Office of the Senate Secretariat

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23 December 2008

Dear Member of Senate:

I advise you that a meeting of the Senate of Acadia University will occur at 4:00 p.m., Monday, 12 January 2009 in BAC 132. The <u>AGENDA</u> follows:

- 1) Minutes of the Meeting of 8 December 2008
- 2) Announcements and Communications
- 3) Business Arising from the Minutes

4) New Business

- a) Graduate Studies Committee PhD Program in Education (089-34-GRD) *
- b) Curriculum Committee Art and the Environment (089-35-CRE) *
 - Comparative Religion (089-36-CRE) *
 - Interdisciplinary Studies (089-37-CRE) *
 - Economics (089-38-CRE) *
 - English and Theatre (089-39-CRE) *
 - History and Classics (089-40-CRE) *
 - Languages and Literatures (089-41-CRE) *
 - Music (089-42-CRE) *
 - Philosophy (**089-43-CRE**) *
 - Political Science (089-44-CRE) *
 - Sociology (089-45-CRE) *
 - Business Administration (089-46-CRE) *
 - Education (089-47-CRE) *
 - Recreation Management and Kinesiology (089-48-CRE) *
 - Biology (089-49CRE) *
 - Computer Science (089-50-CRE) *
 - Earth and Environmental Science (089-51-CRE) *
 - Nutrition and Dietetics (089-52-CRE) *

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- Physics (**089-53-CRE**) *
- Psychology (**089-54-CRE**) *

5) Other Business

Yours sincerely,

ORIGINAL SIGNED

Rosemary Jotcham Registrar and Secretary of Senate

* Material Attached

Items Carried Over/Tabled: Faculty Development Committee - Endowed Chairs (**078-30-FAC**) Guidelines for Memoranda of Agreement Bursary Recommendations Academic Integrity Committee - Acadia University Calendar Statement on Academic Integrity (**089-17-INT**) as per minutes of 14 Oct 08

Page 1/Attachment 4)a) Senate Agenda/12Jan09 089-34-GRD

Inter-University Doctorate of Philosophy in Educational Studies Executive Summary

Three leading education programs in Nova Scotia are proposing the first ever Inter-University Doctoral Program in Education in Nova Scotia. The Doctorate of Philosophy degree will be jointly and collaboratively designed and delivered by a cadre of 58 faculty members from the Faculty of Education at Mount Saint Vincent University, the School of Education (Faculty of Professional Studies) at Acadia University, and the St. Francis Xavier School of Education (Faculty of Arts). All three institutions currently have flourishing Masters and BED programs. Governance will be provided by mechanisms in place at each institution but will be overseen by a newly established Inter-University Doctoral Governance Committee (IDGC) supported by the Inter-University Doctoral Administrative Committee (IDAC) and Administrative Assistant. The guiding principle shaping the proposed governance and administrative structures is one of efficacy of fair governance and the achievement of consensus by democratic means, especially transparent and collaborative participation that respects the rights and interests of all stakeholders. The designation *Institution of Record* is applied to the university where the doctoral candidate's dissertation supervisor is located. Candidates receive their degree from that university.

Doctoral candidates will obtain a research-oriented PhD in *Educational Studies*, which is concerned with the study of education in a broad sense. It conceives education as extending through the life span and encompassing all of the institutional and non-institutional ways in which people learn, from early childhood through mature adulthood. The PhD will feature an interrelated thematic approach that mirrors faculty research strengths as well as the major pedagogical issues conventionally associated with educational studies: curriculum studies, literacies, inclusive education, lifelong learning, educational foundation and leadership, and psychological aspects of education. Students can either declare an interest in a particular theme or design a program that weaves two or more themes together. Doctoral students also may choose to engage thematic foci with their subject matter or 'teachable.' As is common within educational studies, the program will be a blend of philosophical understandings of education, conceptual and theoretical underpinnings of education, epistemological and ontological foundations of educational inquiry, and research perspectives and methods in education.

While new to Nova Scotia, a joint PhD in Education has been instituted successfully in Ontario. The current proposed degree was developed in compliance with the recently released Council of Ministers of Education, Canada (CMEC, 2007) Pan-Canadian standards for graduate studies. The proposed PhD in Educational Studies is a 7-unit program comprising 2.5-units of course work (more via Special Topics and/or Independent Study) if deemed necessary at time of Admission), a 1.5-unit Comprehensive Portfolio, including at least 10 intellectual artifacts with attendant examination, and a 3-unit Dissertation. Normally, students should be able to

complete the program within four years (after a Masters degree), but have up to six years. Fully qualified applicants will be expected to complete all of the required course work during residency and the comprehensive portfolio examination within two calendar years of their acceptance into the program. The program will be delivered in real time and/or via comprehensive Distance e-Learning Platforms (especially, WebCT/Blackboard/Moodle, Elluminate live! and videoconferencing (VTC) systems). The three universities have rich library holdings for education researchers. Two universities hold Tier II Canada Research Chairs in Education.

Qualified applicants will only be admitted if a suitable supervisor and program can be provided. Collectively, the 58 faculty members have: secured over \$20 million in grants in the last three years (the requisite level for a doctoral enterprise is \$3 million); published an average of 12 peer reviewed items each, over a five year span; collectively supervised over 1200 graduate level thesis, dissertations, independent studies and/or graduate projects; and, received over 70 awards for outstanding research, teaching innovation and excellence, distinguished leadership and service and/or book contributions to the field.

There is a pressing need for this doctoral program, given the impending retirement phenomenon within the academy. There will be openings for 30,000-40,000 new professors in Canada by 2011, approximately twice as many graduates as Canada would normally generate in that time frame. Also pertinent is the fact that NS only graduates 1.6% of all doctoral students in Canada, and none in Education. As well, graduate student enrolment in the Maritime provinces increased 23% from 2001-2007, with many students taking two and three education masters degrees because there is no PhD. In this evolving context, there is a strong need for a doctoral program in education in Nova Scotia, which houses five universities offering education programs.

This proposal offers an infusion and sharing of intellectual energy and monetary plus physical resources via a strong, new partnership (rather than by existing programs standing alone). By combining the intellectual and physical resources of the three institutions, the joint doctoral degree program provides opportunities for research collaboration, sharing and joint mentoring. This joint doctoral program will necessarily involve three institutions with different organizational cultures, perspectives and priorities, but all three partners have a strong, deep history and commitment to education in Nova Scotia. These differences will yield a doctoral program richer in academic opportunities than any single institution could create. The nature of the proposed PhD in Educational Studies is such that it can best be offered *via a well-coordinated, consultative, cooperative tri-university partnership* among the teacher education programs at MSVU, Acadia University and ST.F.X. University.

THE MAIN 132-PAGE DOCUMENT PROPOSAL FOR THE JOINT PhD PROGRAM IN EDUCATION INVOLVING ACADIA, MSVU AND StFX FOLLOWS IN ELECTRONIC FORMAT ONLY. IF YOU ARE RECEIVING THIS IN HARD COPY, IT MAY BE FOUND AT http://acadiau.ca/SENATE/AGENDA/Agenda2008-2009/home2008-09.html

Doctor of Philosophy Program in Educational Studies

PROPOSAL

Prepared by

The Inter-University Doctoral Program Proposal Committees of The Nova Scotia Inter-University Committee on Teacher Education (ICTE) and Approved in Principle by Education Programs at Mount Saint Vincent University Acadia University St. Francis Xavier University and Recommended with Specific Changes by External Reviewer and Approved by Senate Academic and Policy Program Committee at Mount Saint Vincent University and the Senate Graduate Studies Committee at Acadia University

Revised November 7, 2008

May, 2008 (Original)

Over the course of the development of the proposal, The Inter-University Doctoral Program Proposal Committee has comprised members from the teacher education programs at Acadia, Mount Saint Vincent University, the Nova Scotia College of Art and Design, St. Francis Xavier University, and Université Sainte-Anne. In December 2001, the Committee comprised members from all institutions represented at the Inter-University Council on Teacher Education. In 2007, the Committee comprised members of MSVU, Acadia and StFX.

Committee members over the course of the development of the proposal include (those involved with the 2007-2008 initiative are marked with an asterisk*):

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<u>Nova Scotia College of Art and Design</u> N. Webb

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Inter-University Doctorate of Philosophy in Educational Studies Executive Summary

Three leading teacher education programs in Nova Scotia are proposing an Inter-University Doctoral Program in Education. The Doctorate of Philosophy degree will be jointly and collaboratively designed and delivered by a cadre of 58 faculty members from the Faculty of Education at MSVU, the Acadia School of Education (Faculty of Professional Studies) and the StFX School of Education (Faculty of Arts). All three institutions currently have flourishing Masters and B.Ed. programs. It will be the first Ph.D. degree of any kind at each university (a comparable joint degree is not available in the Maritime region). Governance will be provided by mechanisms in place at each institution, but will be overseen by a newly established Inter-University Doctoral Governance Committee (IDGC) supported by an Inter-University Doctoral Administrative Committee (IDAC) and an Administrative Assistant. Efficacy of fair governance is the guiding principle that underlies the proposed governance and administrative structures. Central to that principle is achieving consensus democratically through transparent and collaborative participation that respects the rights and interests of all stakeholders.

The program will award doctoral candidates a research-oriented Ph.D. in Educational Studies, which is concerned with the study of education in a broad sense. It conceives education as extending through the life span and encompassing all of the institutional and non-institutional ways in which people learn, from early childhood through mature adulthood. The Ph.D. will feature an interrelated thematic approach that mirrors faculty research strengths, as well as the major pedagogical issues conventionally associated with educational studies: curriculum studies, literacies, inclusive education, lifelong learning, educational foundations and leadership, and psychological aspects of education. Students will either declare an interest in a particular theme or design a program that weaves two or more themes together. Doctoral students also might choose to engage thematic foci with their subject matter or 'teachable.' As is common within educational studies, the program will be a blend of philosophical understandings of education, conceptual and theoretical underpinnings of education, epistemological and ontological foundations of educational inquiry, and research perspectives and methods in education.

The degree was developed in compliance with the recently released Council of Ministers of Education, Canada (CMEC, 2007) Pan-Canadian standards for graduate studies. The proposed Ph.D. in Educational Studies is a 7 unit program comprising 2.5 units or 15 credit hours of course work (more via special topics and/or independent study if deemed necessary at time of admission), a 1.5 unit comprehensive portfolio (including at least 10 intellectual artifacts with attendant examination) and a 3 unit dissertation. Normally, students should be able to complete the program within four years (after a Masters degree), but they will have up to six years. Fully qualified applicants will be expected to complete all of the required course work during residency and the comprehensive portfolio examination within two calendar years of their acceptance into the program. The university of the doctoral candidate's dissertation supervisor will be designated Institution of Record. Candidates will receive their degrees from the university so designated. The program will be delivered in real time and/or via comprehensive distance e-learning platforms, for example, WebCT/Blackboard/Moodle, Elluminate live! and videoconferencing (VTC) systems. The three universities have rich library holdings for education researchers. Two universities (MSVU and Acadia) hold Tier II Canada Research Chairs in Education.

Qualified applicants will be admitted only if a suitable supervisor and program can be provided; however, the proposed program will have the capacity to provide a wide range of quality teaching and supervision. Collectively, the 58 faculty members have secured over \$20 million in grants in the last three years; published an average of 12 peer-reviewed items each over a five year span; collectively supervised over 1200 graduate level theses, dissertations, independent studies and/or graduate projects; and received over 70 awards for outstanding research, teaching innovation and excellence, distinguished leadership and service and/or book contributions to the field.

