

Bounded Exuberance: E-Learning in Ohio

Preliminary Report

December 2004



Table of Contents

Executive Summary.....	3
Introduction	4
A Brief History of E-Learning in Ohio	5
OhioLearns! Snapshot of Courses and Degrees	6
Graph 1.....	8
Common Stories for Uncommon Places.....	8
E-Learning on Campus.....	12
What About the Users?.....	24
Peer Advice: Faculty2Faculty and Student2Student	26
Conclusion and Next Steps	28

List of Tables

Table 1	Fall 2003 Distance Learning Enrollments	4
Table 2	OLN Grants 2000-2004 to Columbus State, Lorain CCC, University of Cincinnati and the University of Toledo	11
Table 3	Fall 2003 Enrollments – Toledo	13
Table 4	Degrees in OhioLearns! – Toledo.....	14
Table 5	Fall 2003 Enrollments – CSCC	16
Table 6	Degrees in OhioLearns! – CSCC.....	17
Table 7	Fall 2003 Enrollments – UC	18
Table 8	Degrees in OhioLearns! – UC.....	19
Table 9	Fall 2003 Enrollments – LCCC	21
Table 10	Degrees in OhioLearns! – LC.....	23
Table 11	Fall 2003 PSEO Enrollments	25
Table 12	Fall 2003 Graduate Enrollments	26

List of Appendices

Appendix A..	OLN Emerging Needs Grants	30
Appendix B..	Selected Bibliography	34
Appendix C..	Survey Questionnaire.....	35

Executive Summary

“Teaching at a distance, to me, is an opportunity to incorporate new technologies in all of my teaching -- traditional and at a distance.”

Ohio faculty member

E-learning is growing in Ohio. More students are enrolling each term in online and other distance education courses. Faculty are embracing the use of technology to enhance classroom experiences and to teach at a distance. Extending learning from the physical campus is a reality of 21st Century education and a reality of students in the Knowledge Economy.

More than 26,000 students enrolled in e-learning courses in the fall of 2003 (23,000 undergraduate and 3,000 graduate) according to data from 18 of 36 public institutions. Two thirds of these students were female and more than half of them were over 25 years old. If data were available from all institutions offering e-learning, enrollments might increase by as many as 15,000 students. Distance learning enrollments in this report are based on courses in the OhioLearns! catalog. Forty-six institutions offer 132 degrees and certificates and 3,200 courses through OhioLearns!.

E-learning encompasses different delivery modes – online, blended, technology-enhanced, interactive video, television, CD or DVD, and correspondence. This report is not about the technology, but rather about the people – administrators, faculty, and students – involved in teaching and learning.

Further data gathering is needed for a more complete understanding of the growth and potential of e-learning in Ohio. Several issues raised in this report deserve additional study, among them:

- Costs of e-learning
- Options for post secondary learning
- Student characteristics – potential new markets
- Impact of technology in teaching and learning
- E-learning for workforce and economic development
- Graduate and professional courses and degrees as expanding markets

Data tables and case studies presented here indicate that Ohio colleges and universities see e-learning as integral to future growth. Students and faculty alike are adapting and adopting learning and teaching by using increasing amounts of technology. Through OLN, Ohio has embraced e-learning as an ongoing force in higher education and technology as integral to education. Within the context of its mission, Ohio institutions will continue to choose how, when, where, and why to provide e-learning to a clientele increasingly hungry for new and different ways to enhance learning.

Introduction

E-learning is growing in Ohio. More students are enrolling each term in online and other distance education courses. Faculty are embracing the use of technology to enhance classroom experiences and to teach at a distance. Colleges and universities see e-learning as integral to future growth.

This report is a snapshot of a single point in time. It represents 18 of the 36 public institutions – almost 70% of total enrollments -- that reported student data to the Ohio Board of Regents for Autumn 2003. Data are not reported for cohort-based programs, independent institutions, or from several institutions that were not yet listing offerings in the OhioLearns! catalog. Subsequent reports will strive to be more inclusive.

National enrollments and reports mimic this snapshot. According to the National Center for Education Statistics (NCES), enrollment growth in distance education nearly doubled between 1997-98 and 2000-01 from 1,661,000 to 3,077,000 (NCES 2004). In Ohio, institutions reported continual growth each term. Students are demanding high-quality online courses and programs and on some campuses, online courses close out before traditional courses. As a recent survey of the Sloan Consortium indicated, enrollments are increasing, students are satisfied, and institutions see online learning as critical to long-term strategies. The full text of the report, "Entering the Mainstream: The Quality and Extent of Online Education in the United States, 2003 and 2004," is available on the Sloan Consortium's Web site.

OLN offers this preliminary look at e-learning in Ohio in that same spirit – enrollments are increasing, students are satisfied, and e-learning, in some manifestation, is critical to the long-term growth for Ohio's colleges and universities. This preliminary report creates four case studies to place enrollment growth in an institutional context. In each subsequent report, OLN will highlight selected institutions to offer a "picture" story along with enrollment data.

Fall 2003 Distance Learning Enrollments

Table 1 **

Sector / Campus	Undergraduate DL	Total UG Enrollments	% UG in (DL)	% Credits that is in DL
CommTechColleges	14,396	98,551	15%	8%
University Regional	1,462	28,115	5%	2%
Main Campuses	7,185	149,616	5%	2%
State Totals	23,043	276,282	8%	4%

**This data represents 8 of 15 community colleges and state community colleges, 2 of 8 technical colleges and 8 of 13 universities or 67% of the undergraduates in public colleges and universities. Data as of 11/1/2004 from the OBR Performance Report 2004.



A Brief History of E-Learning in Ohio

With a campus within 30 miles of nearly every Ohioan, Ohio has a tradition of reaching out to its citizens through its 118 public and private colleges and universities. Distance learning, or e-learning, is a current strategy showing great promise to increase access to higher education and improve the economic condition of Ohio. The Ohio Learning Network (OLN), established by the Ohio Board of Regents in 1999, guides Ohio's e-learning endeavors with colleges and universities as they enter into the Knowledge Economy. OLN provides programs and services in educational technologies, professional development, workforce development, and statewide shared resources.

OLN's beginnings are found in The Technology in Education Steering Committee (TIE). The Committee was convened by the Ohio Board of Regents and the Ohio Department of Education "to examine the complex questions surrounding the integration of technology with the educational process" (TIE, 1996). Creating OLN was one of several recommendations of the 1996 report, "Technology in the Learning Communities of Tomorrow: Beginning the Transformation."

By 1998, OLN was working collaboratively with members of the fledgling distance learning community in Ohio. Some members of that community had provided distance education for more than 20 years – most notably Ohio University (its correspondence programs are 80 years old) and community colleges (local telecasts). Other institutions were just beginning to capitalize on new web technologies, expanding dial-up connectivity, and increasing home ownership of personal computers to build a new form of distance education community. As in any new endeavor, much was untested, uncertain, and for some, uncomfortable. For others, this was a time of innovation, exploration and trials – by both error and fire!

