Seneca

eLEARNING PLAN 2006 - 2009

Broadening the Range of Learning Opportunities

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INTRODUCTION:
THE EDUCATION LANDSCAPE

In 2001 the Council of Ministers of Education in Canada put forth five factors to govern education in Canada in the 21st century. They are: accountability, accessibility, mobility, high quality education, and responsiveness to learners needs [1].

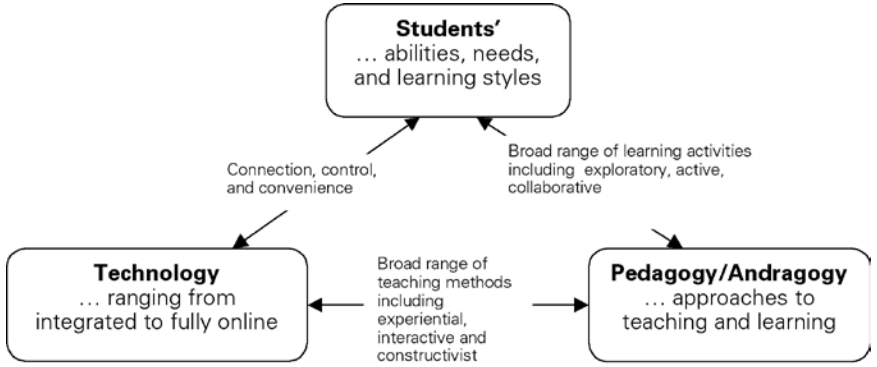
The province of Ontario revealed its plan for higher education in 2005; **Reaching Higher: The McGuinty Government Plan for Postsecondary Education.** Backed by a significant increase in funds for postsecondary education, this plan focuses on increased access, quality and accountability [2].

Seneca College's Strategic Plan 2004-9 describes a vision "to lead in student success … by preparing today's learners for tomorrow's communities and workplaces" and "in access to higher education … by developing comprehensive programming, multiple pathways and supports for students in achieving their educational goals" [3].

The College's accompanying Academic Plan 2004-9 describes an academic community that is "inclusive, challenging and inspirational" to students; "open, collaborative and creative" to educators; and "dynamic, supportive and enabling" to Seneca faculty and staff [4].

These then are the guiding values for Seneca's 2006-9 eLearning plan.

Today's learners, technology, and faculty approaches to teaching and learning in diverse programs form a trio of interconnected forces in our education landscape. The relationship between these forces forms the basis of this eLearning plan.



Students

Today's learners include the 'net generation', 'millennial learners' or 'generation Y'. These students often prefer to learn through exploratory active discovery and experience, by 'doing'. They are social learners who gravitate towards working in teams, interaction, and learning activities in which they can participate, preferably multitasking these activities. They are proficient at reading visual images and wish a variety of media be employed in learning [5]. They view technology in learning, if indeed they notice its presence at all, as a tool with which to immediately and continuously connect with others and for convenience and control of their learning activities [6]. Seneca students span several generations of learners however support for these learning characteristics and preferences is considered to be of benefit to all learners.

Technology

Today's learning technologies have matured. They are having an impact on how we seek, digest and share information, on our approaches to teaching and learning, and on public access to education. Educational objectives drive technological innovation while technology and the systems that support it make some activities more accessible to teachers and learners and eventually, some activities less accessible. This is a not a model of determinism but of co-evolution of technology alongside teaching and learning [7].

Pedagogy

Technology enhanced learning activities expand, enrich and reinforce classroom learning. They also open new avenues of teaching and learning with virtual and augmented reality, simulations and games. Technology enhances teachers' abilities to incorporate such practices as collaboration, participation and experience in the design of learning activities.

Terminology

The terms '**eLearning**' and '**technology enhanced learning**' are used synonymously throughout this document. These are defined broadly: the use of information and communications technology in teaching and learning. Online learning then is a subset of elearning, as are all learning activities and teaching and learning communication stored or distributed via a digital medium.