Factors within the evolving context of higher education in the Maritimes, especially Nova Scotia, point to a pressing need for this doctoral program. First, the demographics among current faculties will result in a large number of retirements. By 2011, there will be openings for 30,000-40,000 new professors in Canada, approximately twice as many graduates as Canada would normally generate in that time frame. Second, graduate student enrolment in the Maritime provinces increased 23% from 2001-2007, with many students taking two and three education Masters degrees because there is no Ph.D.

This proposal offers a means of addressing these identified needs through an infusion and sharing of intellectual energy, monetary and physical resources via a strong new partnership rather than stand-alone programs. By combining the intellectual and physical resources of the three institutions, the joint doctoral degree program provides opportunities for research collaboration, sharing, and joint mentoring. This proposed program will necessarily involve three institutions with different organizational cultures, perspectives and priorities, but all three partners have a strong, deep history and commitment to education in Nova Scotia. Diversity across institutions will yield a doctoral program richer in academic opportunities than any single institution could create. The proposed Ph.D. in Educational Studies can best be offered via a well-coordinated, consultative, cooperative tri-university partnership among the teacher education programs at Mount Saint Vincent University, Acadia University and StFX University. Its collaborative nature is its greatest source of strength.

Preface

This doctoral degree was developed in full compliance with Maritime Degree Level Qualification Framework and the 2007 Council of Ministers of Education, Canada (CMEC) *Pan-Canadian Ministerial Statement on Quality Assurance of Degree Education in Canada* (signed in February 2007 by all provincial Ministers of Education, subsequent to work begun in 2004 by the Advisory Committee of Deputy Ministers of Education). The Committee drafted standards for three areas:

- 1. Learning outcomes depending on whether the degree is Bachelor, Masters or doctoral (called the *Canadian Degree Qualifications Framework/MPHEC Degree Level Qualifications Framework* (2007a), comprising two components);
- 2. Procedures and standards to use when assessing the quality of new degrees being proposed (called *Procedures and Standards for New Degree Program Quality Assessment*); and,
- 3. *Procedures and Standards for Assessing New Degree-Granting Institutions.*

Because this proposal stems from established degree-granting institutions, it focuses on the first two standards.

Standard One - Canadian Degree Qualifications Framework

The following addresses the first component, *Descriptions of Degree Categories*, comprising four dimensions (Student Outcomes for this proposed Ph.D. degree are at Section 3):

- the doctoral program ensures that students will build on the knowledge and competencies in a field or discipline acquired during prior study, usually at the graduate level;
- it involves course work of varying length aimed at cultivating further conceptual depth and breadth;
- it requires written and oral examinations (in this case, a comprehensive portfolio examination) of knowledge and aspects of the discipline as a prerequisite to dissertation work;
- it is a research-oriented program leading to a Ph.D. (rather than a practice-oriented degree leading to an Ed.D.). The focus is on the development of the conceptual, theoretical and methodological knowledge and skills required to do original research and to make original contributions to scholarly knowledge in the form of a dissertation. The degree involves less course work than a practice-oriented degree and does not require an internship (as would an Ed.D.);
- the degree was developed to ensure that graduates acquire and/or enhance their ability to make informed judgments on complex educational issues and to employ innovative approaches and intellectual engagement when posing, tackling and solving problems as a preparation for employment and future study;
- the degree is intended to be completed within six years (the standard time frame within education and within Canada); and,

• as is the norm, admission to the degree requires a Masters degree with an appropriate specialization or a Masters degree with appropriate bridging studies (in this case, available via special topics and independent studies, determined at time of admission).

The second component of the first standard, six dimensions of the *Degree-Level Standards*, is related to expectations of graduates holding a doctoral degree vis-à-vis their subsequent ability to engage in autonomous transfer of knowledge and skills and their proximity to the forefront of the field of education (upon graduation and into the future):

- the degree will only be awarded if the student demonstrates a thorough understanding of a substantial body of knowledge that is at the forefront of the academic discipline or area of professional practice; in this case, this means at the forefront of education and one, or a combination, of six interrelated themes of doctoral study in educational studies;
- the degree ensures that students gain conceptual understanding and methodological competence to generate new knowledge at the forefront of the field of education, make informed judgments about complex disciplinary issues that might require conceptualizing new methods and perspectives, and produce original research or advanced scholarship that qualifies for peer review and merits publication;
- the degree enhances students' abilities to undertake pure, and/or applied research conducted at an advanced level, and to apply the knowledge thus gained in ways that contribute to, advance and extend the intellectual boundaries of the discipline;
- the degree enriches students' abilities to communicate complex and/or ambiguous ideas, issues and conclusions, clearly and effectively through course work, a comprehensive portfolio (with over 10 knowledge artifacts) and a dissertation;
- the degree is designed so that students will gain respect and appreciation for the scope of the area they are exploring within the context of the limitations of their own work as well as the discipline of education, including an appreciation for the complexity of knowledge and the potential contributions of other interpretations, methods and disciplines; and,
- the degree is designed to ensure that its graduates will have the capacities to be professional educational researchers and leaders with intellectual independence and autonomy that will enable them both to remain engaged and current, and to evaluate the broader implications of applying educational knowledge to complex situations.

Standard Two - Procedures and Standards for New Degree Program Quality Assessment

The CMEC's second standard for assessing the quality of proposed new degrees correlates with the standards for assessing new degrees established by MPHEC (2005) in its policy document titled *Policy on Quality Assurance*. Therefore, the MPHEC policy and standards for new degrees guided the development of this proposal.

1.0 PROGRAM IDENTIFICATION

1.1 Submitting Institution(s)

This proposal is being submitted via a cooperative and collaborative offering of Mount Saint Vincent University (MSVU), Acadia University, and St. Francis Xavier University (StFX).

The Review Panel on Teacher Education (in a report released January 16, 2008) indicated to the Minister of Education that its discussions with the ICTE, about the Post-Shapiro recommendation to develop a joint-doctoral program (Gaskell, Majhanovich, & Tymchak, 2000), "have been encouraging." The Review Panel "endorses the continuation of the efforts of the Inter-University Committee on Teacher Education to [develop] an innovative, research-focused, collaboratively-staffed doctoral program" (O'Brien et al., 2007, p.38).

1.2 Faculty

The program will be offered by: the Faculty of Education at MSVU, the Faculty of Professional Studies (which houses education) at Acadia University, and the Faculty of Arts (which houses education) at StFX.

1.3 School

MSVU has a separate Faculty of Education with a Dean, the Acadia School of Education with a Director is housed within the Faculty of Professional Studies and the StFX School of Education with a Director is housed within the Faculty of Arts.

1.4 Department

The program will be offered by members of the teacher education programs at each of the three universities (see above). The combined faculty at these universities will provide 58 faculty as potential participants in the doctoral program. At present, MSVU, Acadia and StFX offer approved graduate programs at the Masters level in education, and all three universities have flourishing B.Ed. programs (see Section 8.8). The faculty now eligible to be involved in the doctoral program represents a range of academic backgrounds, interests and expertise, including experience in other doctoral programs nationally and internationally as supervisors, committee members, external readers and administrators (see Section 8.4).

1.5 Program Name and Level

The tri-university collaborative partnership will mount a doctoral program in educational studies, which is an aspect of the discipline concerned with the study of education in a broad sense. Educational studies conceives education as extending through the life span and encompassing all of the institutional and non-institutional ways in which people learn, from early childhood through mature adulthood. Major pedagogical issues conventionally related to educational studies include curriculum, literacies, lifelong learning, inclusive education, education foundations and leadership, and the psychological aspects of education.

1.6. Credential granted

Graduates of the program will obtain a Doctorate of Philosophy (Ph.D.) in educational studies, a research-oriented degree.

1.7 Proposed Start Date

July 2009.

2.0 PROGRAM DESCRIPTION

Overview

The Inter-University Doctoral Governance Committee (IDGC) will be the policy body that oversees the governance of the program (see Section 2.2.4). This committee will be supported by the Inter-University Doctoral Administrative Committee (IDAC) (see Section 2.2.5), which will be responsible for coordinating and administering the Inter-University Doctoral Program in Education (IDPE), in accordance with Faculty/School and University policies at each participating institution. Over the past decade all institutions have strengthened programs at both the graduate and post-baccalaureate levels of education. The three participating institutions share positive working relationships among themselves and with school boards, government, teacher associations and other external groups. These relationships are manifested through inter-university faculty research and professional development programs and through support for the present doctoral proposal among members of the wider educational community. The deans and directors of the participating institutions are all members of the Association of Canadian Deans of Education and are well connected to national initiatives in graduate education. Faculty members who will be involved in the doctoral program have established active research programs supported by various external funding bodies (see Section 8.1). The collaborative efforts necessary to develop this doctoral proposal provide a model for the cooperation and collaboration that will be central to the doctoral program itself.

2.1 **Program Objectives**

The tri-university collaborative Ph.D. program in educational studies aspires to:

- use the collective resources of Nova Scotia Faculties of Education for doctoral level study in education through a collaborative model of participation and governance;
- provide a model of cooperation and partnership that enables people in Atlantic Canada to engage in doctoral study as a part of a coordinated research community;
- establish a Nova Scotia based research presence at the doctoral level that is competitive with innovative national and international Ph.D. programs;
- advance the research base in educational studies in the province and beyond;
- build upon the existing research capacity and strengths of faculty in education and to attract, develop and retain doctoral candidates of high caliber;

- recruit, attract and select the top doctoral candidates in educational research regionally, nationally and internationally;
- provide a rigorous learning context that develops the research and intellectual capacities of our doctoral candidates to ensure academic excellence and program completion;
- promote a climate of research and advanced study that will develop human resources in the region at a time when post-secondary resources are scarce and a shortage of teacher educators and university faculty is imminent due to retirements (see Section 6); and,
- maintain and enhance comprehensive programs in education permeated by a culture of collaborative scholarship, and marked by innovation and leadership in educational studies.

2.2 Overall Program Structure

2.2.1 Overview

The proposed Doctor of Philosophy program in educational studies is a 7 unit or 42 credit hour program comprising 2.5 units or 15 credit hours of course work (more if deemed necessary at time of admission), a 1.5 unit or 9 credit hour Comprehensive Portfolio (with attendant examination) and a 3 unit or 18 credit hour Dissertation. Normally, students should be able to complete the program within four years (after a Masters degree), but will have up to six years. Fully qualified applicants will be expected to complete all of the required course work and the comprehensive portfolio examination within two calendar years of their acceptance into the program (see Table 1 for an overview of the doctoral program and Sections 2.4, 2.5 and 2.6 for detailed explanatory text). The university of the doctoral candidate's dissertation supervisor will be designated *Institution of Record*. Candidates will receive their degrees from the university so designated.

Table 1 - Overview of 7 Credit Ph.D. Program (may exceed 7 credits if deemed necessary)

	Year One (mittee will be constituted universities and will be of university Distance e	by June 30 th of the first fered live and concurrent		Entire degree must be completed within 6 years
Summer Seminar One (July start date)	Fall Semester	Winter Semester	Summer Seminar Two	GEDU 9100 Dissertation and Oral Defense (Pass/Fail) 3 credits
GEDU 9001 Foundations of Educational Inquiry .5 credit	GEDU 9003 Contemporary Educational .5 credit	GEDU 9010 <i>1.5 credits</i> Portfolio and		
GEDU 9002 Methodological Perspectives on Educational Research .5 credit	GEDU 9004 Focused Educational Studies .5 credit	cational GEDU 9005 Focus on Methods .5 credit Students m submit por for examin July 1st		
At time of admiss	ion, it will be determine elective courses:	d if candidate needs	Comprehensive Portfolio	
	GEDU 9006 Special Topics or GEDU 9007 Independent Study <i>1x.5 credit</i>	Examination Proposal Development Workshop Have12 months after Portfolio Exam to prepare and successfully defend Proposal		
(in co	GEDU Assembly of Co Research/Scho nsultation with Superviso	omprehensive larly Portfolio	mittee)	

Within the overarching framework of educational studies, students can focus on one or more of six interrelated themes (see Section 2.2.3): curriculum studies, literacies, inclusive education, lifelong learning, educational foundations and leadership, and psychological aspects of education and can anchor their studies in their 'teachable subjects' if so desired. Educational studies in these theme areas will constitute an important point of connection and collaboration between the faculties of education at the three participating universities. The collaborative

program enables students in each institution to participate in studies with a critical mass of students and to take advantage of expertise and resources at the three institutions. As well, the proposed doctoral program will afford a basis for further developing teaching and research collaborations amongst scholars in other disciplines at the three universities and in other provincial institutions (see Section 8.10 for a more detailed discussion of the merit of this partnership).

