Grant Title: **Accelerated Pathways in Advanced Manufacturing (APAM)**

Author: **Community College of Rhode Island**

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Document: Competency Based Education Symposium

DOL Disclaimer Statement:

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YOU'RE INVITED!

The *Community College of Rhode Island* is hosting a symposium on *Competency Based Education* and how it can provide accelerated pathways to employment for Engineering and Information Technology students

Please join us on **February 16, 2017** from 8:30am – 11:30am
Knight Campus, 400 East Ave, Warwick, RI, Room 4090

Keynote Speaker: Julian Alssid
Chief Workforce Development Strategist, College for America

Presentation and Panel Discussion:

Competency Based Education to Drive Workforce Development

Julian L. Alssid, is a nationally recognized expert in workforce development innovation and policy. He has over 25 years of experience working with decision makers who seek to grow the economy and create a pipeline of skilled talent. Prior to joining College for America, Julian founded the Workforce Strategy Center, where he advised over 20 states on workforce policy and established himself as a leader in promoting effective, practical solutions for implementing career pathways and talent development strategies. Julian has authored major studies on education and workforce strategy. Julian has also held senior positions in education and workforce development at the New York City Partnership and Chamber of Commerce, LaGuardia Community College, and the Office of the Mayor of New York City.

Presentation from CCRI Faculty Marissa Laurent and Russell McGillivray, Fire Science Department
Use of CBE in Firefighting and EMT Training Programs and growing technology in these fields

Please RSVP by Feb. 8th via acceptance of this invitation or by email to catoti@ccri.edu

COMMUNITY COLLEGE OF RHODE ISLAND

The agenda will be:

8:30	to 9:00 am	Continental Breakfast
9:00	to 9:15 am	Welcome from VPAA and myself
9:15	to 10:00 am	Julian Alssid - TBD
10:00	to 10:15 am	break
10:15	to 11:00 am	CCRI Faculty Presentation on Mastery/CBE
11:00	to 11:30 am	Panel Discussion and Q&A

Julian L. Alssid, is a nationally recognized expert in workforce development innovation and policy. He has over 25 years of experience working with decision makers who seek to grow the economy and create a pipeline of skilled talent. Prior to joining College for America, Julian founded the Workforce Strategy Center, where he advised over 20 states on workforce policy and established himself as a leader in promoting effective, practical solutions for implementing career pathways and talent development strategies. Julian has authored major studies on education and workforce strategy. Julian has also held senior positions in education and workforce development at the New York City Partnership and Chamber of Commerce, LaGuardia Community College, and the Office of the Mayor of New York City.

Russ McGillivray has both an Associates and Bachelor's degree in Fire Science and is a 2012 graduate of Anna Maria College with a Master's of Public Administration. He is a Licensed Practical Nurse, a Rhode Island Emergency Medical Technician Cardiac and Instructor Coordinator. Russ has been an adjunct faculty member for the Community College of Rhode Island's Fire Science Program since 2008 and has served as the Director of the Fire Science program since June of 2015. Russ is the Chief of the East Greenwich Fire Department and is a retired Army Reservist. His Army service includes a yearlong deployment to Iraq where he served with the 399th Combat Support Hospital.

Professor Marisa Laurent is a University of Rhode Island graduate with a Master's in Adult Education. She is a licensed Rhode Island Emergency Medical Technician Cardiac and Instructor Coordinator. She is also an American Heart Association Instructor. Professor Laurent has been an assistant professor for the Community College of Rhode Island's Fire Science Program since 2013. Since joining the CCRI team, she has acted as the accreditation coordinator for the program and successfully obtained accreditation as a training facility through the Rhode Island Department of Health, Center for Emergency Medical Services. Prior to joining CCRI, she worked at the RI Department of Health, Center for Emergency Medical Services as a Field Technician and Public Emergency Management Suite Coordinator. Professor Laurent is passionate about the program and enjoys teaching students about the field of fire science and how to respond and evaluate medical emergencies. She takes great pride in watching her students grow throughout the program and gain success within their careers.