The term '**pedagogy**' is used throughout this document as a term familiar to college faculty, but it is meant to include course design and teaching methods fundamental to andragogy, a theory of adult education. Andragogy includes principles of experiential, explicit, relevant and problem-centered learning along with student involvement in the planning and evaluation of learning [8]

The terms '**postsecondary education**' and '**higher education**' are used interchangeably to refer to education after high school: apprenticeship, college and university programs and institutions.

eLEARNING PLAN

Universal Instructional Design, with roots in architecture and industrial design, describes the need for "multiplicity in design, delivery and evaluation (using course design and delivery to present information and evaluate performance in a variety of ways that accommodate the broadest possible range of student preferences and strengths)" [9].

Seneca's Academic Plan 2004-9 supports the "development of delivery modes that allow students to broaden their learning styles and to use preferred learning styles" (pg 12). It further states that Seneca will "develop eLearning strategies that enhance the classroom experience and address new learning styles" (pg 8).

Objective: To provide a broad range of learning opportunities and modes of interaction that support diverse learning styles, abilities and needs through the integration of technology in teaching and learning.

Strategy: eLearning material and activities that support and reinforce learning outcomes and that help students acquire lifelong learning skills using technology will be made available to students in multiple modes.

Implementation: Faculty training and development, technology support, development of eLearning objects, and decisions around technologies purchased and supported in the college will reflect the objectives and support the strategies in this eLearning plan.

1. Engagement

Student engagement in learning has proven to increase student retention and success [10] and has the potential to draw students into deeper learning experiences. Popular engagement principles include student-faculty contact, cooperation and collaboration among students, active learning, prompt feedback, time on task, high expectations, and respect for diverse talents and ways of learning [11].

An evolving learning parable supports this process of learning: **'I hear and I forget, I see and I remember, I do and I understand. I teach and I master.'**

Objectives

i) Enhance interactive, exploratory, collaborative learning

ii) Enhance experiential learning (e.g. problem-based learning, simulations, games)

Strategies

i) eLearning activities will support a diverse range of learning styles and intelligences including visual, auditory, and kinesthetic/ experiential strengths.

ii) Instructional strategies with technology, where possible and appropriate, will include active, exploratory, and experiential learning opportunities and will encourage students to participate in the learning process.

2. Communication and Sharing

The 'network society' [12] is characterized by social organization and communication across networks. The net generation, among others, learns through constant and immediate connection, and collaboration and sharing within their social networks [13], supporting a shift in information flow in education from a hierarchical to a networked model. Collaborative learning supports student engagement [14]. Peer review of public research and learning objects reveals an academic practice of collaboration and sharing information, including the co-construction of validity and authority.

Objectives

i) Enrich communication and relationships between and among students, faculty, staff and administration.

ii) Support intra and inter school and institutional sharing of course materials and best practices to increase quality of learning and choices of ways to teach and learn.

Strategies

i) Electronic communication will be used to enhance and broaden the ways that students can interact with faculty, support systems and other students.

ii) eLearning will support the ability to share material (refer to Seneca College Intellectual Property Policy[15]) and encourage sharing of Seneca's course activities and material within the College and with partner institutions (see Ontario Freedom of Information policies regarding sharing of student work [16]).

iii) Mechanisms will be employed to communicate and demonstrate relevant best practices in eLearning to faculty throughout the college.

3. Quality

There is growing evidence to show that 'blended' learning can enhance and enrich learning outcomes [17]. eLearning at Seneca will be considered where it adds value to the teaching or learning experience. The College Academic Plan 2004-9 states that Seneca will "address the various learning styles in a manner conducive to the subject matter" (pg 8).

Objectives

i) Increase breadth and depth learned
breadth: increased perspectives, choice
depth: engagement, critical thinking, problem solving, higher order thinking

ii) Increase relevance and currency of information to support learning outcomes

Strategies

i) eLearning will be used to broaden the ways in which students can become engaged with subject material and learning activities.

ii) eLearning will be considered where it adds value to the educational experience.

iii) eLearning will be explored where it increases the relevance, currency and/or quality of information available to students.

iv) eLearning will be explored where it supports student information literacy.

4. Access

Seneca's vision includes "to lead in access to higher education" including the core strategy of researching "effective/promising strategies, including eLearning, that promote access, retention and success in Canada".[18] Seneca's Academic Plan states that we "are dedicated to being flexible without compromising our standards" (pg 5).

Objectives

Where feasible within available resources and where pedagogically appropriate:

i) Support for the learning needs of diverse students through expanded access to learning activities at a time and place that is responsive to students' needs.

ii) Broader access to course materials and learning activities that support a range of students' academic backgrounds, learning styles and abilities.