This timely program is unique in Canada, with the closest model being the joint doctoral program in Educational Studies among Brock University, the University of Western Ontario, the University of Windsor and Lakehead University, http://www.jointphdined.org and http://calendar.lakeheadu.ca/current/programs/Graduate_Studies/gradeducPh.D.html. Details of this degree are set out in Appendix I. Students complete course work, a Comprehensive Portfolio (with examination), a Proposal and a Dissertation. The governing bodies of each university approved the degree requirements and procedures for the program. They accepted their first students in the summer of 2000 and underwent their first Ontario Council of Graduate Studies Periodic Appraisal in 2003-2004 (OCGS is similar to MPHEC). In June 2004, OCGS granted the Joint PhD program leave to operate as a program of *good quality* (the highest rating). The next review is scheduled for 2010-2011. There is a Secretariat Office that rotates between universities, with the office moving to Windsor in the summer of 2008.

The Ph.D. program set out in this collaborative proposal mirrors the best and most innovative practices of contemporary successful Ph.D. programs in education, both nationally (notably the Ontario joint PhD) and internationally. As part of the program development process, working drafts of the proposal were forwarded to respective education faculty members at the three participating institutions in Nova Scotia, and to leading scholars and administrators in education elsewhere in Canada and the United States, for support and feedback. Suggested changes that improved the proposal were incorporated.

2.2.2 Program Philosophy

The proposed program is based upon the understanding that education is a complex process that transpires in multiple contexts, takes many institutional forms, and is best understood from a wide range of disciplinary perspectives including those developed in educational studies and broader perspectives of the social sciences, sciences, and humanities. Advanced study of education requires that students develop a deep and sophisticated appreciation of theories, practices and their integration; an ability to conduct advanced educational research using appropriate and rigorous research methods; a capacity to participate in contemporary academic and policy discourses; an awareness of contemporary educational issues; and a judicious sense of best practices (per the Standards developed by CMEC, 2007, set out in the Preface). The proposed Doctorate in Educational Studies Program is designed to foster the development of these competencies to national standards so that graduates can assume strong leadership roles related to education in Nova Scotia and elsewhere. As well, the degree is founded on the premise that educational scholarship and attendant leadership is a process best served through the kinds of collaboration that will be embedded in this program.

2.2.3 Interrelated Themes of Doctoral Study

As noted previously, a Ph.D. in educational studies is concerned with the study of education in a broad sense and conceives education as extending through the life span and encompassing all of the institutional and non-institutional ways in which people learn, from early childhood through mature adulthood. Faculty research strengths and areas within which students can focus their studies revolve around interrelated themes that mirror recurrent pedagogical issues with which educational studies are concerned (see Figure 1):

- curriculum studies
- literacies
- inclusive education
- lifelong learning
- educational foundations and leadership
- psychological aspects of education
- A. It ensures that doctoral students study core issues and questions of education while making the content personally, professionally and socially relevant to them.
- B. The interrelated themes identified for this degree are consistent with the research interests of the existing complement of faculty as evident from an analysis of the CVs (Sections 8.1 and 8.2).
- C. This approach allows for and anticipates the natural evolution and progression of research, theories, ideologies and methodologies within themes.
- D. The approach allows for changes in faculty expertise over time at the three institutions.

Figure 1 - Six Doctoral Study Interrelated Themes

Curriculum Studies



Inclusive Education

Lifelong Learning

Literacies

Educational Foundations and Leadership

Psychological Aspects of Education

Either alone or in some combination, these interrelated themes will inform doctoral students' research or be a sole focus. Students can either declare an interest in a particular theme or design a program that weaves two or more themes together. These well established themes ground the doctoral program in long-standing, recognized areas of study within educational studies, while accommodating the evolution of scholarly nuances within a rapidly changing field. All of these themes are of growing importance in education. As well, given our rapid development as a knowledge society, all are ripe for further advanced study and research.

Another aspect of this approach is the ability of students to choose one or more themes to anchor their studies, while still engaging with their academic discipline. This means that teachers who specialize in mathematics, English, science, history, or other subjects can still draw on their content background while engaging with the philosophical and theoretical explorations of one or more themes. The courses for this degree were chosen because, collectively, they provide intellectual and conceptual grounding in educational studies. Students will be prepared to be *educational researchers*, regardless of any theme(s) they choose to explore. As students move through the program of study, they will have rich opportunities to engage and learn with faculty members versed in research related to these themes and other topics. While doctoral students' research interests might well focus on one or more of the theme areas, they will graduate with a *PhD in Educational Studies*, not with a PhD in a particular topic or theme. The following subsections provide brief conceptualizations of the themes.

Curriculum Studies

Curriculum studies involves inquiry into the pedagogical spaces within which teachers and students live and learn. Within this theme is an examination of theoretical and philosophical perspectives that inform the everyday lived experiences and practices of school communities. Students drawn to this theme will join a bourgeoning cadre of educators interested in crossdisciplinary explorations of epistemology, pedagogy and the practice and processes of teaching and learning. Research issues transcend the various subject areas of educational inquiry, while still allowing intellectual space for subject focused studies (e.g., mathematics, science or health education).

Because schooling, pedagogy, and curriculum are constructed within broader social, historical, and cultural contexts, interrogation focuses on the ways that teachers and students are socialized into particular ways of being and knowing. Doctoral students working within this theme will develop and deepen understandings of curriculum planning, curriculum decision making, and curriculum development, as well as the planned curriculum, the enacted curriculum, and the received curriculum (Marsh and Willis, 2003). Doctoral students will critically examine the intellectual offerings of a range of curriculum scholars across the spectrum of paradigms and ideologies. They will explore and conduct research around the nuances of the relationship between curriculum theories and educational practices.

Literacies

In current times, educators and students must continuously reconceptualize the meanings and practices associated with "literacy" and "text." This theme is thus multifaceted and will include philosophical and theoretical study of cognitive, historical, socio-cultural, and political dimensions of literacies for learning. Doctoral students choosing this theme may be concerned with a broad spectrum of possibilities including, but not limited to, print-based, technological, media, family, and also visual, literary, and other arts-based literacies. Students will have opportunities to take a critical view of literacies within and beyond school. The theme encompasses research and attention to the needs of a wide range of learners, such as those who experience difficulties in reading and writing print-based text, those who are positioned as marginal within the school system, and those for who English is an additional language. The literacies theme is predicated on the assumption that one important role of schooling is to prepare students to become critical thinkers and independent learners who can effectively use various forms of literacy to negotiate their roles as family members and responsible members of a democratic society. Given current and historical emphases on particular forms of literacy in Western cultures, this theme offers rich potential for doctoral research.

Inclusive Education

Inclusion is a contested concept in education because it relates to educational and social values, as well as to our sense of individual worth. Educational inclusion as a theme concerns itself with philosophical, theoretical and critical awareness of diversity in learning and the ways in which issues related to diversity and equity are taken up and mediated in schools and in society. This diversity comprises elements of ability, race, ethnicity, culture, gender, sexual orientation and social class, among other differences experienced in society. Successful inclusion depends on flexibility in learning environments, curricula, delivery systems and instructions, as well as the involvement of educators, leaders, learners, parents and communities. Diversity must be valued, not just tolerated and accommodated. This theme enables doctoral candidates to engage in scholarship focused on researching and examining the deep theoretical, philosophical and practice nuances of including everyone in the educational journey and experience, leading to children and young people being able to develop their capacities as successful learners, confident individuals, responsible citizens and effective contributors to society. Doctoral students will research the idea of what inclusive practice means in their classrooms and schools, in light of others' research, theoretical innovations, and educational policy and legislation. This theme especially invites scholars to explore theoretical and philosophical issues around rural education and inclusion, given that two thirds of students in Nova Scotia attend rural schools.

Lifelong Learning

The theme of lifelong learning will engage students in critical, analytical explorations of learning processes over the life span in a wide range of social, institutional, cultural and curricular contexts beyond the formal public school setting. Stemming from adult education, lifelong learning is an innovation that brings a focus to community and international development, citizenship, and cross-cultural learning, among others. The education of adults across their lifespan concerns itself with issues of adulthood and selfhood as well as the educational potential that lies outside the formal system. Students drawn to this theme will be intrigued with the process of learning over the lifespan within a learning society. They will appreciate the distinctions between adult education and adult learning (the newest conceptualization), with the former referring to planned educational activities and the latter to life's curriculum. This learning can deal with being a consumer and worker, a democratic citizen, and a member of resilient communities. The scholarship shifts from a focus on the school as institution to the learner as an intelligent agent with the potential to learn from all of life's encounters. This theme exposes students to philosophical and theoretical examinations of an

emergent new conceptualization of education and learning. Scholars of lifelong learning examine individual and collective learning within a learning society. Learning involves all of one's life, in the sense of both time-span and diversity. The idea that learning should be supported and encouraged through the life course is the crux of this theme for doctoral research in educational studies.

Educational Foundations and Leadership

This theme sits at the nexus of foundations and leadership. Educational foundations scholars are interested in pursuing in-depth, critical studies in the history, philosophy and sociology of education by exploring the underlying principles of education, the nature of knowledge, how classical, modern and post-modern theories and philosophies have impacted K-12 curricula, pedagogy, and research. A joint focus on foundations and leadership opens compelling lines of intellectual and philosophical investigations about the connections between critical inquiry of the educational context and leadership directions. The broad definition of leadership assumed in this theme includes teachers and other educators as transformative leaders (as well as transactional leaders), shared governance (the system by which an educational unit is controlled), and community-family-school collaborations. Rather than limiting the focus of the intellectual inquiry to one particular perspective of leadership, students will examine, critique and integrate a variety of philosophical and theoretical orientations to leadership. In particular, doctoral students will critically consider the roots, tensions and controversies surrounding the character of Canadian education. This theme will help students reflect about and intellectually examine the relationship between the role of education and leadership, and the larger society that education and educators help to form. Central to educational foundations and leadership are pedagogical issues of values, morals, ethics and the critical examination of power relationships in society and educational politics. Of special interest in Nova Scotia are power issues relevant to First Nations peoples, African Nova Scotians and issues around rural education. Regarding the latter, 70% of Nova Scotians live in rural areas and upwards of half of rural Nova Scotians do not complete high school. Doctoral students will engage with intellectual inquiry around different and sometimes competing visions of the ideal society, and educational leadership and practices.

Psychological Aspects of Education

Within this doctoral program, psychological aspects in education is intended to address the cognitive and affective aspects of learning, memory and information processing in the broadest sense. Traditional conceptualizations of psychology include areas normally viewed as educational psychology and educational counseling. However, the program does not provide the type of clinical experiences one would find in programs that prepare individuals for licensing in the areas of school or clinical psychology or in the area of psychological therapy. Rather, this theme provides opportunities for participants to examine a variety of areas such as the study of the cognitive processes inherent in the teaching/learning process in education; the study and development of theories of human development as they inform a wide range of questions, issues and problems; and, the provision of mental health, personal development and career oriented group and individual educational counseling and curriculum based programs.

