student role can be beneficial for students who know how to take advantage of it (we discuss this later), it does present additional challenges for those who are just learning to enact the role. Determining what strategies to use and when to use them appropriately requires a degree of reflection that is not necessary for the other roles with which community college students tend to be familiar. Community college students in our dataset were expected to assess their performance and diagnose potential solutions to role-related problems to a degree not seen in other roles. Without this second overarching characteristic—which we call *self-awareness*—community college students were unable to enact the four main components of the role.

We define *self-awareness* as an individual’s ability to critically examine and reflect upon personal strengths and weaknesses in order to develop a plan for addressing self-diagnosed deficits as a means to successfully enact the role; the academic literature sometimes refers to this process as metacognition (Davidson, Deuser, & Sternberg, 1994; Duckworth, Akerman, MacGregor, Salter, & Vorhaus, 2009, Flavell, 1979). Some researchers have noted that the ability to understand one’s own needs encourages academic success by developing an internal “feedback loop” in which students are able to monitor their own learning and anticipate, assess, and solve problems as they occur (Zimmerman, 1990, 2001; Carver & Scheier, 1981; Zimmerman, Moylan, Hudesman, White, & Flugman, 2011).

Our data suggest the need for students to develop the ability to reflect upon and become aware of not only their academic learning but of their behavior as well. Enacting a fluid role requires students to examine their own adherence to role-related norms and to diagnose potential problems. One student, for example, described her reflection on her new, looser schedule and its implications for her study habits, saying, “And I’ve figured out that even though I have all that freedom, I’m still able to focus my time and efforts toward school work—not just, oh, I got a week to do that.” Another described his thought process in similar terms: “And now it’s like, I got one class and then I’m done for the whole day. So it’s like, what am I supposed to do?” Both of these students found that they had to think and reflect upon their behaviors in order to make sure that they were able to meet academic and other role-related demands.

Below, we provide additional examples of how the need for self-awareness influences aspects of the community college student role. It is important to recognize that the need for self-awareness is a highly prominent characteristic of the community college student role, and one that is likely new for many students. Moreover, it, like the notion of fluidity discussed above, contrasts with the expectations of many other roles with which community college students are familiar. Therefore, it is worth paying close attention to the ways in which new community college students develop self-awareness and the ramifications for their academic progress when they do not.

4.2 Four Specific Components of the Role

The remainder of Section 4 of this paper describes and analyzes the four components of the community college role: academic habits, cultural know-how, balancing multiple roles and time constraints, and help-seeking. As noted, we analyzed the data thematically and identified four broad “buckets” of knowledge, skill, and attitude required of successful community college students. These buckets make up four components of the college student role—items that others expect community college students to be able to know and to do. When students engage in these behaviors, they signal to others that they are serious about being a successful community college student. The subsequent sections discuss each of the four specific components in more detail.

Academic habits. Our data indicate that the community college student role requires a revision of students’ academic habits and behaviors. Recall that we are not discussing technical demands of the role, acquiring academic skills such as those needed for writing essays or factoring a polynomial. Instead, this component of the role refers to the normative behaviors and actions that contribute to academic success. *Academic habits* refers to activities that cut across disciplines and that generally entail new ways of going about or approaching school-related learning. These habits include strategies for completing college work, approaches to learning, and other academically oriented behaviors.

New community college students have experience with academic habits, of course, as they were all high school students at some point. But the community college role requires a change in these habits. Successful college student role enactment entails academic habits that are more independent, reflective, and self-initiated than are other student roles. The academic habits and behaviors we identified from our data are expected by college professors but differ in important ways from those expected by high school teachers. They require a new toolkit of strategies in order to successfully enact them. Table 2 summarizes these habits and behaviors, and provides sample strategies used by the students in our sample.

Table 2: Academic Habits

Behaviors and attitudes	Strategies
Manage workflow independently	<ul style="list-style-type: none"> • Use a syllabus • Complete work without clear due dates or that must be done over a long period of time in increments
Organize and manage time and time-related demands	<ul style="list-style-type: none"> • Find the best time and place to study for individual circumstances • Plan ahead in order to carve out enough time to complete assignments • Study in new ways, and identify which methods work best
Independent and reflective note-taking	<ul style="list-style-type: none"> • Take notes from multiple sources • Discern what is likely to be important
Use the “tools of the trade”	<ul style="list-style-type: none"> • Use tools and resources such as Blackboard and the library appropriately • Regularly access tools, even in the absence of explicit instructions to do so

Manage workflow and time-related demands independently. Community college students are expected to manage their workflow independently. Unlike in high school, where students are given specific assignments to complete every day or specific studying tasks, community college students are expected to complete work on their own and in the manner that suits them best. The most prominent example of this expectation is the college syllabus, where students are given their expected work for the semester at the outset and then are left alone to complete it independently. Instructors do not regularly remind students to use the syllabus or to complete the reading assignments, and instead assume that students know to refer to it throughout the semester.

Independently completing work means that students must become less reliant on external supports or structures and more reliant on their own sense of discipline, sense of responsibility, and awareness of what is expected of them. They must learn to approach academic work in new ways—studying over long periods of time and thinking in more critical terms about what it means to successfully learn and master course requirements. One student described this new workflow by saying, “There’s really no actual work. It’s up to us to do the studying and the note-taking and stuff.”

What is frequently referred to as new time management techniques is really a way to balance the role-related demands of independent academic habits. Students must effectively manage their time by learning new strategies for completing academic work. This is more than just creating a schedule for studying or finding ways to balance competing demands. Instead, it is the development of recognition that college work is different and therefore must be approached in a new way. For example, community college students are required to read and do work on their own, even when instructors do not explicitly review the assignment or collect it for a grade. As one instructor said, “You have to decide if you’re going to study or not.” The result is that students need to find the time to do this studying—but the role-related expectation is the completing of independent work, not time-management per se.⁵

Similarly, the pace of college courses requires new academic approaches. As noted above, courses have a few graded assessments or assignments each semester, with

⁵ Cox (2009) argues convincingly that this expectation runs counter to student expectations and preferences, as students do not view college work as “real” or meaningful unless it is collected and graded.

ungraded work to be completed in between. Learning to approach these graded assignments, which cover more material and are worth a larger component of the course grade than high school assignments, typically requires a new strategy. Part of the strategy is time management, but such management is really only an end toward students' learning to learn more on their own. Students are expected to think analytically in their work—rather than simply rush through it—and to start studying earlier in order to complete large assignments in a thoughtful and measured manner.

Interviewees summed up the need to develop new ways of managing time to promote independent, longer term learning throughout their interviews:

It's tough because you have to do so much and you have to remember so much. One class gave you 10 assignments, another class gives you 10 assignments, and it's kind of hard to do everything in one week. (Student)

...The freedom of time to just, you know, the freedom of assignments. Where it goes, you know, we need this three-page paper by next Thursday. Boom! Done! Last time you heard about it was, you know, the Tuesday before, and I can sit down with my planner and go, okay, Monday is this. Tuesday is this. Wednesday I'll do the outline for it. And it's just, it's so nice to be able to run my own ship, I guess. (Student)

Note that while these interviewees are discussing time management, they are at the same time describing the ways in which the community college role requires the development of new academic habits, such as studying during one's free time or using a planner, that encourage independent learning and can help students adapt to the new workflow of the collegiate environment. Likewise, these strategies require a degree of reflection in order to be effective. Students need to understand what is expected of them and how they can best achieve those expectations. They engage in self-regulated learning in order to recognize where they stand in their learning and where their weaknesses are—what they need to work on.

Engage in independent and reflective note-taking. A second type of academic habit required by the community college student role is that of independent and reflective note-taking. Though high school students are also expected to take notes in class, college

note-taking is fundamentally different. A student contrasted the two by saying, “Most of my history classes in high school would be, they gave us notes, like fill-in-the blank or something. But the lectures in college, they don’t give you anything. You have to take all the notes yourself.”

As this student implied, community college students are expected to do more than copy what their instructor writes on the board. They must discern on their own which elements of a lecture or discussion are worth writing down. Successful community college students also discover that notes can come from multiple sources, including lectures, class discussion, and textbooks. To do this, they need to develop a more active and engaged approach to note-taking. As such, successful community college students are expected to actively construct their knowledge while simultaneously evaluating what is important and what they might have difficulty with.

One instructor described those students who do *not* successfully enact role expectations this way:

When I see students taking notes in a math class, invariably they write only what is on the board. Invariably they ignore what the teacher is actually saying, which is why this step is next. They just copy down, okay, “cross multiply.” [If one asks,] “Why do you cross multiply?” [they say] “I don’t know, she just did.”

Similarly, another instructor expects students to use their notes when studying. The instructor expected students to think about how they can “rewrite [their] notes, reconstruct [their] notes” in order to promote further learning. In sum, community college instructors want students to take notes on the course content in order to reconstruct the lesson later on, if needed.

Self-awareness is a key aspect of college note-taking habits. In order to be active note-takers, students must be able to think about what they might need to refer to in the future. They need to be able to reflect on what they know and what they are likely to need to know. Role others—particularly professors—expect students to develop an understanding of what is important without having to be told this explicitly.

Use tools of the trade. Finally, community college students are expected to learn about and make a habit of using the “tools of the trade.” These include institutional tools (e.g., advising courseware or course registration systems), college support services (e.g., tutoring, course tools, including Blackboard or other course management systems, and basic technological applications), research tools (e.g., library and online resources); and interpersonal resources, (e.g., faculty or support staff). Interviewees indicated that college students are expected to make use of these resources independently and appropriately.

Unlike in other student roles, such as that of high school student, role alters for the community college student role do not remind students to make use of these tools. For example, students are expected to use the library on their own as appropriate for course assignments without having to be told to do so explicitly. They also need to access courseware, such as Blackboard or Moodle, regularly and on their own: “I’m assuming they know how to navigate Blackboard and send an email,” said one instructor. Moreover, the expectation is that students will use these resources correctly—for example, relying on online sources for research without resorting to plagiarism.

As with note-taking, using the tools of the trade effectively and appropriately also requires student reflection and self-awareness. Those individuals successfully enacting the community college student role must understand when to use a given resource as well as how to access the resource. One instructor described the reflective process by which successful community college students learn to use their syllabi appropriately:

It’s there, the opportunity for [the students] to see the syllabus in the very beginning [of each course]. ... Most of them don’t believe it. Then the first test comes and there is panic mode and then they want somebody to help them. And then they backtrack and try to fill in what they should have been doing from the very beginning.

In sum, the first component of the community college student role requires individuals to refine their academic habits to meet new expectations. These habits can be met via a variety of strategies, given the fluidity of the role. However, figuring out which academic habits and strategies are appropriate to use and when to use them requires self-awareness. Students must be able to reflect on their learning and their needs to identify behaviors that will benefit them and use strategies that are effective for their personal

circumstances and learning styles. Role alters expect that community college students will independently take the time to think critically and analytically about both course content and their own understanding of that content in order to identify strategies, tools, and behaviors that will allow them to meet deadlines and complete assignments thoughtfully and effectively.

Cultural know-how. The second component of the community college student role is the development and use of cultural know-how. All institutions, community colleges included, have their own cultures and norms. A key element to successfully enacting the community college student role is that students must understand and adhere to institutional norms. Community college students are expected to have the contextual awareness to understand what is expected of them in given situations, and to determine how to adapt and conform to those expectations. We refer to this contextual awareness as *cultural know-how* in order to signify that students must understand the institutional culture and its importance, and know how to enact it.

It is important to note that college is rooted in White, middle-class culture (Rendon, Jalomo, & Nora, 2000; Hurtado & Carter, 1997; Tierney, 1999). The forms of discourse, types of language, and ways of interaction that are seen as “normal” or “accepted” tend to be rooted in middle-class norms, largely because college faculty have been educated in such cultures themselves. Though some have called for transforming these expectations via approaches such as culturally relevant pedagogy (Ladson-Billings, 1995; Paris, 2012), middle-class cultural expectations remain the norm in community college instruction. First-generation and minority students are particularly disadvantaged because they have less familiarity with these norms and know fewer individuals who can help them learn about them.

This is not to say that community college students need to “give up” their home cultures, but rather that in order to enact the community college student role effectively, they need to be able to adhere to institutional cultures, at least within the confines of the college environment.⁶ Not doing so will result in negative feedback from role alters as

⁶ Whether the presence of a middle-class culture and culturally defined notions of motivation, effort, and commitment is appropriate is an issue worthy of discussion but is outside of the scope of this paper. We would certainly contend that such culturally constrained norms disadvantage certain groups of students and

well as poor role performance—potentially culminating in poor academic outcomes (Collier & Morgan, 2008). Community college students must, in effect, become what Lacy (2007) calls “code-switchers,” demonstrating their knowledge of middle-class norms even as they hold onto their home cultures. One instructor described this aspect of the role explicitly, saying that it is important for the college to figure out how to help students “make that cultural shift ... and sort of get them used to this academic culture and what we expect from them.”

Table 3 highlights the cultural know-how expected by interviewees, as well as strategies used by students to demonstrate such know-how.

Table 3: Exhibiting Cultural Know-How

Behaviors and attitudes	Strategies
Engage in collegiate discourse	<ul style="list-style-type: none"> • Use academic and non-colloquial language in speaking and writing • Engage in discussion about opinions • Demonstrate openness to new ideas
Demonstrate culturally defined forms of respect and commitment	<ul style="list-style-type: none"> • Participate in give-and-take with professors • Put forth strong effort
Recognize that community college is less forgiving than high school or other venues	<ul style="list-style-type: none"> • Do not expect exceptions • Adhere to rules and deadlines • Adapt to instructors’ personal styles

Engage in collegiate discourse. Faculty and administrator interviews revealed that community college students are expected to engage in “collegiate” forms of discourse. This includes using academic and non-colloquial language when both speaking and writing. An instructor explains: “Where do you draw the line at? That the text-messaging type of wording is not appropriate for college-level? ... [That] the lower case *i* and these symbols are not college writing?” Another instructor noted that there are appropriate and inappropriate ways to interact with faculty members. Successful

that it is worth finding ways to make college success less dependent upon class-based normative understandings. However, our data indicate that these class-based expectations do exist and are in many ways reified; since our goal is to present a model of what community college students currently are expected to do, we take these norms and expectations at face value for the purposes of our conception of the role.

community college students need to learn the difference, as well as to “[learn] how to feel comfortable [communicating] with a faculty member.”

Culturally acceptable discourse also includes the ability to engage in conversations about ideas and opinions rather than mere facts, as well as showing an openness to new ideas and experiences. One student told us that upon transitioning to college, “You need to be open to new opinions. I learned that.” Note that this was new to him, demanded by the college environment, and different from other social roles he had held before. Another student told us that, in addition to time management and study skills, a key thing required for college success is open-mindedness: “Basically, just don’t be closed-minded; be open-minded to a lot of things. To me being open-minded could be making new friends or getting different opinions about different things.”

Community college students are expected to participate in class discussions that are often free-wheeling and potentially controversial or uncomfortable. This requires verbal fluidity, as well as respect for new opinions, and recognition that this kind of “talk” is an academically and intellectually worthwhile endeavor. One student expressed frustration with a class that contained little lecture or discussion of the textbook, instead focusing on discussion and, in his mind, “rants.” He noted that “there were very strong opinions in the class,” which took some getting used to, especially since he tended to be “a quiet guy in class.”

Demonstrate culturally defined forms of respect and commitment. Instructors also noted that the college student role requires demonstration of respect, commitment, and motivation in ways that are defined by middle-class norms and cultures. Instructors wanted to see that students really “wanted to be in college” but viewed only certain behaviors as indicative of such commitment and desire. Even students who felt that they were committed to obtaining a college degree were not viewed that way by instructors if they did not adhere to normative middle-class ideals of demonstrating respect for authority and motivation for collegiate-level learning.

Respect for authority and the collegiate enterprise was signaled by an array of student behaviors. Some of these were linguistic in nature, such as the desire for proper language use expressed by the instructor in the text-message language example above, whereas others involved personal appearance and self-presentation. One student told us

that, upon entering community college, she learned that how she dressed influenced how her instructors viewed her: “You need to dress professionally when you are going to school because teachers will respect you more.”

One accepted form of showing commitment to college was to put forth a good faith effort both in and out of class. Instructors viewed such efforts as indicative of students’ being goal-oriented and ready to put in the work necessary for college success. One instructor told us that for community college students, “mere attendance in the class is not sufficient to give you a passing grade. ... You’re going to be expected to develop critical thinking skills ... not just a regurgitation of material to pass a standardized test.” Both faculty and students spoke of a give-and-take, whereby students who exhibit the appropriate form of “respect” for their instructors are more likely to receive help or positive reinforcement in return. A student explained:

If you go in their class and be disruptive and, you know, just aren’t very nice, then they’re not going to be very nice to you, and they’re not going to be lenient, especially if you turn in an assignment late.

Not exhibiting normatively accepted forms of commitment was often interpreted as being disrespectful or not being ready for college. Lamented one instructor:

Often [in high school] just showing up every day and breathing at the end of the semester guaranteed you a successful completion of a course. And now, they find that not only do I have to be here and stay alive, but I have to do something else and do it well and that’s the part they really have difficulty with.

Another instructor expressed a similar sentiment when telling the following story:

Two weeks ago these two students, I believe they both have D [grades]. ... I know they are both extremely bright, and they’re just not doing the work. And they both came up and said, “Oh we have to get at least Cs in this class, what do I have to do to get a C in the class.” I said, “You can start by turning in your assignments.” I said, in fact, “I’m going to give you until Friday. Put your assignments in my box ... I’ll give you full credit for them.” Neither one came to class today. At the end of the semester when they come to me and say, “But we really needed Cs,” I’m not inclined at all

to massage the numbers or whatever the case may be because they're not living up to their end of the bargain.

Note her implicit expression of a give-and-take between teacher and student, a cultural expectation that leniency is something to be earned, not given, and that students who do not live up to their "end of the bargain" are not deserving of positive feedback.

Recognize that community college is less forgiving. The community college culture is less forgiving than other institutional environments, particularly high school, where exceptions are frequently made for students and their personal circumstances. Our data indicate that while some acknowledgement of personal circumstances was made, in general, community college students in the study were expected to function in a more impersonal and unforgiving environment than they were otherwise used to. This facet of the role was expressed by one instructor who said, "I just can't stop [a lesson] because a couple of you guys don't have a book or you are dealing with financial aid. We just can't stop." Therefore, a key element of demonstrating cultural know-how entails recognizing that there are few exceptions in college and behaving accordingly.⁷

Students in particular were surprised to discover this aspect of the role, and their surprise was salient in our interviews with them. One described this expectation thusly: "[Professors are] not going to stop the lesson for you to leave. You're there for what they're talking about or you're just out." Another said, "You need to take it seriously. ... Make sure you get everything done because teachers are not going to give you all the extensions and benefits they would give you in high school."

Not only are community college students expected to adhere to rules and deadlines, they are also expected to adapt to various instructional styles. Professors and disciplines have varying approaches to coursework and studying, and community college

⁷ At first blush, this finding seems to contradict the notion of fluidity within the role. But a closer read of the data indicate that fluidity and inflexibility coexist within the community college student role. The less forgiving and more inflexible nature of the role refers to the expectations and normative standards themselves—the outcomes of the role. Fluidity, on the other hand, is related to the behavioral strategies that help students meet the standards. Our data indicate that college instructors had clear, culturally based standards of behavior for students; how students reached those standards, however, was fluid since students could meet the standards in a variety of intersecting and overlapping ways. Instructors clearly wanted to feel respected and feel that students took college seriously, for example, and they generally did not make exceptions for students who do not display this respect. Strategies that students used to demonstrate respect include modes of dress, language, interpersonal behavior, work ethic, and reliability, among others.

students must learn that these expectations will not change to meet their needs. The students are expected to adjust, not the instructors. One student said, “So I have to learn to work with their teaching styles to fit it into ... my learning style so that I can comprehend it better.” Note that the expected onus of change is on the student, not—as it often is in high school—on the instructor. Recognizing this difference and learning to function accordingly is a key element to exhibiting cultural know-how and enacting the college student role.

Individuals entering the community college student role are therefore faced with a significant challenge as they must contemplate how to meet role-related demands that are simultaneously diffuse and inflexible. Though the “how” of the role remains fluid—there are multiple strategies to meet expectations—the “what” is not, as deadlines, anticipated learning outcomes, and expectations are more immutable. Consequently, the role requires community college students to reflect on their needs and act accordingly. Students must develop an understanding of college culture and its ensuing behavioral expectations. Then, they must assess their own ability to adhere to those expectations. This requires students to enact the culture and behavior of college (while also maintaining their connection with their home cultural practices and languages).

Balancing multiple roles and time demands. We have already noted that community college students not only enact the community college role, but they typically also engage in other social positions as workers or as family members caring for others. These additional roles compete for their time and energy, and the stresses of these roles may conflict with the demands of the community college student role. Unlike high school students for whom it is generally assumed that their role as a student is primary, community college students may find that they must privilege the demands of other roles to the same—or even greater—degree than their student responsibilities. As a result, a fundamental expectation held of community college students is that they find ways to balance the many demands on their time associated with their multiple roles.

It is important to recognize that many of the students in our dataset defined the college experience differently from the traditional image of college that is portrayed in popular culture. Though there were a few exceptions, most students did not expect or even want an intense, college-based social life. They viewed college instrumentally—

usually as a means to a job with sufficient wages to support a family—and were not trying to balance typical collegiate social activities with their other roles. In this way, their vision of the community college student role aligned with the expectations of faculty, who also focused on classroom- and academically-based role-related demands. Even with these smaller parameters, however, the students in our sample were expected to find ways to balance the competing demands of the community college student role and their other social roles. This was often a struggle for many students.

Our data confirm that being a modern community college student is a balancing act. Explained one student, “I work full time and have three children and a husband and a home, I can’t just run over to [campus] and hope that somebody’s going to be at the tutoring center.” Another student described the conflict and emphasized the need to put other roles first when she said, “Because at home I can’t hardly get anything done because my little girl wants all the attention. It’s just so hard.”

Table 4 outlines various behaviors that indicate to others that community college students are successfully balancing their multiple roles. It also shows strategies used by community college students to effectively balance their multiple role responsibilities.

Table 4: Balancing Multiple Roles

Behaviors and attitudes	Strategies
Make college a priority	<ul style="list-style-type: none"> • Take responsibility for meeting deadlines • “Stick-to-it-ness”
Use the fluidity of the part to their advantage	<ul style="list-style-type: none"> • Find a schedule that works for personal circumstances • Filter out distractions • Have a plan • Modify obligations
Communicate with instructors early and often	<ul style="list-style-type: none"> • Earn acknowledgement of the balancing act by honest and frequent communication

Make college a priority. A key behavior or set of behaviors expected of college students is that they make college a priority, even when other roles are important as well. It is important to recognize that this component of the role is connected to the previous one, developing cultural know-how, in that the behaviors and expectations surrounding the balancing of multiple roles are rooted in a middle-class assumption that privileges

college-going over other responsibilities. Instructors and staff frequently expressed the notion that college should be *the* prominent, or at least a prominent, role in students' lives, as expressed here:

[Students] have a really hard time understanding why they're not successful when they're not putting so much extra time outside of being here on campus into their coursework. ... They feel like if they're in class that's what they need to do. But we know that there's so much more to it.

What I mean is they fail because their lifestyle prevents them. It's an obstacle. Their lifestyle, in that they have families; they have children; some of them take care of a parent; most have transportation but some might not. They have to work—they're single parents—they have to work.