Terminology and definitions for these new delivery mechanisms and new ways of learning floated around the community. OLN struggled to create a definition that was acceptable to its members and finding none, instead, chose a different path. OLN accepted courses with various delivery methods into the OhioLearns! catalog, but stipulated that at least 70% of any course had to be delivered away from the institution. Any campus visits were noted in course descriptions in the catalog so students taking e-learning courses understood that some required attending campus.

For the purposes of this report, distance learning and e-learning (extended learning) are used interchangeably. Both terms encompass many different delivery modes and mixed delivery modes – online, blended, technology-enhanced, interactive video, television, CD or DVD, and correspondence. This

report is not about the technology, but rather about the people – administrators, faculty, and students – involved in teaching and learning.

After five years, OLN continues to earn respect from its 65 members for its products and services. In a survey of members, 96% found OLN's resources helpful to daily work, 86% believed OLN is a successful organization, and 72% believed that OLN is a catalyst for change. It is important to note that OLN is not simply an organization, but OLN is a community. The bulk of creativity, new ideas, and work began in OLN's five constituency committees. Those committees are: Academic Outreach, Annual Conference, Professional Development, and Emerging Technologies -- all under the oversight of the Governing Board. OLN staff manages and guides these creative programs and services.



OhioLearns! Snapshot of Courses and Degrees

When OLN opened the OhioLearns! catalog in December of 1999, Chancellor Rod Chu called the catalog “a jewel in the crown of educational opportunities” for the state of Ohio. Designed as a ‘one-stop shop’ for adults to find distance learning programs, the catalog has grown from 17 institutions offering 519 courses to more than 46 institutions offering 132 degrees and certificates and on average 3,200 courses used by more than 350,000 Ohioans annually. The OhioLearns! catalog is a dynamic tool. On any given day, the course listing changes as institutions offer enrollments for “anytime” to traditional fixed time courses offered by quarters and semesters.

Faculty from Ohio's colleges and universities created these courses and degrees in a variety of different ways using different funding sources, including sweat equity, campus funds, grants from the Ohio Board of Regents and grants from OLN. To date, OLN has funded nearly \$6 million for collaborative course and degree development, resulting in 28 new programs available at a distance (Appendix A).

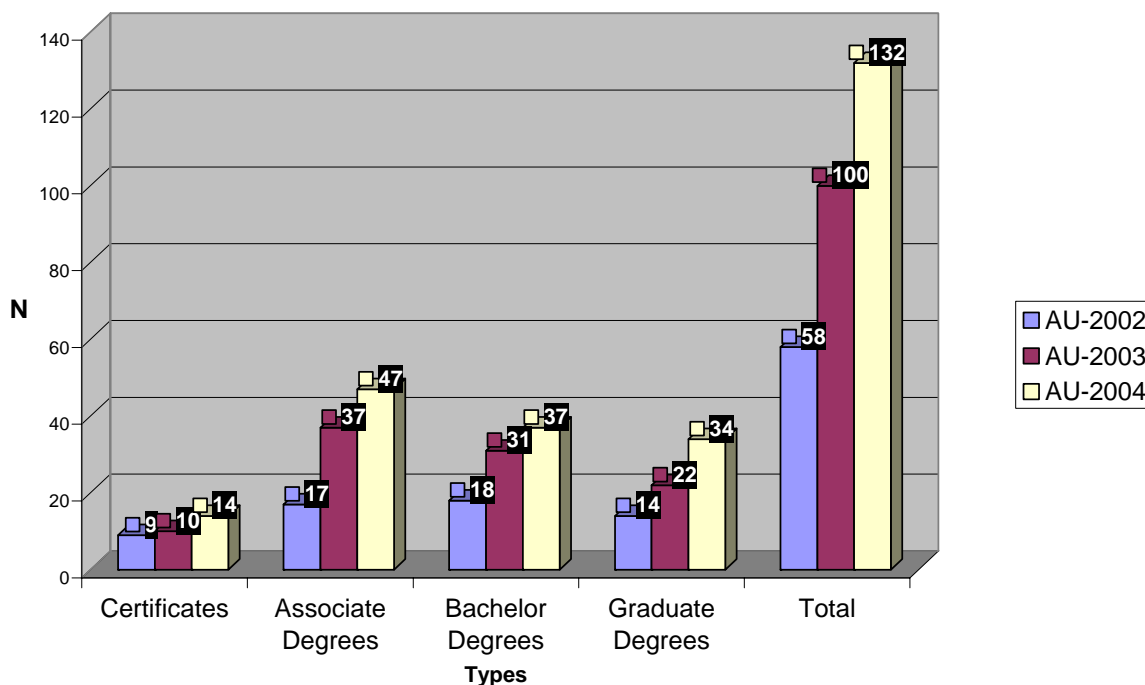
Many institutions relied on faculty innovators or “Lone Rangers” to begin e-learning programs on a campus. Other institutions created a central unit to develop programs. Many of the Lone Rangers found OLN, its communities and conference, to be places to gain knowledge, ask questions, and learn new methods and ideas. Quickly, the community grew and the Lone Rangers were joined by new distance learning (DL) units on many campuses with interesting names like Global Campus, IDEAL (Interactive Distance Education for All Learners), Without Boundaries, etc.

Institutions joined OLN for a variety of reasons; some were looking for partners to share development and costs, others simply came to share and learn, and a few came out of fear of being left behind in the technology push. Through these communities, OLN developed a web-based clearinghouse of teaching and learning and student support resources used by thousands of faculty and administrators across Ohio. (See http://www.olin.org/teaching_and_learning/ and http://www.olin.org/student_services/.)

The annual conference is the best example of sharing resources. It began in 1999 as the Ohio Video Intranet pushed by an idea of anytime, anyplace delivery of video—still a statewide goal and now more possible with the Third Frontier Network. From a small, day-and-a-half event attended by fewer than 200 individuals, the annual conference is now a three-day event attended by 400 faculty, staff, and students, hosted by the Ohio Digital Commons for Education (a confederation of OLN, OhioLINK, Ohio Supercomputer Center [OSC], and OARnet), and consistently rated by more than half of the participants as “the best conference I attend.”

As Graph 1 shows, program growth came rapidly in the late 1990s, but tended to plateau by 2003. The fast growth of e-learning created an interesting marketplace and phenomena not seen in higher education since the 1970s. Several books and reports have chronicled this growth and nearly unbounded exuberance. See Appendix B for a list of those resources.

Degrees & Certificates Listed in OhioLearns! Autumn 2002 - Autumn 2004



Common Stories from Uncommon Places

Administrators across the four institutions surveyed believe that course development was the greatest obstacle or the most significant one to overcome in mounting e-learning courses and programs. They all describe difficulties in finding new resources for technology and support personnel, and point to the success of grants as necessary to start programs.

Another common theme of unexpected outcomes across the four institutions is enrollments exceeding projections. Some institutions may have been too conservative in estimating enrollments. Several institutions mentioned faculty support of e-learning as a contributing factor to enrollment growth. Columbus State Community College (CSCC) credited faculty and staff “embracing” e-learning, along with student satisfaction, as contributing to its enrollment growth. At Lorain County Community College (LCCC), enrollments increased by 47% in the last five years. Columbus State, University of Cincinnati (UC) and University of Toledo (UT) all experienced enrollment growth. E-learning allows growth to occur without requiring additional classroom space.