Each of these areas is ripe for further theoretical development, building on past successful impacts on teaching, learning and curriculum. Those drawn to the psychological aspects in

education theme will have the opportunity to concern themselves with the interests of how psychology impacts education in schools, higher education, child guidance and the wider community. Doctoral candidates will explore theoretical advances in child, adolescent and adult development; educational assessment; learning theory; personality and counseling theories; mental health, wellness promotion, personal and social development, self concept and related areas; cognitive science including problem solving, thinking and information processing; and, will consider the implications of these areas for practice.

2.2.4 Governance Structure (Policy Body)

Governance is the policy body that oversees the doctoral program, developing and managing consistent, cohesive policies, processes and decision-rights for those involved in the program. The intent of governance is to provide assurances that the three universities will produce and ensure a worthwhile pattern of good results while avoiding patterns of undesirable circumstances. The decisions taken by the body define expectations, grant power and verify expected performances. Efficacy of fair governance and the achievement of consensus by democratic means, especially transparent and collaborative participation that respects the rights and interests of all stakeholders, are guiding principles that shape the proposed governance and administrative structures.

Governance will be provided through existing governance mechanisms at each participating institution and will be overseen by a newly established Inter-University Doctoral Governance Committee (IDGC) supported by the Inter-University Doctoral Administrative Committee (IDAC) (see Section 2.2.5). IDGC will route policy matters through the appropriate governance bodies at each participating institution to obtain departmental and appropriate upper levels of administrative and governance (Senate) approval. Table 2 profiles the proposed governance and administrative structures.

Inter-University Doctoral Governance	Inter-University Doctoral Administrative
Committee (IDGC) (n=4)	Committee (IDAC) (n=6)
 Academic Vice President from each university (n=3), or his or her designate (such as Dean of Graduate Studies) Chair of IDAC (elected by IDCG for three year term) n=1 	 Doctoral Program Coordinator from each institution (either by election or appointment) n=3 Faculty member from each institution (either by election or appointment) n=3 Chair of this group is elected by the group for a three year term, sits on the IDGC, ex officio A Program Administrative Assistant for the Ph.D. will report to the IDAC Chair, and will come from the same institution

The mandate of the IDGC is to:

- monitor program quality;
- monitor and review policy recommendations regarding the operation of the doctoral program;
- review and approve faculty accredited to the program;
- review and set policies related to admissions;
- review and approve programs of study;
- initiate program assessment every five years; and
- review financial recommendations of the IDAC.

2.2.5 Program Administration (Curriculum Development, Supervision and Admissions)

The Inter-University Doctoral Administration Committee (IDAC) will administer the program. The IDAC (6 members) will comprise the Doctoral Program Coordinators, chosen from each of the three participating institutions on the basis of one coordinator from each institution, and one additional faculty member from each institution. Each institution will determine whether appointment or election is their preferred method of selecting a Program Coordinator and additional IDAC faculty member. In addition to representing their institution on the IDAC on all matters pertaining to doctoral studies, doctoral program coordinators will be responsible for internal communications pertaining to the doctoral program; organization of regular meetings; liaison with doctoral students and faculty; student/program coordination; and, all matters pertaining to the ongoing monitoring of the doctoral program. The Chair of this group will be elected by IDAC for a three-year term. All decisions of the committee will be made by majority vote. The mandate of the IDAC is to:

- develop and recommend to IDGC policies regarding all aspects of the doctoral program;
- review and recommend to admissions departments at participating institutions all admissions to the program;
- review and approve all student programs of study;
- review and approve faculty and/or supervisory committees;
- review and approve external dissertation examiners;
- review and recommend to participating institutions scholarships and/or graduate awards;
- oversee the organization and operation of the doctoral program, including all matters pertaining to program promotion, planning, development, revisions and all matters pertaining to day-to-day operations with students and faculty;
- monitor and ensure program quality;
- review progress reports of doctoral students; and,
- ensure effective communication among all faculty, sister programs, and external communities with an interest in the work of the doctoral program.

A Program Administrative Assistant reporting to the IDAC Chair will assist the doctoral Program. The office of the Program Assistant may be housed at the same institution as the IDAC Chair. The Terms of Reference for IDAC will be set by the first complement of representatives comprising the committee, and approved by IDGC. They will set contingencies for meeting times, modes of meeting, rotating membership (to ensure continuity), quorum, procedures for

invited members, policies for conflict of interest, and other operational issues. The terms of reference will be a flexible document, open to amendments as policies and practices become clarified and codified.

2.2.6 Evergreening Principle

The principle of evergreening will underpin the foundations of this doctoral program. An evergreening principle enables the IDAC to make modest, timely changes to the doctoral program as facts, information and their interpretation warrant, enabling it to address concerns and opportunities as they present rather than letting them accumulate or be lost. In attempts to keep abreast of intellectual innovations, changing environments and contexts, student enrolment trends, student issues and contributions and the like, IDAC will develop a powerful *formative evaluation system* to augment the automatic five year program review in place at each institution. Relevant information will be gathered and analyzed by the IDAC, and will inform policies pertinent to program quality, curriculum, admissions procedures, committee structures, supervision, evaluation processes (portfolio, proposal and dissertation defense) as well as inter-university collaboration and communications.

2.2.7 Metrics and Statistics

The evergreening will enable the program to be accountable to students, respective university communities and the wider community. Ongoing review will ensure that the program remains flexible, viable and vigorous, thereby better ensuring a rigorous doctoral experience. Evergreening will contribute to a more sustainable program, better ensured by the development of relevant metrics to gauge trends and changes. These metrics will include enrolment trends, attrition rates, completion rates, and comparative statistics for similar doctoral programs. Information may be gathered using focus groups, surveys, entry and exit interviews, and response to ongoing student feedback.

The Doctoral Program Coordinator, under the guidance of IDAC, reporting to IDGC, will undertake systemic and constant oversight of the program at each site, as required by any quality doctoral program in Canada. Coordinators will create flexible structures and processes that enable the program to be flexible and proactive. They will actively strive to grow in response to the student participants, allowing for possibilities and potentialities. Resultant information systems will inform program development, including curricular and pedagogical innovations, program administration decisions, funding requests for the program, self-studies, and marketing and promotional initiatives. With rigorous and timely metrics, the doctoral program will be better positioned to attract and retain high quality candidates.

2.2.8 Criteria for Faculty Participation and Doctoral Supervision/Committee Participation

Critical to the success of the program will be opportunities for faculty members to work with and supervise doctoral candidates and the provision of appropriate support to doctoral students. Rigorous criteria will guide the appointment of faculty members as supervisors or committee members (as recommended by Levine [2007]).

Criteria for accreditation as doctoral faculty include:

- tenure stream appointment as a faculty member at one of the participating institutions;
- possession of an earned Doctorate;
- demonstrated record of scholarly activity as established by peer review; and
- demonstrated record in the supervision of graduate theses.

Criteria for accreditation as a doctoral supervisor normally include:

- eligibility for appointment as doctoral faculty (see above); and
- demonstrated record of supervision of graduate theses at the Masters level to completion or the doctoral level to completion.

Criteria for accreditation as a doctoral committee member include:

- ability to contribute to the research being undertaken;
- eligibility for appointment as doctoral faculty (see above); and,
- in some situations, a committee member who may not meet the criteria for appointment as a doctoral faculty member may be accredited on the recommendation of the supervisor because of his or her unique specialized knowledge.

2.2.9 Faculty Workload

It will be necessary not only to ensure appropriate levels of support to doctoral students, but also to ensure that workloads for faculty are equitable both within and amongst participating institutions (IDAC and IDGC will co-manage this aspect of the program). Faculty duties and responsibilities in respective teacher education programs and Masters programs at the participating institutions are already extensive. Therefore, a member of faculty will normally be permitted to supervise a maximum of three doctoral students at any one time and participate as a committee member on a maximum of two doctoral committees at any one time. As well, a faculty member will only be permitted to teach one doctoral seminar during any given term. Section 2.6.6 sets out details for how courses will be assigned and administered across the three partner institutions.

2.3 Admission Requirement and Standards

2.3.1 Requirements

- An applicant will hold a Masters degree from a recognized university in education or in a related field of study (cognate discipline);
- An applicant will normally have completed a graduate thesis. Applicants who have not completed a graduate thesis in a field related to their doctoral studies will be required to submit evidence of their ability to undertake research in education through the completion of a qualifying research paper of sufficient depth and scope to reflect their research competence;
- Scholarly preparation to conduct research, normally including graduate level courses in quantitative and/or qualitative research methods and design;

- Three letters of reference, normally including two academic and one professional reference;
- A recent curriculum vitae indicating current initiatives in education, and scholarship to date;
- A letter of intent indicating a proposed area of study from among the six interrelated themes;
- An interview with a selection committee that is a subcommittee of the IDAC; and,
- A minimum of A- or 80% average in his or her highest degree. *Qualified applicants will only be admitted if a suitable supervisor and program can be provided.*

2.3.2 Applications Process

Student applications for the Ph.D. program will follow an admissions process as follows:

- Apply to their institution of choice through existing procedures by January 31 for July entry (when courses begin). An application that meets the deadline at one participating institution will be considered to have met the deadline at all participating institutions;
- The Doctoral Program Coordinator at the institution will review the application for basic criteria (minimum standards, prerequisites and letters of reference, curriculum vitae, and grade point average, see Section 2.3.1). The Coordinator will determine availability and appropriate fit of a potential supervisor;
- In the event that a Doctoral Program Coordinator determines that a student is a strong candidate for the program, but an appropriate potential supervisor is unavailable at the applicant university, with the student's permission, the Coordinator will forward the file to the Doctoral Program Coordinators of the other participating institutions to determine if a potential supervisor might be available;
- The Doctoral Program Coordinator will recommend to the IDAC qualified candidate(s) for admission;
- If a candidate concurrently applies to all three universities, the Doctoral Program Coordinator will determine the best academic fit, communicate this information to the three universities, the IDAC and the student, and give the student the option to select the best academic fit;
- The IDAC will review applications and, by majority agreement, recommend acceptance of applicants to the participating institution;
- If the applicant is successful, the Doctoral Program Coordinator will assign an appropriate pro-tem (research) advisor for the student;
- The participating Office of Graduate Studies will inform the applicant in writing regarding the decision of the IDAC according to existing institutional policies. This home institution will then become the Institution of Record for that doctoral student;
- In addition to specific program requirements and regulations, students are bound by the regulations and procedures pertaining to graduate studies at their Institution of Record;
- The pro-tem advisor will arrange for an entry meeting for the successful applicant. The purpose of this meeting will be to develop a preliminary program plan and an initial outline of the proposed research area. This preliminary plan will be submitted in writing

to the IDAC (within a time frame specified by the IDAC), through the Doctoral Program Coordinator, for approval;

- A copy of the file will be housed in the Office of Graduate Studies that is accessible to the Chair of the IDAC; and
- If, after admitted, a student changes advisors his/her home institution will shift to the location of the advisor, if appropriate.

2.3.2.1 Admissions Quota

Standard operating procedure in most graduate schools involves placing quotas on admissions for logistical, pragmatic and academic integrity reasons. Approximately 14 students will be admitted each year, distributed among the three universities (see Table 3), depending on academic fit between the applicant and faculty member(s) (see Section 2.3.2). As noted in Section 2.3.1, "qualified applicants will only be admitted if a suitable supervisor and program can be provided."

2.3.2.2 Competitive Admissions

Normally, IDAC will use a competitive admissions policy rather than a rolling admissions policy, but it will consider applicants on a case-by-case basis and waive the fixed application date if deemed warranted.