Though this expectation may be culturally biased, unfair, or unrealistic, it is an assumption made by most of the staff and administration at college, and so we take it as a starting point for this component of the role.⁸ Moreover, although the majority of instructors we spoke with recognized the multiple roles that their students play (see second paragraph of quote directly above), this acknowledgement was almost always followed by a statement emphasizing that school and school work still needed to be completed and prioritized. Instructors often framed this as overcoming the “obstacle” of other roles; regardless of how it was stated, the message was that part of successfully being a community college student is finding a balance that privileges the student role.

Respondents frequently used phrases such as “making college a priority” or “being dedicated” to school. For instance, one instructor referred to the community college student role “as a job.” In addition, another instructor explained: “I want them to take this very seriously. I want them to take their college education very seriously and make it a priority.” Though these phrases appear vague and are hard to operationalize,

⁸ As in the previous section, given the scope and focus of this paper, we take the cultural components of these expectations at face value, even though others (Ladson-Billings, 1995; Rosenbaum et al., 2006) have argued both in favor of and against maintaining and even explicitly teaching middle-class norms within educational institutions.

further analyses indicate that instructors had specific behaviors in mind that signaled such dedication and commitment.

Instructors in our study indicated that behaviors such as completing assignments on time and meeting deadlines on a regular basis demonstrated that college was a priority. Successful community college students independently keep track of deadlines, are aware of when various tasks need to happen, adhere to those deadlines, and take responsibility for meeting them. One instructor described these behaviors and attitudes as “stick-to-it-ness.” As such, they were inclined to look favorably upon students who exhibited such behaviors.

Take advantage of the fluidity of the role. Successful community college students learn to use the fluidity of the role to their advantage. The fact that time can be used flexibly can help in balancing multiple roles. For example, successful students might opt to study or visit a tutoring center between classes instead of socializing, thereby freeing up off-campus time for the demands of other roles. Because a specific mode of studying is not typically specified, successful students study in ways and at times that best meet their needs and obligations. One student described her personal strategy for completing work by saying, “I just have to put time aside. I stay here [on campus] more often than I go home; that way I don’t have the distractions to do the stuff so I can succeed.”

These students also use the flexibility of the role to modify their in-school and out-of-school obligations. This may include cutting back on how many courses they are taking or designing course schedules that balance easy and hard courses in a given semester. The fact that there is flexibility in many aspects of college including course scheduling and work flow can help in this regard. An instructor described the desirability of this strategy by saying,

Someone needs to tell [students] to be realistic between balancing their goals, what they want to do, what curriculum they want to pursue, [with] working and raising a family. ... A lot of our students ... try to take full loads and raise a family and work full time, and I think that just kind of sets them up for failure in many respects.

For many students, the key to taking advantage of the role's flexibility was having a simple, actionable plan for balancing their multiple roles. Many students discussed the benefits of having such a plan, whether for scheduling study time, seeking help, or tending to family. Such a plan gave structure to the many demands that the students faced, and it provided a systematic and thoughtful way to confront challenges when multiple roles conflicted. Explained one student,

I need to have a plan because I'm very spontaneous and I just, I go with the flow type thing. That's a good mentality but also you always need a plan. And I have realized throughout this year-and-a-half I needed a plan from the get-go because if you don't have a plan, if you're just like doing it or whatever, then you might go out of those two years with not much of what you really wanted.

Taking advantage of fluidity, particularly in order to develop a plan for balancing multiple roles, requires a highly developed ability to reflect on one's needs and act accordingly. Students need to be able to think critically about their various roles and obligations and to develop strategies that will work for their unique circumstances. They also need to have enough awareness to recognize when strategies are not working, in order to make appropriate modifications.

Communicate with instructors early and often. Another strategy used by successful community college students is to communicate with instructors honestly, early on, and often. Both students and professors indicated that, if they are inclined to be lenient in their expectations, they are more likely to do so for students who communicate with them on a regular basis. Students indicated that they desired some recognition of the balancing act they perform, particularly if they do everything in their power to make college a priority. Professors agreed, to an extent, but emphasized that the onus was on the students to ask for and earn any flexibility. One student described the way he could and should have approached his instructor when trying to balance a move and school requirements:

And I was just so busy in the move and everything that I was like, I completely forgot and I didn't really take the time out to do, you know, like I said, make school my priority either way. And that's where I messed up. And

then when I went back with the stuff and when I went back to Miss Taylor, I was like, “Look, I’m really sorry.”

An instructor described the same process, only from the faculty point of view:

I want to meet students, maybe not halfway, maybe 80 percent. I want to meet them there, but they’ve got to put in the work to do that and show me that they really want it and that they’re trying.

Across all elements of this component, self-reflection and meta-cognition were key. Individual students have unique circumstances, and the strategies that allow one student to meet deadlines may not work for others. Students must be able to take a critical look at their personal circumstances in order to develop strategies for success. For example, a key strategy for many students was to develop a realistic sense of what is and is not feasible, given their other role-related demands. One instructor described this as a process in which students “figure out where their balance is . . . they have to figure out what they’re giving up.” Note the use of the phrase “figure out,” which implies a cognitive and reflective process on the part of the student.

For some students, this figuring-out process led them to weigh various options or seek alternative ways to achieve their educational goals. This might include dropping a course, taking courses online, changing majors, or modifying their study habits. One student we met with, for example, found it difficult to keep up with her studies while enrolled full time, so she modified her academic commitments:

I was taking like 13 or 14 credits and I had an assignment here due, you know, on the same day, and I was overlapping my studying and it was really overwhelming, and so I dropped down to two classes. And that’s a lot easier.

The point is that role incumbents recognized the importance of adhering to role-related demands, and when confronted with challenges to doing so from other areas of their lives, thought strategically about their options and made choices that modified their behaviors to allow them to balance school successfully. Engaging in this process required a high degree of self-awareness and reflection.

Help-seeking. The final component of the college student role is engagement in help-seeking behaviors. Community college students are expected to seek out help in ways that are more proactive and self-directed than is expected of high school students or employees. They must do this in a timely manner and in ways that are more culturally delineated with a stronger sense of what they need—this is often fundamentally different from previous forms of help-seeking with which role aspirants are likely familiar. This component is obviously related to the first, academic habits, in that it supports students' academic progress. But help-seeking is a very specific kind of academic habit, and one that takes on particular importance in the community college; this component therefore appears separately in our analysis.

Respondents indicate that help-seeking in college is fundamentally different from help-seeking in high school. Unlike in secondary school and at many jobs, role alters do not approach community college students offering assistance. Instead, the students themselves are expected to funnel themselves into a preexisting structure of supports that are made available by the institution. The college offers services, and students need to find and use them on their own. Explained one student, "It's college. They do everything; they have the Learning Center, the Tutoring Center, they've got the library, they've got all these computer labs. I mean they offer everything. ... You have to figure it out on your own." An instructor made a similar point when saying, "I'm not going to be the Wizard of Oz and know everything. ... I'm just going to steer you [the student] and tell you what steps you may want to take."

The data indicate that help-seeking in the community college is a process, where students first must recognize that they need help, then must understand the possible places to get help from, and finally follow through on asking for help. Successful role incumbents learn about this process and enact it throughout their college careers. Table 5 highlights the three main parts of the process, as well as strategies used by successful community college students to engage in help-seeking behaviors.

Table 5: Help-Seeking

Behaviors and attitudes	Strategies
Demonstrate awareness of need	<ul style="list-style-type: none">• Ask for help early• Anticipate areas that might become problematic in the future
Gain knowledge of available resources	<ul style="list-style-type: none">• Know what resources are available• Know when to use resources, how to do so appropriately, and which ones to use
Develop a sense of agency	<ul style="list-style-type: none">• Take the initiative to seek out help• Ask for assistance rather than waiting for it to be offered• Advocate for oneself

Develop an awareness of need. Before they can ask for help, community college students must recognize that they need assistance. Since others are unlikely to approach them and offer help, students must diagnose their needs on their own. For example, they need to realize that they will need help in a certain subject, or that they will need guidance in planning their schedule for the following semester. One instructor noted the need for student awareness by saying, “If you’re not good at math and you need help and you’re struggling, you need to avail yourself” of available services. Another college’s tutoring center made this demand even more explicit, requiring students seeking assistance to articulate a specific problem to be solved or goal to be accomplished prior to each tutoring session.

Ideally, students must recognize that they might need help before the need becomes acute. Said one instructor, “We have students who are coming in the last few weeks and they say they don’t understand anything. Well, there’s no way we can bring them up to speed.” Another expressed frustration that students often don’t seek out advisors until they are failing: “Students don’t have to see their advisor unless they have a block on there. They have a block because their average has dropped below C, then in order to register they need to see someone.”

Gain knowledge about available resources. Community college students are also expected to have a working knowledge of available resources, including college support services, supportive staff and faculty, and sources of information. This means that they are expected to know what resources are at their disposal, when those resources are

available, what those resources can provide, and how to use them appropriately. An instructor noted that many new community college students do not have this knowledge, saying, “And so I guess that’s the problem. There is a group that [does] not ask the questions that need to be asked, who don’t even know that they need to be doing that.”

Another instructor described the expectation that community college students know what resources exist and how to avail themselves of their help more succinctly: “Whether they take advantage of [available services] is their personal decision.” A student described this role-related expectation from the student perspective, saying “the important thing [in asking for help] is a student has to do their part.” This student noted that she was not having success in community college because she was not “doing her part.”

Another key element of this expectation is that community college students are able to navigate multiple resources. Most community colleges have myriad support services at students’ disposal, from advising and tutoring to informal interactions with faculty. The expectation is that students will not only know about all of these resources and when to use them, but also *which* resource to use for any given problem. As such, role alters expect community college students to be reflective enough to diagnose and solve problems on their own. They are also expected to develop skills that will enable them to self-advise or independently develop solutions to various educational and bureaucratic obstacles. An instructor explained: “We look at it as making sure that you understand what’s here and get you jump-started. At the same time, our goal is to make sure that you’re able to function yourself.”

Develop a sense of agency. Finally, once community college students have identified both a problem and places that might assist them in solving it, they are expected to take the initiative to seek out that help. We refer to this as having a sense of agency, in that role incumbents are expected to take action for themselves rather than wait for others to do so for them. Exhibiting help-seeking agency is a behavioral hallmark of the community college student role. Role alters view students’ attempts to get help for themselves as a key indicator that they are committed to the role and have learned how to enact it successfully. Failure to demonstrate this type of behavior, on the other hand, is likely to lead to negative perceptions.

One instructor summed up this expectation by saying, “And you have to keep telling them, “You are a college student now, I’m not going to outline everything for you. You’ve got to read [materials about campus policies, procedures, and services], you’ve got to know where you stand.” Note that she uses the words “college student,” explicitly linking the behaviors in this quote to individuals’ status (or lack of status) in the role. Her words emphasize the need for students themselves to take action, by reading and understanding what needs to be done.

Agency is seen in a variety of behaviors. Students demonstrate agency when they seek out and demand help when they need it—in essence, becoming their own advocates. Study participants were very clear that such self-advocacy was a key element of the community college student role, and that those individuals who are unable or unwilling to proactively seek out help were unlikely to be successful. One instructor summed up this sentiment when saying,

Students who do not seek out advising, students who do not ask questions or who do not have self-advocacy skills to go, “something doesn’t look right here,” may truly not get the help that they need until they apply for graduation and receive that letter saying, “Oops, you still have these four requirements.”

Clearly, reflection and self-awareness are necessary in all three phases of the help-seeking process. Students cannot recognize that they need help if they are unable to assess their strengths and weaknesses, and they are unlikely to be able to identify the correct type of help or service without the ability to reflect on their own needs. Students need to have enough self-knowledge to understand what they need and how to get it. It is worth noting that self-reflection and help-seeking are not the same thing. For example, a student can reflect on their learning without translating that reflection into help-seeking, while others may seek out help without first thinking about what type of assistance they really need. Still other students may decide, upon self-assessment, that they do not actually need to seek out additional assistance.

It is important to recognize—though many of our respondents did not seem to do this—that the types of proactive help-seeking described here constitute another culturally constructed expectation. Asking for help, for some students, is anxiety-provoking. For

other students, particularly those for whom college is unfamiliar and who may see themselves as not really belonging in postsecondary education, engaging in help-seeking behavior may be challenging or even identity-threatening (Gardenhire-Crooks, Collado, Martin, & Castro, 2010; Cox, 2009).

5. Conclusions and Recommendations

This paper used interview data from students, faculty, and staff at three Virginia community colleges to refine, extend, and clarify the role of a community college student. We did this because much of the existing research on the high school-to-college transition and on college preparation focuses on academic preparation, traditional four-year students, or both. Researchers have been generally inattentive to the non-academic components of college preparation, and have been particularly silent when it comes to what those expectations are in non-residential, non-four-year institutions.

Analyzing data from over 170 interview transcripts, we identified four distinct components of the role: academic habits, cultural know-how, balancing multiple roles, and help-seeking. We also found that the community college student role differs from other roles with which students might be familiar, such as those of a worker, family member, or high school student, because of both its fluidity and the greater degree to which self-awareness and reflection is necessary for successful role enactment. As such, the community college role is a challenging one for students to understand and enact. The overarching elements and specific components identified here can serve as a basis for improved student preparation for college. Practitioners can use these findings in a variety of ways to help potential and new community college students better understand what will be expected of them during their community college experience.

Working with students to explain the non-academic demands to which community college students are held is a key college preparation and success strategy, as our findings indicate that while the fluidity and flexibility of the role can be beneficial, these aspects can also leave room for confusion and misinterpretation. Without clear signposts to guide them, community college students are likely to find it challenging to know how to enact role-related expectations. They may also have a hard time recognizing whether or not

they are meeting the demands of the community college student role. Finally, because the community college student role is considerably different from the other roles they might inhabit, they have fewer cognitive resources to rely on as they develop their own interpretations of and integration into the college student role.

In order to prepare students for the community college student role, practitioners need recognize that successful role enactment entails two things: (1) understanding the normative expectations of the role and (2) having the cognitive repertoires that allow for normatively appropriate behaviors. This means that students need to be told that there are distinct expectations to which they will be held in the community college, given examples of those expectations, and shown (or, ideally, allowed to practice) strategies for meeting these expectations. It also means that new and potential community college students need to be given the opportunity to develop the reflective and metacognitive skills required to select strategies and behaviors for their specific role-related circumstances.

The tables presented throughout this paper provide an approach to helping students understand the normative role of a community college student. Presenting the tables, or documents based on them, to students might help students recognize that such expectations exist and might provide them with a set of strategies to use. This could be carried out in college orientation or College 101 courses, or even in meetings with college applicants or in high schools. Instructors can also use these tables to construct exercises in which their students are given the opportunity to practice these strategies—asking them to construct multiple ways to study for an exam, for example.

Whether via the tables or another strategy, scaffolding students' learning so that they are introduced to the expectations of the community college student role in a developmental manner is a key college readiness strategy. This is particularly true for students who are from cultures other than the middle-class, White culture upon which collegiate norms are based. Meeting students where they are, in terms of norms, expectations, and understandings, and helping them generate more detailed and actionable understandings of community college expectations can help them become comfortable with and successful in community college while maintaining cultural pluralism.

It is essential that any attempt to communicate the norms of the community college student role occur outside of high school. Secondary schooling is an opportune place to provide such information, of course, but since many community college students enter postsecondary education from outside of high school, college readiness efforts cannot focus solely on that institution. Instead, community colleges must find ways to communicate these expectations to a broader population. This might include leveraging adult basic education programs, worker retraining programs, or even popular media. And because all new community college students encounter the classroom, finding ways to communicate role-related norms and expectations early and often in students' college courses is essential. Community college instructors, if given the language to articulate their expectations clearly, can and should work to incorporate opportunities for expressing their expectations to students from the outset of their courses.

In addition, it is imperative that students develop the appropriate reflective and metacognitive skills, which may be harder to achieve as such skills require students to cultivate new ways of thinking. Community college students are expected to become self-regulated learners who are able to assess their needs and progress, think critically about their options, and act in ways best suited to their personal circumstances. Developing such skills occurs over time, and students need ample opportunity to practice and build their skills. Research suggests that it is possible to teach students these skills (Zimmerman et al., 2011) and that doing so can improve student outcomes (Dignath & Büettner, 2008).

Providing students with opportunities to practice reflecting on their educational progress and problem-solve in relation to their academic lives is critical in preparing them for the role of a community college student. As with communicating the norms of the role, such practice needs to occur during *and outside of* high school. Helping new community college students become reflective individuals needs to be incorporated into the first-year community college curriculum. Instructors should help their new students develop the metacognitive skills necessary for future college success. Activities such as student success courses and one-on-one guidance sessions can also serve as venues for developing and practicing these skills, but given scarce resources, a key location for sustained metacognitive practice is the academic classroom itself. A range of

instructional strategies, including contextualized instruction, conceptual learning, and collaborative practice, can encourage the development of metacognitive skills, including self-awareness and reflection (Flavell, 1979; Davidson et al., 1994; Perin & Hare, 2010).

The data presented in this paper are used to provide a clear, actionable set of expectations to which community college students are held and the strategies by which successful community college students meet these expectations. Currently, these expectations are held by college instructors but they are rarely clearly articulated to aspiring and new community college students. If they are communicated at all, they are generally referred to in vague and incomplete language—leaving students with little real guidance about the expectations to which they are held.

The clearly defined expectations and strategies presented in this paper may therefore provide an important foundation for improving student readiness at community college. Finding ways to communicate these expectations to students—clearly, early on, and in ways that they can understand and use—is a key next step. Doing so will not be easy, particularly for the many students who enter community college from outside of the education system, but the effort could be a way to alleviate some of the frustration that students experience and could potentially move the needle on student success. Community college leaders and practitioners should consider finding ways to accomplish this task.

References

- Attinasi, L. C. (1989). Getting in: Mexican-Americans' perceptions of university attendance and the implications for freshman year persistence. *Journal of Higher Education, 60*(3), 247–277.
- Aud, S., Hussar, W., Johnson, F., Kena, G., Roth, E., Manning, E., . . . Zhang, J. (2012). *The condition of education 2012* (NCES 2012-045). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Bailey, T., Jeong, D. W., & Cho, S. W. (2010). Referral, enrollment, and completion in developmental education sequences in community colleges. *Economics of Education Review, 29*, 255–270.
- Bernard, H. R. (2002). *Research methods in anthropology: Qualitative and quantitative approaches* (3rd ed.). Walnut Creek, CA: Altamira Press.
- Blumer, H. (1969). *Symbolic interactionism*. Englewood Cliffs, NJ: Prentice Hall.
- Bill & Melinda Gates Foundation. (n.d.). Why college completion? Retrieved from <http://www.gatesfoundation.org/postsecondaryeducation/Pages/why-college-completion.aspx>
- Byrd, K. L., & Macdonald, G. (2005). Defining college readiness from the inside out: First-generation college student perspectives. *Community College Review, 33*(1), 22–37.
- Carver, C. S., & Scheier, M. F. (1981). *Attention and self-regulation: A control theory approach to human behavior*. New York, NY: Springer-Verlag.
- Cho, S. W., & Karp, M. M. (2012). *Student success courses and educational outcomes at Virginia community colleges* (CCRC Working Paper No. 40). New York, NY: Columbia University, Teachers College, Community College Research Center.
- Choy, S. (2002). *Nontraditional undergraduates* (NCES 2002–012). Washington, DC: U.S. Department of Education, National Center for Education Statistics. Retrieved from <http://nces.ed.gov/programs/coe/analysis/2002a-sa01.asp>
- Collier, P. J., & Morgan, D. L. (2008). “Is that paper really due today?” Differences in first-generation and traditional college students’ understandings of faculty expectations. *Higher Education, 55*, 425–446.
- Conley, D. T. (2005). *College knowledge: What it really takes for students to succeed and what we can do to get them ready*. San Francisco, CA: Jossey-Bass.
- Conley, D. T. (2007a). The challenge of college readiness. *Educational Leadership, 64*(7), 23–29.

- Conley, D. T. (2007b). *Redefining college readiness* (Volume 3). Eugene, OR: Educational Policy Improvement Center.
- Conley, D. T. (2010). *College and career ready: Helping all students succeed beyond high school*. San Francisco, CA: Jossey-Bass.
- Cox, R. D. (2009). *The college fear factor: How students and professors misunderstand one another*. Cambridge, MA: Harvard University Press.
- Davidson, J. E., Deuser, R., & Sternberg, R. J. (1994). The role of metacognition in problem solving. In J. Metcalfe & A. Shimamura (Eds.), *Metacognition: Knowing about knowing* (pp. 207–226). Cambridge, MA: MIT Press.
- Dickie, L. O., & Farrell, J. E. (1991). The transition from high school to college: An impedance mismatch? *The Physics Teacher*, 29(7), 440–445.
- Dignath, C., & Büettner, G. (2008). Components of fostering self-regulated learning among students: A meta-analysis on intervention studies at primary and secondary school level. *Metacognition and Learning*, 3(3), 231–264.
- Duckworth, K., Akerman, R., MacGregor, A., Salter, E., & Vorhaus, J. (2009). *Self-regulated learning: A literature review* (Research Report No. 33). London, UK: University of London, Institute of Education, Centre for Research on the Wider Benefits of Learning Research.
- Ebaguh, H. R. F. (1988). *Becoming an ex: The process of role exit*. Chicago, IL: University of Chicago Press.
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist*, 34(10), 906–911.
- Gardenhire-Crooks, A., Collado, H., Martin, K., & Castro, A. (2010). *Terms of engagement: Men of color discuss their experiences in community college*. New York, NY: MDRC.
- Goffman, E. (1961). *Encounters: Two studies in the sociology of interaction*. Indianapolis, IN: Bobbs-Merrill.
- Hurtado, S., & Carter, D. F. (1997). Effects of college transition and perceptions of the campus racial climate on Latino college students' sense of belonging. *Sociology of Education*, 70(4), 324–345.
- Ibarra, H. (1999). Provisional selves: Experimenting with image and identity in professional adaptation. *Administrative Science Quarterly*, 44(4), 764–791.
- Jenkins, D., Jaggars, S. S., Roksa, J., Zeidenberg, M., & Cho, S. W. (2009). *Strategies for promoting gatekeeper course success among students needing remediation: Research report for the Virginia community college system* (Full-length technical

- report). New York, NY: Columbia University, Teachers College, Community College Research Center.
- Karp, M. M., Bickerstaff, S., Rucks-Ahidiana, Z., Bork, R. H., Barragan, M., & Edgecombe, N. (2012). *College 101 courses for application and student success* (CCRC Paper). New York, NY: Columbia University, Teachers College, Community College Research Center. Manuscript in preparation.
- Karp, M. M. (2011). *Toward a new understanding of non-academic support: Four mechanisms encouraging positive student outcomes in the community college* (CCRC Working Paper No. 28, Assessment of Evidence Series). New York, NY: Columbia University, Teachers College, Community College Research Center. .
- Karp, M. M. (2006). *Facing the future: Identity development among College Now students* (Doctoral dissertation). Available from ProQuest Dissertation and Theses database. (AAT 3199561)
- Lacy, K. R. (2007). *Blue-chip black: Race, class, and status in the new black middle class*. Berkeley, CA: University of California Press.
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32, 465–491.
- Le Compte, M. D., & Preissle, J. (1993). *Ethnography and qualitative design in educational research* (2nd ed.) San Diego, CA: Academic Press.
- Lumina Foundation for Education. (2009). *Lumina Foundation's strategic plan: Goal 2025*. Indianapolis, IN: Author. Retrieved from http://www.luminafoundation.org/wp-content/uploads/2011/02/Lumina_Strategic_Plan.pdf
- Merton, R. K. (1957). *Social theory and social structure* (Revised ed.). London, UK: The Free Press of Glencoe.
- Oleson, V. L., & Whittaker, E. W. (1968). *The silent dialogue: A study in the social psychology of professional socialization*. San Francisco, CA: Jossey-Bass.
- Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational Researcher*, 41(3), 93–97.
- Perin, D., & Hare, R. (2010). *A contextualized reading-writing intervention for community college students* (CCRC Brief No. 44). New York, NY: Columbia University, Teachers College, Community College Research Center.
- Provasnik, S., & Planty, M. (2008). *Community colleges: Special supplement to The Condition of Education 2008* (NCES 2008-033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics.

