

# SIMON FRASER UNIVERSITY

S.05-122

## Senate Committee on University Priorities Memorandum

TO: Senate

FROM: John Waterhouse  
Chair, SCUP  
Vice President, Academic

RE: Proposal for M.Ed, M.A. and Ph.D. in  
Educational Technology and  
Learning Design (SCUP 05-060)

DATE: November 16, 2005

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At its October 19, 2005 meeting SCUP reviewed and approved the proposal from the Faculty of Education for a Masters of Education, a Masters of Arts, and a Doctor of Philosophy in Educational Technology and Learning Design.

### Motion

That Senate approve and recommend to the Board of Governors, the proposal for the M.Ed, M.A. and Ph.D. in Educational Technology and Learning Design in the Faculty of Education, including the following new courses: EDUC 890, 891, 892, 893, 894, 930, 931, 932

encl.

c: T. O'Shea  
K. O'Neill  
C. Amundsen

SIMON FRASER UNIVERSITY  
DEAN OF GRADUATE STUDIES  
MEMORANDUM

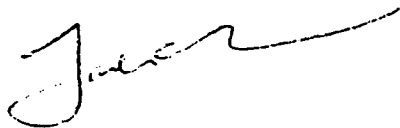
TO: Senate Committee on University Priorities  
FROM: Jonathan Driver, Dean of Graduate Studies  
Chair, Senate Graduate Studies Committee  
SUBJECT: Faculty of Education: New program proposal (GS 2005.36)  
M.Ed., M.A., Ph.D. in Educational Technology & Learning Design  
DATE: September 29, 2005  
cc: Tom O'Shea, EDUC

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At its meeting of 12<sup>th</sup> September 2005 Senate Graduate Studies Committee approved a new program proposal - M.Ed., M.A., Ph.D. programs in Educational Technology & Learning Design in the Faculty of Education, with the understanding that the existing master's program in Curriculum and Instruction with a specialization in education and technology is replaced by the new master's program. I request SCUP recommend approval of the new programs to Senate.

The program includes proposals for eight new graduate courses:

- EDUC 890-4 Educational Media as Foundations of Curriculum
- EDUC 891-4 Learning Design in Technology-Mediated Environments
- EDUC 892-4 Cognitive Tools and Multimedia Learning
- EDUC 893-4 Organizational & Social Aspects of Learning Technology Design
- EDUC 894-4 Methods for Research and Inquiry in Learning Technologies
- EDUC 930-4 Considering the Future of Learning Communities
- EDUC 931-4 Group & Organizational Learning Technologies
- EDUC 932-4 Learner-Centred Design



## PROPOSAL FOR MED/MA/PHD PROGRAMS IN EDUCATIONAL TECHNOLOGY & LEARNING DESIGN

12 May	2004	“Notice of Intent” and supplementary information approved “in-principle” by Senate Committee on University Priorities
5 August	2004	Received by Dean of Graduate Studies
21 October	2004	Reviewed by Assessment Committee for New Graduate Programs
17 December	2004	Received revised program proposal from Faculty of Education
14 March	2005	Sent proposal to six external reviewers by Dean of Graduate Studies
29 April	2005	Received five external reviewers’ reports by Dean of Graduate Studies
9 May	2005	Sent five external reviewers’ reports to Faculty of Education by Dean of Graduate Studies
3 June	2005	Received response to external reviewers’ reports from Faculty of Education
21 June	2005	Reviewed and approved by Assessment Committee for New Graduate Programs
30 August	2005	Received revised proposal by Dean of Graduate Studies
30 August	2005	Submitted to Senate Graduate Studies Committee

SIMON FRASER UNIVERSITY  
DEAN OF GRADUATE STUDIES  
MEMORANDUM

TO: Jon Driver, SGSC

FROM: Trude Heift, ACNGP

SUBJECT: Program Proposal in  
Educational Technology and  
Learning Design

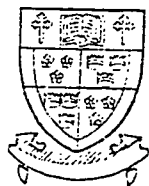
DATE: August 30, 2005

At the ACNGP meeting of 21<sup>st</sup> June 2005 the committee unanimously recommended that the proposed graduate programs in Educational Technology and Learning Design (M.A., M.Ed., PhD) be forwarded to SGSC, with the recommendation that they be approved, pending the following revisions:

- 1) Clarification of requirements of M.A. and M.Ed. degrees;
- 2) Distribution of the technology versus in-class components;
- 3) Description of the goals for the three degrees;
- 4) Clarification of the composition of the cohorts;
- 5) Description of the Program Institute;
- 6) Description of required versus recommended readings for all courses.

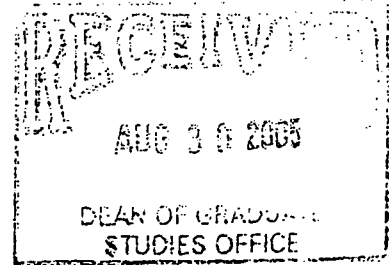
These changes have now been made and the concerns raised by ACNGP have been addressed.

