



The Faculty of Education

# **Technology Integration Plan**

(Revised 2008)

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**Technology Integration Plan**  
**Faculty of Education**  
(Revised 2008)

This document outlines an Information and Communication Technology (hereafter referred to as Technology) Integration Plan for the Faculty of Education within the context of the University of Alberta's broader strategic plan. Part 1 of the document presents a vision statement, followed by a section on goals and the relationship of these goals to the strategic initiatives of the University. As background for current priorities in the Faculty, Part 2 outlines some of the Faculty's accomplishments to date along with suggested general directions for future initiatives. Part 3 of the document presents a list of priorities for the coming two years. Initiatives completed since 1999 are listed in Appendix A.

In 2007-2008, the Council for Technology in Education (CTE) conducted research in order to develop an overview of technology use in the Faculty in terms of teaching, research and administration, and to assess the effectiveness of the Faculty's existing Technology Integration Plan. A two-phased study was designed that a) measured self-assessed attitudes, skills and opinions about technology use within the Faculty through a survey, and b) assessed technology use and needs through individual interviews with staff members. Findings from the study contributed significantly to the current version of the Faculty's Technology Integration Plan.

## **PART 1: INTRODUCTION, VISION AND GOALS**

### **INTRODUCTION**

The Technology Integration Plan of the Faculty of Education reflects the University of Alberta's mission statement as set out in *Dare To Discover: A Vision For A Great University* (2006):

*Within a vibrant and supportive learning environment, the University of Alberta discovers, disseminates, and applies new knowledge through teaching and learning, research and creative activity, community involvement, and partnerships. The University of Alberta gives a national and international voice to innovation in our province, taking a lead role in placing Canada at the global forefront.*

The Plan also embodies the goal of Discovery Learning as described in the University's Academic Plan (2007-2011), *Dare to Deliver*.

*We use the term "Discovery Learning" in its broadest philosophical sense to embrace many different approaches to active education, particularly those that exploit our research-intensive environment, increase student engagement, and reach out to our communities.*

In relation to this goal, *Dare to Deliver* states that the University will:

*Develop the technical infrastructure and expertise necessary to form virtual communities of practice, and use these to complement face-to-face learning, as well as collaborative research groups, mentorship and knowledge.*

Technology is viewed as integral to teaching and learning processes, creative activity, community involvement and partnerships, and to excellence in research. The Faculty's Technology Integration Plan recognizes the role of technology in successfully meeting the goals outlined in *Dare to Deliver*.

The Plan also promotes the priorities of the Faculty as set out in the 2006 Faculty of Education Academic Plan:

*It is important for us: a) to explore and demonstrate the kinds of pedagogical adaptations needed for teaching and learning with technology, and b) to continue to build a strong research and leadership presence in professional and academic communities to promote technology integration in instructional practice.*

The Technology Integration Plan provides for both long-term and short-term goals. This plan is an evolving document, inclusive and flexible enough to react quickly to changes in technology and yet specific enough to provide direction for immediate action. It also reflects the reality that faculty members in a professional faculty need to integrate technology into their own work, and

in turn, need to prepare their students to integrate technology into their work in post-secondary institutions, schools and libraries.

The Council for Technology in Education, established in 1999, developed the first Technology Integration Plan. The Council is responsible for monitoring the implementation of the action plan and also for the development of policies and procedures regarding technology integration into teaching and learning, research and administration within the Faculty. The Council recommends priorities in the deployment of technology resources within the Faculty and develops and coordinates efforts to obtain financial support for the integration of technology into teaching and learning, research and administration. The Council is chaired by an Associate Dean and has broad representation from departments and units across the Faculty.

## **VISION**

The Faculty of Education provides an educational environment wherein technology is an integral part of the teaching and learning process, research and administration. In this environment, technology will continue to be part of the everyday practice of how students learn, how faculty members teach, how faculty members and students conduct research and communicate with the field, and how administrative services facilitate activities within the Faculty.

Students expect their educational experiences in the Faculty will incorporate up-to-date ICT tools. As a result, it is important that instructors demonstrate their leadership in the field of technology integration and in the pedagogical adaptations demanded by the integration of information and communication technology into teaching and learning. To this end, the Faculty of Education will continue to provide professional development and leadership support in those areas where technology influences the way we teach, learn, conduct research and facilitate administration.

## **GOALS**

Goal statements in the Technology Integration Plan are organized under three major headings — teaching and learning processes, research, and administration. Optimizing the teaching and learning process through technology integration is crucial to attracting and satisfying outstanding undergraduate and graduate students as well as meeting the technology goals of Alberta Education and school districts, and the professional development needs of teachers, librarians, and other professionals. In addition, technology itself is a focus for research as researchers investigate the impact of technology on teaching and learning processes and the use of digital information and multi-media technologies in course delivery. In relation to administration, the Faculty of Education actively supports the implementation of the PeopleSoft administrative information systems at the University of Alberta and continues to develop additional programs to meet specific needs.

The significance of acquiring and maintaining adequate human and technological resources permeates the goals in each of these areas. These resources are essential in optimizing teaching and learning processes, research excellence and administrative efficiency. They are also crucial

in attracting and retaining high quality personnel in the Faculty of Education and in ensuring that the Faculty is able to demonstrate leadership and respond to the various communities it serves.

### **1. Teaching and Learning Processes**

The Faculty of Education is responsible for the education of teachers, school administrators, librarians, counselors and other professionals. Educators constantly search for more effective ways to optimize teaching and learning processes. Used appropriately, technology has the potential to increase the quality, efficiency and accessibility of our academic programs. The Faculty also has a responsibility to prepare teachers to work in Alberta schools. Alberta Education has explicitly stated that information and communication technology must be integrated into education to enhance student learning, and to increase the efficiency, flexibility and responsiveness of Alberta's lifelong learning system (*Learning and Technology Policy Framework*, 2004). The School Act requires that graduates of our program be able to demonstrate that they understand the functions of traditional and electronic teaching/learning technologies, and that they know how to use and engage students in using these technologies. Alberta Education's *Information, Communication and Technology (ICT) Program of Studies* was implemented in 2000. The *ICT Program of Studies* is not a stand-alone curriculum. Instead, technology is viewed as a tool for problem solving that is integrated across all subject areas. Unlike any other program of studies, the ICT program is to be delivered by all teachers, making technology a crucial component of pre-service teacher education and of on-going professional development programs.

In the *Report and Recommendations on Alberta's Commission on Learning* (2003), technology was identified as one of the eight key areas that require further attention. "Not just learning about technology or adding computers to schools but learning with technology and making sure a range of technologies is fully integrated and used as powerful tools for both teaching and learning" (p.40). The Commission recommended that all teachers be proficient in the integrated use of technology in their teaching, and have the necessary support in their classrooms. It also recommended that all teacher preparation programs model the appropriate application of technology and provide adequate, ongoing professional development to the field (p.110). The Faculty of Education therefore needs to provide pre-service and practicing teachers with knowledge of technology and of how to integrate technology into the curriculum.

Similarly, the School of Library and Information Studies (SLIS) must qualify for international accreditation of its Master of Library and Information Studies program from the American Library Association (ALA), and its graduates must meet criteria of technological awareness and competence. The most recent ALA accreditation review took place in 2006. The program was approved for a further seven years.

