

6. Strategies for Evaluating the Change

The LTU Online initiative incorporates Lawrence Tech’s “Assessment at Lawrence Technological University” program. This initiative is integrates a range of evaluation measures focused on student learning, program course enrollment, and financial results.

The three LTU Online degree programs are the Bachelor of Science in Technology (BSIT), Master of Business Administration (MBA), and Master of Engineering Management (MEM). Each program incorporates the same educational objectives and assessment methods used in the traditional programs taught on the Southfield campus. LTU Online assessment and evaluation tools are administered using the Blackboard™ course management system and are collected and forwarded to the college and academic program for inclusion in their outcome assessment documentation.

Assessment of Student Learning

Assessment of LTU Online academic programs and courses at Lawrence Technological University will follow the guidelines and standards maintained by the University Assessment Committee. Since academic programs are the responsibility of individual colleges and academic departments, LTU Online will collaborate with colleges and departments to incorporate current outcome assessment plans and reports. We will do this by actively collaborating with each of the academic program directors responsible for programs within the colleges. LTU Online producer Ms. Diane Cairns has been appointed a member of the University Assessment Committee, representing LTU Online as well as the College of Management, where she serves as the academic coordinator for the College’s Project Management curriculum.

Academic achievement is assessed using the assessment instruments currently in place within each of Lawrence Tech’s four colleges. The evaluation instruments are administered to LTU Online students and faculty using the Blackboard™ course management system and include:

- **Consistent Assessment Components** – Each LTU Online module includes an assessment component linked to the theory and practice components of the module. Periodic knowledge-based quizzes and exams are administered during the course to provide formative views of student learning.
- **Final Examinations** – Each course uses a final examination tailored to the course content and learning objectives, and some courses use a pre/post exam model. The final examination is accompanied by a scoring rubric to ensure assessment consistency across course sections.
- **Pre-post Tests** – BSIT courses incorporate the use of weekly pre- and post-tests. Assessment of this data provide faculty the opportunity to measure student learning and course objectives.
- **Program Comprehensive Examinations** – The MBA and BSIT programs administer comprehensive examinations at the end of the student’s academic program. When authorized by the Commission to deliver fully online degree programs, LTU Online will

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implement these comprehensive examinations during the last semester of a student’s academic program.

- **Student Course Evaluations** – Mid-term and end-of-term student evaluations are administered using each college’s standard evaluation document. The evaluation is completed online with the results available to the professor only after grades are submitted.
- **Student Satisfaction Survey** – An LTU Online student satisfaction survey will be implemented by the end of fall 2006 to measure student satisfaction with their course, instructor, and Lawrence Tech student services.
- **Faculty Self-Assessment** – A faculty self-assessment utilized by the College of Management has been adapted for use by LTU Online instructors. The self-assessment is administered at the end of each semester from the Blackboard™ LTU Online Faculty organization and measures faculty satisfaction with LTU Online staff and services.

Assessment results are reported to the appropriate academic program director by LTU Online to be incorporated with college-level assessment data. Examples of current assessment instruments for the MBA and BSIT programs are included in Appendix L. Assessment methods for the MEM program are currently being developed by the College of Engineering.

A summary of LTU Online assessment and evaluation methods is shown in Figure 8. A written report is prepared that summarizes the assessment information, and this report is submitted to and discussed with the responsible academic program director. Course and program enhancements will be made in collaboration academic program directors and faculty, and the results of course enhancements are monitored in future semesters.

LTU Online Assessment and Evaluation				
<i>Program</i>	<i>Student Learning</i>	<i>University Objectives</i>	<i>Student Satisfaction</i>	<i>Faculty Satisfaction</i>
Bachelor of Science in Information Technology	<ul style="list-style-type: none"> ● Comp. exam ● Weekly assessment ● Course exam 	<ul style="list-style-type: none"> ● College assessment and evaluation requirements 	<ul style="list-style-type: none"> ● College midterm and end-of-term evaluation 	<ul style="list-style-type: none"> ● Faculty midterm and end-of-term evaluation
Master of Business Administration	<ul style="list-style-type: none"> ● Comp. exam ● Weekly assessment ● Course exam 	<ul style="list-style-type: none"> ● College assessment and evaluation requirements 	<ul style="list-style-type: none"> ● College midterm and end-of-term evaluation 	<ul style="list-style-type: none"> ● Faculty midterm and end-of-term evaluation
Master of Engineering Management	<ul style="list-style-type: none"> ● Course exam ● Weekly assessment 	<ul style="list-style-type: none"> ● College assessment and evaluation requirements 	<ul style="list-style-type: none"> ● College midterm and end-of-term evaluation 	<ul style="list-style-type: none"> ● Faculty midterm and end-of-term evaluation
Graduate Certificate in Project Management	<ul style="list-style-type: none"> ● Pre/post exam ● Weekly assessment 	<ul style="list-style-type: none"> ● College assessment and evaluation requirements 	<ul style="list-style-type: none"> ● College midterm and end-of-term evaluation 	<ul style="list-style-type: none"> ● Faculty midterm and end-of-term evaluation
Graduate Certificate in Nonprofit Management and Leadership	<ul style="list-style-type: none"> ● Pre/post exam ● Weekly assessment 	<ul style="list-style-type: none"> ● College assessment and evaluation requirements 	<ul style="list-style-type: none"> ● College midterm and end-of-term evaluation 	<ul style="list-style-type: none"> ● Faculty midterm and end-of-term evaluation

Figure 8 - LTU Online Evaluation and Assessment Procedures

Program and Course Enrollment

All LTU Online courses are designated with a campus code of “OL” to represent 100% asynchronous online classes offered under the auspices of LTU Online. Students taking online classes are subject to the same admission requirements as for on-campus students. The only designation of online learners is through their enrollment in individual “OL” courses. Additional reporting will include current students admitted to Lawrence Tech and registering for LTU Online courses. This information is obtained by use of the unique course number and campus code assigned to each course section.