- Ragin, C. C. (1994). *Constructing social research: The unity and disunity of method*. Thousand Oaks, CA: Pine Forge Press.
- Rendon, L. I., Jalomo, R. E., & Nora, A. (2000). Theoretical considerations in the study of minority student retention in higher education. In J. M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 127–156). Nashville, TN: Vanderbilt University Press.
- Roderick, M., Nagaoka, J., & Coca, V. (2009). College readiness for all: The challenge for urban high schools. *The Future of Children*, 19(1), 185–210.
- Roderick, M., Nagaoka, J., Coca, V., Moeller, E., & (with Roddie, K., Gilliam, J., & Patton, D). (2008). *From high school to the future: Potholes on the road to college*. Chicago, IL: University of Chicago, Consortium on Chicago School Research.
- Rosenbaum, J. E., Deil-Amen, R., & Person, A. E. (2006). *After admission: From college access to college success*. New York, NY: The Russell Sage Foundation.
- Rosenbaum, J. E., Stephan, J. L., & Rosenbaum, J. E. (2010). Beyond one-size-fits-all college dreams: Alternative pathways to desirable careers. *American Educator* 34(3), 2–13.
- Shields, N. (2002). Anticipatory socialization, adjustment to university life, and perceived stress: Generational and sibling effects. *Social Psychology of Education*, 5, 365–392.
- Simpson, I. H. (1979). *From student to nurse: A longitudinal study of socialization*. Cambridge, United Kingdom: Cambridge University Press.
- Tierney, W. G. (1999). Models of minority college-going and retention: Cultural integrity versus cultural suicide. *Journal of Negro Education*, 68(1), 80–91.
- Turner, R. H. (1990). Role change. *Annual Review of Sociology*, 16, 87–110.
- Venezia, A., Bracco, K. R., & Nodine, T. (2010). *One-shot deal? Students' perceptions of assessment and course placement in California's community colleges*. San Francisco, CA: WestEd. Retrieved from http://www.wested.org/online_pubs/OneShotDeal.pdf
- Venezia, A., Kirst, M. W., & Antonio, A. L. (2003). *Betraying the college dream: How disconnected K-12 and postsecondary education systems undermine student aspirations* (Final Report of the Bridge Project). Stanford, CA: Stanford Institute for Higher Education Research.
- The White House, Office of the Press Secretary. (2009, February 24). *Presidential address to joint session of Congress*. Retrieved from

http://www.whitehouse.gov/the_press_office/Remarks-of-President-Barack-Obama-Address-to-Joint-Session-of-Congress/

- Zimmerman, B. J. (1990). Self-regulated learning and academic achievement: An overview. *Educational Psychologist, 25*(1), 3–17.
- Zimmerman, B. J. (2001). Theories of self-regulated learning and academic achievement: An overview and analysis. In B. J. Zimmerman & D. H. Schunk (Eds.), *Self-regulated learning and academic achievement: Theoretical perspectives* (pp. 1–38). Mahwah, NJ: Lawrence Erlbaum Associates.
- Zimmerman, B. J., Moylan, A., Hudesman, J., White, N., & Flugman, B. (2011). Enhancing self-reflection and mathematics achievement of at-risk urban technical college students. *Psychological Test and Assessment Modeling, 53*(1), 141–160.

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HELP WANTED

As manufacturing rebounds and becomes more technical, skilled workers are in demand

By D.C. Denison
GLOBE STAFF

Earlier this year, Berkshire Manufactured Products won a lucrative aerospace contract that requires the Newburyport company to invest between \$200,000 and \$500,000 in equipment and hire two machinists.

Three months later, the equipment has been ordered but Berkshire is still seeking the two skilled workers to operate it — despite enlisting 11 employment agencies to find them. Berkshire has been through this before; last year it took eight employment agencies and three months to hire two machinists.

"It's a major creative challenge to find skilled machinists," said company president Steve Keches. "You don't want to have the machines, and no one to operate them."

Such difficulty finding workers has become increasingly common among the state's manufacturers as the sector rebounds from the recent recession, expanding

production and adding jobs. From the Pioneer Valley to the North Shore to Southeastern Massachusetts, these companies say they can't find workers with skills needed for a modern manufacturing industry that focuses on advanced products for technology, medical, aerospace, and defense sectors.

While Governor Deval Patrick and President Obama pursue policies to expand manufacturing, companies say the shortage of skilled labor is making it harder for them, the industry, and ultimately the state's economy to grow.

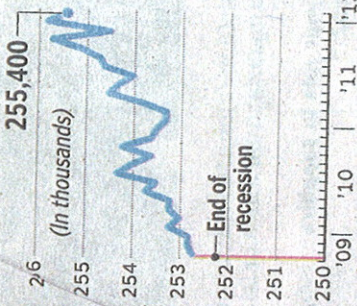
Last year in Massachusetts, only health care had a greater need for workers than manufacturing, according to an analysis of job advertising by the University of Massachusetts' Donahue Institute. Manufacturers advertised nearly 73,000 openings in 2011, compared to about 76,000 in health care.

If the state's manufacturers can't find skilled workers,

MANUFACTURING, Page G4

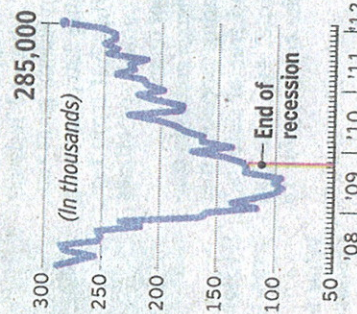
MANUFACTURING'S REBOUND

Manufacturing jobs in Massachusetts



SOURCE: US Department of Labor

Job openings in US manufacturing



JAMES ABUNDIS/GLOBE STAFF

▶ MANUFACTURING

Continued from Page G1

said Barry Bluestone, an economist at Northeastern University, the industry could erode, diminishing what is the state's fifth largest employment sector, and second largest in terms of payroll because of its high wages. While employment has shrunk dramatically in recent years, the sector still employs more than 250,000 and has added 2,700 jobs since the end of the recession.

"What could happen is that some manufacturers who want to expand won't be able to," Bluestone said. "Some others may reduce output because they can't replace workers who retire. And, finally, some may decide that they just can't operate here, and move their operations to China or India, where they can find the talent they need."

Tell Tool Inc., in Westfield, started in 1967 making small levers for the aircraft industry, but today manufactures complex aerospace parts of titanium, aluminum, magnesium, and other materials. Like Bluestone, Tell Tool president Dave Smith worries that the aerospace companies making up the bulk of his customers will move overseas if local contractors can't find enough skilled workers to keep up with orders.

Recently the company, which employs about 140, held an open house to recruit workers. Eighty attended, but only two had the right skills.

"We're having a tough time finding people," Smith admitted. "If you could find me 10 machinists, I'd hire them yesterday."

Several factors are contributing to the shortage, including the sector's recent rebound, the

retirement of baby boomers, and a perception of manufacturing as dying, dirty industry that has discouraged young people from seeking careers in the field. Bluestone projects the industry could have more than 100,000 job openings in the next decade.

Underlying the skills shortage is the changing nature of manufacturing.

Assembly jobs moved offshore long ago, but Massachusetts has held on to high-end or precision manufacturing, which requires sophisticated, computer-controlled equipment to create prototypes, precisely machined parts to meet demanding tolerances, and workers who possess not only an understanding of materials and traditional shop procedures, but also solid skills in math and computer programming.

One of the most sought after workers, for example, is the computer numerical control, or CNC, machinist, who generally works behind a computer terminal loaded with thousands of dollars of software and can earn as much as \$100,000 a year. Reading instructions from a blueprint, the machinist controls high-speed cutters that carve out parts with tolerances many times thinner than a human hair.

The skills required to run these machines often fall into a manufacturing generation gap. Many veteran machinists are uncomfortable with computer programming. Younger, more computer-savvy workers lack manufacturing experience and seek opportunities in other fields.

Of the 7,426 students who graduated from the state's 38 vocational technical schools in

2011, just 545 came from programs focused on manufacturing skills.

"Manufacturing is just not a sexy industry," said Scott Brown, senior vice president of operations at Berkshire Manufactured Products.

Paul Harrington, a labor economist and director of Drexel University's Center for Labor Markets and Policy in Philadelphia, said it isn't surprising that many promising students never get on a manufacturing career track.

"There are some very good jobs in advanced manufacturing, but there's no getting around the fact that manufacturing has been shedding jobs for a very long time," he said. "We're in a boom cycle now, but there's still an element of risk in a manufacturing career."

O-D Tool & Cutter in Mansfield, which cuts and sharpens the tools that machine shops and precision manufacturers use, has 20 employees. Company president Kevin O'Donnell said he'd like to add more, but when resumes come in, the applicants don't have the requisite skills.

"You have to know your math, you have to know your algebra, and your trigonometry," said O'Donnell. "And today, the people who know all that are more interested in computer science. They think manufacturing is obsolete."

The state has launched initiatives to try to change that perception, including the governor's Advanced Manufacturing Collaborative, which aims to support the industry through workforce development and other efforts.

In addition, the Massachusetts Manufacturing Extension

Partnership, a publicly funded group that advises small manufacturers, has received a \$4 million US Labor Department grant to work with Worcester Polytechnic Institute and Worcester Technical High School to train workers for the industry.

This year, the partnership expects to get 200 to 300 people started on manufacturing careers. "It's not nearly enough to fill the skills gap," said director Jack Healy, "but it's a start."

Many companies also have their own training programs. The Custom Group, a precision manufacturing company in Woburn, has gone a step further. After struggling to find qualified employees, the company started its own internal training program in 2008. The following year, it started offering machining classes to the industry and general public. The cost for a 16-week class, 320 hours of training, is around \$7,000.

Although these training initiatives will help, Steven Tamasi, chief executive of Boston Centerless, a Woburn specialty manufacturer, said the state needs a long-term approach to what has become a chronic problem. The message that there are high-paying, satisfying careers in manufacturing has to be communicated to young people consistently, and constantly refreshed to reach new generations of students, Tamasi said.

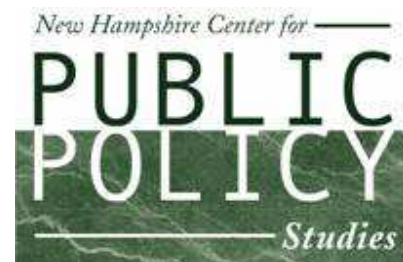
"Even if these programs are successful, we need long-term programs, funnels, and support," he said. "Otherwise we're going to be talking about the same thing three or four years from now."

D.C. Demison can be reached at demison@globe.com.

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carredondo@nhpolicy.org

Smart Manufacturing and High Technology New Hampshire’s Leading Economic Sector

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Authors

Dennis Delay
Economist

Steve Norton
Executive Director

About this paper

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Write to: NHCPPS, 1 Eagle Square, Suite 510, Concord NH 03301

Smart Manufacturing and High Technology: New Hampshire's Leading Economic Sector

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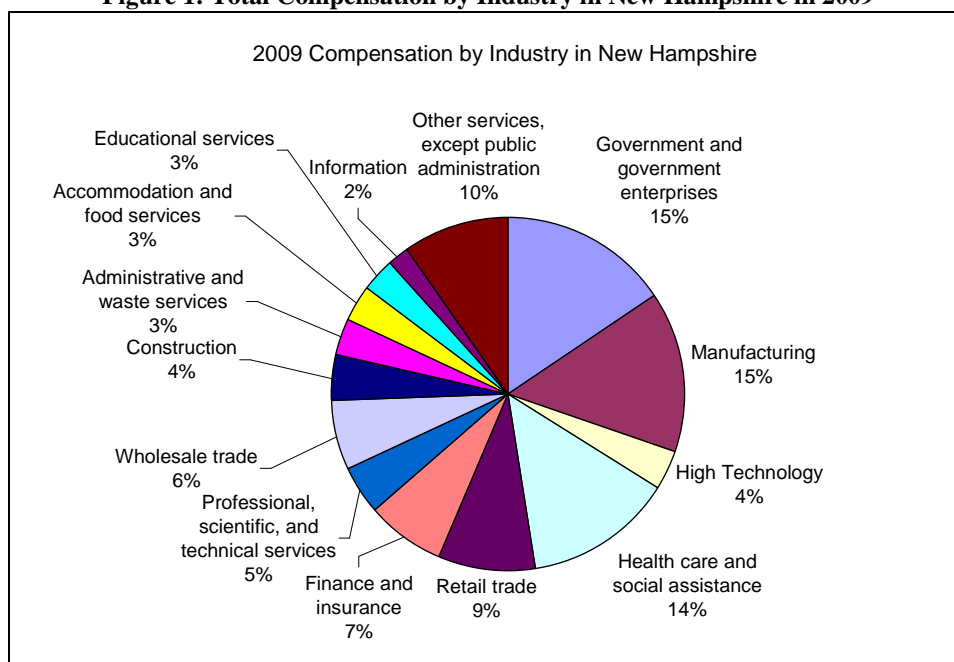
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Executive Summary

The Smart Manufacturing/High Technology (SMHT) sector, which includes all of New Hampshire's approximately 2,100 manufacturing companies as well as more than 1,600 high technology companies, is the engine of the state's economy. Look beyond the reports of lost manufacturing jobs, and you find an industrial sector that is a still-powerful engine of economic growth in New Hampshire. As described in a recent report from the U.S. Manufacturing Competitiveness Initiative, "smart" manufacturing is "driving a revolution in the development and application of manufacturing intelligence to every level, from product invention through design, sourcing, production and delivery."¹

As shown in Figure 1, SMHT remains the largest part of the New Hampshire economy. Together, manufacturing and high technology companies account for 19% of the state's economy.

Figure 1: Total Compensation by Industry in New Hampshire in 2009



Source: US Bureau of Economic Analysis

SMHT has been one of the hardest hit sectors in the most recent recession. But while the sector is changing in character, wages and benefits continue to grow. Wages and benefits paid by SMHT companies in the state increased from \$3.7 billion in 1990 to \$6.4 billion in 2009, even as the number of manufacturing jobs in New Hampshire declined. Granite State manufacturers now produce more industrial output, but with fewer employees, than they did twenty years ago.

In addition, the sector employs one out of six of New Hampshire's private sector workers. SMHT companies import wealth into New Hampshire at a rate four times that of the travel and

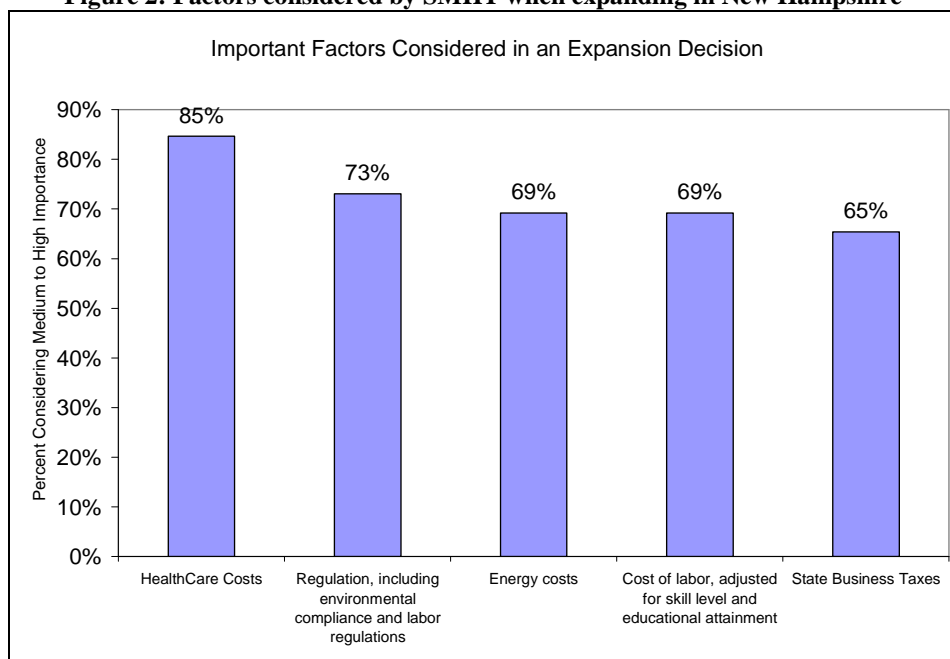
¹ U.S. Manufacturing Competitiveness Initiative at Compete.org

tourism industry, the industry often linked anecdotally with New Hampshire's economy. And while SMHT companies represent 8% of the companies paying the state's Business Profits and Business Enterprise taxes, those same companies accounted for 23% of the total business tax revenue in FY2008, the highest of any industrial sector.

Not surprisingly, there is a significant economic impact associated with the creation of SMHT jobs. Economic impact models suggest that the creation of 100 new manufacturing jobs in New Hampshire will create as many as 138 additional jobs in the rest of the state economy, add \$11 million in earnings, \$18 million in Gross Domestic Product (GDP), and generate \$1.2 million in state and local tax revenue. Creating 100 new healthcare or tourism jobs has a much smaller return on investment. (See page 15.)

This paper also examines the advantages and disadvantages facing New Hampshire SMHT companies when competing with other states and countries (See page 17). According to our research, higher wages, health care costs, and energy costs are New Hampshire disadvantages (Figure 2). The state's top advantages, according to survey respondents, are low overall personal tax burden, the quality of the New Hampshire labor force and the state's quality of life.

Figure 2: Factors considered by SMHT when expanding in New Hampshire²



Finally we list some of the ways policymakers can encourage the establishment and growth of smart manufacturing and high technology jobs in the state, by trying to preserve the state's competitive advantages and mitigate its disadvantages. The primary factors that policy makers need to focus on include healthcare policy, investments in education and infrastructure, and tax policy.

² See Figure 11: Online Survey – Competitive Pressures in this report

Smart Manufacturing and High Technology: New Hampshire's Leading Economic Sector

Definition of Smart Manufacturing/High Technology (SMHT)

There is no one comprehensive, widely-accepted definition of Smart Manufacturing and High Technology (SMHT). The phrase is used by many organizations in different, sometimes conflicting, ways. One of the most widely used definitions of Smart Manufacturing involves the use of technology to improve products and/or processes, with the relevant technology being described as “advanced,” “innovative,” or “cutting edge.” The definitions of high technology employment often include occupations in both manufacturing and nonmanufacturing industries.

The Center reviewed and rejected a number of different definitions of advanced manufacturing as too narrow. As a result, for the purposes of this report, the Smart Manufacturing/ High Technology (SMHT) sector includes manufacturers engaged in the transformation of materials into new products using advanced technology and skilled labor. All of New Hampshire's 2,073 manufacturing companies arguably fall within the above definition as competitive pressures have led manufacturers to make the best use of technology and skilled labor to improve products and/or processes. The relevant technologies are often described as “advanced,” “innovative,” or “cutting edge.” New Hampshire's 1,600 high technology companies engaged in software publishing, computer systems design and scientific research are also included in our SMHT definition.

Smart Manufacturing focuses on the occupational skill sets and technology used by companies to produce goods. This is the definition used by the Department of Labor Employment and Training Administration, and also the US Council on Competitiveness. The point is that all manufacturing requires skilled employees in order to be successful. Also, all manufacturers used advanced manufacturing techniques, including lean manufacturing, supply chain management, customer-focused innovation, advanced talent management, systemic continuous improvement, extended enterprise management, sustainable product and process development, and global engagement.

Examples of manufacturing companies in New Hampshire included in SMHT are Hypertherm, Cirtronics, Hitchiner Manufacturing, Sturm Ruger, Markem-Imaje, Amphenol TCS, Elektrisola, Thermo Fisher Scientific, New England Wire Technology, Monadnock Paper, and Globe Manufacturing. A table of 2009 annual employment and wage data by manufacturing subsector is available in Appendix IV. In addition, Dynamic Network Services, Inc., Ektron, Optima Technologies, Great Bay Medical Products, ScaleTera Renewable Energy, LLC, and Sunrise Labs are examples of software publishing, computer systems design and scientific research companies also included in New Hampshire SMHT.

Recent History of SMHT in New Hampshire

The following table (Table 1) shows the number of companies, the level of employment and the average weekly wage for SMHT establishments, for each of the years 2001 through 2009. As of 2009, there were over 3,700 SMHT companies in New Hampshire, employing almost 80,000 people, and paying an average wage of more than \$1,200 per week.

Table 1: New Hampshire SMHT 2001 to 2009

New Hampshire Smart Manufacturing and High Technology Based on the Skill Set Measure	Total Manufacturing	Software Publishers	Computer systems design and related services	Scientific research and development services	Total Manufacturing and High Tech	Total NH Private Employment	Mfg/ High Tech as % of Private Employment
2001							
Average firms	2,444	181	979	156	3,760	40,434	9.3%
Average employment	97,412	4,077	6,376	1,579	109,444	531,225	20.6%
Average weekly wage	\$859.65	\$1,529.37	\$1,379.67	\$1,415.92	\$922.92	\$691.51	133.5%
2002							
Average firms	2,374	163	931	155	3,623	40,372	9.0%
Average employment	84,818	3,380	5,092	1,583	94,873	521,320	18.2%
Average weekly wage	\$886.70	\$1,542.36	\$1,453.81	\$1,449.93	\$949.89	\$703.84	135.0%
2003							
Average firms	2,316	142	928	147	3,533	40,644	8.7%
Average employment	80,265	3,042	4,776	1,279	89,362	520,362	17.2%
Average weekly wage	\$928.04	\$1,561.04	\$1,463.20	\$1,460.05	\$985.80	\$724.91	136.0%
2004							
Average firms	2,310	162	969	148	3,589	41,550	8.6%
Average employment	80,049	2,898	5,246	1,422	89,615	529,461	16.9%
Average weekly wage	\$973.96	\$1,843.06	\$1,466.13	\$1,512.19	\$1,039.42	\$760.66	136.6%
2005							
Average firms	2,255	152	1,071	159	3,637	42,067	8.6%
Average employment	80,064	2,911	5,903	1,475	90,353	536,173	16.9%
Average weekly wage	\$1,002.00	\$1,903.86	\$1,516.56	\$1,577.30	\$1,074.07	\$788.93	136.1%
2006							
Average firms	2,219	144	1,126	165	3,654	42,884	8.5%
Average employment	78,329	2,847	6,205	1,482	88,863	541,435	16.4%
Average weekly wage	\$1,066.51	\$1,917.93	\$1,657.28	\$1,857.27	\$1,148.23	\$827.48	138.8%
2007							
Average firms	2,189	126	1,241	124	3,680	43,055	8.5%
Average employment	77,762	2,667	6,675	1,269	88,373	543,800	16.3%
Average weekly wage	\$1,109.42	\$2,039.26	\$1,644.30	\$1,831.76	\$1,188.25	\$852.45	139.4%
2008							
Average firms	2,158	120	1,330	137	3,745	43,108	8.7%
Average employment	75,912	3,055	7,308	1,441	87,716	541,768	16.2%
Average weekly wage	\$1,126.95	\$2,278.30	\$1,740.09	\$2,083.74	\$1,233.85	\$870.64	141.7%
2009							
Average firms	2,073	116	1,390	140	3,719	42,508	8.7%
Average employment	68,054	2,871	6,647	1,478	79,050	517,634	15.3%
Average weekly wage	\$1,120.98	\$2,209.00	\$1,738.00	\$1,844.00	\$1,225.90	\$867.00	141.4%
Percent Change 2001 to 2009							
Average units	-15.2%	-35.9%	42.0%	-10.3%	-1.1%	5.1%	
Average employment	-30.1%	-29.6%	4.3%	-6.4%	-27.8%	-2.6%	
Average weekly wage	30.4%	44.4%	26.0%	30.2%	32.8%	25.4%	

Source: US Bureau of Labor Statistics

SMHT companies account for 9% of New Hampshire's private sector employers, but they employ more than 15% of New Hampshire's private sector workers. The average weekly wage for SMHT workers is 40% higher than the average weekly wage for all private sector employees working in New Hampshire. The table also shows a decline in the number of employees in the SMHT sector, from almost 110,000 in 2001 to just fewer than 80,000 in 2009. Jobs in the SMHT sector in New Hampshire have fallen because of the decline in the economy due to increased productivity, globalization of the economy, and to the Great Recession.