No Significant Difference – The Instructor is Key

Maintaining quality was, and is, important to all four institutions. All have worked toward high quality online, technology-enhanced, and blended courses so students would find “no significant difference” in their courses. All measured student outcomes and found that students in e-learning or distance courses fared as well as students in face-to-face courses. Two campuses used the OLN Quality Task Force report, “Quality Learning in Ohio and @ a Distance” to drive quality processes on campus. On each campus, faculty were closely involved with campus-wide e-learning efforts and faculty insisted that quality is paramount. In short, faculty drive the quality of courses on campus regardless of delivery methods.

Students believed the key indicator of quality of e-learning was the same indicator as a traditional course – the quality of the instructor. Students indicated that the quality of the distance learning courses was as effective and fulfilling as the quality of the traditional courses. From their own words:

“...Replication of the classroom experience is difficult, even with online chat sessions. However, the content and requirements I have experienced have been challenging and rewarding. The quality was high.”

“...I would rate my learning as the same.”

“...DL was my first higher education experience – quality instructors - Although I have not taken a traditional class, I have talked to many people who have taken them and they tell me my course work and theirs are very similar. Also the University has had the same traditional instructors as do the online courses and that has been a great experience.”

Some students felt that various disciplines were better suited than others to online learning while other students felt their learning style determined what courses they preferred to take online. Students seemed to like the anonymity of online learning... like the old New Yorker cartoon showing a dog using a computer with the caption “On the Internet, no one knows you’re a dog,” students felt online courses put them all on a level playing field. While students were cautious about the time necessary to take an online course, they liked the self-paced nature of e-learning.

“...all students have to participate, which gives a much better variety of opinions and points of view. All students are on the same level playing field – gender, age, handicaps are irrelevant.”

“...I have found that I am able to move at a much faster pace with distance learning than in a classroom situation. I have found it strange to sit in the classroom and listen to an instructor explain things, along with waiting for the rest of the class to catch on, catch up or find their way with the course material. With distance learning, students have a one-on-one interaction with the

instructor, in addition to the potential for each student to be heard from and for students to assist one another.”

OLN helps institutions assess the quality of e-learning with two related activities on its web site—assessing services to students and faculty assessing content delivery. The student services components of a course are indicated by a ‘Best Practices’ designation if an institution meets the indicators from the Quality Report. Students can learn about the availability of services in the OLN web site area of online student services.

The Course Self-Study Tool is a voluntary, self-evaluation completed by the faculty member who designed and taught the course. This new service will be available in January, 2005. Faculty who participated in the summer pilot said the tool was very helpful or somewhat helpful; it inspired increased use of learning technologies, and the accompanying resource bank was very helpful to faculty.

A Few Words about the Costs of E-Learning

Information about the costs of e-learning is as diverse as the institutions themselves. Different institutions recorded teaching costs in different ways, though, some cost beliefs were shared among those interviewed. Some administrators agreed that start up costs have been higher with any e-learning courses – online, or technology-enhanced — compared to a traditional lecture course. In some institutions, faculty are paid ‘overload’ to develop courses. This can increase costs when compared to a faculty member creating a course as part of regular workload. In other institutions, faculty developed e-learning courses as part of their regular work load. Some institutions indicated that once a course is developed, the costs to teach are about the same as in a face-to-face course. And, in some instances, costs may lower over time as the course is taught repeatedly.

These findings ring true across the nation as various articles and research about costs indicate. This also is true for institutions like the British Open University that enroll more than 160,000 students annually at a distance. Development of any course, regardless of delivery, often can be more expensive than teaching that same course. For some institutions, using common course materials in traditional and/or distance courses reduces that cost.

Early in its development, OLN and the Ohio Board of Regents heard loudly from institutions about start up costs for distance education – technology software and hardware, training faculty, marketing and administering programs – and responded with various grants and services. The Regents Technology Initiatives grants were done in cooperation with OLN in 1999 and 2001. Early grants for Basic Capacity made it possible for some institutions to have email or distance learning rooms. Later, Technology Initiatives grants focused on portal services for students, Course Management Systems (CMS) comparisons, and new programs and degrees. Most recently, the Ohio Commons received a Technology Initiatives grant to address costs on campuses by piloting an innovative

statewide shared services project including course management systems, authentication, and digital asset storage and cataloging.

OLN's strategy continues to interweave technical assistance with professional development and collaborative content development and delivery. In its first two years, OLN trained hundreds of faculty in course management systems before CMS was a commonplace tool, and provided statewide discounts ranging from 12 - 25% off the cost, saving campuses more than \$75,000 annually. More than \$1 million of faculty development projects in 2000 gave many faculty an early step-up in using technology while also creating new, collaborative P-16 programs.

The four institutions profiled in this report have been successful in receiving OLN grants as the following table indicates.

OLN Grants 2000-2004 to Four Institutions
Table 2

Partnership Grants 2000: THRO-Net Partners in Distance Education and Faculty Development	UC	\$49,955.00
Partnership Grants 2000: University of Cincinnati / RISE Partnership in Early Childhood Education	UC	\$75,000.00
Emerging Needs Content 2001: Ohio Engineering Management Consortium Online Computer Science & Engineering Tech: A Bachelor of Science	UC	\$250,000.00
Emerging Needs Content 2001: World-Class Manufacturing/Web-based Engineering Education	UC	\$250,000.00
Emerging Needs Content 2001: Online Computer Science & Engineering Tech: A Bachelor of Science Degree Completion Program	UT	\$400,000.00
Learning Communities Readiness 2002	CSCC	\$3,000.00
Learning Communities Readiness 2002	LCCC	\$3,000.00
Learning Communities Readiness 2002	UC	\$3,000.00
Learning Communities Readiness 2002	UC	\$3,000.00
Learning Communities Readiness 2002	UC	\$3,000.00
Learning Communities Readiness 2002	UT	\$3,000.00
Emerging Needs Planning 2002: Web-based Nurse's Aide Training Program	CSCC	\$15,000.00
Emerging Needs Planning 2002: Online Critical Thinking Modules for the Associate Degree Nursing	LCCC	\$15,000.00
Emerging Needs Content 2002: Technical Workforce Development	UC	\$512,050.00
Emerging Needs Content 2002: Online Information Technology: Associate of Applied Sciences & Bachelor of Science Degree Completion Program	UT	\$403,722.00
Emerging Needs 2003: Alternative Associate Degree Nursing	CSCC	\$299,828.55
Emerging Needs 2003: Online Health Information Management Bachelor of Science Degree Completion Program	UT	\$259,640.70
Learning Communities 2004: Prior Learning Assessment e-Portfolio Learning Community	LCCC	\$20,000.00
Learning Communities 2004: Revolutionizing Problem-Based Learning: Using Web-Based Technology to Support Faculty Development and Student Learning	UC	\$20,000.00
Learning Communities 2004: Business Management Technology FastTrack Ohio Learning Community	UT	\$20,000.00
Total		\$2,108,196.25

Costing questions prompted OLN to join a national technology costing project. In January 2002, ten state colleges and universities decided to use Technology Costing Methodology (TCM) provided by NCHEMS and WCET (National Center for Higher Education Management and Western Cooperative for Educational Telecommunications) to better understand the costs related to technology-enhanced, distributed, and distance learning. These costing tools are available at <http://www.wcet.info/projects/tcm/>.

