Lake Area Technical Institute Quality Initiative

Overview of the Quality Initiative/Executive Summary

In November 2012, Lake Area Technical Institute submitted this Quality Initiative Proposal:

Lake Area Technical Institute (LATI) recognizes the need for a prolonged, sustained, and concerted effort to raise the level of excellence and availability of online, hybrid educational programs**.** Beginning February of 2012, the **Online Instruction Initiative** was implemented to advance the online, hybrid offerings at LATI through improvement of current offerings and the addition of other online, hybrid courses.

In fall of 2012, 8.8% of LATI students were online students. At that time, 11 of the 29 programs offered at LATI had an online option (Dental Assisting, Practical Nursing, Computer Information Systems, Financial Services, Business Associate, Agriculture, Medical Laboratory Technician, Drafting, Precision Machining, Robotics, and Welding).

Six of those programs were targeted for the quality initiative time period: Agriculture, Precision Machining, Business, Nursing, Robotics, and Medical Laboratory Technician. This represented at least one program from each division (Health, Trade and Industry, Business, and Agriculture) at Lake Area Technical Institute. To reach the goals of the initiative, these programs were charged with increasing and/or improving upon the online courses that were offered. Assessment involved monitoring direct measures such as standardized test scores where available (comparing online cohort with on campus cohort) and retention in online courses; and indirect measures, such as job placement figures, employer satisfaction surveys, and student satisfaction surveys.

Scope and Impact of the Initiative

Accomplishments

Lake Area Technical Institute realized some of the coursework that worked well for on campus students, did not work as well for students completing their studies online. Our objective with the online instruction initiative was to design the coursework to work as well in the online arena as it works on campus, and to update and improve online delivery methods.

Since the Online Instruction Initiative began, LATI has increased the number of online courses offered, improved online course content, improved the quality of students' online experiences (to meet the students' learning expectations and outcomes they experience on campus), and realized a gain in the number of online/hybrid students. In fall of 2014, 10.9% of LATI students were online students. Those improvements were due to a number of practices implemented during the Online Instruction Initiative time period.

The most significant accomplishments since the inception of the initiative include: hiring an Instructional Designer and Educational Technology Specialist (through grant funding), the development of the Best Practices for Online Courses rubric, the development of the Online Teacher Evaluation rubric (and instituting the online teaching evaluations), the development of a shared online syllabus where best practices were shared among instructors, and offering TechBytes and other teacher training activities.

To date, online completion rates have improved as a result of the online coursework redesign and the improvement in online delivery methods. Moving forward, we are improving our methods of tracking completion rates and also with student recruitment efforts. To date, we have attained an increase in the number of online students.

Online Instruction Initiative Activities Timeline

Year 2012-2013:

a. Online Success Course Creation:
   Jenzabar/My Portal 100 or ELearning Essentials was created to educate online students on the various aspects of the LATI online learning management system (Moodle). New online students took the course at the start of their first semester. This was a requirement but no credits were awarded.

b. Creation of a Focus Group to Address Student Retention/Success:
   For the 2012-2013 year, LATI created a full-time Retention Advisor position. LATI was part of a consortium that created a Retention Tool Kit.

c. Enhancement of Current Online offerings was implemented and remains under development:
   A rubric of best practices for an online course was created.

d. Online Instructor In-services began.

e. Hired an Educational Tech Specialist to assist with development and implementation of online courses.

Year 2013-2014

a. Implement additional kinesthetic activities in online courses
   Nursing and MLT acquired several resources that contributed to additional kinesthetic activities in online, hybrid courses. MLT added a simulated lab experience for its online (and on campus) students. Nursing and MLT each acquired practice arms with computerized instructional set-ups

for students to practice blood drawing and IV starting techniques when they came on campus. MLT worked with NANSLO labs to offer lab experiments that were totally online.

b. Started TechBytes for online instructor Professional Development. Lunchtime technology sessions were offered to instructional and support staff from October 25, 2013 through April 11, 2014. The sessions included lunch and were held at 11:00 and noon on the second and fourth Fridays of the month. The purpose of the sessions was to introduce technology tools and explore new technologies as well as to facilitate the sharing of technology ideas among staff members.