Overall, a major goal of the Faculty of Education is the integration of technology to optimize teaching and learning processes in courses offered on-campus and through alternative delivery. A further goal is to optimize learning environments in schools and to optimize the services and operations of libraries and information agencies.

- 1.1 Faculty members will make technology an integral part of teaching and learning processes in two ways: (a) through enhancing the delivery of instruction, and (b) as a tool to facilitate the development of knowledge, skills and abilities, including problem-solving and critical thinking.
- 1.2 Undergraduate and graduate students will (a) integrate technology into teaching and learning processes to facilitate the development of knowledge, skills and abilities, including problem-solving and critical thinking, and (b) will be able to effectively navigate the services of libraries and information agencies.
- 1.3 The Faculty of Education will collaborate with other Alberta institutions to develop accessible pre-service and in-service programs that are cohesive and transferable.
- 1.4 The Faculty of Education will collaborate with other Faculties and programs to provide staff development for faculty members to help them integrate instructional technologies into teaching and learning processes.
- 1.5 The Faculty of Education will collaborate with the professional community and with the University to facilitate the integration of technology into teaching and learning processes in school, library and post-secondary contexts.
- 1.6 The Faculty of Education will collaborate with other units on-campus and in the private sector to ensure that faculty members and students have access to the technical infrastructure (hardware and software) and support needed to optimize teaching and learning processes.

## **2. Research**

A second major goal of the Faculty of Education Technology Integration Plan is the integration of technology into the research process in order to conduct world-class research programs and meet the research needs of the future.

- 2.1 Faculty members and graduate students will continue to integrate technology, as appropriate, into all aspects of the research process including access to information, collection of data, analysis of data and dissemination of results.
- 2.2 The Faculty of Education will continue to explore the use of technology in education and its impact on teaching, learning and research.
- 2.3 The Faculty of Education will collaborate with other units to provide staff development to help researchers integrate technologies into their research projects.
- 2.4 The Faculty of Education will collaborate with other units to ensure that faculty members and students have access to the technical infrastructure and support necessary to conduct world-class research.

- 2.5** The Faculty of Education will collaborate with partner colleges to research the impact of alternative delivery programs that increase access to off campus sites.

### **3. Administration**

The third major goal of the Faculty of Education is to use technology as much as possible to optimize the efficiency and effectiveness of administrative services.

- 3.1** The Faculty of Education will continue to work collaboratively with the University to implement and upgrade PeopleSoft information systems for financial, student, and human resources administration.
- 3.2** The Faculty implements the eTRAC (Electronic Tracking of Research Awards and Contracts) system for financial reporting purposes and will continue to upgrade the system as necessary. In addition, Grants 2.0 (due for completion in Spring 2009) will combine pre-award activities for research grants and contracts with post-award fiscal management functionality ensure greater control over the University's allocation of research dollars and provide grant information to the whole research community.
- 3.3** The Faculty of Education took a lead role in developing and implementing the University of Alberta's Human Ethics Research Online (HERO) system to improve researcher services related to ethics certification for research projects involving human subjects.
- 3.4** The Faculty of Education will optimize communications with faculty, staff, students and stakeholders via a new Faculty website. A web administrator has been hired to re-develop the faculty web-site and convert it to the new content management system (due for completion in Fall 2010).
- 3.5** The Faculty of Education will work collaboratively with other units to ensure that support staff has access to a sound technical infrastructure, including support for administrative shadow systems, as well as professional development opportunities to optimize efficiency and effectiveness of administrative services.
- 3.6** The Faculty of Education will continue to support new initiatives that enhance the efficiency of the administrative work of the Faculty such as the implementation of a new Field Experiences student placement program that will be operative in Spring 2009.

## **PART 2: BACKGROUND TO ACTION PLAN**

### **1. Teaching and Learning Processes**

Key constructs, including accessibility of hardware and software, program focus, professional development and productivity, permeate the Faculty's efforts in reaching the teaching and learning goals delineated above. Accomplishments and general directions for the future are outlined below in relation to each goal.

#### **1.1 Use of Technology by Faculty Members**

The Faculty of Education has a long history of using technology to increase accessibility of programs. The integration of technology in education dates back to initiatives in the 1960s and includes the pioneering work of Dr. Steve Hunka with the IBM 1500 (a joint project with the Faculty of Medicine). Much of this early work with computer technology centered on the development of Computer-Assisted Instruction. Recent advances in communication and infrastructure have allowed Faculty members to use technology resources in a variety of ways such as:

- developing Internet-based alternative delivery models such as asynchronous systems (eClass), or synchronous systems (video conferencing, or peer-to-peer voice/video over Internet Protocol, e.g. *Elluminate*<sup>®</sup>)
- designing and developing blended-learning (Face-to-Face, online) environments
- teaching with technology and modeling how technology can be used when preservice teachers begin working in K-12 schools
- teaching applied information technologies using classroom technology
- producing instructional materials to enhance both teaching and learning

##### **1.1.1 Professional Development (PD)**

###### **➤ Purpose of the Technology PD Unit**

The purpose of the Technology PD unit is to assist Faculty of Education staff and graduate students in the integration of Information and Communication Technology (ICT) into teaching, research, administration, and personal productivity. The professional development model is based upon the premise of empowering staff so that they can autonomously use technology for their own purposes. To accomplish this goal the Technology PD unit:

- provides training, workshops, information sessions, one-on-one assistance and consultation to Faculty of Education staff and graduate students
- develops resources such as tutorials and lesson plans to aid in the use of technology for teaching, research, administration, and personal productivity
- researches, identifies, and recommends innovative technologies for teaching, research, administration, and personal productivity
- researches, follows, and recommends sound pedagogical practices that support meaningful technology integration in teaching

### ➤ Examples of Technology PD Services

The Technology PD unit acts as a catalyst for many technology integration initiatives in the Faculty. The nature of the support provided depends on the needs of the particular group. Some examples of support include one-on-one assistance (e.g. web page and online course development), formal workshops (e.g. Elluminate, Inspiration, FileMaker Pro), drop-in work sessions (eClass), information sessions (e.g. ePortfolio, qualitative research software), guest lectures and in-class demonstrations (e.g. SMART Board, web 2.0 tools, lego robotics), consultation and support for projects involving innovative new technologies (e.g. piloting an ePortfolio system, student response system, podcasting, or learning management system). The Technology PD unit also supports independent learning through the development of online resources for staff (e.g. text and video based tutorials). In addition, the Technology PD unit coordinates the provision of a proctored mobile lab during classes, provides short-term loans of hardware/software to instructors who are preparing for in-class technology use, coordinates mobile labs software upgrades, and investigates, purchases, and tests new hardware/software for teaching and learning.