*Trude Heift*



SIMON FRASER UNIVERSITY

Memorandum



TO: Jon Driver, Chair, Senate Graduate Studies Committee  
FROM: Thomas O'Shea, Director, Faculty of Education  
SUBJECT: Educational Technology and Learning Design Program  
DATE: August 30, 2005

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The attached graduate program (Educational Technology and Learning Design Program) is now ready for the Senate Graduate Studies Committee review process. Can you please include this on the September 12, 2005 Agenda.

Thank you,

A handwritten signature in cursive script, appearing to read "T. O'Shea".

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Dr. Thomas O'Shea  
Director  
Graduate Programs

cc: Trude Heift, ACNGP

TOS:ll

SIMON FRASER UNIVERSITY  
DEAN OF GRADUATE STUDIES  
MEMORANDUM

TO: Dr. Cheryl Amundsen Dr. Kevin O'Neill	FROM: Trude Heift, ACNGP
SUBJECT: Educational Technology and Learning Design	DATE: June 21, 2005

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Dear Drs. Amundsen and O'Neill:

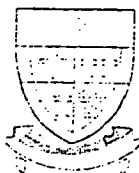
Thank you very much for your presentation at the ACNGP meeting on June 21. The committee was very pleased with the explanations you provided at the meeting and recommends the following modifications of the graduate program proposal in Educational Technology and Learning Design to go forward to SGSC:

- 1) Modify the requirements for the MA and MEd degrees (the same number of credits for both).
- 2) Clarify the distribution of the technology versus in-class components.
- 3) Clarify the goals for the three degrees (MA, MEd, PhD) by including a description of how the courses assist in achieving these goals.
- 4) In your response to Dr. Wright, you describe the composition of your cohorts. Please include your response in the proposal.
- 5) With respect to the Program Institute, describe the funding available to you and your experience with a similar project.
- 6) For week 8 of all course proposals specify that students will participate in the Program Institute and not attend classes. Also, indicate required versus recommended readings for all course proposals.
- 7) Include the vectors in the course proposal forms and obtain course approvals from the Faculty of Education.
- 8) Include a calendar description in the proposal.

Please send us a copy of the revised proposal and I will forward the recommendation to SGSC. If you have any questions, please don't hesitate to contact me.

Thank you very much for your hard work on the proposal.

Best regards,



**Program Proposal**

**Educational Technology and Learning Design**

**M.Ed., M.A. and Ph.D.**

# Educational Technology and Learning Design

## I. Executive Summary

This is an opportune time to launch a program focused on the practical and professional concerns of educators in schools, post-secondary institutions and the workplace regarding the use of learning technologies. Contemporary trends in our educational practices, our economic models of work and performance, and our hopes for the role of computers in many aspects of our lives, all illustrate a need for applied programmatic research and education in this area.

The infrastructure and tools required for effective learning technology practices are gaining increasing presence in schools, colleges, universities and workplaces. The potential for quality learning experiences, increased performance and valuable social rewards has never been greater. However, we remain largely in a “technology push” mode – pursuing innovations for their “impression value” rather than their potential to support fundamental improvements in how people teach and learn. This program, developed as a collaborative effort between the Faculty of Education and the new School of Interactive Arts and Technology in the Faculty of Applied Sciences, would bring together cohorts of K-12 teachers, postsecondary and workplace educators to develop a broadly interdisciplinary appreciation of the potential of new media for learning.

Together, the students in the program will develop transferable skills and insights by designing technology-supported learning resources for formal and non-formal learning environments. They will thus have the opportunity to become articulate in a wider range of areas than is typically available in any one program, leading not only to a set of thoughtful graduates, but to a new basis for constructive dialogue in the field at large.

The needs of this community are complex and cannot be met by any single tradition. Practitioners want access to the best scholarly research from the fields of organizational, cultural and Media studies and from educational psychology, as well as a range of inquiry methods including those normally used in software development. Programs in educational technology or instructional systems or educational psychology rarely meet these needs.

This will be a cohort-based program. Each cohort will intentionally be selected to represent a mixture of professionals from K-12, workplace and post-secondary settings. The program will be unique in bringing together different traditions in a constructive interdisciplinary manner. Key strengths of this program lie in the accommodation of different but related traditions of discourse about learning and technology, and opportunities in every course for students to engage in design that is of direct relevance to their own professional contexts. These designs may include the development of Media artifacts, plans for their use, and/or formal evaluations of technology-based innovations for learning.

The Master’s program begins with a careful consideration of the role of media in learning, from historical and cultural perspectives (EDUC 890). From here it progresses to engage students in critique and design based on frameworks for learning design and categories of learning technologies (EDUC 891). Students will probe the well-established



findings of cognitive research on individual learning (EDUC 892), and consider how this knowledge can usefully constrain design, in light of recent work on how learning is accomplished by groups in complex organizational settings, with their own customs of media use (EDUC 893).

