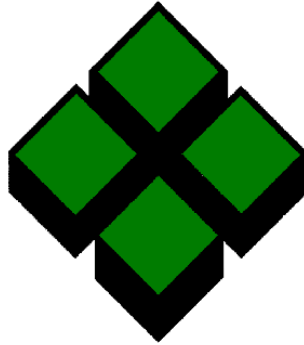


Approved by President George
4-2-08



**DELAWARE TECHNICAL
&
COMMUNITY COLLEGE**

**E-LEARNING EDUCATION STEERING
COMMITTEE**

REPORT AND RECOMMENDATIONS

APRIL 2008

**E-Learning Education Steering Committee
Report and Recommendations
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I. Introduction

E-Learning has become an integral component of teaching and learning at Delaware Tech. The College values E-learning because it enhances traditional on-campus classroom instruction by providing additional learning opportunities and support for diverse learning styles. It improves access to education to both geographically-isolated and non-traditional students. Many faculty have immersed themselves in the use of educational technology, using these tools to strengthen student engagement and promote student learning.

The purpose of this report is to strengthen E-Learning at Delaware Tech. It is also important to assure college stakeholders that E-Learning courses are held to the same academic standards as on-campus classes. Assessment of E-Learning is necessary for Delaware Tech to demonstrate that students are learning what the college says they are learning.

The E-Learning Education Steering Committee was charged by the Deans of Instruction with the following:

1. Research best practices and emerging trends.
2. Address Middle States evaluation teams' recommendations.
3. Conduct a SWOT analysis.
4. Develop an E-Learning Vision Statement.
5. Make recommendations that will support attainment of the vision and form the basis for the goals and objectives that will strengthen E-Learning.
6. Develop and implement a model for the assessment of E-Learning.

The committee researched E-Learning with a goal of providing insight and recommendations on improving E-Learning at Delaware Tech.

E-Learning Education Steering Committee Members

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II. Research

The E-Learning Education Steering Committee used literature reviews, student records and observations to compile data on enrollment, trends and best practices. A SWOT was conducted by examining internal and external factors.

Best Practices in E-Learning

A myriad of resources are necessary for student success, whether the instructional format is seated on-campus or E-Learning. For the seated student, these resources are easy to obtain on campus, whether it is the course instructor, a counselor or a librarian whose services are needed. For the E-Learning student, there are the limitations of distance as well as time. Moreover, the seated student has access to other resources if the ones they want are unavailable. The E-Learning student's choices are much more restricted. Therefore, for best practices to occur, we must ensure that the full complement of resources be made easily available and accessible to them.

Commitment and investment in E-Learning

- ❖ New technology initiatives are funded in order to provide access to education to all students, maintain cutting-edge technology, and provide training for faculty.
- ❖ The same level of student services is provided to all students.

Carefully-considered data on E-Learning

- ❖ Course evaluations are conducted each semester to help determine student satisfaction.
- ❖ Trends in E-Learning at the College are periodically identified and improvements are made as necessary.

Student-centered environment

- ❖ Students receive the best advisement possible in order to understand the knowledge and equipment necessary to succeed in an E-Learning course.
- ❖ Flexible scheduling to include a variety of E-Learning courses maximizes the availability of classes for students.
- ❖ Computer-mediated communication is used to facilitate dialogue.
- ❖ A strong technological infrastructure is provided.
- ❖ Registration and payment for courses are easy for students.
- ❖ E-Learning courses have the same academic standards as on-campus courses.

Methods ensuring students are academically prepared for coursework

- ❖ Counselors and academic advisors are aware of the rigors and demands of an E-Learning course.
- ❖ Students have access to an E-Learning self assessment.

- ❖ On-campus and on-line orientations alert students to the demands of an E-Learning course.

Commitment to ongoing training for faculty

- ❖ Faculty has ample professional development opportunities to foster their use of best practices.