c. Revised the informational letters sent out to online students from the front office. Because new online students weren't all on campus for orientation, a letter was prepared to instruct the student on how to access to the online courses.

d. Evaluated the overall online initiative at LATI using the Quality Standards for Online Programs document. The document was given to the online committee and some online instructors and the instructors were asked to self-evaluate.

e. Created an online learner web resource to provide information about online learning at LATI to prospective and current online students. The website, LATI Online Learning, is undergoing final revisions and will go live in May 2014.

f. Conducted My Portal Mini-Sessions. These were open sessions for instructors created to help transition from using Moodle as the Learning Management System (LMS) to Jenzabar/My Portal.

g. Panopto Implementation: The staff had been using Camtasia to record lectures but Panopto offered an institution-wide access and provided user statistics. Staff was offered mini-sessions in the utilization of Panopto.

Year 2014-2015

a. LATI hired an Instructional Designer to work with faculty. The acquisition of the Instructional Designer were critical to moving the quality of the online courses forward and provided the faculty with much needed assistance in the development of the online courses.

b. Continuation of TechBytes with instruction provided by the Instructional Designer and Ed Tech Specialist offered in two sessions, two times per month and one-on-one sessions for instructors (working with instructors to provide technology-enhanced pedagogical practices for online, hybrid and on-campus class instruction). Examples of TechByte Topics included Google Power Searching, Quick Quizzes with BYOD, Rubrics and Online Rubric Creator, and Panopto and Video in the Classroom.

c. Fall In-Services with instruction provided by the Instructional Designer and Ed Tech Specialist:
    1. Introduction to Panopto
    2. Introduction to Panopto for New Users
    3. MyPortal Basics
    4. MyPortal Test Bank Upload

d. Conference-like in-service in the spring for all faculty on various aspects of technology-enhanced pedagogy for all levels of experience. Examples of topics included Connecting Students with Remind, Best Practices of Online Teaching, Library Resources and Tutoring Services, and Panopto 101.

e. A Technology for Teaching and Learning Course was offered to instructors by the Ed Tech Specialist. This was a semester-long course promoting the best practices of online and hybrid pedagogical practices through modeling best practices for both current and future virtual classrooms. Ten instructors representing the following departments took this course: Dental Assisting, Financial Services, Business, Diesel Technology, Entrepreneurship, and General Education. The class met for 20 hours outside of the normal workday and instructors could earn 20 hours of CEU or instructors could earn one graduate credit transcripted through the University of Sioux Falls.

f. An evaluation cycle was created for online and hybrid course offerings at LATI. The online evaluation was reviewed by a panel of online instructors in the fall semester and implemented in the spring semester. Twenty-four online, hybrid courses taught by 24 different instructors were evaluated on the Online/Hybrid Course Structure Evaluation Tool. Instructors were placed on a cycle and had a course structure evaluation once every other year, time permitting. The Structure Evaluations were conducted by the Instructional Designer and Ed Tech Specialist.

g. The Online Committee, comprised of online instructors, meet once a month during the year to review the online course structure evaluation tool as well as to address any questions and concerns with the online student population. The Online Committee reviewed the letter flow and email flow for online students and the new Dual Credit students as well.

h. In additional to the eLearning Essentials course, online instructors were encouraged to give the students activities to demonstrate proficiency in uploading assignments, etc. during the first two weeks of their respective classes. This was important to complete by program, rather than as a separate course, as many programs started to use program-specific software programs that students in the course need to learn during the first two weeks. For course faculty that were using Jenzabar/My Portal, a Jenzabar/My Portal student tutorial was prepared.

i. The Nursing program started using Shadow Help (with Avatars) in their online training. The Medical Laboratory Technician program utilized an online digital microscope view of blood cell differentials and urinalysis microscopics to supplement the students' training on campus with a microscope. The Medical Laboratory Technician program purchased its own equipment (Panoptiq) to prepare digitized microscope slides.

j. A 3-D printer was purchased for Robotics as well as a robot designed for educational purposes, rather than what is found in the workplace.

k. In Precision Machining, a 5^{th} Axis was purchased for one of the machines and the digital readouts were replaced with newer models.

l. Full-time online instructors were hired for Agriculture, Precision Machining and Robotics.

m. A Jenzabar/My Portal student learning tutorial was created to ensure students were proficient in online navigation and were familiar with that environment when completing assignments.