Finally, stocked with questions emerging from their provisional designs for Media artifacts and ways of using them in each of our courses, students will begin to master the complex art and science of evaluating and improving innovations for learning (EDUC 864; EDUC 894). With these tools in hand, they will be capable of producing rigorously analyzed contributions to either or both, research and practice in the context of their choice. As is the practice in the SFU Faculty of Education, the overall goal of the M.Ed. degree is to bring what is learned to the enhancement of one's professional practice and to have the ability to critique and draw on literature relevant to this purpose. The M.Ed. degree is considered a terminal degree. The M.A. degree is a research degree and students are expected to be skilled in the evaluation and design of relevant research. The Ph.D. program builds on the M.A. program, further emphasizing design from a research perspective.

## **II. Curriculum**

The proposed program will develop students' abilities to design learning activities, Media and curricula for the contexts of schools, post-secondary institutions, the workplace, and other informal learning environments. A key strength of this program proposal is the multiple perspectives that are clearly articulated throughout the coursework. These are intended to support students to engage in constructive dialogue leading to informed and reflective practice. Informed by historical-cultural, organizational and cognitive theories, the program will emphasize the dynamic role of theory and research in professional practice.

We believe that the program warrants graduate degree status because, in achieving the goal of developing reflective professionals, it must (a) select academically successful students for admission, (b) engage students with a number and quality of courses that are commensurate with other graduate programs at Simon Fraser University, (c) develop students' abilities to put together the big ideas from the fields studied with sophisticated technical skills to accomplish meaningful work in their professional realms, and (d) develop first-hand competence with relevant research methods required for the completion of a research thesis (M.A. and Ph.D students). We strongly doubt the pragmatics of developing a non-degree program that would have the emphasis on application, research and theory that we envision.

### **Requirements for the M.Ed. and M.A. Degree**

All courses were co-developed by small teams with membership from both the Burnaby and Surrey campus groups. This is reflected on the course proposal forms (see Appendix A). More than one instructor is listed for each course, and it is expected that these individuals will alternate teaching the course.

#### ***Core Courses***

EDUC 890

#### **Educational Media as Foundations of Curriculum**

Cultural-historical study of Media and technologies in education;

	epistemic foundations; Mediation and re-Mediation; history of educational theory and practice.
EDUC 891	<b>Learning Design in Technology-Mediated Environments</b> Behaviorist, cognitive, constructivist, situative theories; computer-supported collaborative learning; design analysis and assessment.
EDUC 892	<b>Cognitive Tools and Multimedia Learning</b> Cognitive theory and research in multimedia learning; adaptive learning systems; individual differences; self-regulated learning.
EDUC 893	<b>Organizational and Social Aspects of Learning Technology Design</b> Networked society; activity theory; organizational culture; expansive learning; behaviour in networks; organizational learning; change and planning; social information systems; the learning society.
EDUC 864	<b>Research Designs in Education</b> Introduction to major research methods in education.
EDUC 894	<b>Methods for Research and Inquiry in Learning Technologies</b> Analysis of Mediated discourse; video and text; phenomenographic analysis; new literacy methods; reflective practice; action research; software for qualitative analysis; mixing methods and evaluation.

### *Elective Courses*

Electives for the Master's program will draw from a number existing courses in the Faculty of Education to address such topics as networked learning (EDUC 853), program development (EDUC 816) and evaluation (EDUC 822), and problems and practices associated with instructional innovation (EDUC 830). Selected courses that are part of the graduate program in School of Interactive Arts and Technology will also be available to students in Educational Technology and Learning Design.

### *Program Institute*

A unique element of the Master's and Ph.D. programs in Educational Technology and Learning Design will be a Program Institute held every semester. Circa week 8 of each semester, every course in the program will substitute a program-wide institute for the regular class of the week. All students enrolled in, and faculty affiliated with, program courses in operation that semester will gather for a Friday afternoon (4:30 – 8 pm) and all-day Saturday institute. Goals served by the institute include:

1. Students develop presentation skills in poster, demo, and symposium Media, and observe others' skills in these formats.
1. Provides a timeframe for students and faculty regarding comprehensive exam and thesis milestones.
1. Creates a venue for program-wide intellectual community with a social weave.

Each institute (one per semester) includes these activities:

A keynote colloquium followed by communal buffet dinner. Speakers may be faculty with the program or visiting scholars.

Friday night poster fair: M.Ed. students who will present their portfolio (comprehensive exam) in the period between the current and the next institute will present posters outlining their learning paths to date. M.A. and Ph.D. students who will defend their theses in the period between the current and the next institute will present posters describing their research to date.

Saturday morning thesis proposal symposium: Students who are ready to form thesis supervisory committees will make a brief (20 – 30 minute) presentation to faculty and students on their thesis proposals, followed by a Q&A period.

Saturday lunch-hour research updates: Research teams affiliated with the program will present research findings, including demos of applications, opportunities for the audience to explore multimedia learning objects, and conventional paper presentations. This will span roughly 11 am – 1:30 pm as an “intellectual” mall and food court event (i.e., people rove about to “sessions” while eating).