E-Learning curriculum guidelines ensuring student success and faculty satisfaction

- ❖ Courses meet effective instructional design concepts.
 - Academic standards for E-Learning courses match those for traditional courses.
 - Course content is presented in various media, linking prior knowledge to new material, and providing relevance and context.
 - Course instruction includes powerful visuals and well-organized print; direct, vicarious, and virtual experiences; and tasks requiring applications to real-life situations.
 - Course design includes for each lesson: motivational techniques, objectives, overview, demonstration or information, practice or exploration with feedback, summary, and assessment.
 - In addition to overall expectations and directions, each activity, assignment, exercise, etc. clearly indicates what students need to do, how they should submit results, any special instructions, etc.
 - Learning activities support instructor to student interaction, (instructor participates in discussion with students via a discussion board or virtual chat room), student to content interaction, and student-to-student interaction. Collaborative projects, group assignments, discussion board and/or virtual chat assignments are utilized.
- ❖ Assessments are linked to core course performance objectives.

Support services appropriate to the 21st century student

- ❖ Students are provided with alternative means of access to support services, including but not limited to live text-based chat and one-on-one video.
- ❖ A system exists that extends access to technical services during evenings and weekends.
- ❖ Bookstores serve as a central distribution center for E-Learning courses and a central online ordering site.

Trends in E-Learning

Enrollment Trends

- ❖ Nearly 3.5 million students took at least one online course during the fall 2006, up 10 percent from the previous year, according to the latest research by the Sloan Consortium.
- ❖ E-Learning enrollment at Delaware Tech has increased more than 38 percent since the spring semester 2004, with the largest increases coming in distributed courses and online courses.
- ❖ Females continue to outnumber males in Delaware Tech E-Learning classes. Enrollment of males increased 17 percent from 834 to 975 between the spring of 2004 and the spring of 2007. Female enrollment increased from 2291 to 3327, or 45 percent, over the same period.

Faculty Trends

- ❖ Faculty who are trained in E-Learning instructional methods use a wider array of instructional strategies.
- ❖ Faculty recognize that development of course content for online delivery is time consuming and labor intensive.
- ❖ Faculty members seek reduced workload and increased compensation because of the time required for E-Learning courses (Howell, Williams, & Lindsay, 2003). Shelton and Saltsman (2006) cite course load consideration as the most common form of compensation for instructors who develop and/or teach E-Learning courses, but also list other incentives and perks for E-Learning faculty, such as higher pay, reduction in committee workloads, reimbursement for residential internet access, and the ability to hold office hours from home.

Academic Trends

- ❖ The term E-Learning is becoming more frequently linked with all types of learning. This includes learning that has traditionally taken place primarily in an on-campus classroom setting, but now is increasingly expected to be enriched with electronic learning tools and components. Historically the term was used to reference distance learning.

- ❖ There is a growing emphasis on academic accountability (Howell, Williams, & Lindsay, 2003), including by the Middle States Commission on Higher Education and the other higher education accrediting agencies.
- ❖ Delaware Tech continues to offer non-credit, professional development online offerings, responding to learners' specific needs.
- ❖ The institutional landscape of higher education is changing (traditional campuses declining, for-profit institutions growing, merging public and private institutions) (Howell, Williams, & Lindsay, 2003).
- ❖ There is an increasing need for learning and teaching strategies that exploit the capabilities of technology (Howell, Williams, & Lindsay, 2003).
- ❖ Emphasis has recently been placed on technologies that foster interactivity and communication between students and students as well as students and instructors.

Technology Trends

- ❖ Increased use of streaming audio and video humanize education that is delivered completely through distance.
- ❖ Content delivery will expand to include Web 2.0 applications such as wikis and blogs, helping increase collaboration and communication.
- ❖ Emerging technologies, such as blogs, wikis, podcasts, and video streaming, are changing current practices and influencing educational theory (Beldarrain, 2006) by improving collaboration and integrating higher-order thinking skills into curricula.
- ❖ Use of broadband continues to increase, with 70 percent of individuals who use the internet at home having a broadband connection, according to the Pew Internet and American Life Project (2007).

