

**CONESTOGA COLLEGE
INSTITUTE OF TECHNOLOGY and
ADVANCED LEARNING**

**Educational Technology
Department
e-Learning Strategic Plan**

2004-2006



CONESTOGA
Connect Life and Learning

Educational Technology Department e-Learning Strategic Plan

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Conestoga College

Mission

To **CHAMPION** innovation and excellence in the development and delivery of education and training.

To **SERVE** responsibly the diverse and ever-changing needs of the community.

To **INSPIRE** students and employees to strive toward their highest potential.

Conestoga College Strategic Plan 2000-2005

Vision

It is Conestoga College's Vision to be recognized as a leader in education and training

- *by providing quality innovative education through the creative use of state-of-the-art teaching/learning methods, technological support, services and research and,*
- *by growing with the needs of a dynamic community located in Canada's Technology Triangle and transforming itself into a Polytechnical Institute.*

Conestoga College Strategic Plan 2000-2005

Education Values

We believe in the use of sound educational/curriculum principles for the development and implementation of quality innovative systems of teaching and learning that include information technology to prepare students with the knowledge, skills and attitudes required for success in the workplace.

Conestoga College Strategic Plan 2000-2005

Educational Technology Department

Educational Technology provides a broad range of services to the College's communities both internally and externally. Its key responsibilities are to provide instructional technology services and solutions to:

- Support the College's core academic mission and business processes.
- Facilitate individual access to information processes for teaching, learning, work and communication.
- Enable students, faculty and staff to work and learn more effectively and efficiently.
- Provide Instructional Technology driven processes that add value to the learner, customer, and community relationship.

In order to successfully perform these functions, the Educational Technology Department has developed the following definition and mandate:

Educational Technology Definition

An organizational unit that provides leadership, planning and support in all areas pertaining to the implementation and use of instructional technology for academic purposes.

Educational Technology Mandate

To define, communicate and support, standards and processes for e-learning course enhancements, development and delivery.

To facilitate the use of technology by faculty, students and administration, such that instructional technology and e-learning related development and delivery becomes an integral part of the College teaching environment.

Educational Technology Department - Goals

In support of its Mission, Vision and Educational Values Statements, Conestoga College has established the Educational Technology Department to focus on the use of instructional technology to enhance teaching and learning – both in and beyond the classroom. Educational Technology will continue to provide innovative leadership, planning and support with respect to all matters dealing with instructional technology and e-learning design and delivery. The specific goals of Educational Technology are:

Leadership

- to provide an improved learning environment for students by providing and promoting electronic resources that will enhance our students'/graduates' abilities to learn and work independently and collaboratively;
- to provide an infrastructure for continuous improvement of innovative alternative teaching/learning methods using Instructional Technology and e-learning materials for mixed-mode teaching that will move the College in the direction of a “virtual college”;
- to provide a clear framework for configuration, design and validation of instructional and presentation technologies in the classroom and lab; with a specific focus on the intended application, ease of use and maintenance of the technology;
- to continue to be an integral part of an Ontario-wide consortium of Colleges which provides collaborative and collective resources for e-learning (e.g. OntarioLearn.com);

Planning

- to develop new collaborative partnerships with other educational institutions;
- to identify opportunities in reducing costs in delivering course material, while enhancing both the teaching and learning experiences affected;

Support

- to provide guidance and support in the use of methods, techniques and technologies suited for distance learning at the College;
- to provide ongoing technical support to faculty and students within the e-learning environment as the demand and necessity for online learning components continues to grow as an integral part of curriculum delivery.

Educational Technology Department Status of Current Projects and Support Activities

The list below reflects an overview of some of the e-learning projects, creations, developments and initiatives that are currently ongoing at the College. This has been achieved through Educational Technology's participation in several internal and external committees and meetings dedicated to the implementation and creation of e-learning initiatives.

Leadership and Planning

Progressive leadership and planning has paved the way for many new ventures and projects, including:

- Online courses supported by the Educational Technology Department include:
 - 33 courses are fully web enabled for on-line delivery.
 - 17 through OntarioLearn.com (including 5 core courses of the Esthetics Program)
 - 16 through Career Development Practitioner Program
 - 18 courses are being delivered in a hybrid mode.
 - Human Resources Management Post Diploma Program
 - Approximately 40-60 WebCT enhanced courses run in full-time programs every semester.
 - Software Engineering Technology
 - Computer Programmer
 - Computer Programmer Analyst
- Four Continuing Education programs are under development:
 - Pre-Service Fire Fighter;
 - Quality Assurance;
 - Youth Recreation Leadership;
 - Construction Estimator.
- Educational Technology has been approached to participate in several comprehensive project proposals. Upon commitment, Educational Technology will contribute to the e-learning portion of the projects; providing expertise such as project management, proposal development and WebCT design. Anticipated program projects include:
 - Machine Tool Builder Integrator to be offered fully online in a consortium model (Trades and Apprenticeship);
 - Common Core for Precision Machining and Tooling web based learning project (Trades and Apprenticeship);
 - Teaching English as A Second Language to be offered fully online (Liberal and Media Studies);
 - General Business Program to be offered fully online (School of Business).
- Upon acceptance of our proposal by the Inukshuk Group, Educational Technology will commence collaboration with Seneca College and University of Waterloo (CLOE) on a Learning Object development project.