2.3.3 Strategy for Expanding Pool of Candidates

While the program will ultimately be open to all scholars, the intake for the first three years will draw from the local pool of candidates, opening up in year four to other applicants (subject to a formative review of the program). Candidates from the Maritime Region will arrive with *sensibilities* of Maritime educational issues, currents, trends and opportunities. Such applicants are more inclined to engage in scholarship that updates and improves the local educational system by becoming educational scholars and researchers, rather than personally updating themselves via further education. Their research questions of relevance in the local context will enhance a culture of research in the region and have the potential to enrich and improve the local educational system. Their doctoral research will help to inform their own work and that of other educational leaders. Further, locally situated research will contribute to the expansion of knowledge among teachers, administrators and the wider public.

The decision to give priority to local candidates at the outset of the doctoral program is predicated on the need to meet the pent up demand (see Section 6). Gradually admissions will expand to attract more people from the region, the nation and then the world. The Maritime Provinces have historically been characterized as users of knowledge, not producers of knowledge. To enhance regional sustainability and growth, the region needs more educational researchers who have learned and worked in the local system and who will ultimately return to that system after completing this doctoral program. The educational experiment can continue, *grounded in the local*, recognizing that there is a place for non-local applicants. The latter may well produce knowledge applicable to the region; therefore, the program will begin accepting candidates from other parts of Canada in its fourth year, thus enhancing movement towards *Pan*-

Canadian research (ACED, 2007). Concurrently, it will be possible to develop strong Maritime participation in the national forum via the research conducted in the program. Finally, likely within year six, admissions will open to international applicants.

2.3.4 Planning for Attrition (Planned Admissions)

An essential feature of this gradual inclusive strategy will be planned admissions that will address the issue of attrition (the gradual diminution in numbers or strength because of constant stressors). Since more than half of Canadian students do not complete their PhD (Elgar, 2003) (the optimal completion rate is 75%), it is essential to plan for this contingency in order to adjust marketing and recruitment processes, and to ensure that we have not overextended our faculty capacity for supervision and teaching. There will be an intentional design and monitoring of the number of admissions over the first six years of intake (see Table 3). This plan and oversight, which respects the principle of evergreening and the five-year program review policy of MPHEC, takes faculty workload into consideration. Well-supported students will be less likely to withdraw from the program; thus improving the completion rate. Lowering the number of people who leave before they complete their program of study is a moral imperative of this program. As well, we do not want to block the generation and dissemination of new knowledge, the intent of doctoral studies. We have an obligation to a body of knowledge within the distinct discipline of Education. As well, pragmatically, we will have likely found our niche within the first six years, necessitating a considered revision of policies.

Table 3 profiles projected enrolments for the first six years of the program. The first line, titled First (referring to first intake), should be read straight across, meaning 14 students will be admitted in Year one of the program and, by year 6, all of them will have graduated (or left via attrition, which is planned for in this table). The assumption is that six candidates will graduate in 2013, and the other six will graduate by 2015 (they can finish the degree in four years but may take up to six years). The second line is the second intake of students, et cetera. Note that, yes, in 2015 (the seventh year of the program existing), if these predictions hold, we will have 61 doctoral students, with about half of them working on their dissertation and the other half enrolled in first and second year course work and/or proposal writing or portfolio.

Overall Enrolment							
	2009	2010	2011	2012	2013	2014	2015
First	14	14	13	12	6	2	0
Second		10	10	8	8	4	2
Third			10	10	8	8	4
Fourth				14	14	13	12
Fifth					14	14	13
Sixth						15	15
Seventh							15
Total # of Students	14	24	33	44	50	56	61

Table 3 - Number of Enrolments for First Six Years of Program

MSVU Enrolment							
	2009	2010	2011	2012	2013	2014	2015
First	6	6	5	4	2	0	0
Second		4	4	4	4	2	0
Third			4	4	4	4	2
Fourth				6	6	5	4
Fifth					6	6	5
Sixth						7	7
Seventh							7
Total # of Students	6	10	13	18	22	24	25

Acadia Enrolment							
	2009	2010	2011	2012	2013	2014	2015
First	4	4	4	4	2	1	0
Second		3	3	2	2	1	1
Third			3	3	2	2	1
Fourth				4	4	4	4
Fifth					4	4	4
Sixth						4	4
Seventh							4
Total # of Students	4	7	10	13	14	16	18

StFX Enrolment							
	2009	2010	2011	2012	2013	2014	2015
First	4	4	4	4	2	1	0
Second		3	3	2	2	1	1
Third			3	3	2	2	1
Fourth				4	4	4	4
Fifth					4	4	4
Sixth						4	4
Seventh							4
Total # of Students	4	7	10	13	14	16	18

2.3.5 Canadian Charter of Rights and Freedoms

Both the standard of due diligence and full respect for the Canadian Charter of Rights and Freedoms will inform the admissions process, <u>http://laws.justice.gc.ca/en/charter/</u>. Within the context of the admissions quota (Section 2.3.2.1), the IDAC will encourage applications from communities underrepresented in graduate study on the basis of race, national or ethnic origin, color, religion, sex, age or mental or physical disability (Section 15(1)) in their administration of the doctoral program admissions policies.

A respect for the richness to scholarship that comes with student diversity (local, regional, national and international) will inform the admissions process. Such diversity leads to better access to differently-experienced students, more opportunities to challenge the status quo, better ability to create new and different knowledge, and more opportunities for intellectual and actual exchanges. A concerted effort will be made to create many doorways through which applicants access the program, contributing to the uniqueness and innovativeness of our program.

Systematic care and rights-informed consistency will underpin all efforts when considering applications to the program; however, to ensure academic preparedness and ongoing integrity of the program, the review of applications, by necessity, will be informed by the applicants' *academic qualifications* for a doctoral level program of study. For these reasons, each application will be dealt with on a case-by-case basis within normal admission procedures.

2.3.6 English Language Proficiency

To achieve success in this doctoral program, applicants will require strong reading, writing and comprehension skills in the English language. To that end, the IDAC will be guided by respective university's language proficiency policies for those for whom English is not a first language. This policy will ensure each learner will be best able to reach his or her full potential as a scholar and researcher. Students for whom English is a second language/dialect will have

full access to the ESL and international student support services in place at each of the three participating universities.

2.3.7 Arm's Length Admission Policy

Normally, the arm's length principle will apply to the admissions process to ensure that all applicants are on equal footing. There is a need however, to strike a balance between an arm's length principle (to avoid undue influence from favoritism and nepotism) and an authentic, valid request from a faculty member(s) to work with an intellectually well-matched, richly qualified applicant. To that end, when appropriate, a full disclosure statement of *a prior* relationship between the faculty member(s) and the applicant will be included in the student's application package (signed by both). This statement also will set out a rationale for why the proposed collaboration is academically justified. This process respects the principles of transparency and accountability, thereby accommodating the normal arms-length principle of guaranteeing equal treatment, yet appreciating the reality that a rich intellectual endeavor could unfold if such an applicant is admitted into the doctoral program.

2.3.8 Many Ways of Knowing Policy

Applicants must demonstrate capabilities in at least one epistemological and ontological research foundation (often positivism, interpretivism and/or criticalism, among others), in addition to the Section 2.3.1 requirement that they have scholarly preparation to conduct qualitative and/or quantitative research. Including this as an admission requirement enables the Doctoral Program Coordinator to take into consideration many ways of knowing and of disseminating scholarly findings to an array of audiences. This policy moves the program beyond traditional reliance on positivistic scholarship usually couched in a conventional Masters degree with a thesis, opening the door for innovation and creativity when considering applications to the program and resultant program plans. Accounting for such issues as equivalences, recognized life accomplishments, indigenous ways of knowing, prior learnings, and peer and juried adjudications will enhance possibilities for innovation and for the inclusion of a diverse range of scholars. For clarification, although the "many ways of knowing' policy applies to admissions, any artifacts generated *before* applying for the program (even if through many ways of knowing) will not count for the portfolio (section 2.5.2.2).

2.3.9 International Student Visas

Undoubtedly, the doctoral program will receive applications from international students, given the current climate of internationalization and globalization of Canadian campuses. As well, many international students come to Canada to obtain a Masters degree, intending to eventually pursue doctoral studies. In the case of an international applicant, full consideration shall be given to the constraints and opportunities that exist within the rules, regulations and expectations regarding residency and other restrictions attached to visitor visas, study visas and temporary work permits. Familiarity with the network of Canadian agencies that deal with international students will be necessary, especially Canadian Embassies and Consulates and Canadian Citizenship and Immigration (CIC), www.cic.gc.ca. The Doctoral Program

Coordinator and IDAC will work in close collaboration with those who support student international initiatives on respective university campuses.

2.3.10 Student Evaluation and Grading

To ensure that the Ph.D. program meets the highest standards of academic excellence, students will be subjected to rigorous assessment and evaluation at all stages of their degree. The five core required courses will be assessed according to the grading scheme in use at the student's Institution of Record. Under normal circumstances, any student receiving a grade below B- in any graded course will be required to withdraw from the Ph.D. program. The comprehensive portfolio examination and the dissertation will be assessed on a pass/fail basis. Students will only be granted a pass for work that is of the highest academic merit.

2.3.10.1 Grading Matrix

Each university has respective Academic Regulations for academic advising related to graduate level grading schemes, student standing, academic offenses and grade appeals. Students will be graded according to the system in place at their home university. Students may not continue in the program with a failing grade. They do have the option to appeal a grade.

	MSVU	Acadia	St.F.X. Does not use Alpha grades
A+	94-100	94-100	
А	87-93	87-93	
A-	80-86	80-86	
B+	77-79	77-79	
В	73-76	73-76	
В-	70-72	70-72	

2.3.11 Student Appeals

A student wishing to appeal a grade should consult the Academic Appeals Procedure policies set out in the calendar of his or her home institution. *Normal procedures involve* advising students at the time of admission to the program to preserve all exercises, papers, reports and other graded material for the course. If they wish to question a grade, their first step is to discuss the grade with the instructor within three weeks of the release of grades. Standard procedure is *normally* to request a grade analysis, which, if not satisfactory, is followed by a reread. The student must be informed that the original grade will be replaced by the revised grade assigned via the re-read procedure (implemented by the arms-length Registrar's office). If the revised grade is a failing grade, the student may not continue in the program.

2.3.12 Grade Changes

When an instructor determines that a grade must be changed, formal signed notification is sent to the Doctoral Program Coordinator no more than five weeks after the final deadline for submission of grades. The Coordinator forwards a copy of the recommended grade change to the appropriate authority at the student's *Institution of Record*. Procedures in place at respective universities for grade changes to the student's transcript will apply.

2.3.13 Grades of Incomplete/Deferrals

In the case of grades of incomplete and deferred, policies in place at the Institution of Record will apply.

2.3.14 Grades for Work in Progress

A grade for work in progress normally applies for independent studies, the Portfolio and Dissertations. In such cases, the instructor(s) will contact the Doctoral Program Coordinator directly for interim approval of this grade notation, following which the *Institution of Record* policy will apply.

2.3.15 Maintaining Registration in Graduate Programs (Continued Good Standing)

In summary, the proposal contains language for failure of the PhD defense (Section 2.5.4.2 (p.37) and failure of the Comprehensive Portfolio defense (Section 2.5.3.8), "Normally, a failed portfolio will result in termination from the program, even if all course work is completed successfully (GPA above 3.0)". Section 2.3.10 states "The five core required courses will be assessed according to the grading scheme in use at the student's Institution of Record. Under normal circumstances, any student receiving a grade below B- in any graded course will be required to withdraw from the Ph.D. program." The proposal also contains reference to academic standing at Section 2.3.10.1: "Each university has respective Academic Regulations for academic advising related to graduate level grading schemes, student standing, academic offenses and grade appeals." Also, "Students may not continue in the program with a failing grade." As a general principle procedures in place at respective universities will apply.