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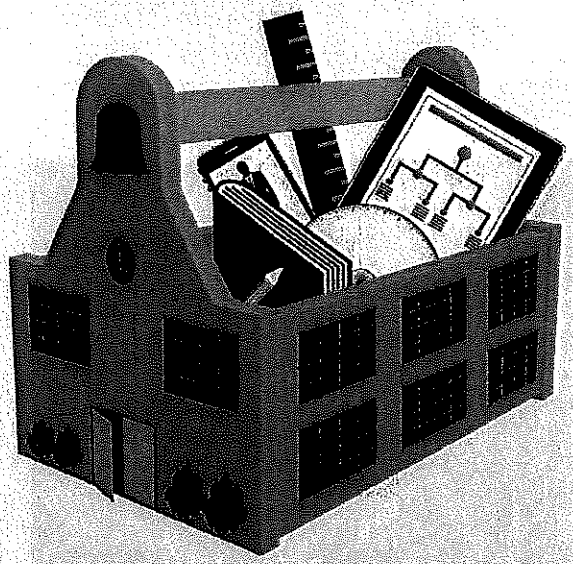
- Pearson eText: Rich media options let students watch lecture and example videos as they read or do their homework. Instructors can share their comments or high lights, and students can add their own, creating a tight community of learners in your class.
- Decision-Making Cases: Decision-Making Cases take EMT students through real-life scenarios that they typically face in the field. These branching cases give students the opportunity to gather patient data and make decisions that would affect their patient's health.



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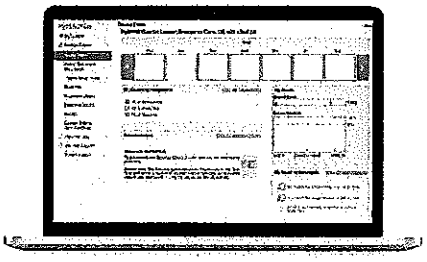
BRADY is proud to be part of Pearson, the worlds leading learning company. We remain committed to providing a pedagogically-sound suite of solutions that offer the flexibility to meet the unique needs of every learner, while keeping a focus on efficacy. At BRADY we are passionate about what we do and about partnering with educators to prepare students to become street-ready EMS professionals.

DIGITAL SOLUTIONS



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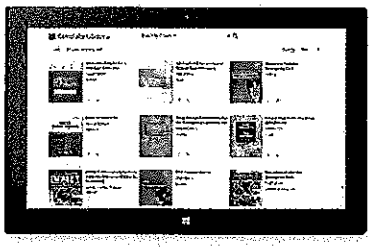
Fostering engagement both within and outside the classroom, MyBRADYLab helps students better prepare for class, quizzes, and exams—resulting in improved performance in the courses.

MyBRADYLab fosters learning within and beyond the classroom. Features include:

- Gradebook
- Multimedia Library
- Pearson eText
- Decision-Making Cases

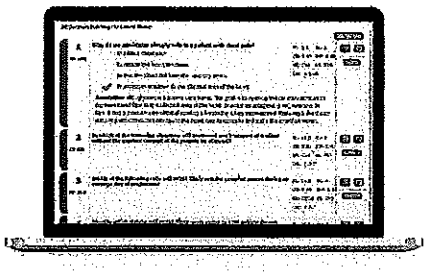


Digital Library for Paramedic

All of your BRADY eTexts and technology resources in one place, for one low subscription price.

The BRADY Digital Library offers access to all of your BRADY eTexts and technology resources used across your program—in one place, for one affordable subscription price.

- *Paramedic Care (All Volumes)*
- *Understanding 12-Lead EKGs*
- *Understanding EKGs: A Practical Approach*
- *Basic Arrhythmias*
- *12-Lead ECG for Acute and Critical Care Providers*
- *Pearson Health Professional's Drug Guide*
- *Easy Four-Step Method for Drug Calculations*
- *Drug Dosage Calculations for the Emergency Care Provider*
- *Prehospital Emergency Pharmacology*
- *Essentials of Anatomy and Physiology*
- *Medical Terminology*
- *International Trauma Life Support*
- *EMPACT*
- *IV Therapy for EMS*
- *EMS Documentation*
- *Advanced Pediatric Emergency Care*



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EMSTesting.com was created by nationally recognized experts, whose products are time tested and are proven to work. **EMSTesting.com** includes computer-adaptive testing, computer-based testing, validated final exams, online test generator and much more!