Course summary meeting: The penultimate event of each institute will be a 2.5-hour meeting that substitutes for the suspended class of the week. At this meeting, the course leader and students will analyze and synthesize information presented during the institute, drawing out and analyzing relations specifically keyed to the topic(s) of the course. Students enrolled in more than one course in the semester will choose their option of course summary meeting, or instructors may find creative ways to commingle rosters and activities.

A concluding social event.

We recognize that the Program Institute varies from the usual non-credit seminar structure in the Faculty of Education. We already have experience with a similar requirement in our existing master’s program for which students meet four times over the course of an academic year with programming developed jointly by faculty and students. In terms of monetary and staff resources that will be needed to run the Program Institute, we have been formally advised that graduate programs offered at the Surrey campus garner at least \$9000 per year per student. We plan to use a portion of these funds to cover the administrative and other costs associated with the Program-wide Institute.

*Summary of requirements for M.Ed. and M.A. degree:*

M.Ed. degree: Six core plus two elective courses, successful comprehensive examination and participation in the Program Institute.

M.A. degree: Six core plus one elective course, successful thesis defense and participation in the Program Institute.

The number of credits required by the M.Ed. and M.A. degree are the same, a total of 40 credits. This breaks down as follows:

(M.Ed. degree)

(M.A. degree)

Five core courses @ 4 credits each

Five core courses @ 4 credits each

One core course (EDUC 864) @ 5 credits  
Two elective courses @ 5 credits each

One core course (EDUC 864) @ 5 credits  
One elective courses @ 5 credits

Comprehensive exam @ 5 credits

Thesis @ 10 credits

***Schedule of Course Offerings:***

Typically in Master's programs in SFU's Faculty of Education, students follow the cohort they entered with through their core courses, one per semester. The first four core courses for the Master's in Educational Technology and Learning Design (EDUC 890-893) have been designed in such a way that they can be taken in any order. This was done with the intent of providing students with the option to take two courses per semester, if their work schedules and budget permit it. In the year the program opens, only one course will be offered each semester. However, starting in the second year the program is offered, first-year students will be able to take the courses that their second-year counterparts are enrolled in. This arrangement will enable students to take 8 credits per semester if they can arrange educational leave with their employers.

## Requirements for the Ph.D. Degree

As the Ph.D. degree builds on the Master's program, admission will require a background that is cognate. Due to the uniqueness of the Master's program, we expect that in many cases Ph.D. candidates will need to take a selection of Master's courses as part of their individualized study plans.

### *Required:*

EDUC 901 History of Educational Theory  
EDUC 902 Contemporary Educational Theory  
EDUC 866 Advanced Qualitative Methods in Educational Research  
EDUC 975 Advanced Quantitative Methods in Educational Research  
EDUC 983 Doctoral Comprehensive Examination  
EDUC 899 Doctoral Thesis  
Participation in the Program Institute (non-credit)  
Successful completion of two for-credit special topics seminars (see below)

Most students will also be strongly advised to follow a Directed Readings course (EDUC 910) with their supervisors prior to the Comprehensive Examination.

### *Special topics seminars:*

Faculty associated with the program will regularly offer special topics seminars focusing on different aspects of Educational Technology and Learning Design (See Appendix B for three examples). The purpose of these courses is to provide an apprenticeship-like research experience within the program itself, rather than solely through research assistantships. Special topics seminars will be continually developed to allow the program to accommodate the rapidly changing nature of this field. Ordinarily, each student will be expected to take at least one seminar offered by his or her chosen senior supervisor. The student may choose to take the second seminar in SIAT, provided that it is deemed appropriate by his or her senior supervisor.

**Summary of requirements for the Ph.D. degree:** A minimum of six courses (four of these are specified above, the remaining two to be chosen from the special topics seminars available), participation in the Program Institute, the successful completion of the comprehensive exam, and the successful defense of a thesis. The average time to completion for a Ph.D. student, assuming an earned Master's degree from our own program or a close cognate, would be four years. Assuming an intake of three students per year, this would result in a steady-state enrolment of approximately twelve students at the Ph.D. level.

## **III. Transition to the New Programs**

This proposed program will replace the existing Education and Technology Master's program in the Faculty of Education, for which intake will cease after Fall, 2005. The faculty involved from the Burnaby campus have already adjusted their teaching schedules so that the old program can be maintained while the new one is started up. Two new hires in Educational Technology, which were recently advertised and are expected to be in place for Fall 2005, are integral to this plan. New faculty will teach the new courses in the Master's program while current faculty close down the existing program.

As the current Education and Technology Master's program takes M.Ed. students 2 1/3 years to complete, taking each course in sequence with their cohort, each of the existing of courses will need to be offered once more to allow the 2005 cohort to finish. Students in the existing Master's program will be permitted to take courses from the new program as electives when these courses come on stream; however, since the new program has a very different structure from the existing one, students admitted to the existing program in 2005 will not be permitted to take the new courses to meet core requirements. We do not plan to offer a formal route for students in the existing program to switch to the new program.