Economic Trends

- ❖ Keeping up with technology creates funding challenges, as the annual cost of systems such as Blackboard continues to increase.
- ❖ Sending faculty to conferences and training to stay abreast of the latest technological developments is costly but necessary.

Delaware Tech E-Learning Enrollment

Enrollment in E-Learning courses has increased more than 38 percent from the Spring semester of 2004 to the Fall semester of 2007. This upswing coincides with the collegewide availability of the course management system Blackboard for all courses.

Enrollment in telecourses has dropped approximately 18 percent from 2004-52 to 2008-51 while enrollment in distributed learning courses has jumped more than 200 percent as faculty and students see the benefit of meeting 50 percent of the time on campus and 50 percent of the time online.

The first chart below shows the enrollment totals for the spring and fall semesters since the Spring of 2004 based on information from the student record system Banner. The second chart compares DTCC graduates from 2005-2007 and E-Learning courses.

TYPES OF COURSE	2004-52	2005-51	2005-52	2006-51	2006-52	2007-51	2007-52	2008-51
Telecourse	1592	1520	1529	1394	1439	1363	1480	1345
CD-ROM Course	106	75	88	72	76	65	74	101
Interactive Video Course	94	108	95	152	109	176	143	171
On-Line Course	1330	1594	1637	1908	1936	2123	2321	2252
Distributed Course	43	43	118	177	142	307	429	511
TOTAL	3165	3340	3467	3703	3702	4034	4447	4380

A Comparison of DTCC Graduates and E-Learning Courses					
Year	Total Degrees	# of graduates taking at least 1 E-Learning Class	% of graduates taking at least 1 E-Learning Class	# of graduates passing at least 1 E-Learning Class	% of graduates passing at least 1 E-Learning Class
2005	993	646	65.06%	564	87.31%
2006	1009	645	63.92%	562	87.13%
2007	1038	690	66.47%	610	88.41%

E-Learning @ Delaware Tech: Strengths, Weaknesses, Opportunities and Threats

<p style="text-align: center;">STRENGTHS</p> <ol style="list-style-type: none"> 1. Campus administration supports E-Learning 2. Solid infrastructure that allows for 24/7 course access and reliable connectivity to the Internet 3. State-of-the-art technology 4. Industry professionals teaching course material 5. Up-to-date campus computer labs 6. Reliable software 7. Support staff that is knowledgeable and helpful 8. Professional development opportunities exist for faculty to learn more about E-Learning. 9. Strong existing curricula 10. Each campus has an E-Learning Center for faculty and staff support 11. Instructors are available for students 12. Instructors understand students' technological concerns and trepidations 13. Instructional staff accommodates the diverse learning styles of students 14. Students have greater access to learning opportunities 15. Campus Teaching Resource Centers offer professional development activities to support the effective use of E-Learning. 16. The College's videoconferencing infrastructure is used to bring in external speakers with expertise 	<p style="text-align: center;">WEAKNESSES</p> <ol style="list-style-type: none"> 1. Lack of media servers limit use of video and audio 2. No support on weekends and limited evening support for students and faculty 3. Lack of diverse Web 2.0 applications such as vodcasts, podcasts and blogs 4. Delays in going from concepts to implementation of new initiatives 5. Lack of effective communication regarding E-Learning College procedures creates student confusion 6. Faculty resistance to new initiatives such as adapting old courses and developing new courses in E-learning formats 7. Bookstore inconsistencies which complicate materials acquisition for E-learning students 8. Some faculty fail to implement best instructional practices 9. No mechanism to identify faculty who can teach E-Learning courses 10. Some courses are "shovelware", meaning in-class material is not adapted for an E-Learning environment 11. Instructional compensation is inconsistent with some faculty paid to develop E-Learning courses and others not paid 12. Professional development funding is limited 13. Lack of E-Learning student orientation on campus
<p style="text-align: center;">OPPORTUNITIES</p> <ol style="list-style-type: none"> 1. Voluntary on-campus E-Learning orientation offered by class or department 2. Dual enrollment with high schools 3. Scheduling flexibility 4. Business partners to supplement technology 5. Inter- and intra-collegiate communication 6. Increased non-credit offerings through E-Learning format 7. Use of video-conferencing facilities for professional development 8. Teaching Resource Center growth 9. Professional development offerings through TRC 10. Alignments of department policies and procedures across campuses 11. Instructor compensation model 	<p style="text-align: center;">THREATS</p> <ol style="list-style-type: none"> 1. Funding resources 2. Other colleges offer E-Learning degrees 3. Technological inadequacies and students' unrealistic expectations regarding content, availability of instructors and feedback 4. Out-of-state tuition decreases growth potential 5. Finding experienced E-Learning instructors