Impact of Initiative

We have accomplished success in many areas that were identified initially as needing improvement. These accomplishments include:

1. Transferring to the new Learning Management System
2. Updating the online course syllabi
3. Utilizing Panapto for recording lectures
4. Improving our methods of coursework delivery in the online environment with the intension of trying to bridge the gap between students who succeed online and students who don't
5. Improving connectivity/communication between online instructors and online students
6. Providing an online orientation where instructors participate and understand online expectations
7. Identifying and understanding multiple technology platforms and surmounting obstacles

Measures of Success

Direct Measures:

1. **Standardized Test Scores**

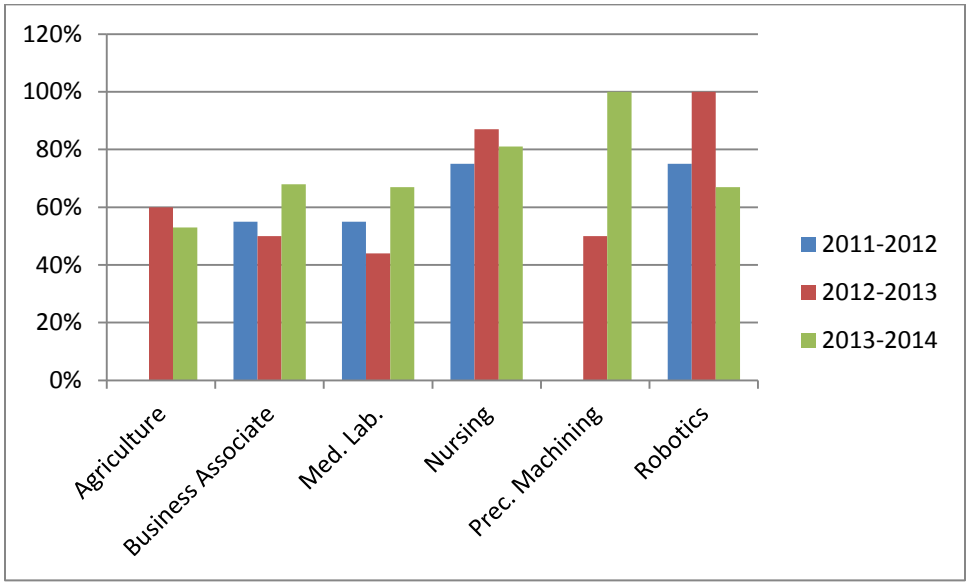
Of the six programs selected, only MLT and Nursing take a national licensure or certification test.

	MLT on campus	MLT online	Nursing on campus	Nursing online
2012	71% (N=7)	0 took	100% (N=51)	100% (N=20)
2013	67% (N=3)	100% (N=2)	93% (N=30)	100% (N=27)
2014	80% (N=5)	100% (N=1)	100% (N=33) 88% passed on 1st attempt	100% (N=25) 91% passed on 1st attempt

2. **Retention** - Institutional online retention since the implementation of the initiative:

2011-2012: 63.7%
2012-2013: 62.1 %
2013-2014: 66.89%

Online Student Retention by Program*



Agriculture online students
2012-2013: 3 retained of 5
2013-2014: 8 retained of 15

BSA online students
2012-2013: 10 retained of 20
2013-2014: 15 retained of 22

MLT online students
2012-2013: 7 retained of 16
2013-2014: 6 retained of 9

Nursing online students
2012-2013: 33 retained of 38
2013-2014: 39 retained of 48

Precision Machining online students
2012-2013: 2 retained of 4
2013-2014: 9 retained of 9

Robotics online students
2012-2013: 7 retained of 7
2013-2014: 8 retained of 12

*2014-15 data is not included as online students complete the program at a slower rate than on campus students.

Indirect Measures:

1. **Job Placement – 2014 Graduates**

LATI experienced 100% placement for 2014 online grads. Placement data is defined by those working or continuing education and includes students who reported back to us.