#### **IV. Learning Methodologies**

This program focuses on professionals' situated needs, by providing faculty consultants to support these needs and by specifying tasks and selecting resources that contribute to their professional practice. Courses are designed to provide significant opportunities to use learners' actual professional problems and life experiences, together with established theory and formal research, as the basis for developing practice.

Courses in the program do not adhere to one particular delivery model. Instead, a combination of face-to-face and on-line work is an expected part of each course, as appropriate to the course's learning goals. It is not planned for the program to be offered entirely on-line, as it is currently infeasible to offer the kind and quality of graduate program we seek to offer entirely at a distance.

Consistent with tradition in the Faculty of Education, face-to-face meetings of courses will take place one evening each week, starting at 4:30pm. This accommodates the schedules of working professionals as far as is possible while offering a four- or five-credit-hour courses in only one trip to campus per week.

Master's courses may be held on either the Burnaby campus or the new Surrey campus. Adequate space and computing resources exist in both locations at the present time. In Burnaby, the Faculty has a well-resourced Centre for Educational Technologies that includes an Instructional Lab adequate to the needs of the proposed courses, as well as a drop-in lab of Mac and Windows computers, mobile iBook labs, digital video cameras, audio equipment, and other resources useful to a program of this kind. The Burnaby campus library's existing resources for the Master's program will be enhanced to support the Ph.D. program.

The Surrey campus also has more than adequate computing resources for this program. The Faculty of Education has a dedicated teaching space on the new campus that would be suitable for any of the proposed Master's courses. This is equipped with a mobile iBook lab, digital video and still cameras, and printers. Elsewhere on the Surrey campus are larger University labs which could be scheduled. Library resources at Surrey would need to be substantially enhanced to support the program, however. A final decision about the location of the proposed Master's program is expected in the coming months.

The first four courses in the Ph.D. program will be offered on the Burnaby campus only, as these are shared with other Ph.D. programs in Education. Other Ph.D.-level courses

may be offered at either the Burnaby or Surrey campuses, according to the needs and interests of both students and faculty.

Class activities for both the Master's and Ph.D. programs will involve both individual and team tasks. Assessment of student learning will be accomplished through traditional processes and products (e.g., seminars and papers), as well as design projects tailored to students' particular professional contexts, and web-based portfolios.

A unique element in our proposal is the non-credit Program Institute described in the above section, entitled "Curriculum". The Institute will serve as a venue for students at all stages of completion to be part of a program-wide intellectual and social community, in which they can develop skill in presenting their formative ideas, and solicit relevant advice for developing them, irrespective of their career goals.

## **V. Program Consultations and Evaluation**

This program has been developed as a collaborative effort among ten faculty members -- six associated with the Education and Technology Master's program, and four faculty associated with the current programs at SFU Surrey. The collaboration of faculty at SFU Surrey and the SFU Faculty of Education has spanned the past two years, and has consisted of regular meetings in which the group shared research perspectives, teaching and learning philosophies, curriculum approaches and perspectives on the needs of our intended audiences. All courses were co-developed by small teams representing each of the campus groups. It is intended that there will be shared responsibility for teaching, revision, and updating of course content. Continuous formative and summative evaluation will be carried out to ensure the quality and relevance of the program to our audience. Regular revision and updating is imperative for a program of this nature as the technologies and methodologies are continuously evolving.

In the development of this program, we invited six current graduate students (in programs at Surrey and on the Burnaby campus) to review the core courses for the Master's program. The reviews were largely positive, but did point to a number of issues that were subsequently addressed by the various course development teams. We also consulted with Rob Woodbury, the current Director of Graduate Programs SFU Surrey, who has carefully read this proposal and given his support (see attached letter).

Finally, we presented this program proposal to and received the endorsement of the Faculty of Education Graduate Programs committee, the Executive committee, and the faculty at large. Minor revisions suggested by each of these bodies were taken into consideration and, in most cases, incorporated.

## **VI. Distinctiveness of the Proposed Programs**

Our review of Canadian institutions offering Master's and Ph.D. level programming related to Educational Technology indicates that the programs offered at Concordia University in Montreal and the University of Calgary are most similar to the programs we propose, at least in degree structure. Both Universities offer a Ph.D. and M.A., while the University of Calgary also offers a M.Ed.

Our closest neighbor, UBC, offers an MET degree (Masters of Educational Technology), which is described on the web site as follows "The MET degree supports a professional development, course-based program (non-thesis)." The MET is an entirely on-line degree, offered jointly with the Monterrey Institute of Technology (Mexico), and administered by a non-academic unit, Distance Education and Technology. The broader mandate of this unit is to support Faculties at UBC in developing distance education opportunities. Altogether, we believe the UBC MET program is sufficiently different from the degree we propose, both in delivery format and content, that it does not pose a conflict.

The University of Saskatchewan also offers a M.Ed. degree (with both thesis and non-thesis routes) as part of the Educational Communications and Technology program. Since students pursuing a M.Ed. are almost always, in our experience, students who live locally, we do not believe we will be competing with the University of Saskatchewan for students at this degree level.