III. Vision for E-Learning

Delaware Tech is committed to improving access and student success by offering quality E-Learning educational offerings and opportunities that exemplify best practices in teaching and foster interaction and collaboration. Through E-Learning, the college will be:

1. An institution that provides dynamic and interactive E-Learning experiences and courses that meet the same academic and assessment standards as on-campus courses and learning experiences.
2. An organization that offers comparable student support services to both on-campus and E-Learning students.
3. An institution whose technological infrastructure for E-Learning meets the needs of faculty, staff and students.
4. At the forefront of providing faculty with professional development opportunities to enhance E-Learning experiences for themselves and their students.
5. An organization that graduates students with technological fluency.

IV. E-Learning Assessment Model

The Middle States Commission on Higher Education places great emphasis on assuring the quality of learning by institutions offering instruction whereby learner and instructor are not in the same place at the same time. Standard 13 of the Commission's *Characteristics of Excellence in Higher Education* states:

“Programs delivered through distance learning modalities—whether by the internet, television, video-conferencing, or other means—should meet academic and learning support standards, appropriate to the type of delivery, comparable to those offered in more traditional formats within higher education. Student learning objectives and outcomes should be consistent across comparable offerings, regardless of where or how they are provided.”

The assessment of student learning outcomes at the program level has been an active and ongoing process at Delaware Tech since the inception of the College's Institutional Effectiveness Structure in 2004. Although Delaware Tech offers few programs completely in an E-Learning format, most instructional programs provide the option of on-campus and E-Learning venues for some of their course offerings. As a result, the focus of E-Learning outcomes assessment at DTCC will be primarily at the course level to ensure equity of student learning outcomes in E-learning formats with those in on-campus formats.

Programs that are offered completely at a distance will be evaluated using the same standards as their on-campus counterparts to ensure consistent academic rigor.

Delaware Tech's Institutional Effectiveness Structure provides for both Student Learning Outcomes Assessment (SLOA) and Educational Support Outcomes Assessment (ESOA). Academic departments conduct SLOA at both the campus and collegewide levels for all associate degree technology programs, with attention given to the improvement of student learning in instructional areas. College and campus academic and educational support service units conduct ESOA to improve service delivery outcomes, including their contribution to an environment that is conducive to learning.

E-Learning assessment is a component of the SLOA and ESOA processes. While student learning goals for all courses in academic programs are consistent across all delivery formats (on-campus, online, telecourse, CD-ROM, and interactive television), it is essential that Delaware Tech assess learning outcomes in E-Learning courses to ensure academic consistency when compared to on-campus courses. The College must also make sure that the services it provides to E-Learning students are comparable to services provided to on-campus students.

Student Learning Outcomes Assessment (SLOA)

The following are intended educational outcomes for the assessment of student learning in E-Learning, separated by components identified by Middle States.