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EMSTesting

EMSTesting.com was created by nationally recognized experts, whose products are time tested and are proven to work. **EMSTesting.com** includes computer-adaptive testing, computer-based testing, validated final exams, online test generator and much more!

How does EMSTesting.com work?

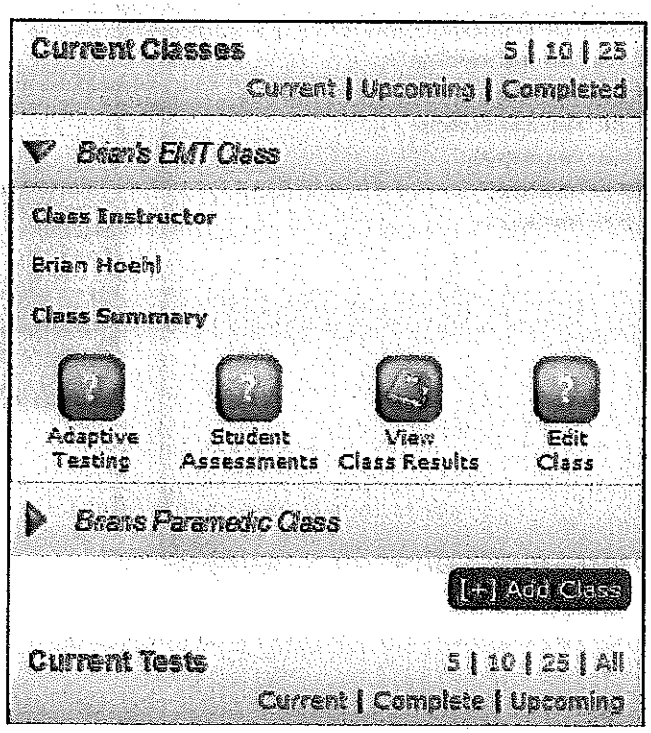
Platinum Educational Group has developed EMStesting.com which allows you to create and administer tests to your students. You can choose questions by Provider Level, Module, Topic, Objective, Bloom Level and the National Registry practice analysis to name a few. You can even indicate what kind of questions you want to exclude! Students also have the ability to practice for their certification exams with the Computer Adaptive Testing component that is available.

You can purchase EMStesting in several ways:

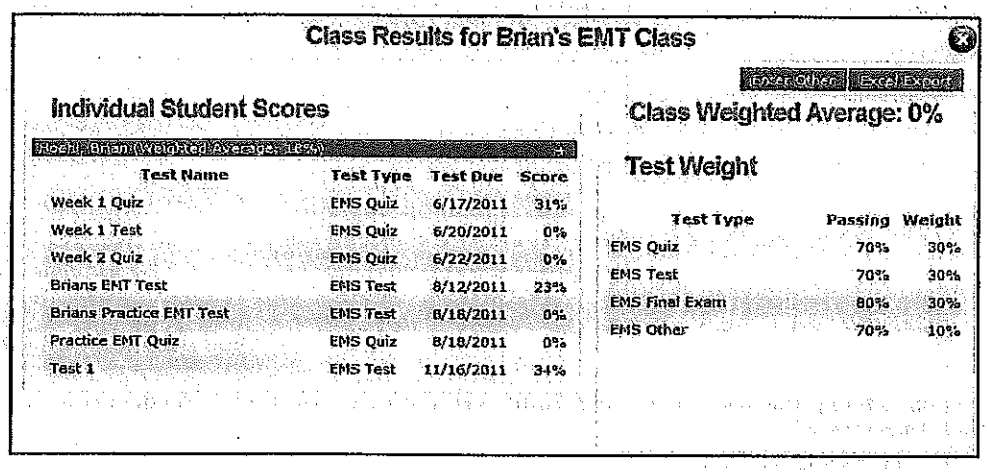
- **Platinum Level:** (Best Seller) Includes Test Generator, Final Exam and our Computer Adaptive Testing Program (CAT).
- **Gold Level:** Test Generator and Final Exam
- **Silver Level:** Test Generator
- **Individual CAT purchase:** Students can purchase the stand alone CAT to use on their own.