2.4 Listing of Courses Required

The proposed PhD program will require students to complete seven credit units equivalent to 42 credit hours according to the following schedule of required and elective courses:

2.4.1 Required Courses

There will be five required Core courses, numbered 9001-9005, valued at .5 units each (2.5 units). These courses deal with: research paradigms, methodologies, theories, research methods, and focused educational studies. Students also will receive 1.5 credits for completing a

Comprehensive Portfolio and 3 credits for completing a Dissertation, N=7 units. Section 2.4.2 addresses elective courses.

GEDU 9001	GEDU 9002	GEDU 9003	GEDU 9004	GEDU 9005	GEDU 9006 and	GEDU 9008 and 9009	GEDU 9010	GEDU 9100
Foundation of Education Inquiry	Perspectives in	Doctoral Seminar: Contemporary Educational Theory	Focused Educational Studies	Advanced Research Seminar: Focus on Methods	9007 Special Topics	Independent Study	Portfolio	Dissertation
GEDU 9001 – Foundations of Educational Inquiry

This course is compulsory for all students and will be taken as part of the first Summer Seminar of the program. To prepare students for independent research, this course will engage students in a thorough study of the epistemological, ontological and axiological foundations of inquiry in the social sciences and in education. GEDU 9001 is a co-requisite to 9002 and a prerequisite for all courses in the program.

Course Description: A consideration of discourses on the nature of knowledge and inquiry that includes detailed investigation of the nature of research in the social sciences and education; an exploration of the ontological assumptions of reality underlying social science research; an investigation of epistemological views of what counts as knowledge as well as an exploration of both the axiological (values and bias) and rhetorical (research reporting structures) components of educational inquiry.

GEDU 9002 - Methodological Perspectives on Educational Research

This is a compulsory course for all doctoral students and will be taken in the second semester of the program. The course will survey the full range of paradigmatic and methodological approaches to research in the social sciences and education in order to prepare students both to read and understand educational research and to consider implications for their own methodological choices (which inform specific methods and analytical approaches). GEDU 9002 is a co-requisite to 9001 and a prerequisite for all courses in the program.

Course Description: A survey of a wide range of paradigmatic and methodological approaches to research in the social sciences and education that may include, but is not limited to: critical feminist research, critical theory, post-structuralism, experimental/positivism, narrative/interpretive (hermeneutics), phenomenology, grounded theory, philosophical analysis, and arts-based inquiry. Prepares students as scholars to understand the strengths and weaknesses of different methodological approaches to research.

GEDU 9003 – Doctoral Seminar: Contemporary Educational Theory

This course is mandatory for all students in the first year of their program. Because it lays the groundwork for subsequent study in the PhD, this course will be an intensive theoretical examination of historical and contemporary thought related to studies in education. The course is a prerequisite for GEDU 9010.

Course Description: An examination of the historical and philosophical roots of contemporary issues in education. Provides students with an advanced and comprehensive understanding of contemporary educational theory. Also provides students with an advanced understanding of the principles and processes of academic scholarship.

Course Process: This course will be offered using a variety of modes including face-toface meetings, teleconference sessions and web-enabled technologies to students at the three institutions. Faculty will engage students in an extensive review of influential and contemporary literature on the historical and philosophical roots of contemporary issues in education. Students will take an active role leading topic discussions and participating in collaborative research investigations.

GEDU 9004 – Focused Educational Studies

This is a mandatory course that students will take in the third semester of their program. At this stage, students will pursue a more intensive investigation of their chosen topic, leading to a refinement of their research question(s), a deeper understanding of their dissertation work and the eventual laying of the groundwork for their dissertation. Normally, students' will *focus* their efforts within the six themes identified for this doctoral program: curriculum studies, literacies, lifelong learning, inclusive education, education foundations and leadership, and psychological aspects of education.

Course Description: Engages students in an intensive and focused exploration of one or more themes of educational studies, within this degree understood to encompass: curriculum studies, literacies, lifelong learning, inclusive education, education foundations and leadership, and psychological aspects of education.

Course Process: This course will be offered using a variety of modes including face-to-face meetings, teleconference sessions and web enabled technologies to students at the three institutions.

GEDU 9005 - Advanced Research Seminar: Focus on Methods

This is a mandatory course that students will take in the third semester of their program. This course will provide students with in-depth knowledge and practical expertise related to specific research methods appropriate to their dissertation research questions, and aligned with their methodological orientation. GEDU 9002 (methodological perspective) is a prerequisite.

Course Description: Engages students in an in-depth exploration of research methods appropriate to the methodological orientation of their dissertation (research design, sampling, data collection and data analysis). This course is intended to develop practical and theoretical research expertise sufficient to support doctoral dissertation work. Depending on the methodology, students could examine methods such as cases studies, surveys, discourse (textual) analysis, narrative inquiry, educational ethnography, thematic analysis, action research, content analysis, interviews, model building, experiments, reflexive journaling, and field research.

Course Process: This course will be offered using a variety of modes including face-to-face meetings, teleconference sessions and web enabled technologies to students at the three institutions.

GEDU 9010 - Comprehensive Examination: Research/Scholarly Portfolio

Students must complete this pass/fail compulsory component normally by the end of the second summer seminar of their doctoral program. Students will develop an extensive scholarly portfolio (see description and further detail in Section 2.5.2 below) that will be presented publically and reviewed by an examination committee composed of the student's Supervisory Committee and an external examiner. The portfolio will provide students an opportunity to demonstrate sufficient scholarly breadth, depth, creativity and engagement to undertake substantive research in the field. Concurrent with the presentations of their portfolio, students will attend a ten-day summer seminar *proposal writing workshop*.

GEDU 9100 – Doctoral Dissertation

The doctoral dissertation is the culminating component of the PhD program (see description and further detail in Section 2.5.3 below). The dissertation is compulsory and

officially will begin only after the student has successfully completed all coursework, passed the research/scholarly portfolio process, and, in conjunction with their academic supervisor, selected a doctoral Supervisory Committee. Students will begin this phase by defending a dissertation proposal (normally within six months of passing the portfolio). Next, students will conduct research and complete the writing of their dissertation. Finally, students will defend their dissertation in a public forum that includes their Supervisory Committee and an external examiner.

2.4.2 Elective Courses

Students may also take (and may be required to take) Special Topics and Independent Studies, if deemed necessary at Admission. Students requiring (to be determined at time of admission) or desiring additional preparation for subsequent components of the PhD program may complete one or more of the following elective courses:

GEDU 9006 and GEDU 9007 - Special Topics Educational Studies

These .5 credit courses will focus on selected special topics in educational studies. They will provide students with in-depth knowledge and further preparation to undertake doctoral research in their particular topic. Normally, these courses would be offered when sufficient student numbers warrant a dedicated seminar. In some instances, doctoral students may arrange to enrol in an existing topic-related Master's course, augmented with doctoral level analysis and applications.

Course Description: An exploration of a selected topic in educational studies to provide students with in-depth knowledge and further preparation for advanced research.

GEDU 9008 and GEDU 9009 – Independent Study

These .5 credit courses will enable students to pursue independent study related to topics in educational studies. They will provide students with in-depth knowledge and further preparation to undertake doctoral research in their particular topic. Normally, students would take one of these courses to acquire specific theoretical or methodological competencies. A decision to register in an independent study course would be made *early in the program* in consultation with their doctoral supervisor.

Course Description: An independent study related to topics in educational studies. The curricula for this course will be determined by the supervisor of the course in consultation with the student and other faculty members, as necessary.

2.5 Other Special Requirements (Comprehensive Examination and Dissertation)

This section of the proposal provides details about the Dissertation Supervisory Committee, the mandatory comprehensive portfolio development process and examination, and the dissertation (totalling 4.5 credits).

2.5.1 Dissertation Supervisory Committee

As noted in Section 2.3.2, the Doctoral Program Coordinator will appoint a pro-tem (research) advisor for each student. Normally, this professor will be the doctoral dissertation supervisor. The advisor/supervisor will guide the portfolio development process, help the student to identify potential artifacts for inclusion in the portfolio, and engage in preliminary discussion regarding the student's preferred topic of research for the dissertation.

In consultation with the student, the pro-tem advisor will identify scholars to serve on the Dissertation Supervisory Committee and will secure the approval of committee members through the IDGC via the IDAC. The Committee will, as a rule, be fully constituted (approved by the IDGC) by June 30th of the first year of the program.

An External committee member will be selected to partake in the Comprehensive Portfolio Examination (see Section 2.5.3.1).

A different External committee member will be selected to partake in the Dissertation Final Oral Defense (see Section 2.5.4.2).

2.5.2 Comprehensive Examination: Research/Scholarly Portfolio

2.5.2.1 Principles Informing the Evaluation System for the Portfolio and Dissertation

Seven principles inform the evaluation system designed for the Comprehensive Portfolio and Dissertation (Cobia et al., 2005):

- Comprehensive evaluations, including both formative and summative methods;
- Active involvement of students in decision-making;
- Strong link to knowledge-skills-attitudes necessary to be a successful educational researcher and leader (See Section 3);
- Flexibility to allow incorporation of emerging professional trends;
- Emphasis on using the evaluation process as a learning tool that provides students opportunities to reflect on and actively influence their own learning and that of their community of learners; and,
- Production of meaningful data that might be used to determine the extent to which the program goals are being met and to guide revision of the program (See Section 2.2.6 on evergreening and metrics).

2.5.2.2

Overview: Throughout the first four semesters of their program, students will assemble a scholarly portfolio that they will submit for examination by their Supervisory Committee before undertaking their dissertation work. Students will compile the elements of this portfolio in negotiation with their supervisor and under the auspices of their Supervisory Committee. Before the end of their second summer, each student will be required to present their portfolio to their Supervisory Committee for examination. The portfolio may include scholarly papers, research grant submissions, evidence of data analysis, methodological essays, among other pieces of work (see list below). At least half of the artefacts included in the proposal will be generated outside of the context of coursework (conference papers, applications for research grants, community-based research initiatives, art installations, dramatic or musical performances, literary works, etc.).

Background & Purpose: The comprehensive portfolio examination will provide students with an opportunity to demonstrate the extent to which they have synthesized prior and emerging knowledge into a substantive conceptual, methodological and analytical awareness that enables them to successfully undertake and complete a research study that contributes to and extends scholarship within their academic discipline.

Portfolio: Students will gather artefacts produced in the first four semesters of the program to demonstrate competence in five principal areas. All elements of the portfolio will be initiated and completed as part of the doctoral program (work completed prior to the commencement of the program is ineligible). Normally, students will include two or three items from each area to a minimum of 10 and a maximum of 15 items (see Table 4).