Strategies

i) Students will have choices in how they reach the learning outcomes of a course where appropriate. This provides consideration for an individual learner's particular abilities, needs and learning styles, and to individualize learning activities and content in order to facilitate student success, where feasible given available resources.

ii) eLearning supports flexibility for students wherever possible, either in timetabling, delivery mode or in access to basic or enriched learning activities.

iii) In each class students will have online access to class administrative information (e.g. term marks, announcements, due dates, assigned work where possible, faculty contact information, subject outlines, topic outlines or weekly schedule).

iv) Mechanisms will be found to ensure that faculty are aware of online material, resources and services available to themselves and their students.

5. Acquire eLearning, Technology and Information Skills

In a rapidly changing knowledge economy and society the college needs to provide students with opportunities to gain lifelong learning skills in order to continue to be effective and informed workers and citizens. This includes an understanding of the characteristics of different forms of eLearning as well as their own learning styles, technical literacy, and the ability to find and qualify information.

Objectives

i) Acquire skill in the use of a range of eLearning environments and approaches to online learning, technology, and information practices to support ongoing learning facility in a knowledge economy and society.

Strategies

i) All students will have the opportunity to experience a variety of approaches to eLearning, electronic communication and online information practices in their diploma or degree program aligned with industry expectations and needs of graduates.

6. Innovation

The College Academic Plan 2004-9 states that Seneca will "respond quickly to the changing markets and needs of our community" and "be flexible and innovative in the teaching of courses by introducing new, effective approaches" (pg 8).

Objectives

i) Encourage innovative approaches to teaching and learning.

Strategies

i) There will be both academic and technical support for faculty in the exploration, assessment and evaluation of innovative technology enhanced teaching and learning. This includes experimentation with a range of technologies, teaching practices and services with support from Seneca and the TEL Institute.

ii) Faculty will have access to academic and technical support for a broad range of teaching tools and methods.

iii) Faculty will have academic and technical support in acquiring the requisite technology and teaching skills to support innovation.

IMPLEMENTATION OF eLEARNING PLAN

This eLearning plan will be implemented through the operational plans of academic and service areas involved in the delivery and support of eLearning in the College. Available resources will be determined on an annual basis through College budgeting processes. Operational plans will respect the objectives and strategies of the eLearning plan and are created within the framework of the College Strategic, Academic and Business plans and associated resource allocation.

There will be an annual review of this eLearning plan in which performance measures will be evaluated, gaps in available resources will be identified, and resulting revisions will be recommended to enhance the success of the eLearning plan in succeeding years.

ENDNOTES

1. from **The Development of Education in Canada**, 2001, a report developed by the Council of Ministers of Education in Canada (CMEC) and the Canadian Commission for UNESCO. Available at: http://www.cmec.ca/international/unesco/ice46dev-ca.en.pdf.

2. Background information on the **Reaching Higher in Postsecondary Education** program is available at: http://www.edu.gov.on.ca/eng/document/nr/05.05/bg0517.html.

3. **Seneca College Strategic Plan 2004-9**. Available at: http://www.senecac.on.ca/cms/about/strategic.jsp. Passage is located on page 4 of this document.

4. **Seneca College Academic Plan 2004-9. An academic community: Engaging students for success.** Available at http://www.senecac.on.ca/ori/elearning/AcademicPlan.pdf. Passages quoted are located on pages 4 and 5 of this document.

5. e.g., Oblinger, D., & Oblinger, J. (2005). **Is it Age or IT: First Steps Toward Understanding the Net Generation**. In Oblinger and Oblinger (Eds.), Educating the Net Generation. Available at www.educause.edu/educatingthenetgen.

6. Kvavik, R. (2005). **Convenience, communications, and control: How students use technology**. In Oblinger and Oblinger (Eds.), Educating the Net Generation. Available at www.educause.edu/educatingthenetgen.

7. Katie King (2003) describes the deterministic views of technology in: **Women in the Web: teaching technology narratives**. Chapter in **The Informatics of Resistance**, M. Bousquet and K. Wills (Eds.). Alt-X. Available at: http://www.electronicbookreview.com/thread/technocapitalism/adoptable.