Further comparison of programs in the paragraphs below will be limited to Concordia University and the University of Calgary, since we are proposing to offer research-based degrees at both Master's and Doctoral levels. We compare three aspects of our proposed program with those offered at Calgary and Concordia: the interdisciplinary program content, the integration of theory, critique and application, and the focus on developing scholarly research.

Interdisciplinary nature: Our proposed program has a broad theoretical foundation drawn from learning theories in the fields of Psychology and Educational Technology, as do the other two programs. We go beyond this to draw on theories of individual and group learning from a socio-cultural perspective, from the field of organizational behavior and change, and the field of design. Our students will begin their program with a course that provides a careful consideration of the role of media in learning, from historical and cultural perspectives. Ph.D. students will build on this with the first two courses in their program that are based broadly on an analysis of established and contemporary educational theories. These courses will be shared with other doctoral students in our Faculty, and draw on the strengths of our non-departmental structure. This stands in contrast to the programs offered at the University of Calgary, where the focus is squarely on Systems Theory and learning theories from the field of Psychology, and the practical application of the principles of Instructional Design. Concordia University maintains this same orientation, and includes aspects from the area of Human Performance Technology.

Our more inclusive curriculum is mirrored by our more inclusive plan for admissions. Our goal is to draw a clientele of K-12 teachers, postsecondary instructors, and workplace educators, to create cohorts as diverse as those in our existing Master's in Education and Technology program. These cohorts already consist of individuals capable of developing together a broadly interdisciplinary appreciation of the potential of new media for learning, and carrying out cutting-edge research and development. A unique aspect of our proposal is our Program Institute, that will further this goal by supporting a program-wide intellectual community, bringing all students together once each semester for a weekend, as part of their regular coursework.



The integration of theory, critique and application: Each of the new courses in our program was designed to include a design project developed and critiqued from one or more theoretical perspectives and contexts of use. This was a central consideration in each course design. While it is difficult to precisely compare this facet of our program with others based only on published course descriptions from the other two institutions, it appears that these aspects are often taken up in separate courses at Concordia and the University of Calgary.

The focus on developing scholarly research: Concordia University and the University of Calgary both have, of course, a focus on research, and provide both coursework and supervision to support students in this aspect of their studies. The University of Calgary requires a course in research methodologies and includes the course, the Evaluation of Technology Projects, as a possible elective. No required research methods course is listed for the Ph.D. degree. Concordia University lists Fundamental Methods of Inquiry for Educational Technology as a core course for the M.A. degree, and requires, at the Ph.D. level, both course in advanced research design and a course entitled Quantitative methods in Educational Technology.

Our new program is in concert with the Concordia program at the master's level, requiring both a general course in research methodologies appropriate to Education (EDUC 864) and a course specifically exploring methods for research and inquiry in learning technologies (EDUC 894). At the Ph.D. level we build on this with advanced courses in both qualitative and quantitative research methodologies. Ph.D. students will also be required to take two research apprenticeship courses of their choice, in fields of research and development to which the affiliated faculty contribute. Finally, a primary purpose of our Program Institute is to create a venue for the presentation and critique of developing research ideas and an explicit preparation for future scholarly endeavors.

In sum, we believe that our program design is unique in Canada, and will provide opportunities for qualified students to pursue studies in Educational Technology who are not presently being served by other institutions. We believe this program will help also help to build British Columbia and Canada's international standing in the burgeoning field of Educational Technology.

## **VII. Fee Structure**

Tuition fees for both the Master's and Ph.D. programs will correspond to SFU's fees for full-time, general research programs. (As of this writing, \$1,417.90 per semester.)

## **VIII. Student Funding**

While the Faculty of Education cannot currently offer entrance scholarships to more than a handful of students, there will be ample opportunity for Master's and Ph.D. students who need income to seek paid work on campus. All of the faculty who will staff these new programs maintain active programs of funded research, and will normally be able to hire several students as research assistants. There are also many opportunities for graduate students to serve as sessional instructors (particularly for courses in our undergraduate Education and Technology Minor) and tutor-markers. In the short history

of our current Education and Technology Master's, students in need of paid work on campus have normally found it.

## **IX. Admission**

The program would admit up to 25 new Master's students each year, and 3 Ph.D. students. From this, we predict a steady-state enrolment of approximately 50 Master's students (roughly 32 M.Ed. and 18 M.A.) and 12 Ph.D. students when the program is fully operational. These estimates are based on an average of 2 years to completion for Master's students, and 4 years for Ph.D. Bear in mind that the program is structured so that students may take up to two courses per semester at the Master's level if they are not working full time.

### *Potential pool of applicants:*

There is a need for informed, competent, reflective and discerning individuals who will lead the successful integration of learning technologies in all kinds of educational settings. We expect that as in the current Master's offering in Education and Technology, students in these new programs will derive strength and gain perspective from the range of professional contexts their fellow students represent:

- K-12 teachers who want to meaningfully integrate learning technologies to support and extend the learning of their pupils.
- Staff in the K-12 context who are responsible for continuing education of classroom teachers as regards learning technologies.
- Full-time and part-time workers in the corporate environment seeking advancement as trainers, instructional designers, and organizational change agents.
- Staff in university and college support units with roles related to teaching and learning with technologies (e.g. library, computing services, human resources, new media centres) wishing to become key players in the transition to second generation learning technology integration.
- Post-secondary instructors wanting to expand the use of learning technologies in their disciplines, faculties, and colleges.