Table 4 - Five Principal Areas of Competence to be demonstrated in Portfolio

General Knowledge	In Depth Knowledge	Research Knowledge and Competencies	Professional and Collegial Competencies	Teaching and Instructional Competencies
broad familiarity with/understanding of prominent social, scientific and educational theoretical traditions and trends related to educational studies	thorough and detailed knowledge of a range of issues in their specific doctoral focus area (theme(s))	research competence and critical analysis of current research and methodological issues	a range of professional competencies that will enhance active professional engagement	a range of teaching competencies demonstrative of readiness to assume the role of teacher and mentor in academia and other educational/training contexts

General Knowledge: Students will be required to demonstrate a broad understanding of prominent social scientific and educational theoretical traditions and trends. Students will include artefacts that demonstrate their wide-ranging familiarity with theories related to educational studies. While specific artefacts will be determined in consultation with the supervisory committee, examples of items in this area might include:

- Article for peer review surveying general trends or themes in educational studies
- Scholarly working paper demonstrating broad historical and conceptual knowledge
- Wide-ranging literature review surveying a significant issue or movement in the social sciences or education
- *Conference attendance review*
- Annotated bibliography on a broad conceptual topic
- Field/travel report
- Evidence of original/creative contribution to research in the field
- Comprehensive conference paper

In-Depth Knowledge: Students will demonstrate an in-depth knowledge of a range of issues in their specific doctoral focus area. While specific artefacts will be determined in consultation with the supervisory committee, examples of items in this area might include:

- Article for peer review focused on field of study
- In-depth scholarly working paper focused on field of study
- Literature review leading towards preparation of dissertation proposal
- Annotated bibliography on specific research topic
- Art installation
- Evidence of original/creative contribution to research in the field
- Focused conference paper

Research Knowledge and Competencies: Students will demonstrate research competence and critical analysis of current research and methodological issues. While specific artefacts will be determined in consultation with the supervisory committee, examples of items in this area might include:

- *Review of literature related to issues in research*
- Scholarly article on methodological issue
- Submission for ethics review
- Data analysis, including consideration of methodological issues
- Annotated bibliography related to issues in research
- Evidence of original/creative contribution to research in the field

Professional and Collegial Competencies: To help prepare students for active professional engagement, they will demonstrate a range of professional competencies. While specific artefacts will be determined in consultation with the supervisory committee, examples of items in this area might include:

- Curriculum Vitae
- *Proposal for funding to recognized granting council*
- Article, essay, or book assessment or review
- Draft of scholarly article for submission
- Conference paper/participation
- Art or performance adjudication
- Evidence of significant support to professional organization
- Evidence of significant contribution to community-based organization

Teaching and Instructional Competencies: To ensure that students will be prepared to assume the role of teacher and mentor in academia and other educational/training contexts, students will demonstrate a range of teaching competencies. While specific artefacts will be determined in consultation with the supervisory committee, examples of items in this area might include:

- Evidence of undergraduate or graduate teaching
- Academic seminar presentation
- Theatre in education performance
- Arts-based instruction
- Evidence of curriculum development, needs assessment or program evaluation
- Evidence of community teaching, training, tutoring or mentoring

2.5.2.3 In-Progress Assessment of the Portfolio

The portfolio will be a central organizing feature of the doctoral student's experience and will be developed during coursework, before (perhaps during) writing the proposal and before the dissertation. To maintain relevancy and rigor and to ensure that the exercise aids students in demonstrating readiness to undertake PhD work, both the student and the evaluator(s) will complete an in-progress (formative) assessment of the progress being made on the portfolio, using a form designed for this purpose by the IDAC. This assessment will confirm the providence (originality) of each artifact and help them come to an agreement about the degree of progress to date: (a) exceeds expectations, (b) meets expectations but criteria set out in grading rubric (see below) have to be addressed for some artifacts, or (c) approaching expectations (incomplete or low caliber work). All parties will agree and sign off on what artifacts need further work, what else needs to be done and which ones are complete. This form will be filed with the Doctoral Program Coordinator and entered into the student's file.

2.5.3 Portfolio Examination Process

2.5.3.1 Constituting the Portfolio Examination Committee

In addition to the regularly constituted Program Committee, an additional external examiner will serve on the Examination Committee for the Comprehensive Portfolio. S/he may be a faculty member at one of the participating universities, including the student's home university. The Examiner will be identified by the Supervisor in consultation with the Doctoral Committee and the Associate Dean or Chair of Graduate Studies in Education at the home university. The student will not know the Examiner personally or professionally.

By July 1st, during the second summer seminar, the student will have completed the portfolio. In consultation with the student, the Supervisory Committee and the External Examiner, IDAC will set a defense date for the Portfolio Examination, usually in August. Once this date has been set, the student will submit their portfolio for examination to their fully constituted Supervisory Committee and the External Examiner two weeks before the defense date. Although the External Examiner will not be involved in the development of the portfolio, he or she will be expected to have read it carefully (using the rubric designed for this purpose) and to be prepared for the defense, attending in person or via video or teleconference.

At the defense, the student will present publicly the contents of their portfolio to members of the Supervisory Committee, the External Examiner and fellow graduate students during the summer seminar. The student will share relevant information pertaining to the portfolio's content; the examiners will have an opportunity to discuss points of interest with the student.

In a private session immediately following the presentation and question period, the External Examiner and Supervisory Committee will decide on the acceptability of the Portfolio defense, using the Rubric designed for this purpose. Students will be informed about the outcome of the Portfolio examination immediately following the Committee decision, on the same day. The IDGC will confirm this outcome in writing within two weeks of the defense date, and the letter will be added to the file and sent to the student.

2.5.3.2 Preparing the Portfolio

The portfolio will be a vehicle for the student to demonstrate that she or he has the requisite written, reading and critical intellectual ability to successfully pursue the PhD; it is, in effect, a qualifying portfolio. As noted, students must demonstrate their ability to synthesize prior and emerging knowledge into a substantive conceptual and methodological awareness that will enable them to succeed with doctoral work (Section 2.5.2). Students will have demonstrated advanced professional and intellectual proficiencies as well as depth and breadth of knowledge about the field and about educational studies. A clear research trajectory should be evident.

Along with the In-Progress evaluation form and the 10-15 *knowledge artifacts* required for the Portfolio, the student will include a 4,000 word narrative setting out the rationale for how and what material was selected for inclusion in the Comprehensive Portfolio. The narrative will include:

- a summary of the contents of the portfolio (artifacts should be labeled or otherwise identified) and a rationale for the organization;
- a statement of how each artifact meets the five competency areas as set out in Table 4,
- a statement of the student's role in preparing the artifact (individual or multi-authored),
- a statement of the program objective(s) that are being met by each artifact,
- a statement setting out the intellectual synergy reflected in the collection, and
- a reflective statement about the process and how the activities/contents address the student's research goals and professional development goals.

The medium or media used to submit the Portfolio will depend on the nature of its contents (respecting many ways of knowing and sharing knowledge). It may be presented in a conventional form, such as a binder, but non-traditional venues will also be accepted (art installations, drama, videos, pod casts, and other technologies). Whatever form the portfolio takes, the exhibits must demonstrate that the student is fulfilling the objectives of the doctoral program (see Table 4 and Section 3 for Outcomes).

2.5.3.3 Submitting the Portfolio

Once the Portfolio has been constructed, the student will submit copies to all Committee members and request that they review it over the next few weeks, in preparation for the oral defense. Working through the IDAC, the student and the committee will arrange a convenient meeting time. Copies of relevant evaluation rubrics and outcomes will be distributed with the Portfolio. Should any Committee member wish the student to revise or address concerns (prior to the Oral), these concerns shall be communicated in writing to the student no later than three weeks prior to the Oral, to enable the student to address them, if the student deems it prudent to do so. Should the student wish to revise or add additional material, they shall undertake these tasks no later than two weeks prior to the Oral Defense, to allow sufficient time for the Committee to review the new material. As well, the 4000 word Narrative described previously will be revised to reflect the changes and then shared with the Committee, when the revisions or changes are submitted.

2.5.3.4 Mode of Participation

Parties to the portfolio defense may participate in person or via video or teleconference if circumstances warrant.

2.5.3.5 Expectations for Attendance at Oral

It will be important that doctoral students in the program make all efforts to attend one another's oral examinations in order to provide mutual support, to benefit from knowledge sharing, and in order to prepare them for what to expect in their own oral examination. Typically, the Doctoral Program Administrative Assistant to the IDAC will post notices via Moodle or email to notify doctoral students when and where a Comprehensive Portfolio examination is taking place.

2.5.3.6 Grading the Portfolio

The portfolio will be graded as a Pass or Fail, using a rubric designed to evaluate the *contents and defense* of the portfolio. If the portfolio scores below 3 on a scale of 1-5, the student will be deemed to have failed. This rubric will be developed by IDAC (for approval by the IDGC) and will employ some combination of the following (or additional) criteria, with an attendant performance level scale:

- 1. *contents and scope* (contains all required material, especially 2-3 items in each of the five areas set out in Table 4);
- 2. *choice of artifacts* (collection represents evidence of intellectual progress);
- 3. *relevance* (artifacts reflect competency in five areas as set out in Table 4);
- 4. *depth* (student's academic stance is supported by rich analysis);
- 5. *academic rigor* (meet student outcomes set out in Section 3);
- 6. *accuracy* (clarity and rigor when using concepts, principles and theories);
- 7. *coherence of organization* (logic used to arrange the collection and make intellectual connections);
- 8. *quality of oral presentation* (audience engagement and ability to field questions); and,
- 9. *writing mechanics/technical* (spelling, grammar or punctuation errors).

The student will not begin his or her dissertation until the portfolio requirements have been completed successfully (contents, written rationale and oral defense), thereby demonstrating their potential as scholars through the completion of authentic learning experiences and tasks.

2.5.3.7 Doctoral Candidate Status

Successful completion of the Oral Examination of the Comprehensive Portfolio will mark a milestone for doctoral students in this program. At this time, they will be considered *Doctoral Candidates* rather than Doctoral Students.

2.5.3.8 Policy for a Failed Portfolio

Normally a failed portfolio will result in termination from the program, even if all course work is completed successfully (GPA above 3.0). If this is the first fail, the student may submit a letter of petition to the Doctoral Program Coordinator, within 30 days of receiving the failing grade, to resubmit the portfolio. This letter will describe the student's rationale for a second submission. If the Coordinator approves the re-submission, the student will resubmit the portfolio in three to six months. The same portfolio committee will review the resubmitted portfolio. If the portfolio fails on the second attempt, the student will be terminated from the program.

2.5.4 Dissertation (GEDU 9100)

Overview: The doctoral research will be conceived and developed under the supervision of a dissertation supervisor and a Supervisory Committee. Normally, within six months after completing the comprehensive portfolio examination, candidates will submit a research proposal for the approval of the Supervisory Committee, the IDAC, and the IDGC. The research presented in the dissertation should constitute a substantial and original contribution to the study of education. The candidate must defend his or her dissertation at a final dissertation defense.

2.5.4.1 Proposal

Having completed the required coursework and the comprehensive portfolio examination described above and four semesters of residency, the candidate will be eligible to submit a dissertation proposal. This proposal must show evidence of strong research and scholarly promise, clearly identify the topic or area of the study within the context of literature in the field, and represent a significant and substantial contribution to the field of study. The proposal will be defended publicly normally within six months, but no more than one year, following the successful completion of the comprehensive portfolio. The following procedures will be followed for the proposal defense:

- The candidate will provide the Supervisory Committee with a copy of his or her proposal no less than three weeks before the proposal defense is scheduled.
- The proposal defense will be scheduled in consultation with the student and participating committee members. In collaboration with participating institutions, the IDAC will ensure that the student's university of record will post public notification of the defense two weeks prior to the date.
- At the defense, the candidate will present the proposal, answer questions from the Supervisory Committee, and discuss the implications of the research.
- Candidates will be informed as to whether the proposal has passed examination immediately following the proposal defense meeting. Within two weeks of the defense date, the IDAC will confirm in writing the outcome of the defense.