Curriculum and Instruction

- 1.1 Learning objectives for E-Learning courses are consistent with those offered on-campus.
- 1.2 Learning objectives are clearly stated in course materials provided to E-Learning students.
- 1.3 Course instructional methods, resources, and materials are equivalent in content and quality to those of on-campus courses.
- 1.4 Communication methods in the E-Learning environment provide for sufficient and appropriate interaction among faculty and students equivalent to the student/faculty interaction required in courses offered on-campus.
- 1.5 Students who successfully complete pre-requisite courses in an e-learning environment are as successful in completing the next course in the series as students who completed the pre-requisite course on-campus.

Student Support

- 1.6 E-Learning courses provide students with appropriate introduction/ orientation to the E-Learning environment.
- 1.7 Students in E-Learning courses have access to instructor/instructional resources equivalent to those available to on-campus students.

Evaluation and Assessment

- 1.8 Course activities and evaluation methods in E-Learning courses are of equal rigor to those in on-campus courses.
- 1.9 The evaluation methods in E-Learning courses are designed to ensure the integrity of the evaluation as a secure measurement of student learning.
- 1.10 The scoring structure for assignments/grading policy in E-Learning courses is consistent with that of on-campus courses.
- 1.11 Students in E-Learning courses demonstrate acquisition of learning outcomes at the same level as students in on-campus courses.

- 1.12 Graduates of E-Learning programs demonstrate proficiency in all of the program's graduate competencies and the College's core curriculum competencies.

Educational Support Outcomes Assessment (ESOA)

The following are administrative outcomes for the assessment of educational support units in E-Learning, separated by components identified by Middle States:

Institutional Context and Commitment

- 1.1 Campus bookstores provide students with appropriate course materials/resources in a timely and easily available manner.
- 1.2 ADA requirements are appropriately addressed for students in E-Learning environments.
- 1.3 Downtime is minimal for electronic systems that impact E-Learning students.
- 1.4 Technical support/maintenance of E-Learning systems ensures minimal disruption of access to course materials.

Curriculum and Instruction

- 1.5 Processes which result in the timely receipt of instructional materials, textbooks, and other required resources to on-ground students are equivalent to those for E-Learning students.

Student Support

- 1.6 The registration process for E-Learning courses is regarded by students to be as easy as the registration process for on-campus courses.
- 1.7 Students are satisfied with the quality of education in E-Learning courses.
- 1.8 Electronic library services meet the needs of E-Learning students.
- 1.9 The technology required for students in E-Learning courses to achieve required course objectives is adequate and available.
- 1.10 Technological support for E-Learning students is sufficient to ensure students are able to access course materials/resources.
- 1.11 E-learning students have access to College services equivalent to those provided for on-campus students.

Action Steps

The following Action Steps will be taken annually for SLOA and ESOA:

The Director of E-Learning will:

SLOA

1. Determine a sample of courses that are offered in on-campus, online and in telecourse formats
2. Identify three intended student learning outcomes and two means of assessment for each.
3. Consult with the appropriate department chairs on data that will be gathered and analyzed.
4. Gather and analyze data
5. Use results for improvement, consulting with chairpersons and faculty as appropriate
6. Record results on the approved SLOA forms.

ESOA

7. Determine three intended administrative support outcomes to measure, set the criteria for success, and develop or acquire means of assessment.
8. Gather and analyze assessment data
9. Use results for improvement, consulting with service units to initiate improvement plans.
10. Record results on the approved ESOA forms

The E-Learning Education Steering Committee will:

1. Review intended outcomes to be measured.
2. Review assessment data with the Director of E-Learning.
3. Recommend improvement actions.

The Collegewide Assessment Committee will:

1. Review and approve proposed assessment plans and final records.
2. Submit proposed assessment and final records to the Deans of Instruction and Vice President for Academic Affairs.

The Deans of Instruction will:

1. Work with the Director of E-Learning to disseminate SLOA results to appropriate department chairs and to help facilitate use of results for improvement.