### *Admission requirements:*

The program, consistent with current SFU policy, will require a minimum of a Bachelor's degree (for Master's) or Master's (for Ph.D.) with a competitive GPA for entry. Preference will be given to applicants with backgrounds in disciplines cognate to Educational Technology, including Computing Science and Psychology. As part of the application package, a letter of intent will be expected in each application that demonstrates preliminary understanding of the field, as reflected in stated research interests, realistic personal goals for study, and good written English skills. The letter of intent will be valuable in assessing the "match" between prospective students' needs and available supervision. The admission of students will not be contingent on the availability of financial support.

### *Admissions Decisions and Supervisory load:*

Following established practice in our Master's in Education and Technology, the faculty allied with the new Master's and Ph.D. programs will meet annually (generally in March)

to make admissions decisions, and to assign pro-tem advisors to incoming students. As it is in the best interests of thesis-route students to have committed advisement, no student will be admitted without a firm commitment from a faculty supervisor who can both manage the workload, and is considered by the admissions committee to be a good "match" for the student's stated goals and interests. In the case of MA applicants for whom appropriate, committed advisement is not available, the committee may offer admission in the M.Ed. (non-thesis) route.

*Change of Route for Master's Students:*

MA students may, at any time, apply to the Graduate Programs office to switch to the M.Ed. (non-thesis) route. No special consent will be required. M.Ed. students may also apply to switch to the MA route, though consent will be granted only with the written approval of a prospective thesis supervisor. Supervisors may require that specific courses be completed, or that a thesis proposal be written, prior to switching routes. In all cases, students switching routes must meet the requirements listed above for the degree they wish to earn.

## **X. Faculty**

The new programs will be served by a complement of 9 tenured or tenure-track faculty: 7 located on the Burnaby campus of SFU (see list below), as well as 2 new appointments in Educational Technology to be housed at the Surrey campus. While all of the faculty teach in a variety of programs across the Faculty of Education, we will have a large enough portion of each faculty member's teaching load to offer the proposed programs without hiring any sessional instructors.

Cheryl Amundsen, Ph.D. (Educational technology)  
Suzanne de Castell, Ph.D. (Media, culture and curriculum)  
John Nesbit, Ph.D. (Educational Psychology)  
Kevin O'Neill, Ph.D. (Learning Sciences)  
Jan Van Aalst, Ph.D. (Science Education and Technology)  
Phil Winne, Ph.D. (Educational Psychology)  
David Zandvliet, Ph.D. (Science Education and Technology)

Curriculum Vitae for the current faculty are given in Appendix C.

## **XI. Acknowledgement**

We gratefully acknowledge the participation of three colleagues from the SFU Surrey campus in the preparation of this proposal:

Mike Dobson, Ph.D. (Educational Technology)  
Tracey Leacock, Ph.D. (Cognitive Psychology)  
Janet McCracken, Ph.D. (Educational Technology)

## Calendar Descriptions

### **Educational Technology and Learning Design Ph.D.**

This program is intended to develop broad-minded and highly qualified Educational Technology researchers and designers who may serve in academia, research and development labs, corporations, school boards or other settings. Organized in close conjunction with the Master's in Educational Technology and Learning Design, the program emphasizes an apprenticeship model of learning in which students work closely with faculty members on research projects at the leading edge of their fields. Admitted students must satisfy all requirements for the MA in Educational Technology and Learning Design. Applicants are welcome from a wide variety of educational and technical backgrounds, though they may be required to take courses from the MA program before beginning coursework at the Ph.D. level.

#### *Core Courses*

EDUC 901-5 Seminar in the History of Educational Theory  
EDUC 902-5 Interdisciplinary Seminar in Contemporary Educational Thought  
EDUC 866-5 Advanced Qualitative Methods in Educational Research  
EDUC 975-5 Advanced Quantitative Methods in Educational Research  
EDUC 983-5 Doctoral Comprehensive Examination  
EDUC 899-10 Doctoral Thesis  
Two special topics courses offered by faculty affiliated with the program  
Participation in the Educational Technology Program Institute (non-credit)

Most students should also take a Directed Readings course (EDUC 910) with their senior supervisors prior to the Comprehensive Examination.

Each student's supervisory committee may require further work in the Faculty of Education or other faculties. Students are encouraged to draw additional courses from related units outside the Faculty of Education.

### **Educational Technology and Learning Design MA/MEd**

This program leads to either the MA (thesis) or MEd degree (comprehensive examination). It is intended to develop professionals who can take a scholarly approach to the design of learning technologies, plans for their use, and/or formal evaluations of technology-based innovations for learning. Designed to accommodate either students who are employed full-time during the day or who take leave from work to study full time, the program supports diverse cohorts including professionals from a variety of fields including K-12 teachers, college instructors, instructional designers, and aspiring academics. Applicants are welcome from a wide variety of educational and technical backgrounds. Depending upon the coursework on their transcripts, students may be admitted conditionally upon completing prerequisite courses in the Faculty of Education.