Support

Ongoing technical and instructional design support has been expanded and includes the following:

- A comprehensive WebCT Workshop series has been developed and is being offered through Educational Technology on an ongoing basis.
- In class WebCT training is provided to students at the start of each new intake.
- 4 new workshops for delivery to faculty are under development, including: Instructional Design and Pedagogy, Web Page Design Basics, Learning Object Creations, What to Expect in an Online Course.
- Direct, ongoing technical, tutorial and general inquiry support.
- Educational Technology has been and continues to be fundamental in the development and support of province wide partnerships such as OntarioLearn.com, CLOE, Embanet and Educational Technology Committee. Active participation in co-operative and collaborative projects strengthens our relationship with these provincial institutions.
- Continued development of infrastructure, creation and implementation of policies and ongoing support for e-learning activities.
- Continued research, review and acquisition of high quality on-line materials.
- Continual Professional Development upgrading of staff.

Current and Projected e-Learning Initiatives

The Educational Technology Department has identified the following steps toward the achievement of goals listed on page 5. A number of these projects are currently under way. Identification of e-learning needs at Conestoga has presented additional future action items which are listed below. These steps are not listed in order of priority.

Leadership

- A. Establish the *Learning Management System (LMS) Advisory Group* to determine which learning management product offers the best solution to meet Conestoga's needs with respect to online course delivery and ensure proficient interaction with the new SIS. The *LMS Advisory Group* will make recommendations to ACC with respect to future learning management licensing agreements.
- B. Determine technical and andragogy training requirements for faculty and staff of Conestoga College in the use of new technologies for classroom and distance learning.
- C. Investigate and define parameters of instructional technology responsibilities of the Educational Technology Department (including hardware, software and classroom design). Prepare recommendation to ACC for approval.
- D. Research and develop recommendations for new instructional technology hardware and software products available based on pre-defined criteria (needs assessment/requests) and presented to a decided upon forum.
- E. Collaborate with partner colleges and universities to develop Conestoga's first Learning Object.
- F. Make recommendations regarding courses that are well suited for e-learning (online) component enhancement.
- G. Create an e-learning checklist of considerations to be available to any Conestoga College related review committee for use in planning and development of e-learning courses or programs.
- H. Provide input to Human Resources to assess e-learning responsibilities as part of the standard workload form.
- I. Research and recommend opportunities that Conestoga College can capitalize on by completing a study on the competitive landscape with respect to other college offerings in e-learning.

Planning

- A. Select a new name for the Educational Technology Department that will impart a clear assertion of its role and indicate the range of services it encompasses.
- B. Develop and adopt service standards (Service Level Agreement) for Educational Technology for the support of e-learning.
- C. Create a framework or set of recommended guidelines as part of the course development process to make e-learning a natural part of the college environment.
- D. Research and make recommendations to college policy with respect to issues surrounding online course development and delivery (e.g. copyright, intellectual property, grade posting).
- E. Investigate and recommend the college commitment both financially and from a support infrastructure perspective.
- F. Develop a strategy to reach and engage a larger number of faculty to enhance their knowledge of electronic educational tools available through Educational Technology and Learning Resources.
- G. Recommend an annual training plan offered to all full-time faculty. The objective is to have 15% of the faculty complete an introductory-level training program in the design and delivery of on-line courses by the end of the 05/06 school year.
- H. Establish updated guidelines for recognition of e-learning responsibilities on the standard workload form.
- I. Update program review guidelines to include e-learning.
- J. Develop the Educational Technology Department's e-learning operational plans for 2006/2007, so that an average of 10% of all students' learning will be on-line learning by 2006/2007.
- K. Review full-time programs to ensure that graduates have e-learning skills consistent with the College goal.
- L. Implement a method of tracking the financial costs and benefits of online learning.
- M. Continue to research and make recommendations on video conferencing equipment for Conestoga.