Key Features.

1. Set up multiple classes, create quizzes, comprehensive final exams, view class results and utilize the computer adaptive testing feature!
   - Questions and testing instruments are valid, reliable, and discriminate properly.
   - Content is based on the National curriculum and crossed referenced to the job analysis.
   - Test items are updated routinely to improve their quality and customer satisfaction.



3. View your class results.



Class Results for Brian's EMT Class

Export Other | Excel Export

Individual Student Scores

Roehl, Brian (Weighted Average: 18%)

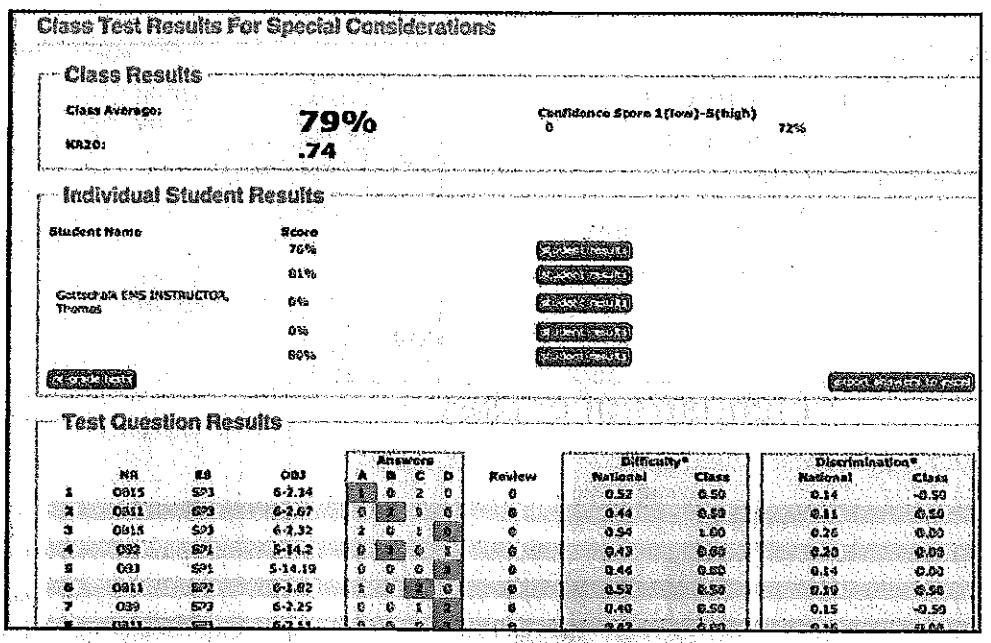
Test Name	Test Type	Test Due	Score
Week 1 Quiz	EMS Quiz	6/17/2011	31%
Week 1 Test	EMS Quiz	6/20/2011	0%
Week 2 Quiz	EMS Quiz	6/22/2011	0%
Brians EMT Test	EMS Test	8/12/2011	23%
Brians Practice EMT Test	EMS Test	8/18/2011	0%
Practice EMT Quiz	EMS Quiz	8/18/2011	0%
Test 1	EMS Test	11/16/2011	34%

Class Weighted Average: 0%

Test Weight

Test Type	Passing	Weight
EMS Quiz	70%	30%
EMS Test	70%	30%
EMS Final Exam	80%	30%
EMS Other	70%	10%