Several institutions used the concepts driving TCM to create their own analysis of distance learning instructional activity. On several campuses, the data was generated by the e-learning unit and shared with the finance office to help chief financial officers better understand the costs embedded in e-learning activities. Individuals said TCM was the single greatest tool to help them build advocacy for their programs. According to one institution, the president found the data generated so compelling that she chose to increase financial support to the unit. On another campus, the data was used to bolster already existing support for expanding e-learning offerings.

Another costing methodology is gaining strength across the nation. Currently, OLN is working with the Course Redevelopment process created by the Center for Academic Transformation and funded by the Pew Charitable Trust. Several Ohio institutions will use grants of up to \$40,000 to redevelop technology-enhanced, large enrollment courses resulting in improved efficiencies and student learning, and cost and resource savings.

Much remains unknown and not well understood about the costs of technology in education. Nearly every institution in Ohio uses some technology in instruction. Technology use is changing teaching and learning in ways yet to be seen, measured, and understood. Ohio would do well to seek comprehensive data across institutions, costing methodologies, and measurements of learning to create a more accurate picture of activities, to better understand the impacts of technology, and to continually improve teaching, learning, and service to Ohioans.

E-Learning on Campus

More than 23,000 undergraduate students were enrolled in e-learning courses in autumn 2003 in Ohio. They were joined by another 3000 graduate students. Two thirds of these students were female and more than half of them were over 25 years old. This snapshot mirrors national enrollments in e-learning which tend to be female adult students.

In Ohio, 26,000 students are just the reported data. Indications are that another 10,000 students may be enrolled in the public institutions and several thousand more in the independent colleges and universities. It is likely that Ohio has close to 40,000 individuals involved in some form of e-learning. Distance learning enrollments were captured for the first time in autumn 2003.

The next section of this report provides a campus perspective on e-learning in Ohio. Individuals at each institution responded to the same set of survey questions (Appendix C). Profiles were created from survey data, historical documents and OLN documents and data.

The University of Toledo

***Fall 2003 Distance Learning Enrollment for the University of Toledo
Table 3**

Sector / Campus	Undergraduate Students	% 25 or older	% UG 25 or over (1)	% Female
Comm Tech	14,396	54%	50%	70%
Regional Campuses	1,462	45%	35%	61%
Main Campuses	7,185	49%	16%	61%
State Totals	23,043	51%	32%	66%
UT	2,856	35%	18%	59%

*Data as of 11/1/2004 from the Performance Report 2004. This represents 67% of the undergraduates in public colleges and universities.

The University of Toledo is a mid-sized, urban metropolitan university in Northwest Ohio. UT began in 1872 as a private arts and trades school offering painting and architectural drawing as its only subjects. In the 125 years since, the university has grown into a comprehensive institution offering more than 250 undergraduate and graduate programs to over 20,000 students from around the world.

A challenging fiscal environment and institutional changes in leadership in the late 1990s were met head-on by the emerging UT commitment to e-learning when it began offering distance learning courses in 1998. The University spearheaded the development of online courses by establishing a centralized distance learning operation led by its director, Dr. Karen Rhoda, who reports directly to the Provost. The Division of Distance and eLearning has grown from a one person operation to an organization of 21 employees and five student workers offering over 670 online courses for the 2004-2005 academic year. UT's NCA accreditation has been extended by the Higher Learning Commission to include its online degree and certificate programs.

Table 4

The University of Toledo Degrees in OhioLearns!		
Title	Delivery	Degree/Certificate
Accounting Technology	World Wide Web	Certificate
Accounting Technology	World Wide Web	Associate
Adult Liberal Studies	World Wide Web	Bachelors
Business Management Technology	World Wide Web	Certificate
Business Management Technology	World Wide Web	Associate
Computer Science and Engineering Technology	World Wide Web	Bachelors
Diversity Management	World Wide Web	Certificate
Health Information Management	World Wide Web	Bachelors
Maintenance Management	World Wide Web	Certificate
Marketing and Sales Technology	World Wide Web	Certificate
Marketing and Sales Technology	World Wide Web	Associate
Master of Liberal Studies Program	World Wide Web	Graduate
Master of Science in Engineering Program	World Wide Web	Graduate

Provost Alan Goodridge traced the growth of Toledo's program to a small group of faculty working with the Division of Distance and eLearning as the early adopters of online learning on the UT campus. Today, the vast majority of UT's online courses are developed and taught by the University's tenured faculty. Toledo recently decided that online courses will be taught only by faculty and instructors who also teach in UT's face-to-face classrooms. This ensures that students receive equivalent learning experiences in online and traditional courses regardless of the delivery method.

UT's online enrollment grew rapidly from no course enrollments in 1997 to more than 13,500 for the 2004-2005 academic year. The offering of degree programs delivered by e-learning is changing the institution in the following manner: 1) students are able to register for more credit hours per semester due to the flexibility of online courses, 2) graduation rates are improved due to the increase per student in credit hours per semester, 3) students from outside the UT commuter area are able to register for online courses and degree programs, 4) departments are able to schedule courses more flexibly, 5) students are able to fulfill requirements when away from the University, and 6) the University is able to effectively recruit distant students to its degree programs.

Originally distance learning was expected to bring new adult learners to UT. And it did, but it also brought in UT's residential undergraduate students who typically enrolled in both face-to-face and online courses in the same semester. Students used distance learning first for its flexibility. They could enroll in more credit hours per term and thus graduate sooner, enroll as a full-time student to meet financial aid requirements, or enroll in both traditional and distance education courses in order to complete their degree program because not all courses for the degree program of their choice may be offered as fully online courses.

As communication via cyberspace has become part of the fabric of daily life, so has e-learning become part of the mainstream of course offerings at UT. E-learning will continue to include both web-assisted and online courses. Faculty who teach web-assisted courses have and will continue to become interested in developing a fully online course. UT plans that its on-campus student population will continue to represent a high proportion of its online course enrollment. The availability of electronically-delivered courses and degree programs will continue to result in greater access to higher education for students in the state of Ohio and elsewhere as society catapults into the 21st Century, an age in which communication via cyberspace is considered commonplace.

Columbus State Community College

*Fall 2003 Distance Learning Enrollment for CSCC

Table 5

Sector / Campus	Undergraduate Students	% 25 or older	% UG 25 or over (1)	% Female
Comm Tech	14,396	54%	50%	70%
Regional Campuses	1,462	45%	35%	61%
Main Campuses	7,185	49%	16%	61%
State Totals	23,043	51%	32%	66%
Columbus State	3,922	55%	45%	70%

*Data as of 11/1/2004 from the Performance Report 2004. This represents 67% of the undergraduates in public colleges and universities.

From humble beginnings -- an enrollment of 185 students, the Columbus Area Technician's School fondly known as CATS – CSCC has grown to the state's third largest community college with enrollments nearing 23,000 students. After making transition to a community college in 1987, CSCC has not looked back since and continues to focus on the future with growing e-learning enrollments a large part of that future.