### ➤ Mobile Lab Service of the Technology PD Unit

The Technology PD unit coordinates the Faculty's mobile labs, which has been an important enabler for many of the technology integration initiatives in the faculty. This service provides access to technology for instructional purposes that would otherwise be impossible due to limited access to highly booked AICT computer labs. A number of undergraduate and graduate students are trained by the Technology PD group and are booked on a casual basis to proctor mobile labs during class time. The most common instructional purpose for which the mobile labs are booked is to access educational web sites and conduct Internet research in class; however, mobile labs are also used for multimedia projects, science probeware, concept map activities, lego robotics projects, exams, collaborative student projects, and group presentations. Some non-instructional uses of the mobile labs includes use for: research purposes, department candidate presentations, Faculty Fair research expositions, Field Experience Associates workshops, Centre for Mathematics, Science and Technology Education (CMASTE) seminars, in-service teacher technology mentorship workshops, conference presentations, and faculty work group and committee meetings.

### ➤ eClass Support by the Technology PD Unit

Another important enabler of technology integration in the faculty is eClass which is the university's learning management system (LMS). Access to eClass is provided centrally by the Academic Information and Communication Technologies (AICT) E-Learning team. As one of the heaviest users of eClass on campus the faculty has opted to provide faculty level eClass support for instructors through the Technology PD unit. The Technology PD unit is one of the few units outside of AICT that have administrator level access to eClass, which has enabled the unit to independently troubleshoot and solve common problems which has significantly increased response times for instructors and teaching assistants. The Technology PD unit

remains in frequent communication with the AICT E-Learning team and continually provides user feedback resulting in product improvements.

The Technology PD unit is continuing to explore ways to improve eClass support for Faculty of Education staff. Currently the unit is piloting templates that were developed to streamline the course creation process and save instructors valuable time. With the campus-wide directive to minimize photocopying of student handouts, eClass sites will become increasingly important to instructors who teach face-to-face classes, and Technology PD support in this area will continue to be critical.

#### ➤ PD for Technology in Research

The Technology PD unit assists faculty with research by providing equipment, consultation, training, and information sessions for researchers. Some areas that the Technology PD unit provides one-on-one training include SPSS, NVivo, SurveyMonkey, and FileMaker Pro. In addition the Technology PD unit offers formal workshops for researchers on how to format research poster presentations so they can be printed on a plotter. In order to assist staff with qualitative research the Technology PD unit collaborates with the International Institute for Qualitative Methodology (IIQM) to offer information sessions about qualitative research software packages such as NVivo, Atlas.ti, MaxQDA, HyperResearch, and Transana.

#### ➤ PD for Technology in Administration and Productivity

Professional development opportunities related to administration and productivity take the form of workshops (i.e. file back-up, FileMaker Pro) and one-on-one consultations (i.e. website development, Content Management System assistance). The Technology PD unit also offers a one-on-one session for staff receiving new computers or software upgrades, and occasionally contributes advice, along with DTE staff, for staff purchasing equipment for office or home. The Technology PD group is using Personal Digital Assistants (PDA; e.g. Palm handheld computer) or cell phones for their personal productivity (e.g. datebook, contacts, memo writing) and are supporting graduate students and staff who are interested in purchasing a PDA or already own one.

#### ➤ Evaluation of the Technology PD Unit

An evaluation of the Technology PD Unit was conducted in January-May 2006. This evaluation measured the effectiveness of the Technology PD group and the initiatives it has undertaken. Evaluation questions focused on knowledge of the Technology PD group, use of Technology PD services, overall impressions, and suggestions for improvement.

A further study in 2008 explored staff use of technology and the supports continuing faculty members, sessional instructors and support staff require. Overall, the consensus was that continued Technology PD support is vital to successful teaching, research and administration within the Faculty and that greater communication within the Faculty regarding Technology PD services would result in an even more effective unit.

### **1.1.2 Alternative Delivery Programs**

An ongoing priority in the Faculty of Education is the development of alternative delivery programs and courses for graduate and undergraduate students. The Faculty's largest initiative is the MEd in Educational Studies program (MES), which is a cost recovery alternative delivery graduate program with several courses delivered entirely online. The program consists of ten graduate level courses (30 credits).

The Teacher-Librarian Distance Learning (TLDL) program is delivered entirely online through the Department of Elementary Education and is offered as either a Master's degree or a Diploma program.

### **1.2 Use of Technology by Students and Practicing Professionals**

It is crucial that students graduating from our programs, as well as practicing professionals, acquire knowledge of technology and of how to integrate technology into teaching and learning processes if they are to meet the needs of their employers.

The Faculty developed a Technology in Education strand of the MEd program organized across three departments (Elementary Education, Secondary Education, Educational Psychology), with contributions from Educational Policy Studies and The School of Library and Information Studies. One core course was developed and offered in Winter 2009 for the first time.

Instructors in the Faculty have collaborated with the Herbert T Coutts Library staff in requiring pre-service teachers to complete assignments that involve the use of information technology to access library resources. There is, however, further need for courses and programs focused specifically on the integration of technology into the curriculum.

The School of Library and Information Studies offers courses specifically designed to prepare professionals for the technological demands of libraries and other information agencies.

Access to library resources has been aided greatly by technology. The library provides access to over 10,000 electronic journals and e-books online. The Herbert T Coutts Library, in collaboration with the Faculty, offers workshops to students on how to use information technology effectively to access these resources. The Faculty will continue to collaborate with the Herbert T Coutts Library to develop information literacy workshops that will facilitate access to and evaluation and use of information.

### **1.3 Use of Technology through Teaching and Professional Collaborative Initiatives**

Special initiatives in teaching or in liaison with the profession require the use and support of information and communication technologies. An example of one such project is the Alberta Social Studies Teacher Education Resource Online (ASTERO).

The intention of the ASTERO project is to respond to the challenges of the new provincially mandated Alberta social studies curriculum, and also to changes in our communities and in technology. In addition, ASTERO serves the pre-service teacher education program. It allows education students to participate in and contribute to the project as well as practicing teachers. The development of frameworks and resources for this site is both collaborative and recursive, integrating theory with practice and reflecting the objective of ensuring that social studies is relevant and interesting to students and their communities.

#### **1.4 Collaboration with Other Alberta Institutions to Develop Accessible Programs**

The Faculty of Education will refine and expand its ability to bring pre-service teacher education to students living in rural and Northern communities. The Faculty has collaborative undergraduate degree completion programs with partner colleges in Grande Prairie, Medicine Hat, Red Deer, and Fort McMurray as well as alternating programs within the Aboriginal Teacher Education Program. The Faculty will move to incorporate more online instructional technology such as Elluminate to transform our collaborative programs into a blended learning program to increase accessibility.

The post-secondary strand of the MES program is meeting the professional development needs of instructors in post-secondary institutions such as NAIT, SAIT, Portage College, NorQuest College, and Northern Lakes College. A section of the K-12 Leadership and School Improvement strand of the MES program is being offered at Olds College. The additional location allowed students that began the program in 2008 to choose Olds College as the location of their two summer residencies. An Early Learning cohort is proposed at Keyano College in Fort McMurray and an Educational Administration and Leadership cohort at Red Deer College in the near future.

#### **1.5 Collaboration with Other Units that Provide Staff Development for Faculty Members**

##### **AICT E-Learning**

The Technology PD unit works closely with AICT E-Learning to ensure that Faculty of Education staff has access to quality PD in the area of online learning. For example, both units worked together to support the Learning Management System (LMS) upgrade from Vista 3 to Blackboard Vista 4 (now called eClass). To support the upgrade Technology PD and AICT E-Learning collaboratively provided Vista 4 training and developed online resources. These resources were later made available to other faculties across campus.