Short-Term SMHT Trends and the Current Economic Crisis, 2005-2009

National manufacturing production showed steady increases between the end of 2001 and 2007. During this period, the manufacturing production index grew by 16%. The index for computer and electronic products saw the highest growth, increasing by 85% between 2001 and 2007. However, after 2007, the production index for manufacturing fell dramatically, bottoming out at 85.4 in the second quarter of 2009 – levels last seen in 1998. Between 2005 and 2009, nearly all of the manufacturing industries measured saw a decrease in production. However, two commodities showed growth during this period: computer and electronic products (up 31%) and aerospace and miscellaneous transportation (up 19%).

The economy began contracting and was on its way to recession at the end of 2007. Conditions eroded substantially soon after the subprime financial shock in the summer of 2007, and turned measurably worse by the end of 2007. Real GDP growth came to a standstill in the fourth quarter of 2007, and declined thereafter.

The end of 2008 brought a global financial upheaval. Oil prices dropped from \$140 to \$30 per barrel, but that was of little comfort, since the cause of plummeting energy prices was a global financial panic. The world financial system at times appeared on the verge of collapse, arguably the worst since the 1929 stock market crash.

The loss in aggregate demand translated into employment declines throughout the economy from December of 2007 through June of 2009 (the official beginning and end points of the Great Recession). The 6% decline in total U.S. employment (all jobs including manufacturing) since December 2007 was twice the average decline in employment in the usual post World War II recession. Industrial production declined by almost 17% from December 2007 to June of 2009, again twice the average of the typical post World War II recession. The US unemployment rate increased by 6.0% (from 4.4% to 10.4%), which was again twice the typical increase in unemployment in prior recessions.

The Current State of U.S. Manufacturing, Early 2010

In the first quarter of 2010, the manufacturing production index increased by 4% compared to the first quarter of the previous year, with both durable and nondurable manufacturing reporting increases. Among manufacturing industries, motor vehicles and parts (up 35%), and primary metals (up 34%) showed the highest increase in production compared to the first quarter of 2009.

While manufacturing employment was still lower through the second quarter of 2010 than in the second quarter of the previous year, it has been increasing each month since January 2010. In the

first six months of 2010, manufacturing employment has grown faster than overall nonfarm employment.

In the first quarter of 2010, manufacturing productivity increased by 7% compared to the first quarter of 2009. This is after a 2% decrease in the first quarter of 2009, compared to the first quarter of the previous year. Durable and nondurable manufacturing productivity also increased, with durable manufacturing productivity up 9% compared to the first quarter of 2010 and nondurable manufacturing productivity up 5%. In comparison, overall nonfarm business productivity increased 6% during the first quarter of 2010 compared to the first quarter of the previous year.

The Impact of SMHT on New Hampshire's Economy

SMHT industries are critical to the New Hampshire economy. In 2009 total compensation, including wages and benefits paid by all New Hampshire private and public sector employers totaled \$34.5 billion (Table 2.) Wages and benefits paid by SMHT companies totaled \$6.4 billion in 2009, up from \$3.7 billion in the year 1990.

Table 2: Total Compensation Paid by New Hampshire Industries; 1990, 2000 and 2009

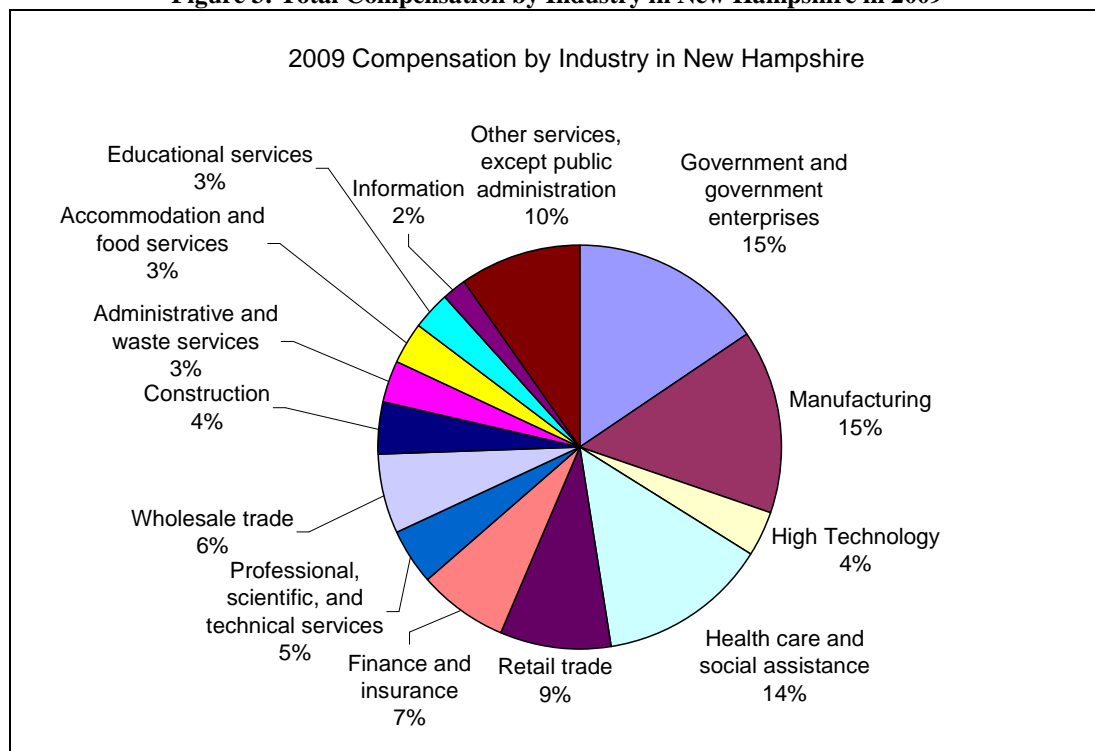
Total Compensation Paid by New Hampshire Nonfarm Industries in 1990, 2000, and 2009			
(Thousands of Dollars)	<u>2009</u>	<u>2000</u>	<u>1990</u>
Manufacturing Companies	\$5,071,826	\$5,542,059	\$3,443,383
High Technology Companies	\$1,314,801	\$802,806	\$235,462
Subtotal of Above (SMHT)	\$6,386,627	\$6,344,865	\$3,678,845
Government and government enterprises	\$5,343,124	\$3,193,819	\$2,142,881
Health care and social assistance	\$4,681,816	\$2,467,588	\$1,257,042
Retail trade	\$3,000,310	\$2,480,693	\$1,422,466
Finance and insurance	\$2,493,594	\$1,619,773	\$798,984
Professional, scientific, and technical services	\$1,587,191	\$1,217,680	\$478,256
Wholesale trade	\$2,202,364	\$1,773,755	\$803,539
Construction	\$1,412,615	\$1,172,512	\$683,069
Administrative and waste services	\$1,183,593	\$747,772	\$318,359
Accommodation and food services	\$1,113,144	\$818,344	\$435,092
Educational services	\$1,073,240	\$573,667	\$289,207
Information	\$623,371	\$589,195	\$261,268
Other services, except public administration	\$3,390,778	\$2,693,842	\$1,363,418
	\$34,491,766	\$25,693,506	\$13,932,425

SMHT Equals Manufacturing plus High Technology Companies

Source: US Bureau of Economic Analysis

Together, New Hampshire Smart Manufacturing and High Technology companies accounted for 19% of total wages and benefits paid in 2009, as shown in Figure 3, making SMHT the largest single sector of the New Hampshire economy. In 2009, the next largest sector was government and government enterprises, followed by healthcare and social assistance.

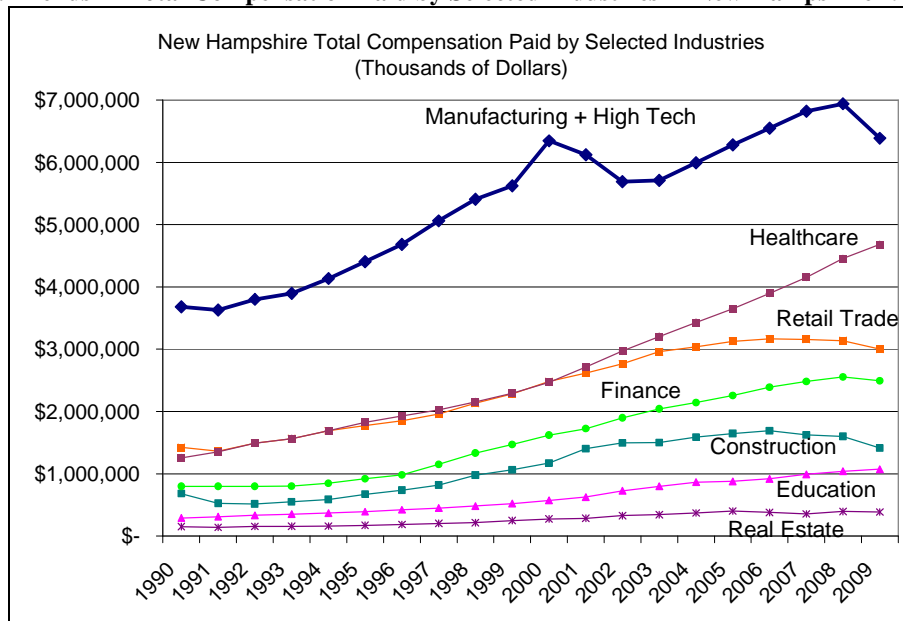
Figure 3: Total Compensation by Industry in New Hampshire in 2009



Source: US Bureau of Economic Analysis

Manufacturing has long been the leading industrial sector in the New Hampshire economy, as measured by the total compensation paid compared to other industries. Health care and social assistance has risen as a percent of overall economic activity, increasing from 9% of total compensation paid by New Hampshire nonfarm industries in 1990 to 14% in 2009. However, SMHT remains the single largest sector by this measure of economic activity, at 19% in the year 2009. The trends in total compensation for selected industries in New Hampshire are shown in Figure 4 below.

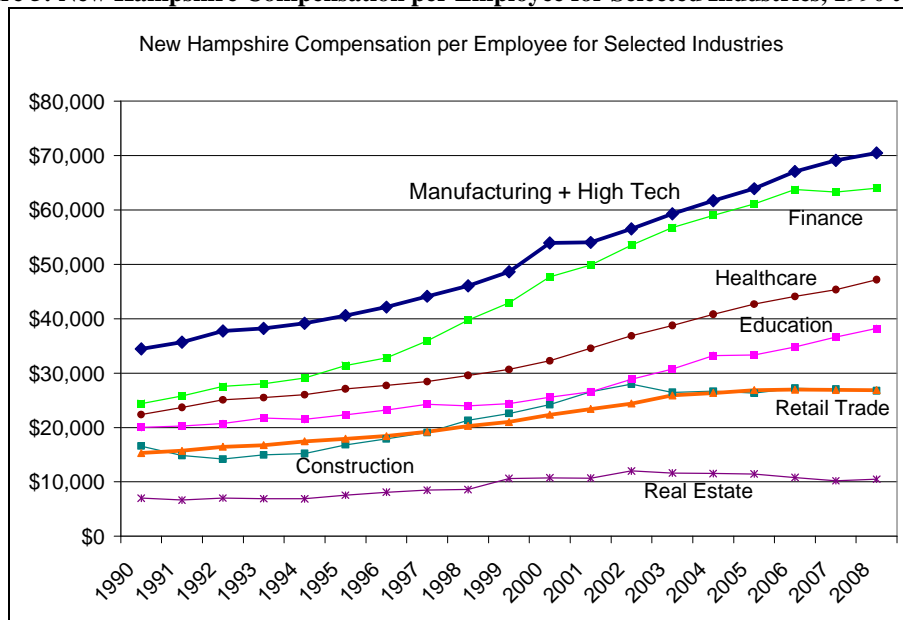
Figure 4: Trends in Total Compensation Paid by Selected Industries in New Hampshire 1990 to 2009



Source: US Bureau of Economic Analysis

More importantly, the SMHT employers are a source of high wage jobs for New Hampshire workers. As shown in Figure 5, the average compensation (including wages and benefits paid) per SMHT employee has exceeded average wages and benefits paid in every other industry sector, including construction, healthcare, education, retail trade and even financial services.

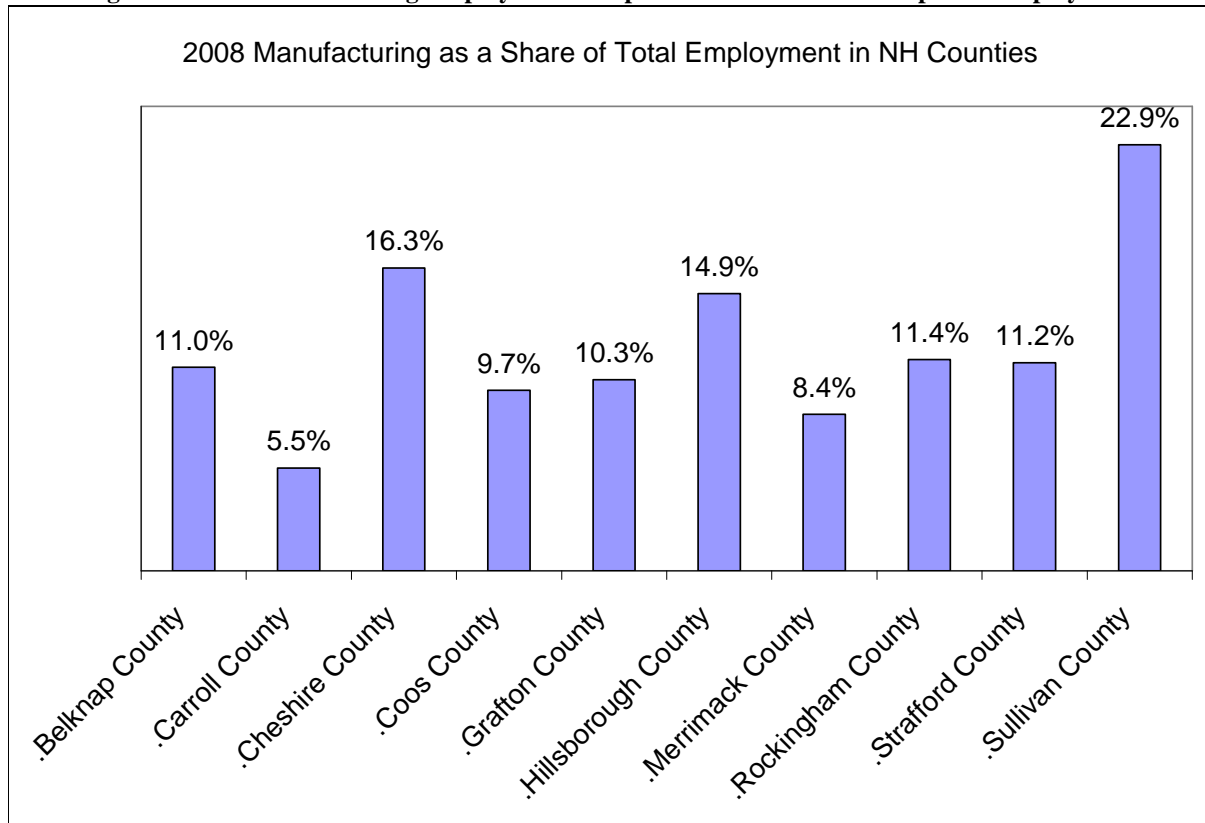
Figure 5: New Hampshire Compensation per Employee for Selected Industries, 1990 to 2009



Source: US Bureau of Economic Analysis

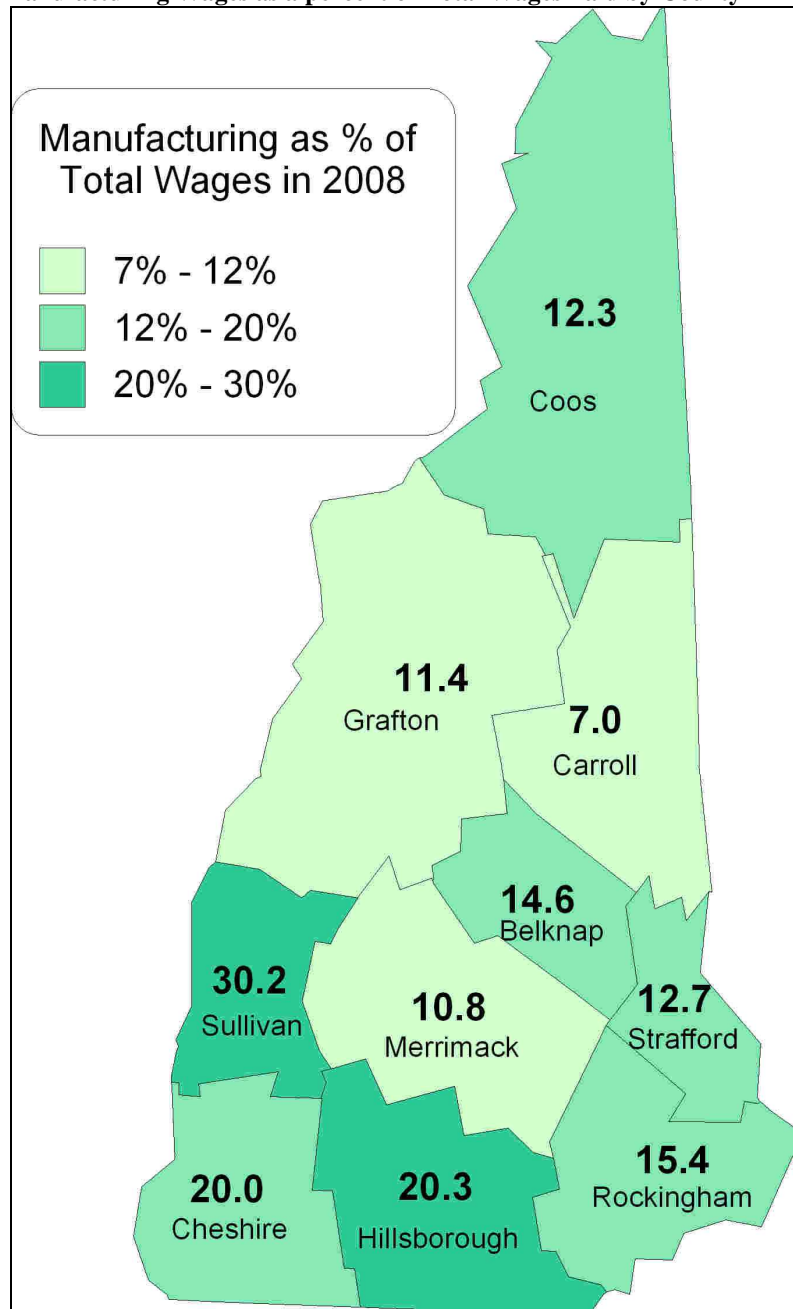
The importance of manufacturing in the makeup of regional economic activity varies by county in New Hampshire. Sullivan County has the highest concentration of manufacturing employment. Carroll County, a prime tourist destination that is part of the Mt. Washington Valley and also borders Lake Winnepesaukee, has the smallest portion of employment in manufacturing. Manufacturing employment as a percent of total employment in 2008 by county is shown in Figure 6, and manufacturing wages as a percent of total wages paid in 2008 by county are shown in Figure 7.

Figure 6: 2008 Manufacturing Employment as a percent of Total New Hampshire Employment



Source: New Hampshire Department of Employment Security

Figure 7: Manufacturing Wages as a percent of Total Wages Paid by County in 2008



Source: New Hampshire Department of Employment Security

Manufacturing Exports Bring Wealth to New Hampshire

A total of 2,264 companies exported goods from New Hampshire to other countries in 2008. Of those, 1,996 (88%) were small and medium-sized enterprises (SMEs), with fewer than 500 employees. SMEs generated 42% of New Hampshire's total exports of merchandise in 2008.³ This was the ninth highest share among the states and well above the national average of 31%. (Data from 2008 are the latest available.)⁴

In 2008, foreign-controlled companies employed 40,400 workers in New Hampshire. Major sources of New Hampshire's foreign investment included the United Kingdom, France, Canada, and Germany. Roughly two-fifths (39%) of these jobs, or 14,800 workers, were in the manufacturing sector. Foreign-controlled companies accounted for 18.9%, nearly one-fifth, of total manufacturing in New Hampshire. That was the third-highest figure among the 50 states. Foreign investment in New Hampshire was responsible for 7.2% of the state's total private-industry employment in 2008. Examples of foreign controlled companies in New Hampshire are BAE Systems, Inc. (United Kingdom); Lindt & Sprüngli (Switzerland); Elektrisola, Inc. (Germany); and Markem-Imaje (France)

Export-supported jobs (from international trade) linked to manufacturing in 2008 accounted for an estimated 5.6% of New Hampshire's total private-sector employment. Nearly one-quarter (23.3%) of all manufacturing workers in New Hampshire depend on international exports for their jobs. For example, for the first-half of 2009, the Manchester-Nashua metropolitan area exported \$830 million in merchandise – or 47% of New Hampshire's total merchandise exports to other countries.

New Hampshire's international export shipments of merchandise in 2009 totaled \$3.1 billion. The state's largest market in 2009 was Mexico, which received exports of goods of \$767 million, or 25% of New Hampshire's total exports that year. Mexico was followed by Canada (\$449 million), China (\$212 million), Japan (\$179 million), and Germany (\$173 million). The state's leading manufactured export category is computers and electronic products, which alone accounted for \$1.2 billion, or 40% of New Hampshire's total export shipments in 2009. Other top manufactured exports that year were machinery manufactures (\$559 million in exports); electrical equipment, appliances and parts (\$221 million); and miscellaneous manufactures⁵ (\$148 million).