In the late 1970s, Columbus State Community College used educational access TV to reach place-bound learners. Course offerings were limited, but faculty could experiment with a delivery other than the traditional classroom. Like many institutions, a core group of one administrator and a few faculty were excited about new delivery methods and nearly 20 years later in 1995, Provost Mike Snider said it was much the same. This time, an administrator and faculty members had a passion to expand the distance learning to web-based learning, video-conferencing and enhance the offering via TV. In 1997, the College received a substantial grant from the Ohio Board of Regents that enabled them to develop a support center for faculty to create distance learning coursework and create a videoconferencing system for the delivery of coursework to off campus centers. CSCC began to integrate a Roundtable process which now has 45 members (including faculty, staff, and administrators) who strategically plan CSCC's e-learning offerings. These offerings today are integral to the core access mission of Columbus State.

Table 6

Columbus State Community College Degrees in OhioLearns!		
Title	Delivery	Degree/Certificate
Associate Degree in Business Management	World Wide Web, Video Tape, Television	Associate
Associate of Applied Science in Marketing	World Wide Web	Associate
Associate of Arts	World Wide Web	Associate
e-Commerce Certificate	World Wide Web	Certificate
Geographic Information Systems (GIS)	World Wide Web	Certificate

Columbus State uses the Teaching Learning Technology Roundtable (TLTR) model towards governance of distance learning. The College's TLTR is faculty-led and contains membership from student services, IT, Disability Services, the Library, faculty, and staff. The TLTR makes recommendations on policies and procedures concerning the administration of the college's distance learning program and is the central body for the dissemination of all data concerning the program.

Through the TLTR, faculty share ultimate leadership of the distance learning program. The roundtable approach provides a global view of what is needed to appropriately operate and support distance learning. The TLTR also provides a place where faculty and staff can air concerns and share best practices concerning distance learning.

A recent addition at CSCC of eight distance learning lead faculty members ensures quality of courses and that a review of pedagogy and course design occurs regularly at the department level. These eight faculty work closely with the TLTR and the college's Teaching Learning Resource Center to ensure that the proper support for faculty to deliver distance learning exists and continuously improves.

Like many institutions, Columbus State plans to offer more courses, certificates, and degrees at a distance as well as further develop blended courses. As new technologies are introduced to enhance distance learning, Columbus State will continue to innovate and explore delivery options for its students.

The University of Cincinnati

**Fall 2003 Distance Learning Enrollment at the University of Cincinnati
Table 7**

Sector / Campus	Undergraduate Students	% 25 or older	% UG 25 or over (1)	% Female
Comm Tech	14,396	54%	50%	70%
Regional Campuses	1,462	45%	35%	61%
Main Campuses	7,185	49%	16%	61%
State Totals	23,043	51%	32%	66%
UC	1,221	62%	25%	59%

*Data as of 11/1/2004 from the Performance Report 2004. This represents 67% of the undergraduates in public colleges and universities.

A physical renaissance is occurring at the University of Cincinnati. UC is transforming its campus into a 24-hour hub for living, learning, and working. Set in motion in 1989, the Master Plan is bringing more green space, state-of-the-art classrooms and research labs, and a host of other amenities for students, all part of a pedestrian-friendly campus for its more than 24,000 students.

This renaissance continues into the academic programs at UC. From a city college in the 1870s to today's comprehensive research institution that has achieved distinction through its nationally ranked programs, it also maintains a deep commitment to accessible education. UC has a long history of using non-traditional formats to meet students' instructional needs (evening/weekend accelerated programs and instructional television and correspondence – AKA the traditional distance learning formats). Most UC colleges (10) are involved in DL at some level, ranging from single course offerings (both credit and non-credit) to entire degree or certificate programs. Beginning in 1984 with a correspondence course-based Bachelor's program in Fire Science Technology, today UC has 10 degrees available in some distance learning format.

Provost Anthony Perzigian described the success of e-learning at UC as emerging from a varied network within the University. At the academic unit level, individual faculty, staff/administrators, and students helped to advance UC's e-learning efforts. In addition, several early adopters (such as the College of Applied Science, Raymond Walters College, and the former College of Evening and Continuing Education) had already developed a variety of supporters for non-traditional, adult learners. In all of these cases, e-learning also could build upon a growing familiarity among the faculty with classroom technology as well as increasing technology resources available through the UC Office of Information Technologies (UCit).

UC's strategic investment in programs is based on several criteria, considering whether a program:

- increases access for students
- meets market needs (creating programs that lead to a credential, etc.)
- responds to competitive pressures (mounting student demands and expectations)
- improves pedagogy and student learning experiences
- creates potential to generate income

Table 8

University of Cincinnati Degrees in OhioLearns!		
Title	Delivery	Degree/Certificate
Addiction Studies	Interactive Video	Bachelors
Clinical Laboratory Science	World Wide Web	Bachelors
Doctor of Pharmacy Degree	World Wide Web	Graduate
Early Childhood Education	World Wide Web and Other	Associate & Bachelors
Master in Education Administration	World Wide Web	Graduate
Fire and Safety Engineering Technology	World Wide Web and Other	Bachelors
Health Information Management	World Wide Web and Other	Bachelors
Library Technology	World Wide Web	Certificate
Master Degree in Education-for Health Care Professionals	World Wide Web	Graduate
Master of Science in Criminal Justice	World Wide Web	Graduate
Master of Education in Teaching English as a Second Language	World Wide Web	Graduate

Distance Learning will be an integral part of the University's 21st Century approach to the diverse educational needs of students. It has carry-over benefits for the traditional classrooms, because DL has been an impetus for change, particularly in relation to increased use of technology in face-to-face classes, but also in traditional faculty issues of quality and intellectual property. Offering courses and degrees at a distance is helping UC create new guidelines and policies for a 21st Century university. These policies will expand educational opportunities, provide students with appropriate courses of instruction and student support systems such as online advising, develop enhanced measures to assess courses and whole programs, and address faculty concerns about intellectual property or ownership.

UC is creating an institutional approach to distance learning that, along with a new academic master plan, will focus offerings in strategic ways to benefit specific programs already in place and create new programs in areas of identified need. This strategy includes a continuous and stable funding base and leveraging of resources by forming strategic alliances in Ohio and elsewhere

in extending DL programs, courses and services, and collaborating with other Ohio institutions in offering DL courses. Faculty will be trained and supported in the design, development, and delivery of effective and profitable DL courses and programs and recognized and rewarded for participation in DL.

Support services are key to UC's future e-learning endeavors. Services for students (library resources, reference services, information literacy instruction), and technical expertise and human infrastructure to support both faculty and students in the DL environment are continually being improved. Centralized coordination and communication coupled with the technical and network infrastructure necessary to reliably support and deliver content are all integral parts of the university's institutional approach to e-learning.

Lorain County Community College

Fall 2003 Distance Learning Enrollment for LCCC

Table 9

Sector / Campus	Undergraduate Students	% 25 or older	% UG 25 or over (1)	% Female
Comm Tech	14,396	54%	50%	70%
Regional Campuses	1,462	45%	35%	61%
Main Campuses	7,185	49%	16%	61%
State Totals	23,043	51%	32%	66%
Lorain	2,145	50%	43%	71%

*Data as of 11/1/2004 from the Performance Report 2004. This represents 67% of the undergraduates in public colleges and universities.