   Amy Bruckman (2002) describes an example of the co-evolution of technology and a pedagogical model of learning in: **Co-Evolution of Technological Design and Pedagogy in an Online Learning Community** in Designing Virtual Communities in the Service of Learning, S. Barab, R. Gray and J. Gray (Eds.). Cambridge University Press. Available at: http://www-static.cc.gatech.edu/~asb/papers/bruckman-co-evolution.pdf.

8. Andragogy is a theory of adult learning described by Malcolm Knowles. See:

   Knowles, M. (1984). **The Adult Learner: A Neglected Species** (3rd Ed.). Houston, TX: Gulf Publishing.

   or

   Knowles, M. (1984). **Andragogy in Action**. San Francisco: Jossey-Bass.

   He describes adults as self-directed learners who want to take responsibility for their learning so need to understand why they need to learn something. They thrive best with processes of learning that are experiential, have immediate relevance, and include a problem-solving approach.

   Some view this theory as a subset of broader learning principles.

9. Universal Instructional Design was adapted by the University of Guelph (http://www.tss.uoguelph.ca/uid/) from Universal Design principles in architecture and industrial design established by the Center for Universal Design at North Carolina State University (http://www.design.ncsu.edu/cud/). UID is based on the premise that "instructional materials and activities should be: 1) accessible, 2) flexible, 3) consistent, 4) explicit, 5) supportive, 6) minimize unnecessary physical effort, while 7) learning environments should be accessible and appropriate for multiple teaching methods." (http://www.tss.uoguelph.ca/uid/UIDBrief.pdf).

   The document quoted contains a summary of UID principles as they apply to Seneca written by the Director of Seneca's CPD department to the VicePresident Academic dated 29/11/2005.

10. The overall findings of a body of research including, for example:

    Pascarella, E. & Terenzini, P. (1991). **How College Affects Students: Findings and Insights from Twenty Years of Research**. San Francisco: Jossey-Bass Inc.

    Tinto, V. (1991). Student Attrition in higher education. In B. Clark and G. Neave (Eds.), **The encyclopedia of Higher Education**. Oxford: Pergamon Press.

11. Arthur Chickering and Zelda Gamson (1987). **Seven Principles for Good Practice in Undergraduate Education**, Racine, Wisc.: The Johnson Foundation, Inc. Available at http://www.csueastbay.edu/wasc/pdfs/End%20Note.pdf.

12. The 'network society' is a term coined by Manuel Castells to describe the way that IT has supported a shift in social organization from hierarchical to networked. In:

    Castells, M (1996). **The Information Age: Economy, Society and Culture Vol.I: The Rise of the Network Society**. Cambridge MA. Oxford UK: Blackwell Publishers.

    "dominant functions and processes in the information age are increasingly organized around networks. Networks constitute the new social morphology of our societies and the diffusion of networking logic substantially modifies the operation and outcomes in the processes of production, experience, power and culture. While the networking form of social organization has existed in other times and spaces, the new information technology paradigm provides the basis for its pervasive expansion throughout the entire social structure." (Vol.I: 469).

13. Oblinger, D., & Oblinger, J. (2005). **Is it Age or IT: First Steps Toward Understanding the Net Generation**. In Oblinger and Oblinger (Eds.), Educating the Net Generation. Available at www.educause.edu/educatingthenetgen.

14. e.g., **Collaborative Learning: A Sourcebook for Higher Education**, (1992), with A. Goodsell and M. Maher, National Center on Postsecondary Teaching, Learning, and Assessment, Pennsylvania State University.

15. Seneca College Intellectual Property Policy (2003). Available at: http://senecac.on.ca/library/Copyright/final_ip_policy_approved.doc.

16. Ontario colleges are governed by the Freedom of Information and Protection of Privacy Act of the Ontario legislature. Available at: http://www.e-laws.gov.on.ca/DBLaws/Statutes/English/90f31_e.htm.

17. The University of Central Florida has done extensive assessment of their web-enhanced courses. See **The Key to Competitiveness: Understanding the Next Generation Learner – A Guide for College and University Leaders**, sponsored by AASCU, Educause, and Microsoft. Available at http://www.aascu.org/book/default.htm.

18. **Seneca College Strategic Plan 2004-9**. Available at: http://www.senecac.on.ca/cms/about/strategic.jsp. Passage quoted is located on page 4 and Core Strategy 2.5 is located on page 12 of this document.

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