*Core Courses*

EDUC 890-4 Educational Media as Foundations of Curriculum  
EDUC 891-4 Learning Design in Technology-Mediated Environments  
EDUC 892-4 Cognitive Tools and Multimedia Learning  
EDUC 893-4 Organizational and Social Aspects of Learning Technology Design  
EDUC 864-5 Research Designs in Education  
EDUC 894-4 Methods for Research and Inquiry in Learning Technologies

*MA Requirements*

Five credits of elective coursework  
EDUC 898-10 Master's Thesis

*MEd Requirements*

Ten credits of elective coursework  
EDUC 883-5 MEd Comprehensive Examination

In the following sections, several course proposals bear the names of non-tenure-track faculty members who were involved in developing them.

The long-term status of these faculty members at SFU is uncertain. The Faculty of Education wishes to acknowledge the important contributions of these scholars to the proposal, while also assuring the Senate that regardless of their future status, the Faculty of Education will have both sufficient and appropriate faculty resources to offer all of the courses detailed here.

## APPENDIX A

### MASTER'S LEVEL CORE COURSES

Course Title	Page #
Educ 890(1) Educational Media as Foundations of Curriculum	A2
Educ 891(2) Learning Design in Technology-Mediated Environments	A10
Educ 892(3) Cognitive Tools and Multimedia Learning	A19
Educ 893(4) Organizational and Social Aspects of Learning Technology Design	A26
Educ 894(5) Methods for Research and Inquiry in Learning Technologies	A38

Senators wishing to consult detailed information on the new courses should contact Bobbie Grant, Senate Assistant, 604 291-3168 or email [bgrant@sfu.ca](mailto:bgrant@sfu.ca)

## APPENDIX B

### ILLUSTRATIVE EXAMPLES OF PH.D. GRADUATE SEMINARS TO BE OFFERED

Course Title	Page #
Educ 930 Considering the Future of Learning Communities	B2
Educ 931 Group and Organizational Learning Technologies	B10
Educ 932 Learner-Centred Design	B15

Senators wishing to consult detailed information on the new courses should contact Bobbie Grant, Senate Assistant, 604 291-3168 or email [bgrant@sfu.ca](mailto:bgrant@sfu.ca)



SIMON FRASER UNIVERSITY

DEAN OF GRADUATE STUDIES

MEMORANDUM

TO: KEVIN O'NEILL, CHERYL AMUNDSEN  
EDUCATION

FROM: TRUDE HEIFT, ASSOCIATE DEAN

SUBJECT: EDUCATIONAL TECHNOLOGY & LEARNING DESIGN

DATE: MAY 9, 2005

CC: ACNGP MEMBERS

- \* You will find enclosed five reports of six external reviewers on the proposal for the **MEd/MA/PhD program of Educational Technology & Learning Design**. We will send you the other report upon receipt. Prior to meeting with the Assessment Committee for New Graduate Programs, I would appreciate a written response to issues raised by the external reviewers, if possible by **Friday, June 3, 2005**.

For your information, the reviewers were asked to respond to the following points:

- The academic merit and structural integrity of the proposed program
- The adequacy of the faculty and other resources available to the proposed program for achieving its intended goals
- The demand for the proposed program among prospective students
- The demand for graduates of the proposed program

A meeting will be scheduled for further discussion of the Educational Technology & Learning Design proposal. I will ask you or a representative of the Education to attend the meeting in order to answer any questions which the committee may have.

TH:vb

Enc.



- \* Senators wishing to review the external review reports should contact Bobbie Grant, Senate Assistant, at 604 291-3168 or email [bgrant@sfu.ca](mailto:bgrant@sfu.ca)

**Name | surname | status | institution | program | Options | sent | reminder | received**

Name   surname	status	institution	program	Options	sent	reminder	received
Peter W. Wright	Professor	University of Alberta	Educational Technology & Learning Design	MEd/MAV PhD	January 28, 2005		17-Mar-05
Judi Harris	Pavey Chair in Educational Technology	College of William and Mary	Educational Technology & Learning Design	MEd/MAV PhD	January 28, 2005	due March 15	14-Apr-05
Richard Kenny	Associate Professor	Alhabasca University	Educational Technology & Learning Design	MEd/MAV PhD	February 2, 2005		15-Mar-05
Richard F. Schmid	Professor	Concordia University	Educational Technology & Learning Design	MEd/MAV PhD	February 2, 2005	due March 30	20-Apr-05
Stephen Petrina	Associate Professor	University of British Columbia	Educational Technology & Learning Design	MEd/MAV PhD	March 8, 2005	12-May-05	No response
Denis Bédard	Professor	University of Sherbrocke	Educational Technology & Learning Design	MEd/MAV PhD	March 14, 2005	due April 29	29-Apr-05