Lorain County Community College opened its doors in 1964. In 1966, LCCC moved to its current location in Elyria, making LCCC the first community college to operate in Ohio. Today, LCCC is nationally known for its University Partnership Program. With eight university partners, LCCC has brought 32 new baccalaureate and master's degrees to local citizens. Currently, more than 13,000 students enroll each year in LCCC Associate Degree programs and the University Partnership Bachelor's and Master's Degree programs.

The College's commitment to serve its community is seen in a long history of distance learning beginning in the late 1970s. Infrastructure was a key component to the growth and development of LCCC's distance learning program. The National Telecommunication Information Administration (NTIA) grant funds built a microwave transmission system using a spectrum provided by the Federal Communication Commission which allowed LCCC to offer its first interactive television class. By 1996, LCCC's University partnership began to offer learning opportunities in the form of global classrooms, interactive instructional centers, and links to all major colleges and universities in the state through the delivery of two-way interactive videoconferencing technologies. The next winter quarter, Internet courses began when Dr. William Hughes developed English Composition using Course in a Box and Dr. Mark McKinley developed Introduction to Psychology in an HTML format. The rest, they say, is history-making.

During the next two years, senior staff and faculty attended several conferences at the New School University (New School) in New York to learn more about the delivery of online courses. LCCC faculty were sent to the New School with the expectation that not only would they develop their own courses, but also they would serve as a resource to other faculty. A year later, a course management tool was adopted to deliver online courses.

At LCCC, the strategic plan determines e-learning efforts. An extensive campus and community visioning process resulted in *Vision 21*, the College's plan-on-a-

page. The College Mission “encourages lifelong learning through accessible and affordable academic, career-oriented, and continuing education.” LCCC emphasizes the student via a vision which seeks to “enrich lives by creating gateways to educational, economic, cultural, technological and personal growth.” A related priority in *Vision 21* is to “advance creative learning any time, any place.”

LCCC focuses on future growth and development by using ideas from national exemplary programs such as the Pew Grant Program on course redesign and the work of the Center for Academic Transformation at the Rensselaer Polytechnic Institute. Relying on its strength of vision and community input as well as on lessons learned from implementing best practices, LCCC has high hopes for its future.

Among plans for the future are those to increase opportunities for students to experience online and land-based educational experiences that increase access and flexibility. LCCC will work toward differentiating staffing and expanding professional development opportunities for faculty. LCCC plans to modularize the curriculum and ensure efficiencies, strengthen accountability, and achieve appropriate levels of standardization in response to the CHEE recommendation for increased accountability in Ohio’s higher education institutions.

Table 10

Lorain County Community College Degrees in OhioLearns!		
Title	Delivery	Degree/Certificate
Accounting	World Wide Web, Video Tape, Television	Associate
Administrative Office Information Systems	World Wide Web, Video Tape, Television	Associate
Associate of Arts	World Wide Web	Associate
Associate of Science	World Wide Web, Video Tape, Interactive Video, Television	Associate
Banking and Finance	World Wide Web, Video Tape, Television	Associate
Business Administration - Management	World Wide Web, Video Tape, Television, CD/DVD	Associate
Computer Information Systems-E-Business Technology Major	World Wide Web, Video Tape, Television	Associate
Computer Information Systems-Network Communications Technologies	World Wide Web, Video Tape, Television	Associate
Computer Information Systems-Software Development	World Wide Web, Video Tape, Television	Associate
Justice Systems Corrections	World Wide Web, Video Tape, Interactive Video, Television	Associate
Justice Systems - Police Science	World Wide Web, Video Tape, Interactive Video, Television	Associate
Office Assistant	World Wide Web, Video Tape, Television	Associate
Police Science	World Wide Web, Video Tape, Interactive Video, Television	Certificate
Public Administration	World Wide Web, Video Tape, Interactive Video, Television	Certificate
Public Administration	World Wide Web, Video Tape, Interactive Video, Television	Associate
Tourism	World Wide Web, Video Tape, Television	Associate
Word/Information Processing	World Wide Web, Video Tape, Television	Associate

What About the Users?

Student and Faculty Opinions and Experiences

Students and faculty at each institution were asked five questions about their e-learning experiences (Appendix C). The open-ended questions were met with a diversity of answers captured below to provide a snapshot of teaching and learning at a distance.

Students enrolled in distance learning classes because of its convenience and flexibility. Among their reasons for taking distance learning classes were: busy schedules relating to family responsibilities, work schedules, distance from campus, and timely degree completion. Some students sought e-learning because it provides different ways to learn. A few students enrolled just out of curiosity. In one case, one student feared the traditional class discussions would be dominated by one or two students, so chose e-learning.

Faculty often began teaching web-based or distance courses for many of the same reasons. Early adopters were curious and typically had some familiarity with distance learning or computer skills. Others were recruited by the administration, sent to training, and quickly became campus advocates for technology in education. Two faculty members surveyed completed their own doctoral work via distance learning.

Unexpected Outcomes

Students and faculty found nearly equal positive and negative unexpected outcomes from their e-learning courses. Many students expected e-learning courses to be easier and take less time than a traditional course, but found that false. Students reported that distance learning courses were more difficult and challenging than they believed. Students were often surprised at how self-motivated they must be to take an e-learning course.

Several students referred to technical issues that they did not expect: e.g., course management system problems and personal computer problems. Some students indicated that they missed the face-to-face interaction of the traditional land-based classes, while other students experienced a better one-to-one interaction with the instructor than previously experienced in face-to-face classes. In their own words:

“...I believe the DL courses have been very difficult at times because you don't have an instructor right there at your beck and call - especially math courses! That was a real tough semester taking math online - what was I thinking???”

“... There is an increased amount of work due to the fact that “live” lectures are replaced by online written and/or video lectures, and additional reading material. Increased web interaction is experienced in distance learning including research and referral to sources that enhance the learning experience.”

One faculty member commented on the reduced interaction while other faculty commented the exact opposite and reported an increase in interaction. Faculty found the interactions could be more 'in-depth' and 'on track' and that the quality and quantity of student-faculty interaction was much better and much higher in Internet courses.

"...Teaching at a distance is a very exciting and challenging experience. It is better to start with a course that the instructor has already taught several times. However, an instructor should not expect that putting course notes on the Web will do the job. It is much more than that. "

**Fall 2003 Postsecondary Options Enrollments
Table 11**

Sector / Campus	% PSEO DL	% PSEO (1)	% DL Concurrently Enrolled	% UG Concurrently Enrolled (1)
Comm Tech	2%	3%	3%	2%
Regional	1%	4%	1%	1%
Main Campuses	1%	1%	2%	1%
State Totals	1%	2%	3%	2%
Columbus State	0%	1%	4%	4%
Lorain County	3%	8%	4%	1%
UC	0%	1%	2%	1%
UT	1%	2%	2%	1%

* Data as of 11/1/2004 from the Performance Report 2004. This data represents 67% of the undergraduates in public colleges and universities.