Lawrence Tech has several course delivery sites in addition to the main Southfield campus. LTU Online provides another option for students to complete courses based on their scheduling needs, and we expect that many students are likely to enroll in both on-ground and online classes. We also recognize that this cross-enrollment rate will be higher prior to receiving Commission approval to offer fully online degrees, as Lawrence Tech will not yet be marketing the availability of degree programs to prospective students. It is possible that we will see an increase in the net number of credit hours per semester for some students as they take advantage of the additional scheduling flexibility provided by online classes. To sustain the LTU Online program, it is imperative to receive Commission approval to deliver degree programs in addition to offering courses which lead to degrees or certificates.

LTU Online staff members are collaborating with Ms. Mary Thomas, Coordinator of Institutional Research, to develop an enrollment reporting model that identifies the net impact of online courses on traditional course enrollment patterns and to identify the number of new Lawrence Tech students enrolling in online classes during their first semester at Lawrence Tech. This information will help us understand the enrollment dynamics associated with the offering of online classes. Institutional reporting defined for LTU Online includes:

1. Number of students enrolled in LTU Online courses
2. Number of students enrolled in LTU Online courses who are also enrolled in courses at other campus sites
3. Number of new students enrolled in LTU Online courses during their first semester at Lawrence Tech
4. Number of new students enrolled in LTU Online courses during their first semester at Lawrence Tech who are also enrolled in courses at other campus sites
5. Number of LTU Online students enrolled in each online program
6. The number of student enrolled in LTU Online courses where the same course is offered as a traditional or hybrid on the same course where they have taken most of their classes
7. Comparison of student credit hour load for students in the same major code who take one or more online courses compared to student who take no online courses

An example of the type of enrollment data reported is shown in Figure 9.²² This report provides information about the students enrolled in a LTU Online course. In this report, six students are

²² Enrollment data is effective June 21, 2006. Specific student information is excluded.

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enrolled in LTU Online courses, and all six students are current Lawrence Tech students. Of the six students enrolled in LTU Online courses, none are registered only for online courses.

Banner ID	Last Name	First Name	CRN	Major Code	Major Description	New Student Fall 06?	First Term Attending	Delivery Sites
00000001	Pxxx	Mxxx	1863	0071	BSIT	No	Spring 1994	Online Main
00000002	Sxxx	Axxx	1863	0043	BS Comp Sci	No	Sum 2001	Online Main
00000003	Sxxx	Bxxx	1864	0043	BS Comp Sci	No	Sum 2001	Online Macomb
00000004	Kxxx	Kxxx	1862	0005	Ass Const Mgt	No	Fall 2000	Online Main Macomb
00000005	Rxxx	Bxxx	1910	3622	Cert Proj Mgt	No	Spring 2000	Online
00000006	Nxxx	Txxx	1914	0031	MBA	No	Fall 1998	Online Main Schoolcraft

Figure 9 - LTU Online Sample Enrollment Report

In addition to enrollment monitoring and reporting, a survey of LTU Online students will be conducted to answer these and other questions:

- What factors motivated students to enroll in online courses?
- How do online courses affect student decision-making about future course selection?
- What expectations do students have about online courses?
- How well were student expectations met?
- To what extent do online courses affect how students perceive traditional or hybrid classes?
- How can LTU Online best provide an enriching learning environment?

The information from this survey will help us interpret enrollment reporting. The student survey is a follow-up to research completed in early 2005 to gather information about the potential for student enrollment in online courses. Data from the 2005 student survey indicated that students were interested in online courses in support of demanding work and academic schedules.

Financial Projections

Given the lean administrative design of the LTU Online initiative and the decisions made regarding faculty compensation, LTU Online has the potential to yield positive financial results on a semester basis as early as fall 2006, and to be net cash-positive as early as spring 2007. With current projections, LTU Online will run a maximum operating deficit of approximately \$132,000 deficit during fall 2006. These projections assume enrollment of 18 students per course section. Enrolling an average of 12 students per course will delay net-positive status to summer 2007, and enrolling an average of seven students per course will delay net cash-positive status

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until summer 2008. With Lawrence Tech’s minimum enrollment of seven students per course section in effect, the least optimistic scenario is not likely to occur.

LTU Online has collaborated with Linda Height, Vice President for Business and Finance, and her staff to develop the revenue and expense forecast for the LTU Online program. Her initial review of the financial model was very favorable, and she is considering if the financial model can be used as a tool for University-wide academic program planning. Current revenue and expense components used in the model are shown in Figure 10.

LTU Online Program Revenues	LTU Online Program Expenses
<ol style="list-style-type: none"> 1. Tuition rate 2. Program deployment schedule 3. Student enrollment per semester in each deployed program <ol style="list-style-type: none"> a. Minimum enrollment target b. Maximum enrollment limit 	<ol style="list-style-type: none"> 1. One-time <ol style="list-style-type: none"> a. Cost of individual course development b. Cost of associated multimedia production c. Cost of initial program/brand marketing d. Software and supplies 2. Recurring <ol style="list-style-type: none"> a. Cost of instruction <ol style="list-style-type: none"> i. Per course (within load) ii. Per course (adjunct or additional load) b. Administrative support <ol style="list-style-type: none"> i. Administrative coordinator ii. Clerical support iii. IT support c. Cost of facilities for special events d. Cost of ongoing marketing e. Cost of telephone conference calls f. Videoconferencing costs <ol style="list-style-type: none"> i. Veraldi Instructional Technology Resource Center ii. Taubman Student Services Center

Figure 10 - LTU Online Revenue and Expense Model