V. Recommendations

1. Adopt a set of established curriculum guidelines for all E-Learning courses that include the use of Blackboard
 - a. Guidelines will focus on instructional design, student learning assessment, course assessment, course technologies and course resources.
2. Establish an easily accessible way to provide current information to advisors and counselors about E-Learning courses and the student characteristics and learning styles which are most likely to produce success in an E-Learning environment.
3. Strengthen the Teaching Resource Centers at each campus to provide a wide array of professional development opportunities that include topics related to E-Learning and the technologies appropriate for this type of learning
4. Establish a 24/7 Help Desk for students utilizing E-Learning.
5. Streamline the distribution process of E-Learning course materials.
6. Expand student services to include real-time chat with counselors, tutors and instructors.
7. Explore the use of web-based videoconferencing and software packages for tutoring sessions.
8. Develop alternative scheduling methods centered on E-Learning delivery methods.
9. Explore the possibility of joining the Quality Matters program that focuses on quality assurance and continuous online education improvement.
10. Update the E-Learning websites for faculty and students.
11. Offer voluntary on-campus orientations for students taking E-Learning courses.
12. Expand the use of an electronic course evaluation system to all courses, no matter the delivery method.
13. Explore alternatives to the negative impact of out-of-state tuition on E-Learning enrollments from neighboring states.
14. Update Policies and Procedures Manual for Distance Learning as found in Appendix M of the Curriculum Guidelines.
15. Convene a forum of division-level representatives to improve communication as it impacts E-Learning students.
16. Explore the feasibility of expanding the one-credit “Tech Seminars” college-wide to introduce all students to E-Learning instructional methods.
17. Utilize Blackboard’s instructional tools in all E-Learning courses, no matter the delivery method.

18. Periodically audit E-Learning courses to ensure that academic standards are being met.

VI. References and Resources

- Allen, I., & Seaman, J. (2007, October). Online Nation: Five Years of Growth in Online Learning. Sloan Consortium.
- Beldarrain, Y. (2006, August). Distance education trends: Integrating new technologies to foster student interaction and collaboration. *Distance Education*, 27(2), 139-153. Retrieved September 10, 2007, from the Academic Search Premier database.
- Howell, S.L., Williams, P.B., & Lindsay, N.K. (2003, Fall). Thirty-two trends affecting distance education: An informed foundation for strategic planning. *Online Journal of Distance Learning Administration*, 6(3). Retrieved August 23, 2007, from <http://www.westga.edu/~distance/oddl/fall63/howell63.html>
- Keeton, M.T. (2004, April). Best online instructional practices: Report of phase I of an ongoing study. *Journal of Asynchronous Learning Networks*, 8(2), 75-100. Retrieved March 23, 2007, from the Academic Search Premier database.
- Ko, S., & Rossen, S. (2004). *Teaching online: a practical guide*. Boston: Houghton Mifflin.
- Lorenzetti, J.P. (2003, October 1). Close the gaps before your students fall through. *Distance Education Report*. Retrieved May 16, 2007, from the Academic Search Premier database.
- Middle States Commission on Higher Education. (2002). *Distance learning programs: Interregional guidelines for electronically offered degree and certificate programs*. Philadelphia: Author.
- Samarawickrema, G., & Benson, R. (2004, September). Helping academic staff to design electronic learning and teaching approaches. *British Journal of Educational Technology*, 35(5), 659-662. Retrieved May 16, 2007, from the Academic Search Premier database.
- Shelton, K., & Saltsman, G. (2006, August). Faculty issues in online education. *University Business*, 9(8), 73-76. Retrieved November 2, 2007, from the Academic Search Premier database.
- Southern Regional Educational Board. (2004). *Principles of good practice: The foundation for quality of Southern Regional Education Board's electronic campus*. Retrieved March 23, 2007, from <http://www.ecinitiatives.org/publications/principles.asp>
- Tips for success in online courses*. (2005). Retrieved April 16, 2007, from <http://www.uhv.edu/webct/students/orientation/successtips.htm>

UT TeleCampus student orientation and handbook. (n.d.) Retrieved April 16, 2007, from <http://komodo.utsystem.edu/coursedev/hbook/index.html/>