A new area of collaboration is the development of banners and icons for Faculty of Education eClass courses and the creation of an online course that is being jointly developed to teach instructors how to teach in an online learning environment. Overall the coordinated efforts of the Technology PD unit and AICT E-Learning have been very successful. For example, the Faculty of Education Technology Report Card 2008 indicated that 88% of teaching staff describe their experience using WebCT/Vista (now called eClass) as very positive, positive, or neutral.

### **Online Program Support Group (OPSG)**

OPSG is a grassroots community of practice which is composed of approximately 20 members from various faculties and departments across campus that support online learning and related PD activities. Members include e-learning leaders, support staff, and instructors from various faculties and centers across campus including the Faculty of Education, Faculty of Arts, Faculty of Science, Faculty of Nursing, Faculty of Extension, Faculty of Pharmacy, Faculty of Medicine and Dentistry, Center for Health Promotion Studies, AICT E-Learning, and Human Resources. OPSG provides a communication network where information, knowledge and experience gained by various groups across campus can be shared.

### **University Teaching Services (UTS)**

University Teaching Services (UTS) supports excellence in teaching and learning through helping instructors and others enhance their teaching skills by encouraging exploration of new approaches to teaching and learning; by striving to improve the academic environment for teaching and learning; and by supporting program and course development. The Faculty of Education collaborates with University Teaching Services (UTS) to offer workshops for UTS's teaching and learning effectiveness program. For example the Technology PD unit recently offered a session for instructors and graduate students about how to teach in an online environment. The Technology PD unit also advertises relevant UTS training sessions on the Faculty of Education listserv.

### **International Institute of Qualitative Methodology (IIQM)**

The International Institute for Qualitative Methodology (IIQM) is an interdisciplinary institute whose primary goal is to facilitate the development of qualitative research methods across a wide variety of academic disciplines. The Faculty of Education works closely with the International Institute for Qualitative Methodology (IIQM) and has collaboratively offered information sessions about software that is available for collecting, managing, and analyzing and qualitative data (e.g. NVivo, Atlas.ti, MaxQDA, HyperResearch, Transana).

### **Edmonton Regional Learning Consortium (ERLC)**

The Edmonton Regional Learning Consortium supports regional professional development needs for anyone who influences student learning (e.g. teachers, support staff, administrators, university professors, etc.). The Faculty of Education and the Edmonton Regional Learning Consortium collaboratively offer technology related training sessions for teachers and Faculty of Education staff. For example the Technology PD unit and Edmonton Regional Learning Consortium recently offered a full day training session on web 2.0 tools for teachers.

## **1.6 Leadership and Collaboration with the Professional Community and University**

### **The Teaching, Learning and Technology (TLAT) Council**

The Faculty of Education has a staff member on the Teaching, Learning and Technology (TLAT) Council. This council is concerned with the development of policies, plans and best practices related to teaching, learning and technology. It assists in identifying instructional strategies and technologies to be studied, practiced and evaluated through special projects undertaken by Faculties and recommends long-term teaching, learning and technology strategies to University leaders.

### **School Technology Advisory Council (STAC)**

The Faculty of Education has representation on the Alberta Education's School Technology Advisory Council (STAC). This council considers key issues and makes educational recommendations to the Ministry on school technology matters from a pedagogical perspective.

### **The Alberta Library (TAL)**

The Herbert T Coumts Library works closely with Alberta Education and TAL (The Alberta Library) to facilitate access to electronic resources that are licensed for the use of Alberta schools. The Herbert T Coumts Library acts as site administrator for Alberta Education's Online Reference Centre, which provides online resources to students in Alberta. Faculty of Education students and faculty have access to these online resources.

### **Educational Technology Council of the Alberta Teachers' Association (ETCATA)**

The Educational Technology Council of the Alberta Teachers' Association (ETCATA) supports teachers who integrate technology into their teaching practices and provides related professional development opportunities. The Faculty of Education has a staff member which serves as the post-secondary representative on the ETCATA. Serving on this council not only keeps the faculty in touch with teachers and administrators in the field, but also serves to keep faculty and pre-service teachers abreast of technology related professional development opportunities outside the university.

### **Faculty- Based Information and Communication Steering Committee**

The Faculty- Based Information and Communication Steering Committee provides a forum for regular discussion and resolution of ICT issues which affect the faculty and AICT in the areas of teaching, learning, research and service. Currently the Faculty of Education has several representatives that serve on this committee.

## **1.7 Access to Technical Infrastructure and Support for Teaching and Learning**

### **1.7.1 Academic Information and Communication Technologies**

The Faculty values and appreciates the services provided to it by the centrally funded AICT. The Faculty subscribes to Internet access and various other services generated by this service organization. The Faculty is the co-sponsor of public computer labs with AICT, permitting student and staff access to both Macintosh and Windows computers in laboratory settings. Mail services provided by AICT allow the faculty and staff electronic mail communication possibilities. The Faculty relies on a central list management service to manage electronic mailing lists (MailMan). Spam and virus services insure up to date protection to our faculty members. Our financial, human resources and student systems are accommodated by the use of a central service (PeopleSoft). The Faculty uses web development tools (eClass), which are supported by AICT for the delivery of courses. Without the central software licensing arrangements provided by AICT, software would be a greater expense to the campus constituents. AICT also supports the Faculty's telephone system. The Faculty acknowledges and supports the central computing services on campus.

### **1.7.2 Education Computer Laboratories**

The Faculty sponsors four public computer laboratories that provide approximately 100 units. Labs of this nature are positioned throughout campus and are funded from capital funding centrally allocated by the University and are maintained through the AICT operating budget. Faculty lab sponsors, such as the Faculty of Education, contribute monies for specialized lab needs as well as provide space for the location of the labs and also help to manage the facility. By way of the Technology Enhanced Learning Spaces Advisory Committee (TELSAC) a renewal schedule is followed in order to update both hardware and software on a regular basis.

The Faculty also maintains and operates a set of its own computer labs. The departments, clinics, and Office of the Dean fund these labs. Some are permanently established in rooms (approximately 90 units) while others are mobile in nature (approximately 120 units). Workstations and laptops accessed in these ways provide our undergraduate and graduate students with equipment for productivity and professional development in the use of technology for teaching and learning. A renewal process has been established to maintain currency of the computing equipment.

### **1.7.3 Division of Technology in Education**

A major priority of the Division of Technology in Education (DTE) is technical support for the instructional program in the Faculty. The division maintains and distributes equipment, manages four microcomputer labs, assists with graphics and video production, provides and maintains faculty networking, provides equipment for videoconferencing, supports web services for the distance delivery of courses, and provides software to support courses.

The Division has a number of units that contribute to this instructional program support: Instructional Resource Services, Equipment Maintenance and Design Services, Computing and Network Services, as well as Administrative Computing Management Services.

#### ➤ Instructional Resource Services

In support of instructional needs within the Faculty of Education, the Instructional Resource Services (IRS) unit responds to requests for all audiovisual, television and computer equipment, and for learning resources contained in the Faculty of Education's professional collection. Service is provided to all members of the teaching staff and to Education students for equipment use in courses offered by the Faculty of Education. These services are also offered to University staff making use of the Education Centre for their teaching.