Support

- A. Resolve outstanding issues re: current and future responsibilities to support e-learning.
- B. Draft a PDF for a third position in Educational Technology for new staff who can support the graphical development of online courses and components and provide WebCT backup support.
- C. Publish guidelines and provide support systems to ensure the validity of evaluation and student performance in on-line courses.
- D. Recommend online instruments for student and faculty evaluation, particularly for on-line learning (SAT).
- E. Revisit and rewrite course shell standards (e.g. branding by school) and make recommendations to college ACC.
- F. Develop a new Online Learning website that provides information relevant to faculty and students with electronic components in their curriculum. (e.g. Students – who to contact, online survey; Faculty requesting website, copyright information)

Educational Technology – Completed Achievements to Date

Academic

- Facilitate the implementation of new programs through OntarioLearn.com that are available fully online, enabling us to move forward in the direction of a “virtual college” (e.g. Esthetics, Pre-Service Fire Fighter). (2002).
- Update of 5 online courses for the “Rural Youth Job Strategy Project 2 – Investing in Innovative Technologies to Deliver Skills to Rural Youth” (RYJS II). (2002).
- Over 120 WebCT enhanced courses have run in full-time programs since September 2001.
- Over 72 online course curriculums have been complete (6 programs and 10 courses for the “Rural Youth Job Strategy Project – Building Information Technology Skills for the Future”). (2001).
- Three full-time programs have been designed and are being offered to meet the needs of employers and students, based on economic and social trends - Software Engineering Technician and Computer Programmer and Computer Programmer Analyst. (2001).

Service/Support

- Sign Memorandum of Understanding to join Co-operative Learning Object Exchange (CLOE). (2004).
- Faculty use a variety of e-learning options in course delivery, communication and course management supported by the WebCT system. (ongoing).
- Overly 120 faculty have attended WebCT training. (2001-2004).
- Educational Technology Department has merged with Learning Resource Centre (LRC) and a new permanent location has been established. (2003).
- The Educational Technology Department has identified and recommended to the ACC an operational financial model for four different methods of online course delivery (OntarioLearn.com courses – Conestoga as “Registering College”, OntarioLearn.com courses – Conestoga as “Host College”, WebCT online courses at Conestoga – CE/T&D, and WebCT online courses at Conestoga – full-time funded.) (2002).
- Creation of the Educational Technology Department on October 1, 2000 with the first full time staff in place and second position in April 2002.

Technology

- A second updated WebCT host server has been acquired and is located at Conestoga College, providing WebCT-based course content to instructor-led and distance education scenarios. (2003).
- WebCT License has been upgraded to Campus Edition 4.1, Focus License and is available for use by any faculty (full- or part-time) wishing to enhance their courses with online components. (2003).

- Managed the installation and implementation of Internet streaming (audio and visual). (2003).
- Establishment of Educational Technology's Digital Media Centre. A multimedia computer system, video capture card, sound mixer, microphones, digital video camera and digital still camera were purchased to facilitate the creation of audio and video content to be streamed. (2003).
- Five courses have contained content that is delivered via the stream server since January 2003 (when piloting began). Applied Degree commercials and Video on Demand pilot movies were also streamed.
- A streaming multimedia server was acquired through RYJS II to provide multimedia support for WebCT and other web-based technologies. (Helix Universal Server provides compatibility with Windows Media and QuickTime files as well as Real Media Files). (2002).
- Five new Robotel SmartClass classroom management systems were acquired (RYJS II). (2002).
- Twenty-five digital video projectors were acquired (RYJS II) to enhance delivery of course material. (2002).

Appendix A

Operational Expenditures

- Over \$1.7 million has been spent upgrading and acquiring hardware systems, software acquisition and curriculum design and development. This summary lists the expenditures from the inception of the Educational Technology Department to March 31, 2002.
- No significant funding has been allotted to Educational Technology since March 2002.

Expenditures (April 2000 – March 2002)		
<i>Hardware</i>	\$323,000	<i>RYJS</i>
<i>Software</i>	\$103,000	<i>RYJS</i>
<i>Curriculum Development</i>	\$435,000	<i>RYJS</i>
<i>Management/Staffing – Contract</i>	\$718,000	<i>RYJS</i>
<i>Management/Staffing – Full-Time</i>	\$ 26,000	<i>College</i>
<i>Promotion</i>	\$ 82,000	<i>RYJS</i>
<i>Travel</i>	\$ 6,000	<i>RYJS</i>
<i>Operational/Ed Tech Set up</i>	\$ 10,000	<i>College</i>
 <i>Total</i>	 \$1,703,000	
Current Ongoing Commitment Dollars by College		
<i>Hardware</i>	?	
<i>Software</i>	?	
<i>Curriculum Development</i>	<i>n/a</i>	<i>each school</i>
<i>Promotion</i>	<i>n/a</i>	<i>each school</i>
<i>Full-Time Staff</i>	\$141,000	<i>College</i>
<i>Ed Tech Admin</i>	\$ 22,500	<i>College</i>
 <i>Total</i>	 \$163,500	