According to a study by Professor Larry Goss of Plymouth State University, manufacturing is the most important export industry in terms of employment size for the state's economy, with

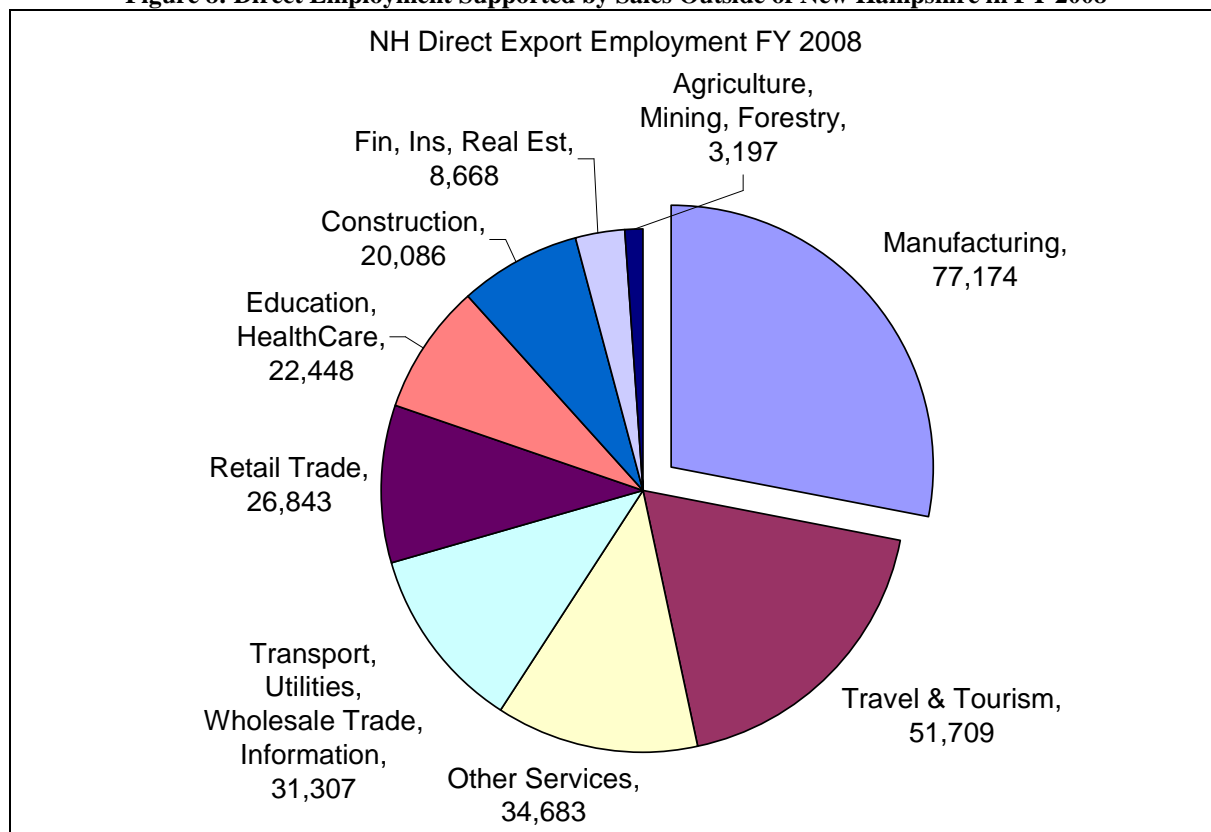
³ Small to Medium Size Enterprises (SME), as defined by the International Trade Administration, U.S. Department of Commerce.

⁴ Data in this section from the State Export-Related Employment Project, International Trade Administration and Bureau of the Census, as well as the U.S. Department of Commerce, Bureau of Economic Analysis. (http://www.trade.gov/mas/ian/statereports/states/tg_ian_002741.asp)

⁵ This major group includes establishments primarily engaged in manufacturing products not classified in any other manufacturing major group. Industries in this group fall into the following categories: jewelry, silverware, and plated ware; musical instruments; dolls, toys, games, and sporting and athletic goods; pens, pencils, and artists' materials; buttons, costume novelties, miscellaneous notions; brooms and brushes; caskets; and other miscellaneous manufacturing industries.

travel and tourism as the second largest employer⁶. According to Dr. Goss's calculations, over 77,000 jobs are directly supported by the exports of the state's manufacturers, compared to about 52,000 jobs in travel and tourism. Jobs supported directly by sales outside of the state are shown in Figure 8.

Figure 8: Direct Employment Supported by Sales Outside of New Hampshire in FY 2008

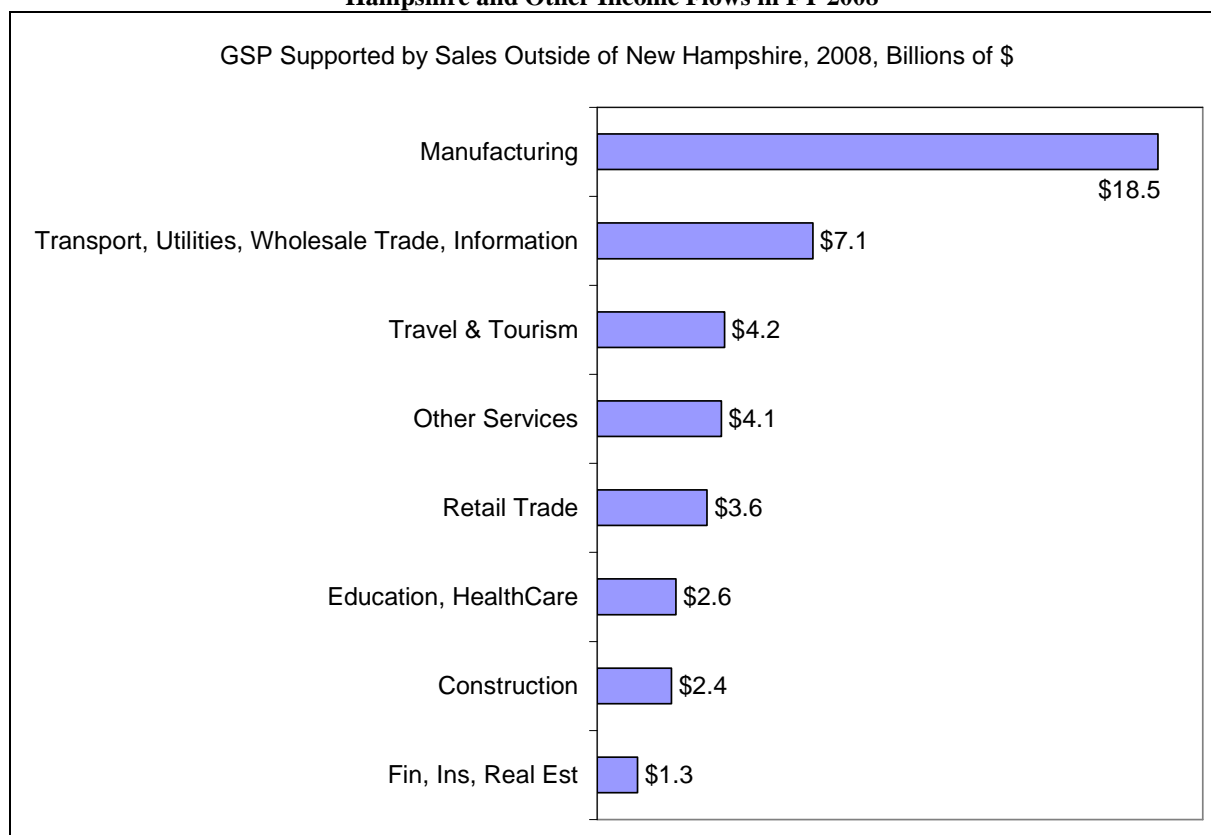


Source: New Hampshire Fiscal Year 2008 Tourism Satellite Account, Table 15

However, when share of gross state product is used as the measure of an industry's supporting share of the state's economy, then travel and tourism ranks as the third most important exporting industry, due to relatively low wages per employee. Said another way, New Hampshire imports four times as much wealth from in-state manufacturing activities as from tourism [manufacturing supports \$18.5 billion in GSP, while tourism supports \$4.2 billion (Figure 9.)] While tourism remains important for many different reasons, (the state's brand, among others), it is clear from our research that manufacturing, together with high technology, drives NH's economy.

⁶ Goss, Laurence. "New Hampshire Fiscal Year 2008 Tourism Satellite Account." Plymouth State University. Plymouth, NH. June, 2009. Dr. Goss's definition of New Hampshire exports includes all goods and services "beyond its borders". This definition is much broader because it includes New Hampshire exports to other states in the United States, as well as international trade.

Figure 9: Direct, Indirect and Induced Share of Gross State Product Supported by Sales Outside of New Hampshire and Other Income Flows in FY 2008⁷



Source: New Hampshire Fiscal Year 2008 Tourism Satellite Account, Table 16 in that report

Manufacturing's much larger contribution to state economic activity, relative to tourism, is not surprising. Tourism jobs are usually in retail trade, accommodations, and food services, which are relatively low-paying occupations (see Figure 5). By comparison, manufacturing's higher wages means it lends more support to GSP from sales outside of the state. While many manufacturing jobs do not require a college education, they are not unskilled, and workers are paid a premium based on their higher skills.

⁷ "In recent years, a number of states have started to measure the relative importance of the travel and tourism industry by calculating its share of the state's economic base in terms of gross state product, rather than by employment. This report presents the share of various industries and economic sectors in the state in terms its export's contribution to gross state product. The U.S. Bureau of Economic Analysis reported that the total gross state product for New Hampshire during state FY 2008 was \$59,913,000,000.manufacturing is still the most important economic sector in terms of its impact of total gross state product, at almost one-third of the total. The four industry sector of transportation, utilities, wholesale trade and information supported 12.1 percent of gross state product with exported goods and services." Source: 2008 Tourism Satellite Account

State Business Taxes Paid by the Manufacturing Sector

In FY2008 New Hampshire manufacturing companies represented 8% of the companies paying the state's Business Profits and Business Enterprise taxes. However, those same companies accounted for 23% of the total business tax revenue. Out of the \$480 million in business taxes identified by major industry code, manufacturing companies accounted for \$125 million (Table 3.)⁸

Table 3: New Hampshire State Business Taxes by Major Industry

New Hampshire Business Tax Revenues by Industry Group Source: NH Dept of Revenue						
Industry	TotalPaid FY06	TotalPaid FY07	TotalPaid FY08	Count FY06	Count FY07	Count FY08
110 Agriculture, Forestry, Fishing & Hunting	\$1,948,097.11	\$1,537,624.29	\$1,416,661.46	469	445	394
210 Mining	\$643,851.92	\$541,185.90	\$318,938.85	57	59	53
220 Utilities	\$6,801,343.47	\$20,399,639.35	\$11,713,546.62	73	68	59
230 Construction	\$16,554,341.02	\$16,560,167.62	\$14,980,598.06	4,479	4,188	3,790
311 Manufacturing: Food, consumables, goods	\$12,415,760.92	\$17,375,399.76	\$20,827,053.98	214	204	187
321 Manufacturing: Wood Products	\$22,810,936.24	\$24,109,321.68	\$15,370,957.13	603	569	520
332 Manufacturing: Metal Products	\$68,213,478.87	\$63,771,597.38	\$72,350,667.43	1,460	1,381	1,288
420 Wholesale Trade	\$46,462,374.63	\$48,451,372.06	\$38,361,385.14	1,747	1,667	1,507
440 Retail Trade	\$65,736,881.83	\$64,645,812.53	\$53,207,967.19	3,470	3,142	2,891
480 Transportation & Warehousing	\$7,372,609.88	\$7,887,854.75	\$6,784,160.68	674	631	547
490 Transportation & Warehousing, postal & storage	\$261,275.51	\$291,954.77	\$194,835.80	40	42	33
510 Information	\$16,533,816.38	\$16,507,046.63	\$47,248,594.36	412	377	326
520 Finance & Insurance	\$73,205,680.94	\$48,997,199.97	\$40,480,460.97	1,168	1,086	1,026
530 Real Estate & Rentals	\$48,047,617.56	\$52,192,700.98	\$48,182,902.25	3,723	3,485	3,197
540 Professional, Scientific & technical services	\$32,338,706.24	\$27,050,482.03	\$28,546,665.08	3,643	3,431	3,196
550 Management of companies	\$30,507,450.12	\$25,299,601.48	\$25,334,188.39	222	210	187
560 Administrative support, waste mgmt & remediation	\$6,402,374.90	\$8,864,365.64	\$6,620,645.24	894	825	772
610 Educational services	\$1,098,193.30	\$645,063.18	\$816,186.79	152	136	134
620 Health care & social assistance	\$17,344,394.75	\$16,539,467.15	\$15,556,701.25	1,489	1,439	1,354
710 Arts, entertainment & recreation	\$4,289,531.04	\$9,660,314.32	\$4,955,301.09	438	431	382
720 Accommodation & Food services	\$8,341,173.64	\$13,058,956.12	\$16,972,079.30	1,378	1,260	1,132
810 Other services, except public administration	\$5,756,055.46	\$4,689,045.43	\$4,382,342.70	1,544	1,450	1,332
900 Public administration	\$312,850.69	\$245,285.09	\$384,905.36	134	129	118
990 Miscellaneous	\$6,500,098.42	\$7,132,007.26	\$5,974,026.44	245	243	237
Total	\$499,898,894.84	\$496,453,465.37	\$480,981,771.56	28,728	26,898	24,662
Manufacturing as Percent of Above	20.7%	21.2%	22.6%	7.9%	8.0%	8.1%
Unmatched PIA codes	\$122,234,158.00	\$150,824,619.00	\$182,640,291.00	19,060	21,718	24,582
Grand Total	\$622,133,052.84	\$647,278,084.37	\$663,622,062.56	47,788	48,616	49,244

Source: New Hampshire Department of Revenue Administration

⁸ As shown on Table 3 total business tax revenue in 2008 was approximately \$664 million. The Department of Revenue Administration did not have industry codes (PIA codes) for 24,582 business taxpayers, who paid almost \$183 million in that year.

What is an SMHT Job Worth in New Hampshire?

Recently Fairpoint Communications released an economic scenario model which allows Northern New England economic development and planning professionals to see the impact of new developments and opportunities on their specific region.⁹ In Table 4, Table 5, and Table 6 below we show the economic scenario model results for New Hampshire, assuming the state added 100 new manufacturing jobs, 100 new health care jobs, and 100 new tourism jobs.

Table 4: Economic Impact of Adding 100 Manufacturing Jobs in New Hampshire

Add 100 Manufacturing jobs in New Hampshire and the result is:						Personal	State and
	Employment	Earnings	GDP	Output	Income	Local Tax	
Direct	100	\$ 5,793,259	\$ 10,394,227	\$ 31,557,796	\$ 8,346,766	\$ 634,354	
Indirect + Induced	138	\$ 5,640,610	\$ 7,654,723	\$ 23,240,446	\$ 8,126,833	\$ 617,639	
Total	238	\$ 11,433,869	\$ 18,048,950	\$ 54,798,242	\$ 16,473,599	\$ 1,251,994	

Table 5: Economic Impact of Adding 100 Healthcare Jobs in New Hampshire

Add 100 Healthcare jobs in New Hampshire and the result is:						Personal	State and
	Employment	Earnings	GDP	Output	Income	Local Tax	
Direct	100	\$ 3,286,675	\$ 4,849,702	\$ 8,760,193	\$ 4,735,350	\$ 359,887	
Indirect + Induced	55	\$ 1,748,870	\$ 4,098,749	\$ 7,403,719	\$ 2,519,723	\$ 191,499	
Total	155	\$ 5,035,545	\$ 8,948,451	\$ 16,163,912	\$ 7,255,073	\$ 551,386	

Table 6: Economic Impact of Adding 100 Tourism Jobs in New Hampshire

Add 100 Tourism jobs in New Hampshire and the result is:						Personal	State and
	Employment	Earnings	GDP	Output	Income	Local Tax	
Direct	100	\$ 1,887,312	\$ 3,524,221	\$ 6,464,779	\$ 2,719,187	\$ 206,658	
Indirect + Induced	32	\$ 1,154,024	\$ 2,632,381	\$ 4,828,800	\$ 1,662,686	\$ 126,364	
Total	132	\$ 3,041,336	\$ 6,156,602	\$ 11,293,579	\$ 4,381,872	\$ 333,022	

The economic scenario model is based on economic multipliers and labor employment data. The multipliers reflect the direct, indirect and induced impacts on earnings and jobs resulting from changes in output, jobs or direct earnings in a specific geographic region for various industry categories.¹⁰ This means that adding 100 manufacturing jobs to New Hampshire will create jobs and income in other sectors of the state economy, as the new industry requires support services from other New Hampshire companies, and as those new employees spend money for goods and services in New Hampshire.

As shown in Table 4 above, creating 100 new manufacturing jobs in New Hampshire will result in an additional 138 indirect and induced jobs in the rest of the New Hampshire economy. All of these jobs will create \$11 million in earnings, \$18 million in Gross Domestic Product (GDP), and generate \$1.2 million in state and local tax revenue. As shown in Table 5 above, creating 100 new healthcare jobs in New Hampshire will result in 55 indirect and induced jobs, with a

⁹ FairPoint sponsored Connect Northern New England Economic Scenario Model V2.2b

¹⁰ Direct Impact: Employment that can be directly attributed to a particular business, activity or industry.

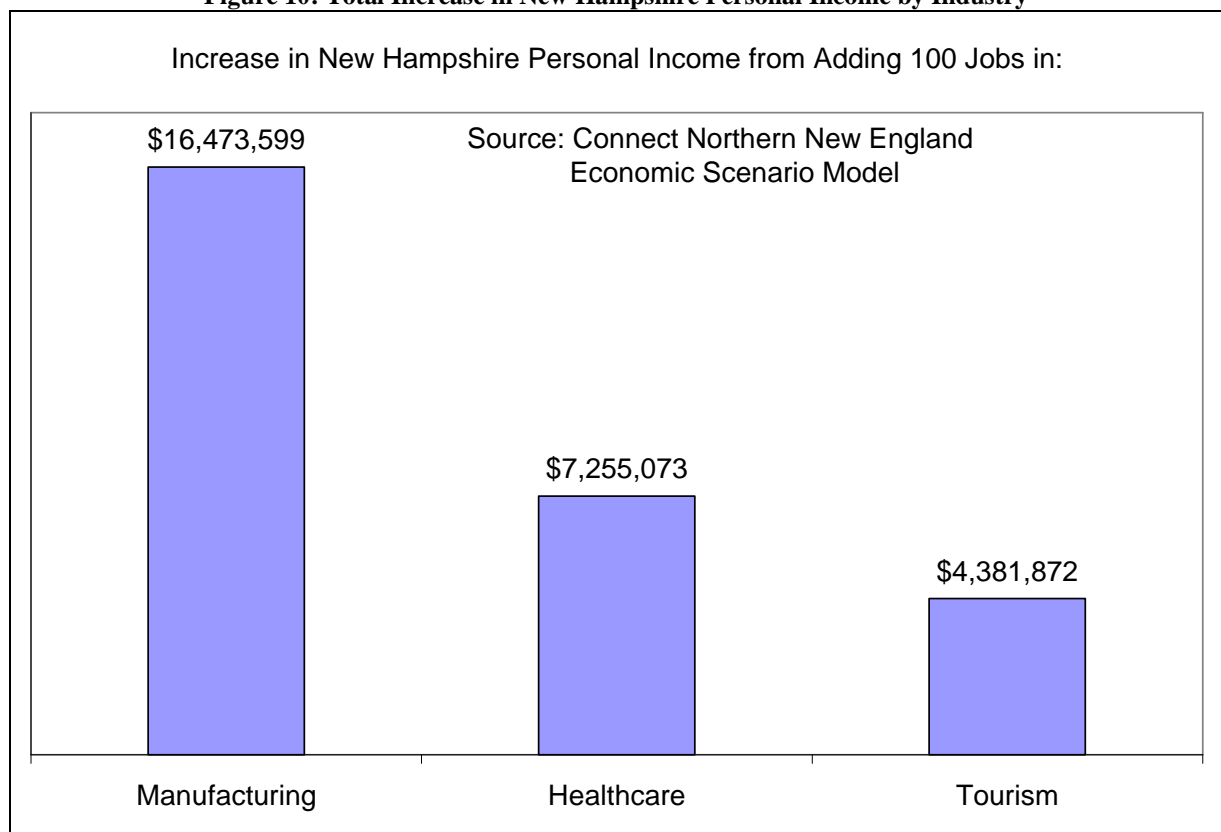
Indirect Employment: Employment in down-stream industries that result from the presence of a particular business, activity or industry. Indirect employment is generally generated in industries that supply or provide services to the direct business, activity or industry.

Induced Employment: Employment generated because of expenditures made by individuals employed directly or indirectly by the particular business, activity or industry.

total of \$5 million in earnings, \$9 million in GDP and \$0.5 million in added state and local tax revenue. As shown in Table 6 above, creating 100 new tourism jobs in New Hampshire will result in 32 indirect and induced jobs, with a total of \$3 million in earnings, \$6.1 million in GDP and \$0.3 million in added state and local tax revenue.¹¹

It is clear from the above analysis that jobs created in the manufacturing sector have a significantly higher economic impact than jobs created in health care or in the tourism industries. Manufacturing jobs, because of their high value, high wages and because they import wealth into the region, create more jobs in other sectors of the economy than does health care or tourism. As shown in Figure 10 below, creating 100 jobs in manufacturing results in twice the increase in total personal income compared to creating the same number of jobs in health care. Jobs added to the manufacturing sector create four times the wealth in the overall economy, compared to creating the same number of jobs in the tourism industry.

Figure 10: Total Increase in New Hampshire Personal Income by Industry



¹¹ In this exercise personal income is estimated outside of the economic scenario model based on the historical ratio of personal income to total earnings. State and local tax revenue is estimated based on the historical ratio of state and local taxes to personal income, from an annual study by the Tax Foundation.

Competitive Pressures Facing New Hampshire SMHT Companies

Manufacturing is the industrial sector most affected by the “mega-trends” transforming the economy. Globalization, off-shoring and outsourcing, the rapid pace of technological change, and rising costs of health care and other labor costs all have a profound impact on manufacturing. Consider globalization: The average school administrator or housing professional probably does not think much about the Far East. But because state-of-the-art manufacturing facilities are now being built in China and elsewhere in the world, local manufacturers have to stay current with the latest technological advances just to stay in the game.

In order to better understand the competitive pressures faced by New Hampshire SMHT companies, the Center pursued three separate research initiatives.

- First, the Center conducted an online survey of New Hampshire SMHT companies, asking those companies to express in their own words the competitive advantages and disadvantages of operating a company in New Hampshire.
- Second, the Center examined the input costs of a select group of competitor states and countries – areas of the U.S. and the world that are most likely to compete with our SMHT companies.
- Finally, the Center examined other studies which rank the states (and sometimes other parts of the world) according to input costs, tax policy and regulatory policy.