### ➤ Equipment Maintenance and Design Services

The Maintenance and Design section of the Division of Technology in Education is responsible for receiving, testing, installing, and maintaining all audiovisual, television, computer equipment, and related network wiring and hardware resources listed on the Faculty of Education's equipment inventory.

### ➤ Network Services

DTE provides assistance to departments in the installation and operation of network connections. Upon request, DTE staff will perform a needs analysis to determine what level of networking would be appropriate for the department, estimate costs, install wiring, and configure the system. DTE staff will also meet with the academic and support staff to address data security concerns and provide appropriate solutions.

A system analyst is assigned to provide "on call" support for the network infrastructure to ensure that "mission critical" systems remain online outside of regular office hours. If problems are encountered with elements of the system, the analyst is paged through an automated system and the analyst then determines the appropriate level of response.

### ➤ Computing Services

Academic and support staff members in the Faculty are provided with ongoing technical support. The desktop support team assists staff when technical problems are encountered in their computing environment. This technical support involves meeting with the user to analyze the problem and test the equipment to determine whether the problem involves hardware, software or the computing network.

### ➤ Administrative Computing Management Services

The Division of Technology in Education provides design and management support for web-based database systems. Support is provided for databases that have general utility for the Faculty as a whole. Support in this context includes design, programming, operation, hosting and backup and recovery support.

While the expertise of the Division may be drawn upon, generally the Division does not support database systems developed within Departments or Centres or for databases that have been constructed for research projects.

### ➤ Video Conferencing Services

The Faculty maintains two video conferencing suites. DTE attends to the technical operation of these facilities which are available for synchronous connectivity. The facilities can be booked for various activities including oral exams, meetings, conferences, supervisions, etc. The video conferencing equipment has been modularized to increase flexibility in supporting larger gatherings than permitted in the video conferencing suites themselves. The suites provide an

advanced educational research environment providing video conferencing capabilities for research collaborations on campus. The suites utilize both high resolution video and audio (MPEG2,H323) using internet conferencing protocols, enabling video conferencing collaborations to most post-secondary institutions around the globe. DTE designed, installed, and now maintains the facility, which is open to all faculty members on campus for research and educational purposes.

#### ➤ Video Editing Services

The Faculty supports video editing by way of a suite equipped with the latest technology. The suite can be booked by graduate students and staff. The video editing process has been duplicated in the Instructional Resources Services unit in order to provide support to undergraduate students in the Faculty.

### **1.7.4 Herbert T Coutts Library**

The Herbert T Coutts Library supports its own multimedia lab in partnership with AICT. Faculty and students have access to the lab for teaching and learning. Software and multimedia resources are available in the lab for hands-on usage so that faculty and students have exposure to a variety of state-of-the-art electronic resources. Faculty will continue to utilize the lab for teaching and will work with the library to provide recommendations for the lab's collection of resources and software. Wireless connection is also available in the lab and in the library.

### **1.7.5 Community Building**

With the upgrade of the Mobile Computer Labs, the Faculty of Education has laptop computers available annually for reallocation. These laptops are available for projects that put them in the hands of students (school or university) for a whole term or a whole year. The Faculty cannot provide funds for upgrades or major maintenance, but the machines can be used as long as they last. The Council for Technology in Education requests proposals from academic staff members in regard to the disposition of these laptops each spring. A one-page proposal must be submitted for adjudication by a sub-committee of the Council. Projects should be designed to improve teaching and learning in specific situations. They do not have to be formal 'research' studies. It is hoped the availability of the laptops will facilitate the Faculty's academic presence in Alberta schools.

## **2. Research**

Two distinct interests may be identified regarding Technology Integration and Research in the Faculty of Education. The first of these concerns is *researching the phenomenon of technology use and integration* in a range of settings, for example, studying the effectiveness of iClickers in the classroom. Included in this category is the exploration and integration of new technologies, for example, implementing ePortfolios for pre-service teachers, or the use of a specialized assessment tool like IMPACT (Immediate Post-Concussion Assessment and Cognitive Testing). The second interest involves *using specialized technology tools* to assist in the research process,

for example, using transcription software to transcribe interviews, or creating a survey that research participants can access online. These two interests may sometimes overlap, for example, using Noldus Observer software to record adolescent videogame use at home.

## **2.1 Researching the Phenomenon of Technology Use and Integration**

The *Support for Technology Advancement in Research on Teaching* (START) grant was founded in 2007 and was designed to fund the costs associated with conducting technology integration research projects in the Faculty of Education's programs. The grant is open to application by all Faculty of Education continuing tenure-track faculty members. START applications are adjudicated by a committee made up of three members of the Council for Technology in Education and the Chair of the Council.

Three projects currently funded under this initiative include:

- **Developing, implementing and evaluating a wiki-based collaborative tool in an online graduate course** (M. Carbonaro et al)  
The purpose of this project is to evaluate the effectiveness of a wiki-based collaborative learning tool toward increasing interactivity and collaboration in a graduate level online course.
- **Graduate Students' Experience with Wimba Voice Technology** (M. Doherty et al)  
Using Content Analysis of online discussions, this study aims to understand graduate students' perceptions of community and satisfaction with Wimba Voice technology.
- **How Can the Use of Interactive Whiteboard in Pre-service Education Change the Nature of Teaching Elementary Language Arts?** (C. Leroy et al)

A project previously funded includes:

- **Developing and evaluating improvements to an on-line graduate course using psychological, research-based design principles for e-learning** (P. Boechler)

The following list is a sample of current faculty projects researching the use of technologies in a variety of educational, therapeutic, and community settings:

- **Video game violence and interactivity as correlates of aggression and cognitive performance in young adults** (P. Boechler and M. Mrazik)  
This study looks at the short-term effects of different levels of violence and different degrees of interactivity within the video games on reasoning, memory and visual search performance. One of the objectives of the study is to investigate if aggression instigated by violent video games mediates temporary changes in cognitive abilities. Preliminary results show that violent games impact cognitive reasoning even after 30 minutes of play.
- **Virtual Reality and Stroke Patient Therapy** (P. Boechler)  
The Department of Educational Psychology is engaged in a study at the Glenrose Rehabilitation Hospital on practice effects in the therapeutic use of Virtual Reality

applications for stroke patients. The study is designed to assess the degree of improvement in performance when using the virtual reality equipment that can be attributed to initial increased familiarity with the equipment rather than true therapeutic effects.

➤ **Health Sciences project** (M. Carbonaro)

The Faculty of Education in collaboration with the Health Sciences Council and Inter-professional Initiative is working to develop new forms of blended learning that combine face-to-face, asynchronous and synchronous delivery methods. Higher education institutions and health care delivery systems are adapting technology in order to manage information and to communicate effectively. The purpose of this research is to determine whether inter-professional team process skills that are traditionally taught in a small group face-to-face setting could also be taught in a blended learning setting. An inter-professional development course designed to teach approximately 750 health science students process skills was redesigned from a face-to-face class to a blended learning course utilizing synchronous and asynchronous technology. Four teams in the blended learning course and four comparison teams in the face-to-face class were evaluated on two main measures: 1) demographic information and computer experience and 2) inter-professional team attitudes, knowledge, classroom observation and student perceptions.