7/7 Online Agriculture grads placed
3/3 Online Business Associate grads placed
1/1 Online Computer Information CISO grads placed
4/4 Online Dental Assisting grads placed
1/1 Online Precision Machining grads placed
2/2 Online Robotics grads placed
5/5 Online Financial Services grads placed
2/2 Online Medical Lab Technology grads placed
25/25 Online Practical Nursing grads placed

2. **Employer Satisfaction Surveys**

In the past, Employer Satisfaction Survey response figures had not been identified as being on campus or online graduates. In 2015, employers were asked to note if they knew their employee was an online/hybrid graduate. The majority of employers did not know. Of the 8 (of 66) employers that noted their employee was considered an online student at LATI, only one was dissatisfied with the quality of the employee while seven were either satisfied or very satisfied.

Spring 2015 Employer Satisfaction Surveys

In Spring 2015, 66 employer surveys were returned, covering graduates in 12 programs.
Employers were asked to rate their LATI graduate employees using the ratings of:
1—No, never, 2—sometimes, 3—usually, 4—yes, always

1. Does the LATI graduate display the occupational skills you expect of an entry level employee in your profession? **LATI average 3.6**
2. Does the LATI graduate demonstrate the work habits (i.e. responsibility, work ethic, attendance, service of self, caring attitude) you expect of an entry level employee in your profession? **LATI average 3.6**
3. Does the LATI graduate display appropriate interactions with clients and co-workers? **LATI average 3.6**
4. Do LATI graduates analyze situations and demonstrate problem solving appropriate for their position? **LATI average 3.5**
5. Does the LATI graduate communicate effectively through reading, writing, speaking, and listening? **LATI average 3.5**
6. Is the LATI graduate able to effectively use information from a variety of sources pertinent to their position? **LATI average 3.4**
7. What is your overall level of satisfaction with LATI graduates' technical preparation for successful employment with your company? 1= disappointed; 2=satisfied; 3= very satisfied **LATI average 2. 6**

3. **Student Satisfaction Surveys**

The student satisfaction surveys were given to online students in Medical Laboratory Technician and Practical Nursing programs. Questions and the average responses relating to student satisfaction in online programs are (1-Strongly agree, 2- agree, 3- disagree, 4- strongly disagree):

1. The program instructors are interested in and enthusiastic about teaching.
   Medical laboratory technician online: 6 students surveyed; **average response 2**
   Practical Nursing online: 4 students surveyed; **average response 2.5**
2. The course sequence in my program is well-organized. MLT (6 students) **average2**; PN (5 students) **average 2.4**
3. Grading and testing is fair and consistent. MLT (6 students) **average 2**; PN (4 students) **average 2.5**
4. Instructors are approachable, helpful and supportive. MLT (6 students) **average 2**; PN (5 students) **average 2.4**
5. Information concerning courses, requirements and education plans is provided. MLT (6 students) **average 2**; PN (5 students) **average 2.4**
6. Information regarding grades is provided. MLT (6 students) **average 2**; PN (5 students) **average. 2.4**
7. LATI provided me the knowledge I need to start a career in my field of student. MLT (6 students) **average 2**; PN (5 students) **average 2.4**
8. I am aware that tutors or peer tutors are available to assist students. MLT (5 students) **average 2.2**; PN (3 students) **average 2.33**
9. Network services (e-mail, wireless connectivity, etc) met my needs. MLT (5 students) **average 1.6;** PN (1 student) **average 2**

Practical Nursing Examples of student satisfaction survey for online improvement:

Component	Expected level of achievement	Frequency	Method	Results of Data	Program Action
Technology resources (5.4)	85% of online students will agree that online technology is conducive to learning and meeting student expectations on exit survey (Question #10 & 11)	June	Student exit surveys	2014—87.5% 2013—86% 2012—64% 2011—50%	2014: Maintained 2013: Maintained 2012: Based on student surveys regarding the technology, a tutorial was developed requiring all students to complete if enrolled in an online program.
Student Resources (3.4)	The average rating on LATI's student exit survey will be a 2.0 or lower regarding the support services. (1= strongly agree, 2= agree, 3= disagree 4=strongly disagree) IT support # 64, 65, 66, 67,68,& 69	July- FT December- PT	Results from the student exit surveys reviewed. Campus, fulltime, and part-time student surveys evaluated.	**Campus student exit survey results:** 2014: 100% < 2.0 2013: 100% <2.0 *laptop lease program - 1.50 2012: 100% < 2.0 *laptop lease program was significantly above at 2.63 2011: 100% < 2.0 *laptop lease program was significantly above at 2.65	2014: Maintained. 2012-2013: Based on the student survey results for two years, (including PT online), the laptop leasing program was changed and allowed students to bring their own laptop to campus. Leasing- now an option and not required.
Preceptor Tutorial (2.4)	100% of preceptors have a faculty member mentor throughout	Biannually, campus/online April/September	Preceptor feedback to mentor	2014 – 100% of preceptors received and signed contract identifying understanding of	2013-2014- Based on preceptor feedback, a preceptor tutorial was created for preceptors to reinforce orientation,

	experience.			role, faculty mentor, and orientation. All met criteria. DON verified assigned preceptors. 2013: 100% 2012: 100% 2014- Some preceptors indicated in discussions with mentors, that they would like a reference for the orientation materials, in addition to how it was currently done.	responsibilities and to enhance mentoring. 2012-2013- Maintained 2011-2012- Maintained

Other items not on our evaluation plan yet:

1. Some online students verbally stated they wanted more practice time in the learning lab prior to check-offs.
   Action: Robin (instructor) increased the time offered (including Sundays when check-offs were on a Monday) and made it mandatory to try to improve all skills.
   Outcome: pending, but positive informal feedback at this point.
2. Faculty felt there was a disconnect with starting classes with distance students.
   Action: require face to face orientation in August prior to the start of classes, either by individual appointment or with the large group.
   Outcome: pending
   Always require the EEEOL prior to the start of classes. No response on exit surveys on that.
3. Immunizations are saved off site with a third party. Makes for easy access for online students when they are requesting them for preceptorships.
4. Panopto introduction at the beginning of courses. (New)

The Medical Lab Technician program distributes a similar student satisfaction survey that had similar results. As a result of the survey, the most recent improvement involved posting procedures online similar to what is done on campus.

4. **Instructor Survey Responses**

LATI online instructors provided feedback following the Technology for Teaching and Learning (TTL) class. The three main course objectives that could be self-assessed were Copyright/Fair Use, Discussions and/or Online Peer to Peer Interactions, and Formative Assessments. Questions and the respective answers were:

1. **How would you rate your knowledge of Copyright/Fair Use before the TTL class:** No knowledge: 40%; Somewhat Competent: 0%; Uncertain: 40%; Competent: 20%; and Highly Competent: 0%.
2. **How would you rate your knowledge of Copyright/Fair Use after the TTL class:** No knowledge: 0%; Somewhat Competent: 20%; Uncertain: 0%; Competent: 80%; and Highly Competent: 0%.
3. **How would you rate your knowledge of Discussions and/or Online Peer to Peer Interactions before the TTL class:** No knowledge: 40%; Somewhat Competent: 20%; Uncertain: 0%; Competent: 40%; and Highly Competent: 0%.
4. **How would you rate your knowledge of Discussions and/or Online Peer to Peer Interactions after the TTL class:** No knowledge: 0%; Somewhat Competent: 0%; Uncertain: 0%; Competent: 60%; and Highly Competent: 40%.
5. **How would you rate your knowledge of Formative Assessments before the TTL class:** No knowledge: 40%; Somewhat Competent: 0%; Uncertain: 20%; Competent: 40%; and Highly Competent: 0%.
6. **How would you rate your knowledge of Formative Assessments after the TTL class:** No knowledge: 0%; Somewhat Competent: 40%; Uncertain: 0%; Competent: 40%; and Highly Competent: 20%.

Commitment To and Engagement In the Quality Initiative

A committee was formed and was named the HLC Quality Initiative Committee. The committee members were staff who were also members of the Online/Hybrid Course Committee. Committee members were Lorna Hofer (chair), Mona Gleysteen (chair), Samantha Walder (Educational Tech Specialist), Gina Grant, Kerry Stager (Financial Services Instructor), Mark Wayt (Computer Information Services Instructor), Alison Albertson (Med. Lab. Instructor), Amber Schleusner (Nursing Instructor), Robin York (Nursing Instructor), Sherray Hurlbert (Instructional Designer), Nicole Misner (Dental Assisting Instructor), and Annette Roby (Computer Information Services Instructor).