4. Analyze detailed results and compare them to others in your class or national averages.



Class Test Results For Special Considerations

Class Results

Class Average: 79%

KR20: .74

Confidence Score 1(low)-5(high)
0 72%

Individual Student Results

Student Name	Score
	76%
	81%
Gottschalk EMS INSTRUCTOR, Thomas	0%
	0%
	80%

Test Question Results

	NR	E9	OB3	Answers A	B	C	D	Review	Difficulty* National	Difficulty* Class	Discrimination* National	Discrimination* Class
1	OB15	SP3	6-2.34	1	0	2	0	0	0.57	0.50	0.14	-0.50
2	OB11	SP3	6-2.67	0	2	0	0	0	0.44	0.50	0.11	0.50
3	OB15	SP3	6-2.32	2	0	1	0	0	0.54	1.00	0.26	0.00
4	OB2	SP1	5-14.2	0	2	0	1	0	0.43	0.00	0.20	0.00
5	OB3	SP1	5-14.19	0	0	0	2	0	0.46	0.50	0.14	0.00
6	OB11	SP2	6-1.82	1	0	2	0	0	0.57	0.50	0.10	0.50
7	OB9	SP3	6-2.25	0	0	1	2	0	0.40	0.50	0.15	-0.50
8	OB11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

EMSTESTING

What Makes EMSTesting's content **Valid** and **Defendable**?

Content Creation

Each question was originally created based on the National Registry's Job Practice Analysis and the National Curriculum. Those questions and newer test items have since been cross-referenced to the National Education Standards and latest practice analysis headings.*

All available and commonly used textbooks and manuals were referenced. When a conflict occurred, common practice or the most appropriate response was used by consensus among the educator team and medical director. The gold standard reference for drug dosages and indications for Platinum has and remains to be the American Heart Association's guidelines and questions are updated with each AHA science change. Reading levels were assigned and we attempt to keep each question within 2 grades of the expected reading level for each provider. Questions were assigned a Bloom's level and estimated cut score. Each question includes annotations with rationales to explain why the correct answer is correct and why the good distracters are not correct.

All questions have been reviewed for cut scores once over 100 candidates have responded and are adjusted based on actual results and Nedelsky method of calculating cut scores.**

*The above guidelines are standards adopted in 2002 by our group's authors and continue to be our practice when making additions and modifications of test questions (items) to our software.

**EMSTesting.com offers ready made final exams that are constructed using a predetermined blueprint which draws items from an entirely different question bank than our regular test building software. This process assures all of the items are new content for students taking their capstone summative evaluation at the end of a program. These tests also undergo the same development and scrutiny as our standard test questions do.

Other Instruments for Success

Our admission and evaluation testing assesses baseline reading levels and math abilities based on the curriculum. The site identifies learning preference and student motivation along with strategies how to utilize the data. In addition, a test anxiety assessment is offered, which automatically launches a tutorial to help them overcome this if present. This is included and preloaded on the student's dashboard for educators to implement.

Also available on the bottom of the student landing page are video tutorials on "How to take a test", "How to study", and "How to read a textbook".

Item Analysis Guidelines

On or around the fifteenth of each month Platinum educators review a report of our Computer Adaptive Testing (EMSCAT) outcomes. As of June 2016, we have had over 34 million responses to our 4,800 question bank which aids us in our validation process. ***

In addition to the raw data analysis from the adaptive and computer based testing experiences, there are numerous channels for instructors and students to provide feedback during exams and test building to the authors of the items. Of these submissions, each are individually reviewed and if appropriate, acted on.

Item	Date	Previous Cut Score	Current Cut Score	Discrimination	Answer	A	B	C	D	Total
1787	5/8/16	0.484686397	0.482211899	0.1811	A	28773	8577	275	21029	58711

***Test items have been answers over 80 million times combined in the computer based and computer adaptive environment.

Test Evaluation & Feedback

The results you receive if you use the full version of EMSTesting online and students take tests online are:

- A KR20 Reliability if over 4 students have participate.
- The class average for the test-both raw score and cut score.
- The Registry, Educational Standard, and National Curricular reference for each question if applicable (not all questions have representation in all three categories).
- The National Difficulty and Discrimination.
- Item Pvalue and Point Biserial score.
- The breakdown of responses for each question.
- The number of responses from the students for questions they would like to discuss in class.
- The student reported confidence level and success rate.

Student outcome pages when enabled will show:

- Results for each student (which are available for the student & instructor).
- Individual student start and end times.
- Performance by reading level.
- Results by cut score.
- Outcome by Bloom's level.
- Ratings by National Registry Reference.
- Scores by Educational Standard.
- Performance by National Objective.
- An opportunity for students to review each question with annotation.