➤ **Art Making as Research Process** (M. Cooley et al)

Staff and students in the Department of Elementary Education use the following technologies in their art making and in studying the art making processes of others: digital photography, photo collage, digital printmaking, digital portfolios (*Digital Remote Capture, PowerPoint*), *Canon Remote Capture* software in conjunction with digital photography, digital video production (video short subjects and documentary using *iMovie, Final Cut Pro, Garage Band etc.*), journal design and layout using *Adobe Creative Suite - PhotoShop, InDesign, Illustrator*, *Epson* slide scanner, and colour printer for proofing, image resource online research using *ArtStore, Cybermuse (NGC)* and others. Digital work is disseminated through on-line journals such as *Curriculum Insights*.

➤ **The Pedagogy of Online Relation** (M. van Manen)

To write online is to think and to stay in touch through language, in language.

Literally, the text on the computer screen is the medium out of which the relation with others, self and knowledge emerges. This project investigates phenomenologically how in online seminars nearness or proximity is accomplished through the “touch” of language and how the evanescence of relational and temporal proximity is the ethics of pedagogical sensitivity, influence, and affectivity.

➤ **Tracing Qualitative Changes in Teacher Practices in Light of ePearl** (C. Adams)

This study investigates phenomenologically how “using ePearl” (an ePortfolio system) in the classroom contributes to reshaping teachers’ daily practices and the way they conceptualize their professional work. In particular, are these new practices and ways of knowing consistent with the research that informed the design and development of ePearl (e.g., Assessment for Learning, self-regulated learning)? Are there unexpected—positive and/or negative—side effects evident? Implications will be formulated regarding teacher practice and ePortfolio design, to be communicated to the ePearl development team.

- **Participatory design for a visually-based drug information interface: Web usability in the context of consumers' health information behaviours** (L. Givens with Humanities Computing)

This study examines web usability in the design process for visually-based search interfaces for drug information, using a qualitative, participatory design approach. The study will inform the implementation of a web-enabled drug database designed with a visual search interface; task-based usability testing sessions (using a verbal analysis protocol) will refine the design of the software prior to launch.

- **Citation-based All-author Knowledge Network Analysis** (D. Zhao)

This research project aims to significantly improve our understanding of, and confidence in, a main method available today for studying knowledge networks: citation-based author network analysis. This approach looks at knowledge networks of authors inter-connected via their publications and the references they contain, using citation-based measures to estimate relatedness between authors. Part of this research is to design and test effective methods for building full datasets that enable these new measures, and to design, develop and test software programs for data collection and analysis that are necessary for social scientists to utilize these new methods in their research.

- **Computer-assisted grapheme-phoneme instruction (Rauno Parrila)**

This study examines the effectiveness of a computerized intervention program called GraphoGame, for grade 1 and 2 dyslexic children. The intent is to train children on grapheme-phoneme correspondences, which are identified as one possible bottleneck for reading development. The emphasis is on younger children as recent research indicates that children should be helped before they face the risk of failing to learn to read in a comparable way to their classmates at school. If the child is helped early enough, the unwanted psychological consequences of a child having to rely on their own learning skills can be minimized.

- **Student Response System Research Project (Tracy Johnson and Amy Meckelborg)**

In order to address the problem of students' inability to maintain attention during large lecture classes many universities have turned to the Student Response System (SRS) to facilitate student interaction and engagement. This study examines whether students in a large education lecture course perceive the use of a Student Response System (SRS) to increase engagement, attention, and participation. The results of this study will serve to inform the implementation of Student Response Systems in the Faculty of Education.

- **ATEP Technology Initiative (M. Carbonaro, K. Peacock, Y. Norton, F. Snart)**

This initiative seeks to enhance the development of the Faculty of Education's Aboriginal Teacher Education Program (ATEP) through technology integration, in two ways: 1) Developing innovative leadership in the area of school and classroom level technology integration to promote student problem-solving, critical thinking, and to support learners with special needs; and 2) Incorporate online instructional technology to transform ATEP into a blended learning program to increase accessibility.

## **2.2 The Use of Technology Tools to assist the Research Process**

The outstanding quality of research conducted in the Faculty of Education is recognized both within and outside the university community. Technology has been, and will continue to be, crucial to the Faculty's ability to maintain and increase the quality of its research. In the past six years, the Faculty has spent over one million dollars on technology for research purposes. Those funds come from a variety of external sources, but in particular from the Special Capital Equipment Fund.

A variety of generic tools are employed for qualitative and quantitative research in the Faculty. Some of these tools include: SPSS, excel, Noldus Observer, NVivo, SurveyMonkey, FileMaker Pro, Atlas.ti, MaxQDA, HyperResearch, and Transana. In addition, the faculty donates old computer equipment for research purposes. For example, the mobile lap renewal process gives faculty the opportunity to make a proposal to use the older laptops in schools for research purposes.

## **2.3 Access to Technical Infrastructure and Support for Research**

Although the primary focus of the technical infrastructure and support provided by DTE is instructional programs, DTE support is available for faculty members and graduate students to conduct research. New faculty members are provided with computers and DTE provides technical support for these computers as well as all other computing and video equipment purchased by faculty members through University or research funds. The provision of technical infrastructure and support has become increasingly critical as the Faculty works to recruit and retain new faculty members.

## **3. Administration**

### **3.1 PeopleSoft**

The Faculty will continue to utilize PeopleSoft administrative systems as they are rolled out to the University. The existing PeopleSoft Human Capital Management (formerly PISCES) and Campus Solutions (formerly OASIS), and redesigned BearTracks have been upgraded from release 8.0 to 9.0 in November 2008. This is the first formal upgrade since 2003.

### **3.2 Optimizing Administrative Services**

The Faculty of Education has a history of using technology to optimize administrative services. In addition to the utilization of the University PeopleSoft administrative tools, the faculty has developed its own tools and shadow systems to assist administrative staff in the efficient day-to-day operations of the faculty. For example, many forms have been placed on the Faculty of Education web site including those for academic appointments, and research and award applications. The Faculty has developed a web-based annual report system for use by academic staff and allows administrators to access and analyze data.

### **3.3 Access to Technical Infrastructure, Support and Staff Development for Administration**

One of the goals of DTE involves the coordination of distributed administrative computing services. DTE provides and maintains the central file services including storage and access to a range of file servers. This facilitates administrative operations and provides backup for pertinent files.

In order to host a number of educational journals, web services have been created and maintained by DTE. These usually require database access via a web interface.

Support staff members attend courses offered by AICT, the Technology Training Centre (TTC), Administrative Information Systems (AIS), and other units to continuously upgrade their knowledge and ability to use new software programs.

### **3.4 Faculty Computer Renewal Program**

The Dean's Office has established the Faculty of Education's Computer Renewal Program to sustain a process for continuing academic staff to help keep computer equipment used in their offices current. Over 100 faculty members have so far taken advantage of the opportunity to replace older office computers with current models. All equipment purchased under this plan must be pre-approved and purchased by DTE or it is not eligible for the reimbursement of \$1500 of the purchase price.