E-learning is often suggested as an option for high school students who want to enroll in college courses. The limited data presented in Table 11 above suggests that a commonly-held belief may not hold true for Ohio. More investigation should be done in the use of e-learning courses for post secondary options. The limited numbers presented in Table 11 indicate that high school students may represent a new market for many colleges and universities.

Fall 2003 Graduate Enrollments*
Table 12

Sector / Campus	Graduate Students DL	Total Graduate Enrollments	% Graduates (DL)	% DL Students Graduate Level
Comm-Tech	0	0	0%	0%
Regional Campuses	56	782	7%	4%
Main Campuses	3,386	44,666	8%	32%
State totals	3,442	45,448	8%	13%
UC	376	7,903	5%	24%
UT	372	3,336	11%	12%

*Data as of 11/1/2004 from the Performance Report 2004, representing 67% of the undergraduates in public colleges and universities.

Colleges and universities are beginning to strategically plan what programs to make available at a distance. Several institutions in Ohio have made commitments to selected graduate programs and professional programs as ways to reach new student markets. The preliminary data presented above indicate this may be true for the University of Cincinnati and its five master degree programs. Neither UT nor UC has a Masters of Business Administration online. Enrollments in those programs might provide a different view of graduate education and should be included in subsequent reports.

Peer Advice: Faculty2Faculty and Student2Students

Both students and faculty were eager to talk about their experiences. Below is their advice in their own words – first faculty and then students.

- Start with a “Web Assisted” class first.
- Give it a try AS LONG AS your university provides ALL of the technical support, provides training, and has development funds. Teaching a DL course is very different from teaching a face-to-face course.
- Focus on organization. My experience has been that the more organized and detailed that your classroom site is--the fewer problems the professor and the students will experience.
- Re-see your course objectives: what do you really want students to learn in this course? HOW will you know that they have learned it?
- How can you facilitate your students' acquisition of important information? HOW can you best communicate knowledge, and HOW can they show you that they "got it.”
- For other faculty who are considering teaching a distance learning class, I would recommend that they must be willing to put in a great deal more time in the preparation and work in the online class and dealing with students. My distance learning classes take much more time to prepare and work through on a weekly basis than my land-based classes. I would also recommend that they come up with unique ways to engage

students. There needs to be some participation by the students on a weekly basis; and this can be a challenge.

Students offered encouraging and realistic advice to others considering taking online and other distance education courses.

- Commit to complete course curriculum in a timely manner.
- Have self-discipline and self-motivation; both are critical to success.
- Be mature, disciplined, plan time well and be very dedicated to learning.
- You must be able to plan your time for reading, studying and test taking.
- You have to be able to plan ahead because there are times when the web may go down and you have waited until the last minute to take a test - then can't get online. YIKES!
- One has to be a “left brain learner”, if one does not learn from reading alone they will struggle.
- This is doable for those that really want to get their education. Students need to be warned that it will not be easy and that it will be a lot of work.
- Technical skills – Motivation – Goal orientation. Willing to use a computer and internet services such as email, eagerness to learn, goal oriented, fearful of a campus setting.

Overwhelmingly, students felt distance learning helped them achieve their educational goals. As noted earlier, students took e-learning courses for flexibility and to fit their education into their lives, not to fit their lives into college and university schedules. Many students work full- or part-time and have families. These responsibilities prevented them from attending regular day classes and as one mother said,

“...Plus, being a working mom with a family, I have been able to fit my DL classes in during the evening hours when my family is less likely to need me.”

Other student comments were:

“...Distance learning has made it possible for me to maintain a GPA that has placed me on both the Dean’s List and the Honors Council. With the ability to learn on an independent basis, my career goals will be achieved by the attainment of my degree.”

“...My career interest involves the area of research. Distance learning has greatly enhanced my capability to move in and out of the Internet environment and learn how and where to locate information on a variety of subjects. Technology is the future and distance learning should only grow and compliment this requirement from this point forward.”

“...It allowed me to take courses when otherwise I would not have been able to that semester. It has shortened the time I need to finish school.”

“...Transfer of skills - Learning to write papers and cite research has been especially helpful in my consulting work and preparation of information for the legislature.”

“...Flexible format assisted in pursuing and attaining Associate degree – improved self esteem - It has helped me accomplish a goal of attaining an Associate Degree through the ability to go at my own pace and a time frame to write papers that I set for myself and most of all give me the self esteem that I can be a college graduate.”

Conclusions and Next Steps

Extending learning from the physical campus is a reality of 21st Century education and a reality of students in the Knowledge Economy. This preliminary report indicates that if nothing else.

Through its programs, most notably OLN, Ohio has embraced e-learning as a current and future force in higher education. Technology is an integral part to delivering educational services. Within the context of its mission, each institution in Ohio will continue to choose how, when, where, and why to provide various educational programs and services, especially e-learning.

Several issues raised in this report deserve additional study, among them:

- Costs of e-learning
- Options for post secondary learning
- Student characteristics – potential new markets
- Impact of technology in teaching and learning
- E-learning for workforce and economic development
- Graduate and professional courses and degrees as expanding markets

OLN will continue to report on e-learning by providing an annual report to the community. Data reported through HEI will supplement data gathered at OLN. Case studies of different institutions will be created in following years.

OLN will continue to push access strategies, including growing enrollments, in its new, free course “E 4 ME.” E 4 ME is designed to give individuals who have not attended college, or who want to return to college, a fail-safe environment to try e-learning and to think about more education. Ohioans who complete the course are assigned an E Guide to assist with transition to education and receive a Certificate of Completion. The Certificate of Completion also provides reduced admissions or enrollment fees at selected Ohio colleges.

OLN will guide statewide shared programs in technology and faculty development and provide services such as online tutoring and aggregating content to foster the growth of e-learning. OLN will continue to nip at the edges of innovation in policies, funding, and the transformational changes that are occurring on campuses statewide and drive Ohio’s economic development.

OLN will do this in partnership with Ohio's colleges and universities. The community will continue to push for excellence in all its extended learning offerings because Ohioans deserve no less. A faculty member from one institution says it well...

"...These hard questions force us outside our re-usable teaching materials that have grown comfortable and stale, and invigorate us to look again at what education is all about. Yes, 'distance education' is still education -- delivered in a new medium but still teaching/learning... It challenges and provides a huge opportunity to really design a course in which your students take control of learning."

"...Teaching at a distance, to me, is an opportunity to incorporate new technologies in all of my teaching, traditional and at a distance."