The Survey of SMHT Companies in New Hampshire

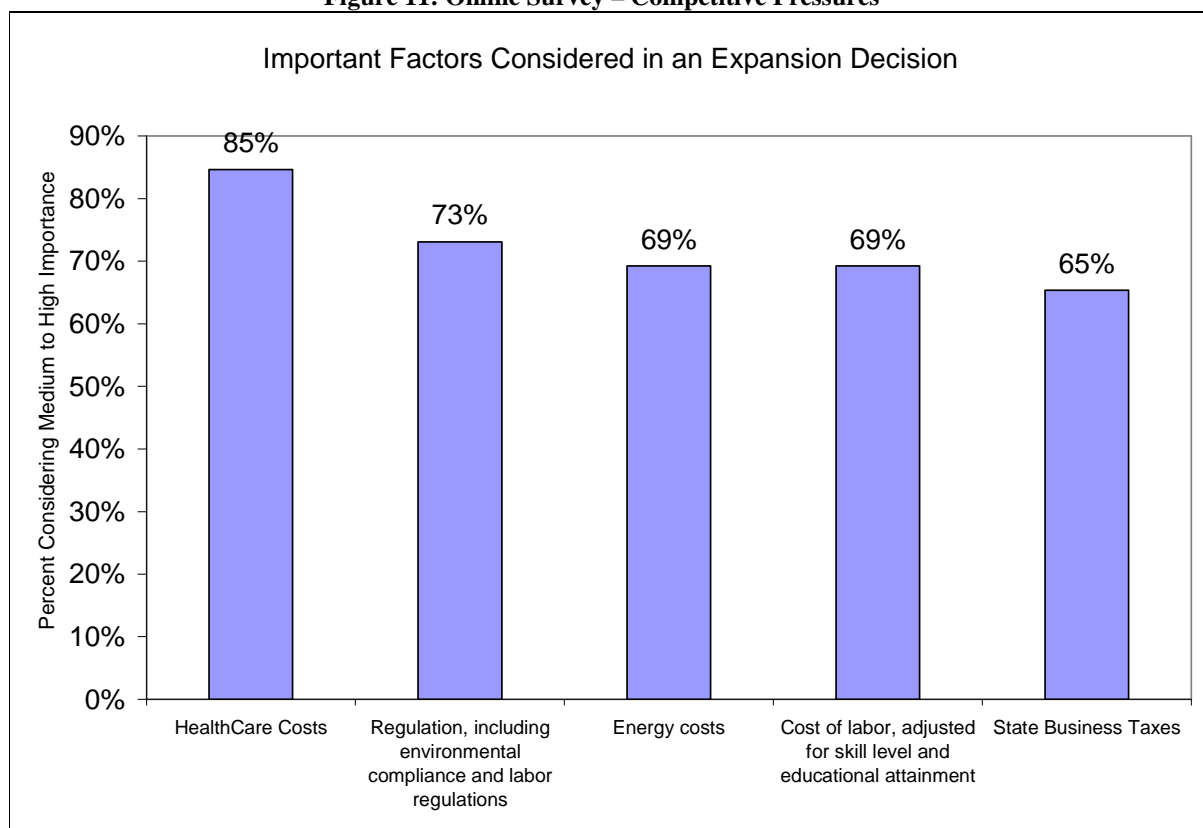
In the last weeks of September 2010, the New Hampshire Center for Public Policy Studies administered an online survey for New Hampshire manufacturing/high technology companies. An email notice of the survey was sent to 70 New Hampshire BIA member companies in the SMHT sector. An email notice of the survey was also sent to the membership of the New Hampshire High Technology Council, a trade organization for many New Hampshire high technology companies. By the end of September 2010, 26 companies had responded to the online survey, a response rate in excess of 25%.¹²

¹² Online surveys are sometimes characterized as not being statistically meaningful, but only useful as a means of beginning to understand potential questions and issues. This is because typically the respondents to an online survey are not a random (unbiased) selection of a larger population, and also that those who do respond to the online survey are self-selected. However, online surveys can be more properly thought of as a census; a procedure of systematically acquiring and recording information about the members of a given population. In this case the given population is the membership of the Business and Industry Association and High Technology Council, specifically those members who have been identified as SMHT companies. The Center has determined, based on the advice of survey research professionals, that response rates above 20% imply that the sample respondents are representative of the given population.

SMHT survey respondents were first asked to rank the competitive pressures they operate under, in particular when considering continuing or increasing production at a New Hampshire-based facility. Respondents were asked to rank the importance of factors on a scale of 1 to 5 (1=low importance to 5=high importance).

As shown on Figure 11, health care costs were the most critical factor SMHT companies weigh when they consider continuing or increasing production in New Hampshire. Regulation, energy costs, costs of labor and state business taxes were also important considerations.

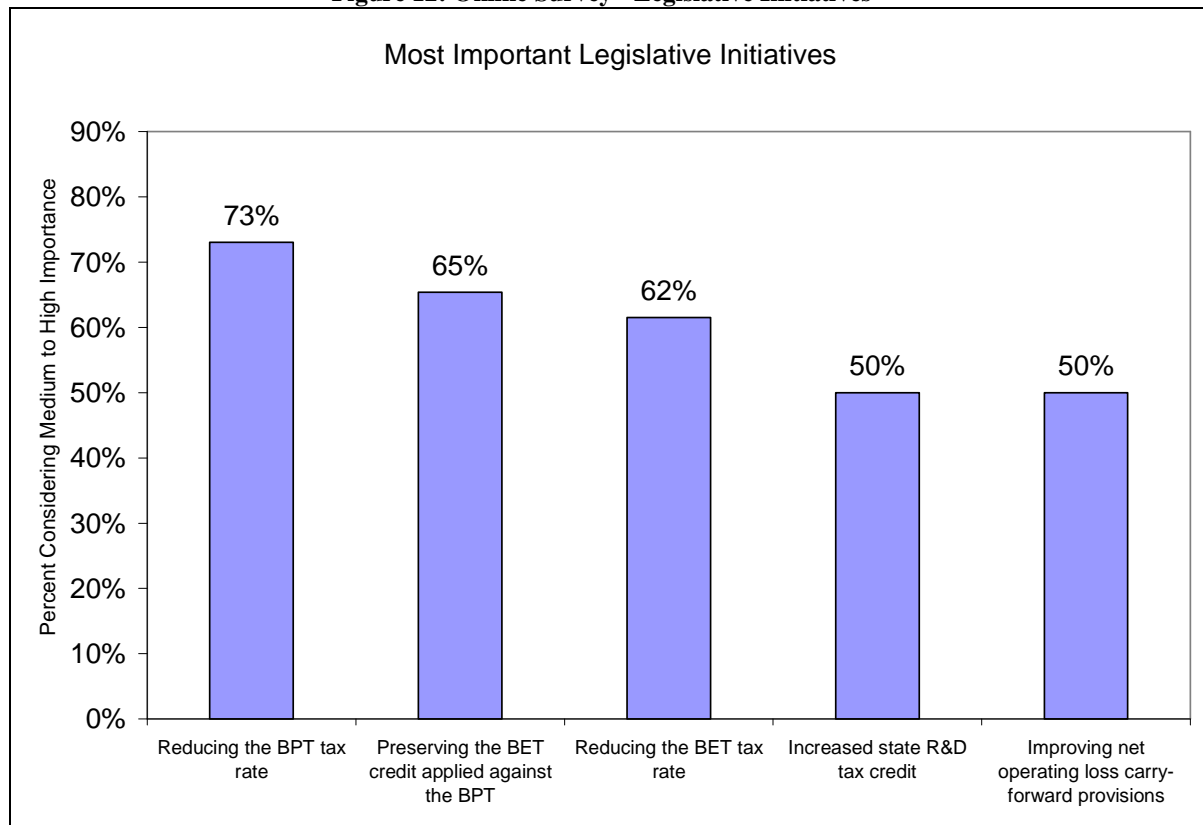
Figure 11: Online Survey – Competitive Pressures¹³



¹³ Question: “We know your company faces significant competitive pressures from around the country and the globe. Please rank the importance of the following factors on a scale of 1 to 5, (1=low importance to 5=high importance), when you consider continuing or increasing production at a New Hampshire-based facility:”

SMHT respondents were asked to consider legislative initiatives they might consider important to a decision to expand their company in New Hampshire. As shown on Figure 12, reducing the BPT tax was considered the most important legislative tax initiative, followed by preserving the BET credit applied against the BPT, and reducing the BET tax rate.¹⁴

Figure 12: Online Survey - Legislative Initiatives¹⁵

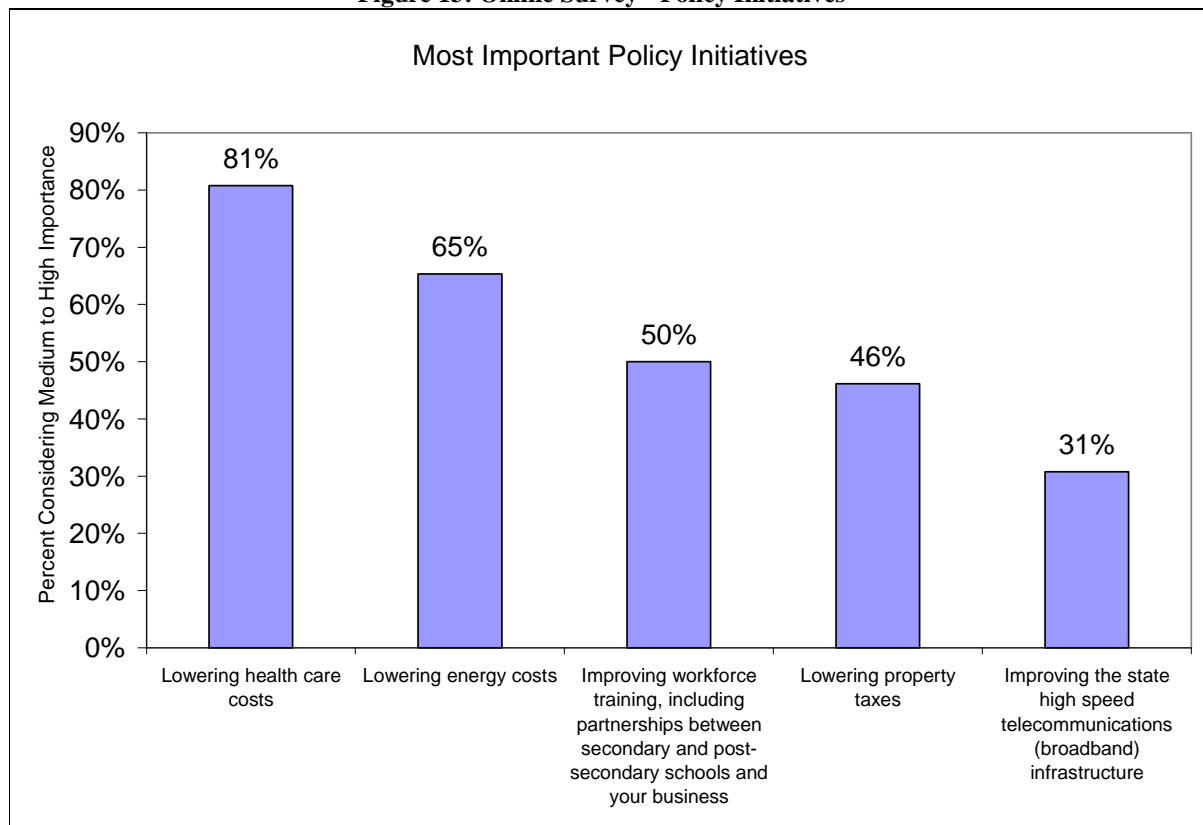


¹⁴ New Hampshire levies both an 8.5% Business Profits Tax (BPT) and a 0.75% Business Enterprise Tax (BET) on companies. The BET is assessed on the enterprise value tax base, which is the sum of all compensation paid or accrued, interest paid or accrued, and dividends paid by the business enterprise, after special adjustments and apportionment. Businesses can credit their BET liability against their BPT liability.

¹⁵ Question: "Which of the following New Hampshire legislative initiatives are most important (on a scale of 1 to 5) if you were to consider expanding your company in New Hampshire?"

SMHT respondents were also asked to consider additional policy initiatives they would rank most important if they were to consider expanding in New Hampshire. As shown on Figure 13 lowering health care costs was by far the most important policy initiative, followed by lowering energy costs, and by “improving workforce training, including partnerships between secondary and post-secondary schools and your business.”

Figure 13: Online Survey - Policy Initiatives¹⁶



SMHT companies place high value on the quality and work ethic of New Hampshire’s workforce, the state’s business-friendly attitude, accessible government, low personal tax burden, and high quality of life. SMHT businesses expressed concern about the state’s fiscal situation and concern that taxes might increase. The southern United States (North and South Carolina, Texas, Florida), India, Mexico and China were mentioned as places where SMHT companies have considered expanding or growing operations, as an alternative to New Hampshire.

Additional comments provided on the survey for each question are shown in Appendix III to this report.

¹⁶ Question: “Which of the following New Hampshire policy initiatives would you consider most important (on a scale of 1 to 5) if you were to consider expanding in New Hampshire?”

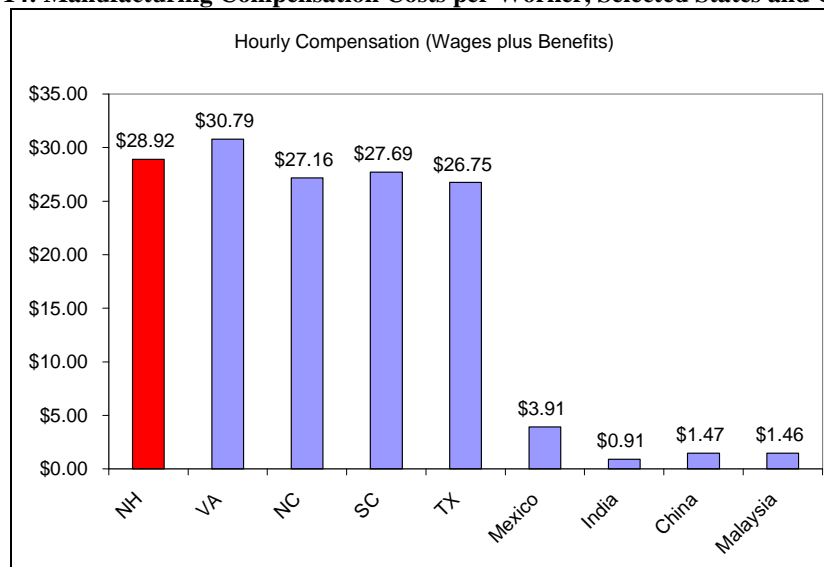
Input Costs and Competitor States/Countries

The Center also gathered data from all available sources to develop its own comparison of New Hampshire competitor states and countries. The competitor states in the United States were chosen based on interviews with New Hampshire SMHT company executives and economic development professionals who identified Virginia, North Carolina, South Carolina and Texas as New Hampshire's primary competitor states from an economic development perspective. One or more of these states appear on other lists of "the best states for business," and all four states appear on the Area Development Magazine "Top States for Doing Business: A Survey of Site Selection Consultants" list.¹⁷

Competitor countries were also selected in this manner. The final choice for New Hampshire competitor countries was based on the responses to an online survey of New Hampshire manufacturing executives. Respondents were asked "On those occasions when your company is considering expanding or growing operations, which other states or countries do you consider (compared to New Hampshire) and why?" Earning several mentions were China, India, Mexico and "Southern Asia." The Center added Malaysia as a country representative of Southern Asia. Malaysia, a middle-income country, has transformed itself since the 1970s from a producer of raw materials into an emerging multi-sector economy, according to the CIA Fact Book.

Wages across competitive states and countries show New Hampshire wages slightly above most competitor states, and dramatically higher than competitor countries, shown on Figure 14.

Figure 14: Manufacturing Compensation Costs per Worker, Selected States and Countries

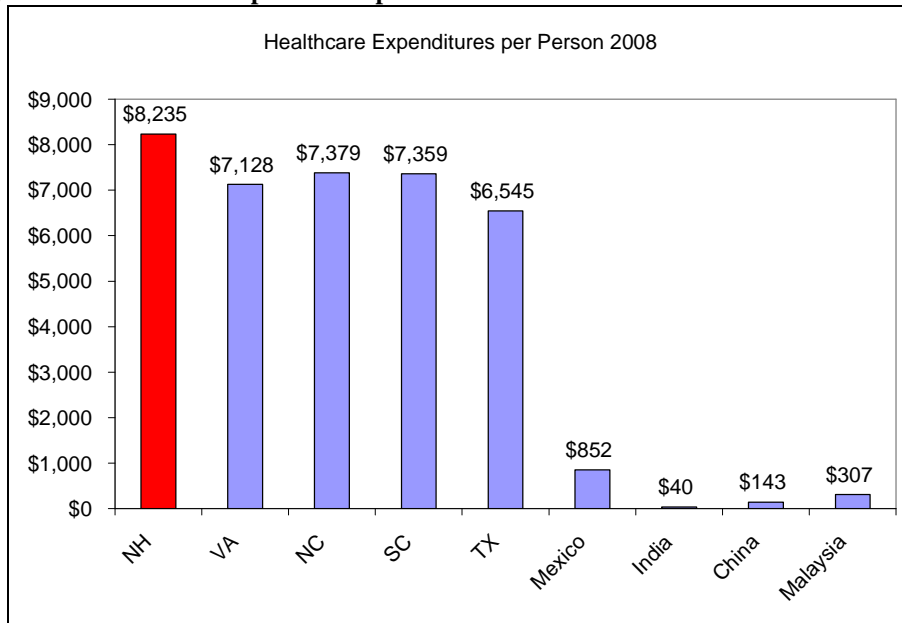


Source: US Bureau of Labor Statistics

¹⁷ Appendix I includes a list of resources documenting various efforts at identifying the degree of business 'friendliness.'

Health care costs are higher in New Hampshire than in most states, and ten times higher than in the nearest competitor country.

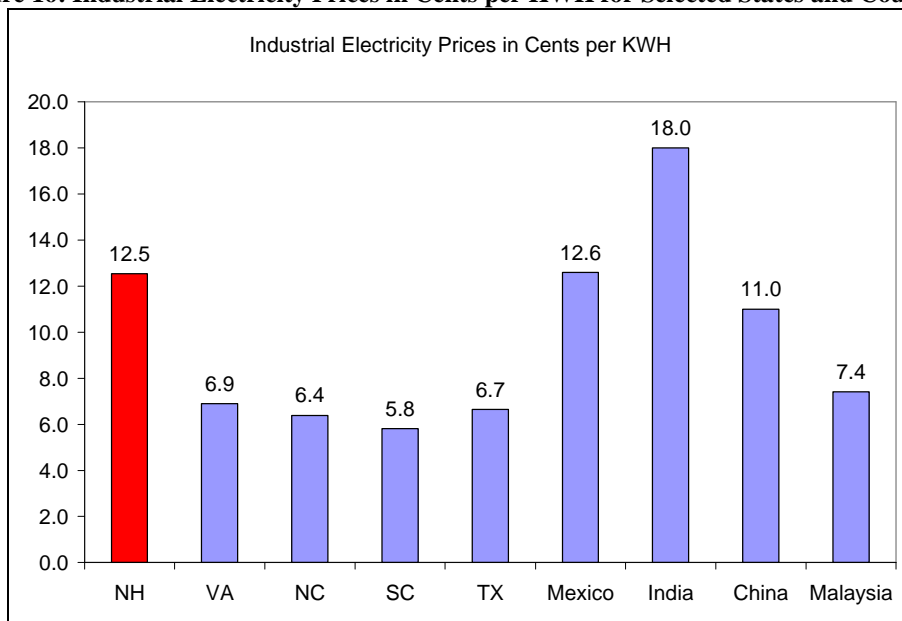
Figure 15: Health care Expenditures per Person in 2008 for Selected States and Countries



Source: Kaiser State Health Facts and WorldBank.org

Industrial electricity prices in New Hampshire are almost twice as high as in New Hampshire’s identified competitor states. Electricity costs in New Hampshire are comparable to Mexico and China. (Figure 16.)

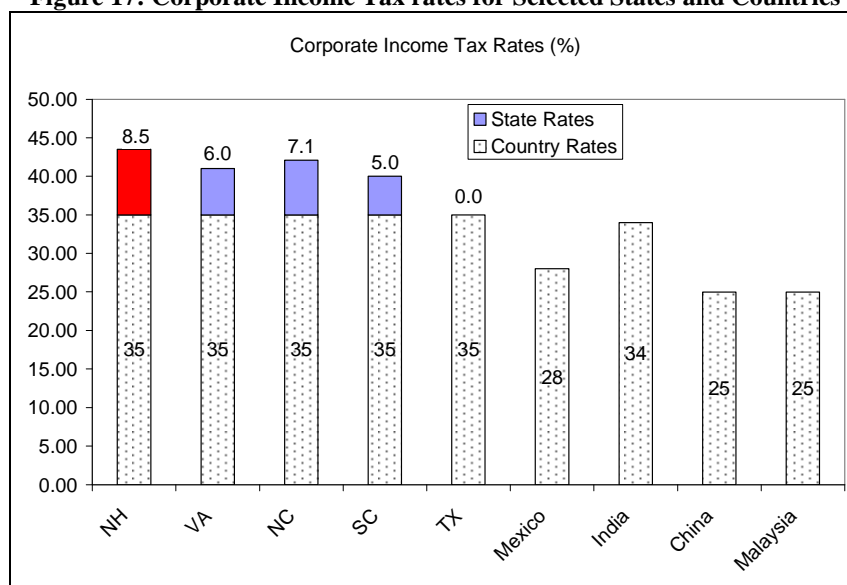
Figure 16: Industrial Electricity Prices in Cents per KWH for Selected States and Countries



Source US Department of Energy

As noted, the corporate income tax rate in New Hampshire is the highest among New Hampshire's competitor states, and highest compared to competitor countries, when the U.S. corporate tax rate is included. The comparison on Figure 17 includes national corporate tax rates, along with the corporate tax rates for each U.S. state.

Figure 17: Corporate Income Tax rates for Selected States and Countries



Source: New Hampshire Department of Resources and Economic Development, OECD and WorldBank.org

Other Independent Studies of Business Competitiveness

To further assess the competitive pressures faced by New Hampshire SMHT companies, the Center examined several independent studies of industry competitiveness. Most of these studies were state-to-state comparisons. Two studies looked at the United States overall and its international competitiveness, although one study compared metropolitan areas in the United States with metropolitan areas in other countries.

Tax Policy and Competitor States

The Tax Foundation's 2011 State Business Tax Climate Index shows New Hampshire's overall tax climate is good: seventh best out of 50 states. However, the detailed study data shows that New Hampshire ranks 38th for unemployment insurance taxes, 35th out of the 50 states for property taxes, and last – 50th out of 50 – for corporate taxes. Only the absence of an income tax (New Hampshire ranks 10th) and a sales tax (New Hampshire ranks 1st among the states because it does not have a broad sales tax) allows New Hampshire to fare so well overall. New Hampshire is compared with the selected competitor states on Table 7.

Table 7: 2011 Tax Foundation Study Results for New Hampshire and Competitor States

Major Components of the State Business Tax Climate Index, FY 2011						
Source: Tax Foundation, Report Number 60, October 2010						
	Overall Rank	Corporate Tax Index Rank	Individual Income Tax Rank	Sales Tax Index Rank	Unemployment Insurance Tax Index Rank	Property Tax index Rank
New Hampshire	7	50	10	1	38	35
Virginia	12	4	17	8	29	25
North Carolina	41	25	36	44	6	33
South Carolina	24	9	27	22	43	23
Texas	13	46	7	37	15	29

Source: The Tax Foundation

Input Costs and Competitor States

Another study from the University of Connecticut found that New Hampshire was one of the most expensive states in which to operate. The study, "High Wages, Low Costs: A Connecticut Paradox?" calculated it costs 93.5 cents to manufacture a dollar's worth of goods in New Hampshire. The study used manufacturing data from the 2007 census which totaled costs of production materials and labor (including payroll and fringe benefits), license fees and taxes, and annual capital costs (which include interest, rental payments and depreciation), which they divided by the gross output in manufacturing to determine the cost of manufacturing a dollar's worth of goods in each state. By this measure, two of New Hampshire's competitor states have the lowest cost structure in the United States (Table 8).

Table 8: 2007 Unit Costs for Manufacturing in New Hampshire and Competitor States

High Wages, Low Costs: A Connecticut Paradox?				
Source: The Connecticut Economy, November 2010				
	Gross Output (Thousands of Dollars)	Gross Costs (Thousands of dollars)	Cost to produce a dollar of output	Rank in the US Highest to Lowest Cost
New Hampshire	18,905,986	17,678,524	\$0.935	2
Virginia	92,214,316	70,795,283	\$0.768	49
North Carolina	205,610,830	147,646,842	\$0.718	50
South Carolina	94,662,922	81,813,103	\$0.864	10
Texas	602,051,743	504,129,742	\$0.837	23

Business Careers and Competitor States

A recent Forbes.com study comparing the best states for business and careers shows that New Hampshire ranked 19th out of 50 states, slightly better than the middle of the pack (Table 9). However, this better-than-average finish is due in large part to high marks the state received for labor supply, growth prospects and quality of life. When looking at criteria that have a direct fiscal impact on businesses, New Hampshire does not fare so well, ranking 40th out of 50 states for business costs and 47th out of 50 for regulatory environment. Every competitor state has a better business cost and regulatory rank than New Hampshire, and only South Carolina has a lower overall rank.