### **PART 3: PRIORITIES FOR 2009 - 2011**

The following initiatives outlined in this section will continue on an ongoing basis after initial implementation.

#### **Strategic Actions**

#### **Target Date**

##### **1. Policy Development**

Recognizing the critical role of information technology in all aspects of work in the Faculty of Education, there is a need for continuous revision of the Faculty's Technology Integration Plan.

Ongoing

##### **2. Access and Efficiency**

This section presents program initiatives followed by those initiatives that involve infrastructure. The Faculty believes that program needs should drive technology rather than technology driving programs.

##### **2.1 Acquisition of Digital classrooms and New Equipment**

The Faculty of Education must prepare teachers, librarians and other professionals to work in a 21st century context. To do this we need 21st century classrooms designed to facilitate collaborative, interactive, flexible styles of teaching. Working to provide such digital classrooms is a high priority.

- a. Develop funding strategies for the acquisition of digital classrooms
- b. Make equipment available in a resource centre for students and Faculty

Ongoing

Ongoing

##### **2.2 Course and Program Development and Delivery**

The primary focus of this part of the plan is to continue the development and delivery of programming for working professionals. A major thrust over the next 3 years will be to extend the range of courses available to working professionals.

- a. Develop alternative delivery components of the MEd in Educational Studies (MES)
- b. Continue to develop courses in the MEd in Technology in Education
- c. Recruit students into the MEd in Technology in Education

Ongoing

2010

Ongoing

### **2.3. Education Computer Lab Facilities**

The Faculty of Education will continue to collaborate with AICT to upgrade existing public computing labs (N 3-110, N 3-108, S 155A, and Ed S 155B) at their respective renewal times.

Ongoing

The Faculty has most recently established 3-year renewal cycles for its 4 mobile, mathematics, language, Career and Technology Studies, School of Library and Information Studies, and Instructional Resource Services computer labs. This ensures that computer renewal reaches across the labs that are directly involved in the teaching and learning of undergraduate and graduate students.

Ongoing

### **2.4 Campus Network Infrastructure**

The existence and support of a high-speed campus network is critical to optimizing teaching and learning, research and administrative services.

Update Faculty infrastructure under guidance of AICT to provide the best possible environment for the learning network, research and administration within the Education Centre.

### **2.5 Access**

- a. Continue to apply for infrastructure renewal funding from government and corporate sources.

Ongoing

The Council for Technology in Education conducted an audit of technology use in the Faculty in 2008. Findings will be reviewed by Council for Technology in Education with a view to informing the most effective use of technological resources and training opportunities across the Faculty.

## **3. Maximize Quality of Teaching and Learning**

### **3.1 Provide In-service Opportunities for Faculty Members**

Further resources are needed to help faculty members effectively integrate technology into the teaching and learning process. The professional development program within the Faculty addresses much of this need.

- a. Provide support and training in the professional development program to faculty members to help them integrate technology into the teaching and learning process.

Ongoing

### 3.2 Maximize ICT Proficiency of Students

The Faculty of Education is required to prepare students to teach the mandated outcome in the ICT program of studies and to function in contemporary classrooms.

- a. Continue to require all pre-service teachers to complete one 3-credit course in computer technology that includes a component in using technology to enhance higher thinking skills (e.g., EDIT 202).
- b. Continue to require pre-service teachers to complete a minimum of one activity/assignment involving use of technology to access library resources. Ongoing - Integrated into EDIT 202

### 3.3 Integration of Technology into Curriculum in Alberta Schools

#### 3.3.1 Integration by Faculty Members

Alberta Education's *Information Communication Technology Program of Studies* must be integrated into all curriculum and instruction courses.

- a. Provide professional development support for all faculty members. Ongoing
- b. Provide an orientation program for all instructors to introduce them to technology available in the Faculty of Education to enhance instruction. Ongoing

## 4. Research

### 4.1 Integration of Technology by Faculty Members

- a. Provide support and training to faculty members to help them integrate technology into the research process. Ongoing
- b. Provide support and training to faculty members who are researching the use and integration of technology. Ongoing

### 4.2 Integration of Technology by Graduate Students

- a. Ensure that information is included in existing qualitative and quantitative research methods courses on integration of technology into all stages in the research process and consideration of technology as a research topic. Ongoing

### **4.3 Sharing Research via Podcasting**

- a. The Faculty supports video podcasts of the Curriculum of Pedagogy Institute (CPIIn) visiting speaker series. Ongoing

### **5. Administration**

- 5.1 Provide technical and functional support for staff members using the PeopleSoft Administration Systems. Ongoing
- 5.2 Develop integrated data bases for tracking information in the Faculty. Ongoing
  - a. Develop a data base for student awards and scholarships, and Faculty awards. Ongoing
  - b. Integrate appropriate databases in the Faculty with PeopleSoft and the Faculty Annual Report). Ongoing
- 5.3 Develop a web-based interactive program to facilitate communication between schools and the University for matching practicum students with cooperating teachers. Spring 2009
- 5.4 Hire a web administrator to rebuild the Faculty website in preparation for the transition to the new content Management system. Fall 2008
- 5.5 Ensure that all activity involving technology in the Faculty is compliant with the Freedom of Information and Protection of Privacy Act. Ongoing

## APPENDIX A

### Initiatives completed since 1999

The following initiatives have been successfully completed since 1999. They are organized in relation to the categories of actions presented in the Technology Integration Plan for Teaching and Learning.

#### 1.1 Created a Council for Technology in Education

#### 2.1 Course and Program Development and Delivery

- a. Teacher-Librarianship by Distance Learning (TLDL) offers Diploma and MEd programs online through eClass.

The following courses have been offered online:

EDES 541	School Library Collection Development
EDES 542	Resource-Based Instruction
EDES 545	Information Technologies for Learning
EDES 546	School Library Information Materials
EDES 547	Organization of School Library Materials
EDEL 595	Leadership in Information Literacy
LIS 540:	Management of School Media Centres
LIS 405/516	Canadian Literature for Young People in Schools and Libraries
LIS 404/518	Comic Books and Graphic Novels in School and Public Libraries

Currently, more than 60 students from across Canada and from several countries around the world are in the TL-DL programs. Interest in the programs continues to grow.

- b. Completed development of alternative delivery components of the MEd program in Educational Studies (MES)

Leadership in School Improvement:

EDU 503	Foundations of Curriculum
EDU 510	Fundamentals of Educational Research
EDU 515	Engaging in Educational Improvement
EDU 900	Research Project

Leadership in Technology:

EDU 520	Fluency with Information Technology
EDU 521	Information Technology in Education
EDU 522	Technology Integration into Science/Math
EDU 523	Technology Integration into Humanities and Social Sciences

EDU 526 Philosophical and Ethical Issues in Technology Integration

c. Development and implementation of a MEd in Technology in education

The program is cross-departmental and draws mainly on existing courses.