Analysis and Most Important Points Learned by the Quality Initiative Committee

1. Having two learning management systems LMS confused students because courses were not identical. Students needed more direction when two Learning Management Systems were being utilized. Faculty members moved courses to Jenzabar/My Portal with assistance from the Educational Technology Specialist and the Instructional Designer.
2. Online adjuncts were encouraged attend TechBytes or in-service sessions. We needed to offer these online (did last year) but track attendance and offer incentives for adjunct faculty to participate.

3. The majority of our online students dropped during the first half-semester of the course. We found if instructors connected with these students in the beginning of the course, some could be retained. (We are now addressing this during orientation).
4. An educational technology specialist or online coordinator and an instructional designer are critical for offering quality online programs.
5. Faculty learn best from example—therefore, through the evaluation process or by taking the Technology for Teaching and Learning class, the faculty improved the quality of their particular online courses.
6. We found the production of online games was not as important as the production of quality online coursework for the majority of programs but online students were more inclined to participate in online games than on campus students. This comment was directed toward program-specific interactive games.
7. All online, hybrid classes should be considered as a separate section for instructor load assignments regardless of the number of students. Rationale: instructors need to administer these classes differently and with the same priority as on campus sections.
8. Good online instructors are a small subset of all faculty, i.e. good on campus instructors do not necessarily equal a good online instructor.
9. It may take some online students more time to show improvements. Improvements may not be evident until next year as it takes longer to acclimate to not being on campus and having that connectivity.
10. Much of the problem with tracking online retention is categorizing the students. In some instances, there are online students who sometimes switch between taking classes on campus and online due to personal circumstance.
11. Our biggest challenges included instructor buy-in and lack of online instructor training, time, and money related to offering our online, hybrid coursework. These challenges are all being addressed through our initiative. The opportunities related to the initiative include reaching students who, for many reasons, weren't able to travel to campus to complete the coursework; and cooperation and collaboration among online and on campus programs and instructors.

Resource Provision
Much of the work that was accomplished with the Quality Initiative was funded through TAA grants. In addition to the new Educational Technology Specialist and Instructional Designer positions, LATI will be hiring an online Student Success Coach using grant funding. In addition, full-time instructors were hired in Precision Machining, Robotics, and Agriculture.

The Medical Laboratory Technician and Practical Nursing programs received physical plant remodels to accommodate equipment designed to assist online students in demonstrating skills when the student is on campus. Equipment was also purchased for these two programs. For Medical Laboratory Technician, a MicroScan microbiology instrument and a BacT alert instrument were purchased for the Sim Lab students. Phlebotomy/IV arms were purchased for both the MLT and Practical Nursing programs

The Sim Lab for Nursing was paid for with grant dollars and supports Practical Nursing and Med/Fire Rescue. The grant also pays for two additional instructors: Mindy Sandau (Nursing) and Kyle Steffensen

(MFR). The Practical Nursing staff reports they are in the planning stages of staging a scenario that involves multiple programs (MFR, MLT, Medical Assisting).

Quality Initiative Committee Plans for the Future

The Quality Initiative Committee has attained a number of successes due to the efforts of staff and faculty for the online initiative. To continue the success, the committee has identified the following as integral elements of the successful initiative:

1. Continued evaluation of online and hybrid classes using the Best Practices Rubric by the Instructional Designer and the Ed Tech Specialist.
2. Continue the instructor observations of online and hybrid course instructors using the Online Teacher Evaluation rubric by the Department of Academics.
3. Continue the TechBytes sessions and/or inservices and track attendance, encouraging all faculty to attend.
4. Continue to improve the EEOL or Jenzabar/My Portal tutorials and ensure that staff are having new students utilize them.
5. Transfer of the online courses from eLearning (Moodle) to Jenzabar/My Portal. The Ed Tech Specialist will assist in the transfer.
6. The Online/Hybrid Course committee will continue to meet.
7. The committee recommends Lake Area Technical hire a full time Online Student Success Coach (advertising for this position began October 2015).