Table 9: Forbes “Best States for Business 2010” New Hampshire and Competitor State Rankings

Overall Rank in 2010	State	Business Cost Rank	Labor Supply rank	Regulatory Environment Rank	Economic Climate Rank	Growth Prospects Rank	Quality of Life Rank	Population	Gross State Product (\$Bil)
19	New Hampshire	40	6	47	32	5	2	1,328,700	\$50
2	Virginia	24	3	2	4	14	6	7,927,400	\$329
3	North Carolina	3	15	3	18	9	32	9,460,300	\$322
34	South Carolina	26	28	8	43	26	45	4,587,000	\$125
7	Texas	26	21	17	2	1	38	25,010,700	\$912

Source: <http://www.forbes.com/2010/10/13/best-states-for-business-business-beltway-best-states.html>

International Manufacturing Competitiveness

U.S. manufacturing competitiveness will continue to decline, according to the 2010 Global Manufacturing Competitiveness Index (GMCI). Index projections suggest by 2015 Brazil will have overtaken the U.S. for fourth in the global rankings behind China, India and the Republic of Korea. The report concludes that increasing talent pools worldwide, coupled with higher U.S. wages, have placed U.S. manufacturing at a disadvantage in the global markets. However, the U.S. should remain at the forefront of manufacturing innovation due to a focus on strengthening science and technology research, the strong intellectual property rights (IPR), technology transfer policy, and science, technology, engineering and mathematics (STEM) initiatives.

The report was created through a partnership between Deloitte's Global Manufacturing Industry group and the U.S. Council on Competitiveness. Based on survey responses from more than 400 senior global manufacturing executives and key government decision makers, researchers developed an index that ranked the “10 drivers of global manufacturing competitiveness.” Respondents also were asked to rate the overall manufacturing competitiveness of 26 countries for 2010 and 2015.

Worldwide, respondents agreed that talent-driven innovation is the top ranked driver of global manufacturing. The “Asian juggernauts” (China, India and Korea) and other nations expected to increase their competitiveness (Brazil, Russia and Poland) have successfully cultivated and retained a strong talent pool comprised of skilled workers, scientists, researchers, engineers, and teachers. Workers capable of fueling innovation and improving production efficiency have overtaken the availability of “cheap labor,” which finished third in the global rankings.

Executives with businesses operating in the United States found the U.S. to have two advantages, but also saw the U.S. as facing several disadvantages in manufacturing competitiveness. Intellectual property protection (75% of respondents) and technology transfer & adoption (61%) are the strongest contributors to U.S. competitive advantage in manufacturing. They are seen to increase U.S. competitiveness due to increased royalty revenues, and they create incentives for further investments in R&D. These advantages keep the U.S. at the cutting edge of manufacturing innovation. However, government policies and laws pertaining to immigration (32.7% of respondents), product liability (42.9%), health care (51.0%) and corporate tax (53.1%)

were reported to be disadvantages to U.S. competitiveness. These policies are seen to increase the cost on producers and “discourage capital investments.” Due to the recent financial interventions (e.g. “bailouts”), government intervention and ownership in companies was ranked as the No. 1 disadvantage (59.2% of respondents) to U.S. competitiveness in manufacturing. In the long-term, respondents believe that government financial intervention and ownership will hurt American competitiveness.

KPMG 2010 Competitive Alternatives Study for Selected Cities in the U.S. and Other Countries

“Competitive Alternatives” is KPMG's guide to comparing business locations in North America, Europe, and Asia Pacific. Competitive Alternatives 2010 is an expansion and update of previous KPMG publications, and measures the combined impact of 26 significant business cost components that are most likely to vary by location. The study also compares data on a variety of non-cost competitiveness factors. The study examined 17 industry operations in 10 countries: Australia, Canada, France, Germany, Italy, Japan, Mexico, the Netherlands, the United Kingdom, and the United States.

The basis for comparison is the after-tax cost of startup and operations over 10 years. The study had the advantage of looking at specific cities in each country, including Manchester, New Hampshire. A comparison of Manchester, N.H., with select cities in North Carolina, South Carolina, Virginia, Texas and Mexico (the only one of our competitor countries available in the KPMG study) is shown in Table 10.

Table 10: KPMG Business Cost Index for Selected Cities

KPMG 2010 Competitive Alternatives Study - Selected Cities		Manchester, NH	Raleigh, North Carolina	Greenville-Spartanburg, South Carolina	Northern Virginia (Metro DC)	McAllen, Texas	Mexico City, Federal, Mexico
Industry	Operation						
Manufacturing							
Aerospace	Aircraft parts	99.3	97.9	97.0	99.2	96.5	86.3
Agri-food	Food processing	100.8	97.7	96.9	98.6	98.2	89.1
Automotive	Auto parts	99.5	97.4	97.0	98.9	97.5	89.2
Chemicals	Specialty chemicals	99.9	98.1	97.5	99.3	96.9	88.8
Electronics	Electronics assembly	99.3	97.5	97.1	99.8	96.6	86.5
Medical devices	Medical device mfg	98.5	96.2	95.9	99.3	94.6	79.5
Metal components	Metal machining	99.3	96.0	95.9	98.9	97.3	84.9
Pharmaceuticals	Pharmaceutical products	98.6	97.1	96.7	99.5	96.0	83.7
Plastics	Plastic products	99.8	95.7	95.6	98.2	97.9	85.3
Precision manufacturing	Precision components	100.1	95.7	97.6	99.1	98.1	91.0
Telecommunications	Telecom equipment	98.9	97.9	97.1	99.4	96.1	85.0
Manufacturing Average of 11 Operations		99.5	97.5	96.9	99.2	96.9	86.7
Corporate & IT Services							
Back office/call centers	Shared services centre	93.2	89.7	86.3	97.0	79.1	47.4
Software design	Software development	97.0	95.1	92.5	98.3	89.1	68.5
Web & multimedia	Content development	97.0	94.9	92.3	98.5	88.7	66.1
Corporate & IT services average of 3 operations		95.9	93.5	90.7	98.0	86.2	61.8
Research & Development							
Biotechnology	Biomedical R&D	91.5	90.5	87.9	99.9	82.0	63.0
Clinical trials	Clinical trials management	97.2	93.6	91.1	98.7	88.4	63.3
Product testing	Electronic systems development & testing	92.5	89.5	86.6	97.7	82.6	59.1
Research & Development Average of 3 operations		93.0	90.7	88.0	98.7	83.5	61.3
Overall result	(Average of 17 operations)	98.6	96.4	95.6	99.0	94.8	82.1

The KPMG study compared each industry in each city to a US average index equal to 100. Manchester had an overall business cost index across 17 industry operations of 98.6, which

means overall costs were 1.4% below the US average. However, Raleigh, N.C.; Greenville-Spartanburg, S.C., and McAllen, Texas all had business cost structures lower than New Hampshire's. Mexico City had an overall business cost index of 82.1, which means business costs in Mexico are almost 18% below the US average across all industries.

As a follow-up to the main KPMG Competitive Alternatives 2010 study discussed above, a separate detailed study of tax costs was released on May 12, 2010. The update revealed that Mexico was in the number one spot for having the lowest total taxes. But changes to the tax systems in Australia, Canada, and the Netherlands enhanced their attractiveness as tax friendly environments. The results from the Competitive Alternatives 2010 Special Report: Focus on Tax report are shown in Table 11.

Table 11: KPMG 2010 Tax Competitiveness for Selected Countries

Tax Competitiveness – 2010 and 2008 Rankings by Country			
		Total Tax Index	2008
Rank	Country	2010	rank
1	Mexico	59.9	1
2	Canada	63.9	3
3	Netherlands	76.4	2
4	Australia	80.8	4
5	United Kingdom	88.0	6
6	United States	100.0	5
7	Germany	124.1	8
8	Italy	129.6	9
9	Japan	138.0	7
10	France	181.4	10

Conclusion

The Center has provided an objective, data-based analysis of the impact of the Smart Manufacturing/High Technology (SMHT) Sector in New Hampshire. We have produced a brief history of New Hampshire's SMHT sector, the status of SMHT in New Hampshire today, and demonstrated that New Hampshire's smart manufacturing/high technology sector is the economic engine in the state.

As of 2009 there were over 3,700 SMHT companies in New Hampshire, employing almost 80,000 people, and paying an average wage of more than \$1,200 per week. SMHT companies account for 9% of New Hampshire's private sector employers, but employ more than 15% of New Hampshire's private sector workers. The average weekly wage for SMHT workers is 40% higher than the average weekly wage for all private sector employees working in New Hampshire.

Jobs created in the manufacturing sector have a significantly higher economic impact than jobs created in health care or in the tourism industries. Manufacturing jobs, because of their high value, high wages and because they import wealth into the region, create more jobs, and more wealth, in other sectors of the economy than any other sector, including health care or tourism.

The state imports four times as much wealth from manufacturing activities in New Hampshire than from tourism.

The Smart Manufacturing/High Technology (SMHT) sector is a critical sector of the New Hampshire economy, but it operates under severe competitive pressures, both from other U.S. states and from abroad. The economic well-being of the state may in no small measure be a function of the state's ability to maintain and encourage the continued growth of this sector.

State Policy Activities and SMHT

There are many ways policymakers can try to foster and maintain smart manufacturing and high technology jobs in New Hampshire. These policies would include lowering healthcare costs, encouraging workforce development and education, investing in infrastructure, and implementing tax policies that promote manufacturing and high tech growth.

Regarding healthcare policy, the BIA online survey of New Hampshire SMHT companies suggests that these companies take into account healthcare costs as the most significant competitive pressure, when they consider continuing or increasing production at a New Hampshire-based facility (Figure 11). These same companies rank "lowering health care costs" as the most important policy initiative that would influence their decisions to expand their operations in New Hampshire (Figure 13).

With respect to tax policy, maintaining New Hampshire's comparative advantage in the area of personal taxes is clearly important. Companies who answered the online survey for New Hampshire manufacturing/high technology companies cite low overall taxes ("No state sales or income tax - makes finding good employees easier") most often, when asked to name one or two of the most attractive features of New Hampshire's business climate (see Appendix III).

A recent analysis of state business tax incentives in New England showed that business tax credits do foster their targeted activities, and that the economic activity produced indirectly by business tax credits is not trivial, and may sometimes be sizable.¹⁸ And the former Congressional Office of Technology Assessment concluded that, "for every dollar lost in tax revenue, the R&D tax credit produces a dollar increase in reported R&D spending." Other studies have found even greater benefits, with the research investment to tax-cost ratio between 1.3 and 2.9.¹⁹

The Center's own research suggests that an effective approach to boost economic development is to improve certain public services, like schools and infrastructure. These studies suggest that an approach to economic development that builds the skills of the current and future workforce, improves the physical infrastructure of regions, and makes communities more attractive places for families and firms represents the most effective use of a state's scarce resources.²⁰

¹⁸ New England Public Policy Center DP No. 09-3: State Business Tax Incentives: Examining Evidence of their Effectiveness (December 2009) by Jennifer Weiner

¹⁹ Robert D. Atkinson, "Expanding the R&E tax credit to drive innovation, competitiveness and prosperity", Published online: 24 July 2007, <http://www.itif.org/files/AtkinsonRETaxCreditJTT.pdf>

²⁰ Prioritizing Approaches To Economic Development In New England: Skills, Infrastructure, And Tax Incentives, Jeffrey Thompson, Political Economy Research Institute, University of Massachusetts, Amherst, August 2010

Another recent study showed that human capital is a key determinant of urban prosperity and that per-capita incomes are strongly correlated with levels of educational attainment.²¹

Increasing the four-year college attainment rate in each of the nation's 51 largest metropolitan areas by one percentage point would be associated with a \$124 billion increase in aggregate annual personal income.

The New Hampshire Advanced Manufacturing Education Advisory Council²² recently examined issues associated with advanced manufacturing and workforce skills. The Council released a report in late 2010 recommending that the New Hampshire Department of Education:

- Develop and implement strategies for the Advanced Manufacturing sector to educate the parents, educators, and students about career opportunities.
- Increase communication between manufacturing and education to assure alignment with current realities of the Advanced Manufacturing industry.
- Strengthen math education to assure student success in areas relevant to their goals.
- Increase accessibility to advanced pre-engineering/manufacturing education to all students.

There is disagreement in the literature as to which of the above policy levers (healthcare, education, infrastructure or tax policy) are most successful at increasing regional quality of life and improving regional economic development. The questions for New Hampshire policymakers are twofold; which of these policies can the state legislature impact, and which would have the largest impact on stated legislative goals?

²¹ "City Dividends; Gains From Improving Metropolitan Performance", CEOs for Cities, 2010

²² The New Hampshire General Court passed legislation in 2008 creating the New Hampshire Advanced Manufacturing Education Advisory Council. Members include lawmakers, manufacturers and educators who focused their work on the charge of the council: "to advise the Department of Education in the implementation, evaluation, and expansion of the advanced manufacturing curriculum, to assist the Department of Education in pursuing public and private funds in order to ensure statewide access for all public high school students to advanced manufacturing curriculum coursework."

Appendix I: Selecting Competitor States and Countries

The final choice for New Hampshire competitor states was based on a conversation with Department of Resources and Economic Development Commissioner George Bald, who identified Virginia, North Carolina, South Carolina and Texas as New Hampshire's primary competitor states. One or more of these states appear on other lists of "the best states for business", and all four states appear on the Area Development Magazine "Top States for Doing Business: A Survey of Site Selection Consultants" list.

The final choice for New Hampshire competitor countries was based on the responses to an online survey of New Hampshire manufacturing executives. When asked "On those occasions when your company is considering expanding or growing operation, which other states or countries do you consider (compared to New Hampshire), and why?", China, India, Mexico and "Southern Asia" were mentioned several times. The Center added Malaysia as a country representative of Southern Asia. Malaysia, a middle-income country, has transformed itself since the 1970s from a producer of raw materials into an emerging multi-sector economy, according to the CIA Fact Book.

The studies examined by the Center are detailed below.

New Hampshire Competitor States and Other Studies

Area Development Magazine looked at the most "business friendly" states in a report entitled "Top States for Doing Business: A Survey of Site Selection Consultants" in November 2010. Consultants to industry are in a unique position to understand the site selection requirements of their corporate clients. Taking this into consideration, the editors of Area Development magazine decided to conduct a "flash survey" of a select group of highly respected consultants who work with a nationwide client base. Area Development asked the consultants to name their top 10 state choices for meeting eight site selection criteria:

1. Lowest business costs
2. Most business friendly
3. Corporate tax environment
4. Overall labor climate
5. Work force development programs
6. Fast-track permitting
7. Rail and highway accessibility
8. Shovel-ready sites

Tennessee topped the list of most attractive states for business, as selected by consultants surveyed by Area Development, followed by Texas, South Carolina, Georgia, Indiana, Mississippi, North Carolina, Virginia and Oklahoma.

How did the consultants' picks stack up? To see how the consultants' top choices stack up, Area Development looked at five other well-respected rankings as follows:

Chief Executive's "Best/Worst States for Business 2010"

1. Texas
2. North Carolina
3. Tennessee
4. Virginia
5. Nevada

All of the top five states picked by the CEOs are on the Area Development list of states best meeting site selection criteria, according to the consultants surveyed. Although Nevada only scored well for its corporate tax environment, it still made the consultants' list.

<http://chiefexecutive.net/ME2/dirmod.asp?sid=&type=gen&mod=Core+Pages&gid=50A045DF3B08449AB199B3B6C2348E9B>

CNBC's "America's Top States For Business"

1. Texas
2. Virginia
3. Colorado
4. North Carolina
5. Massachusetts

Three of CNBC's contenders — Texas, Virginia, and North Carolina — were on the Area Development consultants' radar screens. This ranking includes a heavily weighted quality-of-life factor, which was not considered in our survey consultants.

http://www.cnbc.com/id/37642856/CNBC_s_Top_States_For_Business_2010_And_The_Winner_Is_Texas

Tax Foundation's "2010 Business Tax Climate Index"

1. South Dakota
2. Wyoming
3. Alaska
4. Nevada
5. Florida

The Area Development consultants' agree with the Tax Foundation on Nevada — but the rest of these states were not among their top picks. The Tax Foundation looks at individual as well as business taxes.

<http://www.taxfoundation.org/publications/show/22658.html>

Directorship's "Boardroom Guide to the Best States for Business"

1. Texas
2. Virginia
3. Utah
4. South Dakota
5. Nebraska

Only the top two states — Texas and Virginia — made the consultants' cut. The Boardroom Guide puts an emphasis on states' litigation climate.

<http://www.directorship.com/>

Forbes' "Best States for Business 2010"

1. Utah
2. Virginia
3. North Carolina
4. Colorado
5. Washington

Utah, Virginia, and North Carolina scored high on Forbes' ranking, which includes three factors not included on the Area Development survey: current economic climate, prospects for growth, and quality of life.

http://www.forbes.com/2010/10/13/best-states-for-business-business-beltway-best-states_print.html

Inc.'s "Top 500, Top 10 States 2009"

1. California
2. Texas
3. Virginia
3. New York
5. Florida

Inc.'s ranking is based on the location of the nation's Top 500 firms in terms of revenue growth. The surveyed Area Development consultants only placed Texas and Virginia on their list of where to grow a business.

<http://www.inc.com/ss/2010-inc-5000-top-10-states>

Appendix II: Online Survey Instrument

September 2010

2010 New Hampshire Advanced Manufacturing/High Technology (SMHT) Survey

This project is intended to convince New Hampshire public policy makers of the key importance of smart manufacturing/high technology (SMHT) to New Hampshire's economic vitality, explore ways the state could promote increased SMHT activity, and highlight areas where New Hampshire is competing poorly with other areas of the country and world. Responses to the survey are strictly confidential, and you will not be added to any other email list.

Competitive Pressures and Your Business

We know your company faces significant competitive pressures from around the country and the globe. Please rank the importance of the following factors on a scale of 1 to 5, (1=low importance to 5=high importance), when you consider continuing or increasing production at a New Hampshire-based facility:

- State business taxes *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Property taxes *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Unemployment insurance tax *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Workers compensation costs *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Telecommunications taxes *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Regulation, including environmental compliance and labor regulations *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Energy costs *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Healthcare costs *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Cost of labor, adjusted for skill level and educational attainment *Please rank on a scale from 1 to 5, with 5 meaning most important

- Pressures from organized labor *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Commercial real estate occupancy/ costs *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

Other Competitive Pressures on Your business your chance to tell us about other competitive pressures in your own words.

Legislative Changes Initiatives

Which of the following New Hampshire legislative initiatives are most important (on a scale of 1 to 5) if you were to consider expanding your company in New Hampshire?

- Increased state R&D tax credit *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Improving net operating loss carry-forward provisions *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- “Single Sales” factor BPT apportionment *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Preserving the BET credit applied against the BPT *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Reducing the BPT tax rate *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Reducing the BET tax rate *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

Policy Changes or Initiatives

Which of the following New Hampshire policy initiatives would you consider most important (on a scale of 1 to 5) if you were to consider expanding in New Hampshire?

- Lowering health care costs *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Lowering energy costs *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Improving the state transportation infrastructure *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Improving the state high speed telecommunications (broadband) infrastructure *Please rank each area on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Improving workforce training, including partnerships between secondary and post-secondary schools and your business. *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Greater access to financing *Please rank each area on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Branding New Hampshire as an Advanced Manufacturing High Technology “destination” (like Silicon Valley, Rte. 128 or the Carolina Research Triangle) *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

- Lowering property taxes *Please rank on a scale from 1 to 5, with 5 meaning most important

1 2 3 4 5

Do you have other locations outside of New Hampshire?

If the answer is yes, we would appreciate knowing more about your costs at this (these) location(s) outside of New Hampshire. As always, this information will be kept strictly confidential.

What is the average hourly wage, or labor cost, for the location(s) outside of New Hampshire? Please also tell us where the non-New Hampshire location(s) is based

What is the cost of electricity (cents per KWH) for the location(s) outside of New Hampshire? Please also tell us where the non-New Hampshire location(s) is based

What is the corporate income tax rate for the location(s) outside of New Hampshire? Please also tell us the non-New Hampshire location(s).

What is the average health care cost per employee for the location(s) outside of New Hampshire? Please also tell us where the non-New Hampshire location(s) is based.

How do your environmental compliance costs at the non-New Hampshire locations(s) compare to New Hampshire's? Please choose one of the following:

How do your labor-regulatory compliance costs at the non-New Hampshire locations(s) compare to New Hampshire's? Please choose one of the following:

In Your Own Words

1. What are one or two of the most attractive features of NH's business climate, and why? Your chance to tell us about the NH business climate in your own words.
2. What are one or two of the least attractive features of NH's business climate, and why? Your chance to tell us about the NH business climate in your own words.
3. On those occasions when your company is considering expanding or growing operation, which other states or countries do you consider (compared to New Hampshire), and why? Your chance to tell us about the NH business climate in your own words.
4. Other comments or suggestions for improving the Advanced Manufacturing High Technology climate in NH? Your chance to tell us about the NH business climate in your own words.

Appendix III: Online Survey Comments

September 2010

2010 New Hampshire Advanced Manufacturing/High Technology (SMHT) Survey

1. What are one or two of the most attractive features of NH's business climate, and why?

- Generally good labor pool, although there seems to be shrinking supply of talented, motivated technically skilled folks. Work ethic is generally good and stable.
- Generally small government is also a benefit. You can deal with people there effectively because there are not large bureaucracies."
- Low taxes
- Access to receptive Executive Branch and Legislative Branch.
- Support for companies producing energy efficient products.
- Keeping Government small
- Good work ethic and honesty
- We need to leverage how beautiful this state is and how many things there are to do outside of work. We also need to leverage the many universities that we have as talent pipelines.
- No state sales or income tax - makes finding good employees easier.
- Quality of life issues - why? to attract and retain highly educated employees.
- Tort environment - why? good in a society that is becoming more and more litigious."
- 1)close proximity to technology companies and colleges/universities
2) ability to recruit talent technical people
3) reasonable cost of living for housing, etc.
- The work ethic and values of its population.
- No income or sales tax
- No state income tax for employees
- business friendly environment which is disappearing with the recent legislatures
- Established facilities
- 1. exceptional work ethic, ingenuity, creativity of residents
2. employees are attracted to or stay in area due to NH's rural way of life - nature, schools, low crime"
- 1.Tax Climate
2. Still somewhat Business Friendly
3. Good work ethic for the most part
4. Small State---access to Government agencies
- 1)location/proximity to good to excellent technical colleges and universities
2) Ability to recruit to a desirable life style with reasonable cost of living

2. What are one or two of the least attractive features of NH's business climate, and why?

- Concern over taxation in NH is biggest issue. It seems that NH legislature continually turns to NH businesses as the source for revenue to balance budgets as they avoid addressing the "no-income" tax/school funding issue
- judicial interference in school funding
- Governor's term should be for four years for consistency of management
- State politicians wanting to raise taxes, estate tax potential increases, high cost of education, with poor results.
- NH has a bad reputation of not being Industry friendly and of not having a solid talent pipeline. The perception is that all of the talented employees live in Mass and come here to work.
- Highest business profit taxes in country
- Energy costs are very high - and RGGI/cap & trade make the future rates very uncertain.
- The availability of well-educated and stable (low-turnover) workforce, and the situation with the state's finances are two that come to mind. Why? Answer on well-educated workforce is obvious, but state finances is a big worry - not solving it likely to have negative impact on business climate and it is a big problem with no easy answers. We believe this is likely to be a real obstacle to any Smart Manufacturing high technology companies considering a move or expand here.
- operating costs for manufacturing support; energy, regulatory, benefits for health care
- Uncertainty of tax structure as the state deals with budget deficit.
- massive white collar crime
- BET
- High energy costs
- Competitiveness
- Labor availability"
- 1 - NH doesn't have a consumption Tax like every other state which makes residents pay higher taxes in Property & fees.
- 2. NH lawmakers raid programs - lottery, medical malpractice, cap/trade program which sets a less than acceptable example"
- 1. Losing the Friendly to Business atmosphere
- 2. Heading towards an entitlement society
- High costs for operations; energy, health care, housing (in Southern areas)

3. On those occasions when your company is considering expanding or growing operation, which other states or countries do you consider (compared to New Hampshire), and why?