EDPY 597 Theory Practice in Educational Technology

d. Individual on-line courses offered through departments (note: these courses are not necessarily offered on a regular basis):

Department of Elementary Education

EDEL 567 Introduction to Educational Research

Department of Educational Psychology

EDIT 202 Technology Tools for Teachers

EDIT 435 The Internet: Communicating, Accessing and Providing Information

EDIT 488 Educational Technology and Communication

EDIT 489 Virtual Schools: Designing and Teaching Lessons On-Line

EDIT 535 The Internet: Communicating, Accessing and Providing Information

EDIT 572 Topics in Computer-Based Instruction

EDIT 573 Designing Technology Based Instruction

Department of Educational Policy Studies:

EDAE 390 Introduction to Adult Curriculum and Instruction

EDAE 404 Distance Education

EDAE 445 Trends in Adult Education

EDAE 460 Facilitating Adult Learning

EDAE 461 Developing Programs for Adults

EDAE 485 Evaluating Adult Learning

EDPS 401 Developing a Philosophy of Education

EDPS 410 Ethics and Law in Teaching

EDFX 475 Project in Adult & Postsecondary Education (now EDAE 475)

EDPS 501 Micropolitics in Education

EDPS 501 Policy Reform

EDPS 511 Evolving Concepts in Educational Administration and Leadership

EDPS 512 Administration and Leadership Process in Education

EDPS 531 Supervision of Educational Personnel

EDPS 571 The Organization of Postsecondary Education

EDPS 594 Group Processes in Educational Leadership

School of Library and Information Studies:

LIS 540 Management of School Media Centres

LIS 405/516 Canadian Literature for Young People in Schools and Libraries

LIS 404/518 Comic Books and Graphic Novels in School and Public Libraries  
LIS 589 Feminism and Library and Information Studies

e. Blended courses offered by the Faculty (not necessarily offered on a regular basis):

EDSE 611 Phenomenological Research and Writing – the course has a specialized website (<http://www.phenomenologyonline.com>) designed to be used as a key instructional resource  
LIS 403 Survey of Materials for Young Adults  
EDPY 501 Introduction to Methods of Educational Research

## **2.2 Campus Network Infrastructure**

The existence and support of a high-speed campus network is critical to optimizing teaching and learning, research, and administrative services.

**2.2.1** Updated Faculty infrastructure under guidance of AICT to provide the best possible environment for the learning network, research and administration within the Education centre.

- a. Provided Ethernet connections for all administrative offices and faculty members
- b. Provided Ethernet/wireless connections for all graduate students in the Education Centre
- c. Installed one Ethernet connection for all classrooms in the Education Centre
- d. Installed Ethernet connections/wireless zones in each lab and other appropriate locations in the Education Centre for students to use with their own laptops
- e. The Faculty of Education participated in the University Wireless Service (UWS) wireless project supported financially by the Office of the Vice-Provost Information Technology. This wireless coverage was implemented in the Education Centre North Building in phase 1 and will have Education Centre South and Rutherford Library South in the 2009 phasing.

**2.2.2** Implemented an authentication system for everyone in labs, classrooms and public spaces connecting to the network in the Education Centre

**2.2.3** Developed and implemented a disaster recovery plan for the Faculty

- a. Developed and implemented a back-up system for administration and faculty storage of information
- b. Obtained a service for backup and storage

**2.2.4** Set up a system to search for new technologies to support teaching and learning,

research and administration

### **2.3 Access**

- a. Initiated negotiations with Advanced Education to obtain comparable funding for infrastructure to that provided by Alberta Education for implementation of the Program of Studies in ICT
- b. Collaborated with AICT in development of hardware and software standards for computing in the Faculty that are consistent with standards set by Alberta Education
- c. Collaborated with the University to solicit funds for an endowment to provide “evergreen” personal computers to all full-time faculty members
- d. Collaborated with Academic Technologies for Learning to establish a fund to support acquisition of software and other learning materials
- e. Continued negotiations with appropriate vendors to conduct a pilot study with a cohort of pre-service teachers using laptop computers
- f. Conducted a pilot study with two cohorts of pre-service teachers (one at the elementary and the other at the secondary level) using laptop computers for course delivery in two or three courses

### **3. Maximize Quality of Teaching and Learning**

#### **3.1 Provide In-service Opportunities for Faculty Members**

- a. Obtained LEE 4/5 funding to establish a professional development program in the faculty
- b. Designed and developed a model for the professional development program
- c. Provided support and training in the professional development program to faculty members to help them integrate technology into the teaching and learning process (ongoing)
- d. Encouraged faculty members, where appropriate, to provide professional development plans related to integration of technology into the teaching and learning process as a component of their annual reports
- e. Developed criteria for recognition and reward of efforts directed toward integration of technology into the teaching and learning process (annual report form)

- f. Sponsored a ten-day visit by Dr Victoria Carrington of the Hawke Research Institute, University of South Australia

### **3.2 Maximize Computer Proficiency of Students**

- a. Completed redevelopment of EDIT 202 to model use of technology and to develop knowledge, skills and abilities for using technology in schools
- b. Redeveloped EDEL 300 to model use of technology and enhance delivery to pre-service teachers
- c. Continued to require pre-service teachers to complete a minimum of one activity/assignment involving use of technology to access library resources
- d. Developed a Camtasia presentation, along with discussion questions and an instructor's guide, regarding the appropriate use of Facebook for pre-professionals

### **3.3 Integration of Technology into Curriculum in Alberta Schools**

- a. Provided workshops and alternate delivery courses for practicing teachers to help them integrate technology into the curriculum

#### **3.3.1 Integration by Faculty Members**

- a. Instructors from three curriculum areas received professional development
- b. Provided an orientation program for all instructors to introduce them to technology available in the Faculty of Education to enhance instruction
- c. Collaborated with the Herbert T Coutts Library to provide an orientation workshop for all instructors on using information technology to effectively access library resources

#### **3.3.2 Integration by Students**

- a. Required pre-service teachers to complete a minimum of one activity and/or assignment involving use of technology in three subject areas in the elementary curriculum and in their minor and major subject areas in the secondary curriculum
- b. Required pre-service teachers to complete assignments in senior courses that reflect growth in technology skills
- c. Provided workshops and alternate delivery courses for practicing teachers to help them integrate technology into the curriculum

## **4. Research**

### **4.1 Integration of Technology by Faculty Members**

- a. Collaborate with the International Institute for Qualitative Methodologies to provide support and training to faculty members to help them integrate technology into the research process

### **4.2 Integration of Technology by Graduate Students**

- a. Ensured that information is included in existing qualitative and quantitative research methods courses on integration of technology into all stages in the research process
- b. Collaborated with the Herbert T Coutts Library to provide workshops to help graduate students use information technology and tools for research
- c. Collaborated with the Herbert T Coutts Library to acquire professional research journals and other library resources on technology integration

### **4.3 Sharing Research via Podcasting**

- a. The faculty supports video podcasts of the Curriculum and Pedagogy Institute (CPIIn) visiting speaker series.
- b. SLIS provides audio podcasts of diverse presentations

## **5. Administration**

5.1 Continued to provide technical and functional support for staff members using PeopleSoft Administration Systems

5.2 Continued to develop integrated data bases for tracking information in the faculty

- a. Continue to develop and update the annual report form as a relational data base.
- b. Continued to develop a Field Experience placement database

5.3 Hired a web administrator to redevelop the Faculty of Education website

5.4 Continued to ensure that all activity involving technology in the Faculty is compliant with the Freedom of Information and Protection of Privacy Act