Appendix A

Emerging Needs Grants 2001: Content

Institution	Grant Title	Funding Amount
Miami University	Providing Access to 'Plus Two' Engineering Technology Baccalaureate Degree at Strategic Instructional Hubs for Place-bound Graduates of Two-year Engineering Technology Programs	\$100,000
University of Toledo, Sinclair Community College, Cincinnati State Technical and Community College	Online Computer Science & Engineering Technology: A Bachelor of Science Degree Completion Program	\$400,000
Cleveland State, Miami University, Ohio University, University of Akron, University of Dayton, University of Toledo, Youngstown State University, and University of Cincinnati (fiscal agent)	Ohio Engineering Management Consortium	\$250,000
Cleveland State University, The Ohio State University, Wright State University, and University of Cincinnati (fiscal agent)	World-Class Manufacturing/Web-Based Engineering Education	\$250,000
Bowling Green State University, Cleveland State University, Ohio University, The Ohio State University, University of Toledo, University of Dayton, Youngstown State University, and Wright State University	The Regents Scholar Program for Mathematics and Science Teachers	\$130,000
Sinclair Community College	On-line Electronic & Computer Engineering Technology: A Degree Completion Program	\$450,000

Total Amount Awarded 2001: \$1,580,00

Emerging Needs Grants 2002: IT and Engineering Content

Institution	Grant Title	Funding Amount
Bowling Green State University	Web-Based Transformation of Advanced Technology Education, Bachelor of Science Degree	\$382,267
Cuyahoga Community College	Material Engineering Technology Anytime/Anywhere	\$140,549
Sinclair Community College	On-Line Web Programming Certificate	\$265,001
Sinclair Community College	On-Line Construction Engineering Degree	\$302,589
University of Cincinnati	Technical Workforce Development	\$512,050
The University of Toledo	Online Information Technology: Associate of Applied Sciences & Bachelor of Science Degree Completion Program	\$403, 722

Sub-Total Content: \$2,006,178

Emerging Needs Grants 2003: Health Care Content

Institution	Grant Title	Funding Amount
Columbus State Community College	Alternative Associate Degree Nursing	\$299,828.55
Medical College of Ohio	A Technology-Enhanced, Multi-Institutional Master of Public Health Program	\$239,528.25
Ohio State University	Improving School Health: Extending Educational Opportunities For Ohio's School Nurses Through On-Line Learning.	\$155,630.85
Otterbein College	Teach and Reach: Rural Access to an Accelerated RN to MSN Program	\$286,338.15
Ohio University Zanesville	Portable Content Delivery for the Mobile Nursing Student: Part II	\$30,155.00
Owens Community College	The Owens and Sinclair Community College consortium LEARNS! Online Physical Therapy Assistant (PTA) degree	\$122,441.70
Shawnee State University	Web-Based Credentialing for Clinical Instructors in Physical Therapist and Physical Therapist Assistant Education	\$67,450.00
Sinclair Community College	Online Radiologic Technology Modules	\$80,495.40
Sinclair Community College	Virtual Radiography and Positioning With 3-D Animation	\$85,285.70
University of Toledo	Online Health Information Management Bachelor of Science Degree Completion Program	\$259,640.70
Wright State University	BEACON: Accelerated BSN for Baccalaureate Graduates	\$221,434.55
Youngstown State University	Asynchronous Distance Learning BSAS/Certificate Programs for Health Professions	\$245,561.70

Total Amount Awarded 2003: \$2,093,790.55

Total Amount Awarded 2001- 2003: \$5,891,003.55

Appendix B

Selected Distance Learning Bibliography

CHEA Institute for Research and Study of Accreditation and Quality Assurance (2002). Accreditation and assuring quality in distance learning. CHEA Monograph Series, 2002(1). Washington, DC: Council for Higher Education Accreditation.

Distance Education at Postsecondary Institutions, The Condition of Education 2004. Washington, D.C. National Center for Education Statistics, U.S. Department of Education, Institute of Educational Sciences.

Epper, R. M., & Garn, M. (2003). Virtual college and university consortia: A national study. Available at <http://www.wcet.info/resources/publications/> State Higher Education Executive Officers.

Levine, A. and Sun, J. C. (2002). Barriers to distance education. Washington, DC: American Council on Education.

Lewis, L., Snow, K., Farris, E., & Levin, D. (1999). Distance education at postsecondary education institutions: 1997-98. (NCES 2000-013). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

Oblinger, D. G., Barone, C. A. & Hawkins, B. L. (2001). Distributed Education and its challenges: An overview. Washington, DC: American Council on Education.

Paulson, K. (2002). *Reconfiguring faculty roles for virtual settings*. Journal of Higher Education, 73(1), 123-140.

Rumble, G. (2001). *The costs and costing of networked learning*. Journal of Asynchronous Learning Networks, 5(2), Retrieved May 4, 2004, from <http://www.sloan-c.org/publications/jaln/v5n2/index.asp>.

Sloan Consortium Report (2004) "Entering the Mainstream: The Quality and Extent of Online Education in the United States, 2003 and 2004," is available (http://www.sloan-c.org/resources/entering_mainstream.pdf).

Twigg, C. A. (2001). Innovations in online learning: Moving beyond no significant difference. Center for Academic Transformation. Troy, NY: The Pew Learning and Technology Program.

Web Based Education Commission. (2000). The Power of the Internet for Learning: Moving from Promise to Practice is available at <http://interact.hpcnet.org/webcommission/index.htm> Washington, DC: U.S. Department of Education.

Appendix C

Survey Questionnaire

Provosts

1. How did your institution get involved with distance learning? Who were your campus champions?
2. Where does distance learning fit within your institution's mission?
3. What was the most unexpected outcome of developing your distance-learning program?
4. What was the greatest obstacle you had to overcome to implement your distance learning program?
5. What is your vision for your distance learning program for the next five to ten years?
6. How would you compare the quality of your distance learning courses with the quality of your traditional courses?
7. Does distance learning cost less, same, or more to deliver than traditional courses?

Faculty

1. When and how did you become interested in teaching at a distance?
2. What is your most unexpected outcome from teaching at a distance?
3. How is your interaction with students similar or different when compared to a traditional face-to-face classroom?
4. What would you recommend to other professors and instructors who have not taught at a distance, but are considering it?
5. How would you compare the quality of your distance learning courses with the quality of your traditional courses?

Students

1. Why did you enroll in a distance learning course?
2. What was the most unanticipated experience you had by learning at a distance?

3. What would you say are the characteristics a learner should have to be a successful distance learner?
4. How has distance learning helped you achieve your educational goals?
5. How would you compare the quality of the distance learning courses you have taken with the quality of your traditional courses?

Special thanks to Tom Erney and Mike Snider, Columbus State Community College; Mary Jane Palmer and Karen Wells, Lorain County Community College; Melody Clark and Anthony Perzigian, the University of Cincinnati; and Karen Rhoda and Alan Goodridge, the University of Toledo; Andy Lechler, Darrell Glenn, Melissa Sponseller and the HEI staff at the Ohio Board of Regents. Special thanks to all the Catalog Coordinators who worked diligently with HEI Data Reporters on each campus to change processes and procedures on campus to make this report possible.

How the Report/Survey was conducted:

Four members of the OLN Academic Outreach committee (Melody Clark, Tom Erney, Karen Rhoda, and Mary Jane Palmer) administered the DL Questionnaire (Appendix C) to provosts, faculty, and students at their institutions. Nearly 100 individuals across the four institutions were surveyed. The report's case studies and faculty student information is a composite of that data. Additional data was selected from the OhioLearns! catalog, the OBR-HEI repositories, and OLN staff work. These four institutions were selected for this report because each was an early adopter of the new submission process to OhioLearns! and each institution was represented on the Academic Outreach Committee. In subsequent reports, all institutions' data will be included and other institutions will be selected for case studies.