- We are committed to NH; too many of us live here to move to another location unless our competitive ability degrades. Then likely re-locations would be Texas or Florida where we would be integrated into other divisions.
- None
- North Carolina - highly qualified talent
- India - market opportunities, lower costs, less interference by politicians assuming they can spend money wisely. (They cannot)
- From a purely manufacturing standpoint, NC seems to be the hotbed right now. Other states that are well thought of are Ohio and Virginia. From a Technology standpoint, as

in “I have a developing technology and need talented people to help build the business,” Colorado, California and Wisconsin are the areas that are considered.

- southeastern US (NC, SC)- lower electric rates & business taxes, cheap land and buildings
- Florida, Georgia, California, Illinois. Main reasons are usually associated with logistics/supply chain issues, or trying to be in closer proximity to customers/markets. Usually not about costs or taxes.
- Our customers manufacturing support needs to be mainly in Asia or E. Europe; we consider NH for design, development and introduction of products not volume sustaining manufacturing
- We look to manufacture in lower coast areas within the US
- Puerto Rico
- Carolinas
- We're expanding in Asia as that's where the market has gone
- 1. Houston--Friendly to business, pretty good on taxes
- 2. Availability of labor that knows my business
- China, S. Asia mainly; Mexico as a 3rd alternative

4. Other comments or suggestions for improving the Smart Manufacturing High Technology climate in NH?

- In the global economy, NH cannot compete on labor costs, they are simply too high compared to the rest of the world. This will not change. Therefore we need to compete on innovation and continual productivity improvement while we simultaneously work hard to control growth of the other major costs which impact our competitiveness; primarily health care, taxes and energy. Therefore I recommend the following:
 1. Working on workforce skill base development in engineering, machinists, and lean processes.
 2. maintaining a tax environment conducive to investment and new technology development,
 3. Maintaining a regulatory environment that isn't overly burdensome with an appropriate balance between helping companies comply and enforcement.
 4. Achieving tort reform so that we can control runaway medical malpractice insurance costs which in turn impact health care costs.
 5. Creating an environment where medical providers are compensated for good outcome management vs. activity in order to reduce overall growth rate in insurance premiums.
- Get rid of the Democratically controlled government which threatens higher taxes and higher government spending.
- Support the Manufacturing companies in NH - They produce the jobs
- Government get out of the way
- I think that NH gets lumped in with Vermont too much. It is not seen as industry friendly or cooperative. If it is seriously considered, it is usually only considered as a corp HQ with manufacturing elsewhere. See Tyco and Fisher Scientific. We need to get the state on the map as a destination. I think that a group that focuses on identifying large corporations who are looking to centralize multiple facilities into one, and pursues them proactively to get them to move to NH is necessary over the short term. Once the foundation is set, I think that it will be far easier to attract additional businesses. The

state should also consider funding grants for University start ups that will stay in NH after graduation. The entrepreneurial spirit seems to be high in NH, but they seem to leave quickly, for MA or CA once they get legs.

- NH. Has gotten very crappy over the past 5 years or so. Fees, taxes, energy, taxes, and NH government spending - up, up, up! This is not the NH way.
- You should consider doing some research into how and why Boeing chose South Carolina for their new east coast operations, and perhaps closer to home, why Cisco chose Massachusetts for their recent data center investment. Perhaps there are some interesting lessons in these recent decisions to locate Smart Manufacturing high technology operations that NH could benefit from as part of this study.
- Strengthen the technology support and investments in trade schools, colleges and universities
- You're never going to attract new businesses with a high tax rate - for example: Michigan of 4.95% vs. NH 8.5%. On top of this other states offer local tax relief as well.
- Maybe resurrecting the Industrial revenue Bonds - bond program for start up and /or expanding businesses. This business took advantage of this program in the '70s."
- Strengthen the links and funding between businesses and technology thru the public and private assets of our colleges and universities.

What is the average hourly wage, or labor cost, for the location(s) outside of New Hampshire?

- Houston-Texas and California
- I would say the average labor rates for our employees in Texas are 10-15% higher in our industry due to the demand within the Oil & Gas industry for their particular skill levels.
- California rates are significantly higher than NH comp rate, 15-20% higher due to cost of living in CA.
- Our other locations are Charleston, SC; Fareham, UK; Goa, India; Tirgumures, Romania; and Taipei, Taiwan
- We have commercial operations locations (sales and service offices) in over 50 countries. We have manufacturing, research and engineering, and/or assembly operations in 10 countries. Generally speaking, average labor cost is lowest in China, highest in Western Europe, and USA is in the middle. We only have one significant USA manufacturing operation - the one in NH.
- Our labor costs in other countries - \$3.00 in South China; \$5.00 in Eastern Europe; \$4.50 in Mexico
- Our labor cost is \$12 per hour in Pennsylvania
- Up state NY - same as NH
- Our labor costs are lower everywhere
- New Hampshire average salary (incl. Fringe) = \$153K/yr.
- Metro DC / California = +25%; New York/New Jersey = +20%; Texas = -10%; Massachusetts = 0%
- Yes - all facilities (Carolinas and China) have significantly increased competitiveness
- We only have 7 personnel in other states which would make this data meaningless.

- We have 7 other plants throughout the world but that data would also probably not be valid w/o caveats, etc.
- China and Eastern Europe; \$200/month China; \$400/month E. Europe

What is the cost of electricity (cents per KWH) for the location(s) outside of New Hampshire?

- Texas is significantly less, but we have a minimal facility in Texas so this is not a factor.
- Some examples: China = \$0.04; UK = \$0.15; France = \$0.15
- ranges from \$.12 to \$.15 per KWH in our other locations
- costs are too low to even track
- \$.10185/KWH - PA
- 6 cents in NY versus 14 cents in NH
- 5 to 6 cents per KWH
- Cost of electricity (cents per KWH) in other locations - CA = 19.1; NH = 11.9; TX = 11.6; NY = 12.1; NJ = 16.7; MA = 12.2
- We pay about 5 cents in our other facility
- Indiana - 11.4c/kw
- ~\$.15/kwh

What is the corporate income tax rate for the location(s) outside of New Hampshire?

- Much better in Texas than NH or CA
- Some examples of corporate tax rates outside of NH: China = 25%; France = 33%; UK = 22%
- China is 10% to 25% location dependent
- we found that Massachusetts rates were not so bad, but no longer there
- Michigan - 4.95% and Indiana - 8.5 %
- Corporate tax rates are 10 to 25% in other locations

What is the average health care cost per employee for the location(s) outside of New Hampshire?

- Highest in CA and lower in Texas, although employees participate in a National program.
- This gets complicated due to various country schemes and where there are national insurance schemes. Generally speaking, USA is highest at around \$10K. Most others range between half that and three-quarters that, but again, this is because of the different ways that health care is taxed and funded and so on in various countries. You have to consider this health care cost as one component within the total cost per employee when all things are considered.
- Roughly \$.50 per hour equivalent impact
- We do not provide health care
- \$8,600 - PA
- NH plan for all employees
- New Hampshire is similar to other locations
- included in wage above; equates to ~\$30/month

Other Competitive Pressures on Your Business

- One of the most difficult pressures on our business is the competition that exists from Canadians. NAFTA has resulted in government-subsidized companies coming to the US to compete with us. However, between the exchange rate and the unwillingness of Canadian companies to take US prices, we are able to go into Canada to compete up there. NAFTA is a one way street in our industry - and it's the wrong way US companies.
- Most significant issue is availability of appropriately skilled and motivated technical talent from machinists to engineers to manufacturing specialists (Lean-educated) in order to support our efforts to continuously improve our productivity.
- Foreign competitors low wages, low regulations and low tax burdens
- Availability of Qualified Experienced Professionals (engineers)
- Overseas comp. China/ Asian Countries
- Federal taxes and regulation waste a lot of time. Estate taxes now cost me \$300,000 a year in legal costs and life insurance.
- Internal to my business which is a global manufacturer, I constantly battle the perception that NH is not a manufacturing state. There are states that are seen as far more cost effective, NC, OH, Etc. As far as I can tell, there is no real cornerstone Manufacturing industry or company in NH. It would be helpful if the State could be very aggressive about getting a large manufacturing location, whether it is one or multiple companies.
- This may seem strange to you, but for us, it is more about location, logistics infrastructure, access to highly educated employees and low employee turnover, access to markets/customers...and less about direct costs. We tend to factor costs into our local, regional, national pricing models. Generally speaking, Keene/USA is not an expensive place in which to operate when all things are considered.
- Healthcare Costs are by far and large the major issue.
- Large liquor distributors are exerting extreme "pressure" on state employees - in many cases; NH companies are paying the price.
- Availability of raw materials
- Cost of living in NH
- Regulatory - such as - waste disposal - classification, etc... NH is off the beaten path and hence all must be shipped considerable distances. Also NH or NH waste haulers differ at times on classifying materials hazardous while others do not - increases costs. Costs of operating permits (air, etc) are continually going up without any benefits to payers. Electric rates continually increasing. We pay Indiana, Texas state taxes and NH with NH having the highest rate.

Appendix IV: New Hampshire Manufacturing by Subsector

State of New Hampshire -		Average Annual 2009		
NAICS Code	Industry	Average Firms	Average Annual Employment	Average Weekly Wage
31-33	Manufacturing	2,073	68,054	\$1,120.98
311	Food Manufacturing	109	2,310	\$840.81
312	Beverage and Tobacco Product Manufacturing	16	664	\$1,224.93
313	Textile Mills	27	1,435	\$909.49
314	Textile Product Mills	43	207	\$573.88
315	Apparel Manufacturing	19	463	\$758.01
316	Leather and Allied Product Manufacturing	14	193	\$598.38
321	Wood Product Manufacturing	118	1,809	\$750.21
322	Paper Manufacturing	25	1,426	\$935.17
323	Printing and Related Support Activities	196	2,828	\$818.28
324	Petroleum and Coal Products Manufacturing	19	226	\$1,160.53
325	Chemical Manufacturing	55	1,720	\$1,203.24
326	Plastics and Rubber Products Manufacturing	100	4,679	\$902.03
327	Nonmetallic Mineral Product Manufacturing	100	1,960	\$957.08
331	Primary Metal Manufacturing	40	2,653	\$937.38
332	Fabricated Metal Product Manufacturing	389	10,555	\$964.20
333	Machinery Manufacturing	175	7,731	\$1,206.12
334	Computer and Electronic Product Manufacturing	290	16,115	\$1,554.71
335	Electrical Equipment/Appliances Manufacturing	62	4,074	\$1,076.35
336	Transportation Equipment Manufacturing	38	1,770	\$1,236.65
337	Furniture and Related Product Manufacturing	79	921	\$734.53
339	Miscellaneous Manufacturing	163	4,317	\$907.52
Source: New Hampshire Department of Employment Security; Covered Employment & Wages				



Potential Careers

Here is a list of advanced manufacturing jobs in New Hampshire!

Find the career that's right for you.

Take our six-question survey.

[Start survey](#)

Filter the list.



[Load More](#)

In demand: Indeed.com currently has **1199 positions** listed in NH manufacturing

Indeed.com is a job placement website that's free and easy to use.

Process Operator

Bow, NH

Z-Tech provides great benefits, including paid sick days, paid holidays, 401(k) plan, profit sharing, medical/dental insurance, life, AD&D and disability...

[Read More »](#)

Optical Assembler II- 1st shift

Londonderry, NH

We encourage minorities, women, protected veterans and disabled individuals to apply. No. Requires 2-5 years' experience in optical handling and manufacturing....

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Machine Operators

Nashua, NH

Must have basic machining experience in a manufacturing environment with mechanical abilities, good math skills and knowledge of measuring tools....

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Multi-Discipline Assembler 1st shift (Contractor)

Londonderry, NH

Qualified candidates for this position must be able to read, comprehend and then follow written work instructions....

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Principal QC Inspector

Exeter, NH

At SIG SAUER®, world renowned firearms are the weapons of choice for many of the premier global military, law enforcement and commercial users....

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Contract Manufacturing Quality Spec Evening Shift

Portsmouth, NH

As a Sanofi company, Genzyme benefits from the reach and resources of one of the world's largest pharmaceutical companies, with a shared commitment to improving...

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Connect with AMPed NH online.





Advanced Manufacturing Career Guide



Find a career based on education (2 min.)

- Select the advanced manufacturing career groups that most interest you from the color-coded columns below.
- Review all the positions available within the career groups you selected, taking note of how required education levels vary for each. You can also compare salary information.

Find best matches based on your skills & interests (5 min.)

- Choose a career you'd like to learn more about. Match the six alphabetical letters in that career bubble with the career code breakdown chart at the far right of this poster. Each letter represents a characteristic essential to this career. See how many characteristics pertain to you. Is the career a good match?

Did you find the career for you? Great! Use the QR code at right to learn more. Not sure? Explore other options based on similar essential characteristics by following the instructions to the right.

Exploring career connections

- The colored circles in each career bubble correspond with the career groups below. Each circle represents a group that contains careers requiring similar skills and interests.
- The numerals within the colored circles indicate the number of careers in each group that require similar skills and interests.
- Two careers are considered similar if they share four or more characteristics from the career code breakdown chart at right.
- Compare the career codes to determine common characteristics and differentiators. Which careers are most similar?

Example:

Aircraft Assembler
 • Median wage: \$23.33/hr
 ADHNGS 1 4 1 8

Legend:
 = Career group
 1 = Number of related careers in that career group
 This means there is one related career within the red category (Specialized Technicians).

Career code breakdown

Activities	Work styles	Skills	Abilities	Career types	Work context
A = Task oriented	C = Team environment	G = Basic	L = Physical skills	O = Tech/computers	R = Interacting with people
B = People oriented	D = Information/data input	H = Technical skills	M = Strong senses	P = Administrative	S = Physical work conditions
	E = Thought processes	I = Complex problem solving	N = Cognitive abilities	Q = Hands on	T = Structured work environment
	F = Work output	J = Management skills			
		K = Social skills			

Required education

- High school diploma
- Certificate/post-secondary training
- Associate degree
- Bachelor's degree

Learn more about the careers

Scan the QR code to access full career profiles and more.
www.ampednh.com/careerguide.com



Career groups




Increasing level of education

Increasing level of education



Let's Advance.

Get the skills you need for the job you want.

 Take a minute to learn about AMPed NH

Advanced manufacturing is one of New Hampshire's largest economic industries but there is a growing need for skilled workers. AMPed's high-tech training programs offer you the opportunity to get the coolest job you've ever had.



CONVENIENT

Community Colleges across the Granite State are offering customized training for stable jobs that matter, right in your own backyard.



AFFORDABLE

Achieve your training goals at a pace you can afford. CCSNH offers the most affordable college tuition in New Hampshire.



SMART

It's not just the technology that's smart. Advanced Manufacturing workers are paid about 20% more for the skills they possess than workers in other industries.



Our programs are designed with expertise from **leading employers**.

Choose the advanced manufacturing industry sector that interests you.



ROBOTICS & AUTOMATION





**ELECTRONICS &
ELECTROMECHANICS**



**ADVANCED MACHINE
TECHNOLOGIES**



**ADVANCED WELDING
TECHNOLOGIES**





**ADVANCED COMPOSITES
TECHNOLOGIES**



ENGINEERING & PROGRAMMING



Community College System of New Hampshire

CCSNH and its advanced manufacturing partners are redefining industry education. Courses and training programs are available across the state designed to get you from the lab to the production floor with efficiency.



People are talking about the value of the AMPed NH Program.

Student Testimonials

Expert Testimonials

"The community colleges show a clear understanding of the

"Freudenberg-

workforce needs for advanced manufacturing and the technology sector in New Hampshire, and are moving smartly and quickly to address those needs.”

*New Hampshire
Manchester). We
best and bright
technicians and
manufacturing*



Fred Kocher

Trustee & former President, NH High Technology Council

Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the colleges you're interested in, and a representative will get back to you.

- Lakes Region
- Great Bay
- Manchester
- Nashua
- NHTI
- River Valley
- White Mountains



What code is in the image? *

Enter the characters shown in the image.

Request More Info

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2015/21/7 8:29am

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Let's Advance.

AmpedNH.com User Login

PLEASE ENTER YOUR CREDENTIALS TO LOGIN.

Username *

Enter your ampednh.com username.

Password *

Enter the password that accompanies your username.





Let's Advance.

Precision Manufacturing

The Mechanical Design industry requires properly trained individuals who can follow the design process from inspiration to the actual manufactured product.








**Nashua
Community
College**

For additional course info and registration

[Get Started](#)

This will take you to Nashua Community College

Overview

A mechanical designer requires a diverse knowledge in many areas including computer aided draft and design, machine shop, robotics, and machine components.

Mechanical designers need to have project management skills and the ability to clearly communicate with others. The skills required to be a successful mechanical designer include G and M code programming, the understanding of standards and safety procedures, proper material and tool identification, the ability to make precise measurements given strict tolerances, and the training to operate machinery properly. Employment opportunities for this field of study include:

- *CNC specialists*
- *Mold Makers*
- *Tech support technicians*
- *Field service representatives*
- *General machinists*

ROBOTICS & AUTOMATION



**ELECTRONICS &
ELECTROMECHANICS**



**ADVANCED MACHINE
TECHNOLOGIES**



ADVANCED WELDING



TECHNOLOGIES



ADVANCED COMPOSITES
TECHNOLOGIES



ENGINEERING &
PROGRAMMING



Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

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- White Mountains



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Let's Advance.

Programs Overview

The seven member institutions in the Community College System of New Hampshire each offer training, degree and/or certificate programs focusing on a specific discipline within the advanced manufacturing industry.

Choose your advanced manufacturing concentration

The manufacturing industry has long been an integral part of New Hampshire's fabric, but the industry has evolved with the benefits of technology. There are many exciting, challenging jobs available doing work that really does matter. You won't be limited in what you want to learn and what you want to achieve; rather, you'll be encouraged to explore all the career possibilities available to you.

[Advanced Composites Technologies](#)

Electronics & Electromechanics

Engineering & Programming

Robotics & Automation

Advanced Machine Technologies

Advanced Welding Technologies

Reach out to the colleges of your choice.

We're here to answer all your questions. Check off any of the schools you're interested in, and a representative will get back to you.

Lakes Region

Great Bay

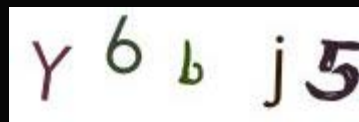
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Get the skills you need for the job you want.



Let's Advance.

Not all propellers grow on trees.

Elevate your life with a career in composites.

Imagine an advanced manufacturing job where you use cutting-edge machinery and the latest technology to help create surgical devices, bridges, wind turbines and aircraft parts, including propellers. AMPed NH provides the training you need for an exciting career in advanced composites.

According to the Manufacturing Institute, more private sector employers in the advanced manufacturing field offer health benefits to workers than in other private sectors, and the pay's better, too! Get on track to a career in advanced composites today!

Visit www.ampednh.com/composites

Twenty-six

The number of times you could wrap Earth with the carbon fiber one NH manufacturing facility will use in its high-tech aircraft engine parts through 2020.

Yowza!



For information on composites and other academic programs within the Community College System of New Hampshire, visit www.ampednh.com



Let's Advance.

Get the skills you need for the job you want.

She couldn't battle Martians without you.



It's a bird, it's a plane...

It's Super Laser! Scientists at the US Department of Energy's SLAC National Accelerator Laboratory created a laser that is a billion times brighter than any previously developed X-ray source, and it can probe hot dense matter at nearly four million degrees.

Is it getting hot in here?!

A career in electronics. What a blast!

If you have a passion for creating cool gadgets like wireless controllers, AMPed NH can provide the training you need for great electronics jobs in the advanced manufacturing industry.

The National Science Foundation found that manufacturers in the US perform two-thirds of all private-sector research and development in the nation, driving more innovation than any other sector. Get on a path to your career in electronics today!

Visit www.ampednh.com/electronics



For information on electronics and other academic programs within the Community College System of New Hampshire, visit www.ampednh.com



Get the skills you need for the job you want.

Let's Advance.

Your future: by design.

Two places at once!

Thanks to engineers, doctors can now practice in two places at once with remote-presence robots. The US FDA recently cleared these robots for use in hospitals, and it will allow physicians to monitor patients remotely.

Holy double doctors, Batman!

Build a career in engineering.

AMPed NH provides training for careers in engineering that feature great benefits and great pay. In fact, the Manufacturing Institute research indicates that Americans in the advanced manufacturing industry earned an average hourly wage of \$32.93 in 2011, higher than other working Americans.

Get on a path to your career in engineering today!

Visit www.ampednh.com/engineering



For information on engineering and other academic programs within the Community College System of New Hampshire, visit www.ampednh.com



Let's Advance.

Get the skills you need for the job you want.

The good toys...

They're not just for boys.

Girls dig technology, too.

Boys of all ages are known for loving their toys, but today women are excelling in successful careers in advanced machine technologies thanks to training through AMPed NH.

In a 2011 Deloitte/Manufacturing Institute survey, 52% of advanced manufacturers said the top skill deficiency among current employees was poor problem-solving skills; 43% claimed a lack of basic technical training was an issue. AMPed NH programs address both—and so much more.

Visit www.ampednh.com/machine

Shop class just got even cooler

If rebuilding that old lawn-mower engine in high school was neat, you'll love making a great living working with 3-D printers, 5-axis CNC machines, and the coolest technology a gearhead ever imagined!



For information on advanced machine technologies and other academic programs within the Community College System of New Hampshire, visit www.ampednh.com

This program or product is sponsored by (or in part by) a \$19.97 million grant from the U.S. Department of Labor, Employment & Training Administration TAACCCT Grant #TC-22504-11-60-A-33. The Community College System of NH is an equal opportunity employer, and adaptive equipment is available upon request to persons with disabilities.



Let's Advance.

Get the skills you need for the job you want.

Get paid to play. Finally.

A career in robotics? Awesome.

Remember when you were a kid and playing with cool stuff was your job? Now you can get paid for it, working with robotics in the advanced manufacturing industry. NAM calculations indicate manufacturing in the United States produces \$1.8 trillion of value each year, or 12.2% of U.S. GDP.

Yes, there are ample opportunities for a career in robotics and AMPed NH can provide the training you need. Get on track today!

Visit www.ampednh.com/robotics

Dancin' Robots!

Honda Motor Company's ASIMO (Advanced Step in Human Movement) humanoid robot can climb stairs, kick, walk, talk and even dance!

Just like you. Kinda.



For information on robotics and other academic programs within the Community College System of New Hampshire, visit www.ampednh.com



Let's Advance.

Get the skills you need for the job you want.

The view from up here?

Way better than any corner office!

An advanced welding career awaits.

If you like working with your mind and your hands—and if you like working up high, down low and in between—AMPed NH provides training for exciting, high-paying welding jobs.

According to the Manufacturing Institute, manufacturing employees earn higher wages and receive more generous benefits than other working Americans.

Get on a path to your advanced welding career today!

Visit www.ampednh.com/welding

Talk about job security

According to the American Welding Society, pictures of welders and their tools have been discovered in Egyptian tombs that date back to 3500 B.C.!



For information on advanced welding and other academic programs within the Community College System of New Hampshire, visit www.ampednh.com