2.5.4.2 Final Defense

Usually, candidates will defend their dissertation within two years after the comprehensive examination. The final defense of the completed dissertation will take place no later than five

years after successful completion of the comprehensive examination, unless an extension is granted by the IDGC and the candidate's University of Record (see Section 2.6.3) The dissertation final defense will be completed according to the following guidelines:

- The dissertation final defense will not be scheduled unless the candidate is currently registered, has completed all academic and program requirements, and has paid all due fees.
- In consultation with the Supervisory Committee, the doctoral supervisor will recommend a list of suitable external examiners for the dissertation, people who are at arms length from the candidate (at least four names). While the External Examiner will usually be engaged in aligned research, he or she will not be known personally or professionally to the candidate, and must be from a university outside the Program. IDAC will rank order the examiners from this list and submit their selection for approval by the candidate's University of Record's Graduate Studies Office. The Office of Graduate Studies will contact the first examiner to arrange details of the examination. This process will continue until an examiner can be found who agrees to serve on the Committee. In the event that an examiner cannot be found, the Office of Graduate Studies will direct IDAC to contact the Supervisory Committee for another roster of examiners, and the process will begin again until someone can be identified.
- The External Examiner will serve as a third reader. He or she will read the near final draft of the Dissertation and send written approval to the Supervisory Committee that s/he feels it is ready for defense.
- If the External Examiner cannot provide this approval, s/he must prepare a written statement setting out pertinent issues perceived as shortcomings significant enough to delay the oral defense (i.e., weak theoretical underpinnings, misalignment between research methodology and research design, issues of rigor in method(s) and/or analysis protocols). The External Examiner's statement (which should be returned within one month of receiving the draft and will be added to the candidate's file) will be shared with the candidate who will work with their Committee to address the concerns, at which point the Dissertation will be sent back to the External Reviewer again.
- When the External Examiner has approved the thesis as ready for defense, the dissertation defense date will be scheduled in consultation with the candidate, participating committee members and the external examiner. Assisted by participating institutions, the IDAC will insure that the candidate's University of Record posts public notification of the dissertation defense two weeks prior to the date.
- The penultimate copy of the dissertation (already approved by the External Reviewer as ready for defense) will be submitted to each member of the candidate's Supervisory Committee a minimum of 30 working days before the proposed defense date for review and feedback. In the meantime, the External Examiner will be asked to prepare for his or her attendance at the Dissertation Defense Examination in person or via video or teleconference (using the rubric designed for this purpose).
- At the defense, candidates will present their dissertation and discuss the implications of their research. Candidates then will answer questions from the External Examiner, from the Supervisory Committee and, in closing, from the public gallery.

- In a private session immediately following the presentation and question period, the External Examiner and Supervisory Committee will decide on the acceptability of the dissertation. Candidates will be informed about the outcome of the dissertation defense immediately following the committee decision, on the same day. The IDGC will confirm this outcome in writing within two weeks of the defense date. The examiners will return with one of the following four assessments:
- A. <u>Unconditional pass</u>
 - The external examiner and members of the Supervisory Committee, including the dissertation supervisor, sign a dissertation acceptance form.
 - Candidate can submit dissertation to the Faculty of Graduate studies for printing without revision.
- B. <u>Conditional pass with minor revisions</u>
 - The external examiner and members of the Supervisory Committee, *excluding* the dissertation supervisor, sign the dissertation acceptance form.
 - Candidate is required to complete minor revisions that do not require substantial alteration of the content, argument or implications of the thesis before submitting the dissertation to the Faculty of Graduate Studies for printing.
 - > The dissertation supervisor will be entrusted to oversee the completion of these revisions and will withhold her/his signature from the dissertation acceptance form until the revisions identified at the defense are satisfactorily completed.
 - The candidate must normally complete all revisions within one month of the dissertation defense.
- C. <u>Conditional pass with major revisions</u>
 - The external examiner signs the dissertation acceptance form but Supervisory Committee members and dissertation supervisor do not.
 - Candidate is required to complete major revisions that include alteration of the content, argument or implications of the thesis before submitting the dissertation to the Faculty of Graduate Studies for printing.
 - The Supervisory Committee will be entrusted to oversee the completion of these revisions and will withhold their signatures from the dissertation acceptance form until the revisions identified at the defense are finished.
 - The candidate must complete all revisions within one month of the dissertation defense.
- D. <u>Fail</u>
 - The external examiner and Supervisory Committee do not sign the dissertation approval form accepting the thesis.
 - The candidate is required to withdraw from the Ph.D. program and is not permitted to resubmit the dissertation for approval.

Candidates will be notified in writing of completion of their dissertation and all doctoral study requirements within two weeks following their submission of a final and approved copy of

their dissertation to library at their University of Record, according to the requirements for thesis submissions at that institution.

2.6 Method of Program Delivery

The following section of the proposal addresses residency requirements and time limits; leaves of absences, extensions and reintegration to the program; the nature of program delivery (collaborative real time and e-learning platforms); course administration and instructor evaluations; and annual student status reports.

2.6.1 Residency Requirement and Time Limits

The proposed Ph.D. is a full-time program; thus, all students will be required to fulfill a residency period of four semesters, extending over two summer seminars and one academic year. However, some students may wish to complete the remainder of their program on a part-time basis. Part-time students will be required to meet regularly with their supervisors and to maintain appropriate levels of communication. To be considered in residency, students must attend all required courses scheduled within the first four semesters of the program (see Table 1), and complete the requirements of the comprehensive portfolio examination. Students will also be expected to support scholarly activities at their participating institution (University of Record) during their residency, including attending scholarly seminars developed for or in conjunction with the doctoral program. As part of their residency, students also can anticipate teaching a university course consistent with their expertise. This teaching experience will form part of the scholarly portfolio that they will submit for comprehensive examination.

All students will be required to complete the degree within six years of initial registration. The normal time to complete the Ph.D. program will be four years, of which the equivalent of 14 months must be in full-time residency. A modified residence plan, in rare circumstances, may be permitted by the IDGC.

2.6.2 Leave of Absence

A leave of absence from the program will be considered in rare circumstances and will be recommended by the IDAC and approved by the appropriate authority at the home institution. In such cases, the student will contact the Doctoral Program Coordinator directly for interim approval of a leave of absence, following which the home university policy will apply. In addition to the regulations of the home institution, relative to leave of absence, doctoral candidates who are considering a leave of absence should note that:

- They are not entitled to use university services or any kind of doctoral supervision during the period of their leave;
- The time line for completion of the doctoral program ceases for the duration of the leave and resumes when study recommences;
- All fellowships, scholarships and other forms of financial support (and eligibility for same) cease for the duration of the leave;
- · Reinstatement of financial aid is not guaranteed. Decisions regarding funding for

students who take leave will be decided by the appropriate authority in consultation with the IDAC; and,

• The candidate cannot avail him or herself of the resources of any of the three universities for the duration of the leave, including faculty supervision, office space, et cetera.

2.6.3 Extensions

Students who anticipate that they will be unable to complete program requirements within the residency period (six years) must apply to IDAC before the end of the 5th year with a modified residence plan that may be permitted by the IDGC.

2.6.4 Reintegration into Program

Each respective university has existing policies pertaining to graduate studies and reinstatement of students to active student status.

2.6.5 Collaborative Arrangement and Delivery of Course work using a Real Time and Distance e-Learning Platforms

MSVU, Acadia and StFX will collaborate extensively to develop and deliver all course work in the program. Each year, one of the participating institutions will host the summer seminar. The seminar host institution will be responsible for identifying course instructors, providing classroom facilities, and arranging for student accommodations (for students attending from other universities of record).

The Graduate Seminar (GEDU 9003) will be offered in a distance education format. Section 8.6 describes in detail the Distance e-Learning Platforms that exist among the three participating universities and that will be used to deliver the course work when a distance mode is required. The main components of these platforms are WebCT/Blackboard/Moodle, Elluminate live![©] and Videoconferencing (VTC) systems. Each time the doctoral seminar is offered it will examine a content-related theme (for instance, "Empiricism and its Impact on Educational Studies") and include a Ph.D. process theme (for instance, "Assembling Your Portfolio").

The "Research" courses (GEDU 9002, 9005) will be offered using a variety of formats including workshops, seminar series (weekly meetings), group and individual consultations and the Distance e-Learning Platforms technologies.

Special Topics courses will be developed and delivered as the need arises or as opportunities allow (for example, visiting scholars).

Independent studies will be negotiated between the IDAC, sponsoring faculty and students and will normally take the form of independent work interspersed with student/faculty meetings.

2.6.6 Course Administration

The summer session courses, GEDU 9001 (Foundations of Inquiry in Education) and GEDU 9002 (Methodological Perspectives in Educational Research) will be delivered on-site, while students are in full residency (the fall and winter courses will be delivered via the e-learning

platforms (see Section 8.6). The sites will rotate between the three universities, as determined by IDAC.

The summer session dates for each offering will mirror those in place at the host university. Normally, summer session courses are delivered between July 1st and August 10th (six weeks). As well, normally, each of these one-half units will be a 36-39 hour course. It is anticipated that students will attend GEDU 9001 in the morning session and GEDU 9002 during the afternoon session. The anticipated pedagogical approach will be a community of scholars, wherein students will experience learning, writing and dialogues, in a reiterative format. The result of a community of scholars approach will be a culture in which research and other forms of scholarship are clearly defined by class participants, valued by the shared learning community, supported appropriately, articulated clearly and integrated into the accepted methods of the doctoral program.

Each year, the Doctoral Program Coordinator, working with IDAC, will arrange for faculty members to deliver the courses. Normally, a professor from the host institution will teach one course and a professor from a partnership institution will teach the other course. In principle, normally, the Coordinator will offer the opportunity to teach these two courses to the pro-tem advisors for the current roster of new students, and will then turn to other faculty members or visiting scholars if the pro-tem advisors are not available (due to research, teaching, sabbatical or administrative obligations, for example).

2.6.7 Course Outline Deadlines

Annual submission deadlines for all courses in the Joint PhD in Educational Studies are as follows:

- Summer Session courses outlines are due at the IDAC by June 15th for July 1st start date.
- Fall semester course outlines are due at the IDAC by August 25th for September start dates per the home university regulations of the instructor(s).
- Winter semester course outlines are due at the IDAC by December 15th for January start date per the home university regulations of the instructor(s).

2.6.8 Course Evaluations

The Doctoral Program Administrative Assistant to the IDAC will administer and oversee course evaluations, following existing policies at each respective university. Normally, course evaluations will be carried out during the final week of all courses offered jointly by the participating universities (some on site and some online). Distribution of results procedures will follow the procedures of the home institution of the instructor(s).

2.6.9 Portfolio and Residency

Students will be prepared for completing their portfolio as part of the graduate seminar while in full-time residency in consultation with their Supervisor (and their supervisory committee members if the committee has been constituted); the student will develop a strategy for

completing and assembling the elements of the portfolio. Normally, a student will work independently to identify, develop and compile artefacts for the portfolio; however, students will be encouraged to form networks and study groups with other students to support them in this task.

2.6.10 Dissertation and Residency

Students completing the dissertation will work independently, guided by their dissertation Supervisory Committee. While many students will prefer to continue their studies on campus, at this stage, residency is not a requirement. Nevertheless, students are required to maintain frequent and continuous contact with their Committee. Students will be fully entitled to use the campus library, computing and other research resources to assist them at this stage of their degree. The three participating universities possess well-developed resources to support distance education. These resources (teleconferencing, web resources, etc.) can be used to support students conducting research in distant locales. It will be permissible, for instance, for students to attend a virtual dissertation proposal defense that can be conducted using teleconferencing technology. The final dissertation defense shall be conducted as a face-to-face meeting, however.

2.6.11 Annual Student Progress Reports

The IDGC will require graduate students to complete, with their supervisors, an annual academic progress report by the end of the winter term as a condition of continuing in the Ph.D. program. These progress reports will be a tool to help students stay on track throughout their graduate program. Students, in consultation with their supervisors, will clarify academic expectations and gauge student progress in the various areas of their program. Progress reports will be reviewed by the IDAC and forwarded to the Dean of Graduate Studies of the appropriate universities.

2.7 Research-Based Doctor of Philosophy

The proposed program is a research-based Doctor of Philosophy in Educational Studies. Students will be expected to complete advanced course work, a comprehensive portfolio examination and a dissertation to prepare them for research careers in education, government, business and civil society organizations. Courses in this degree are intended to prepare students to complete a substantive and original dissertation that contributes significantly to the advancement of knowledge in educational studies (see Preface).

3.0 STUDENT OUTCOMES AND THEIR RELEVANCE

3.1 Learning Outcomes for Educational Research

The proposed doctoral program will prepare students as scholars, researchers and leaders who will contribute to the development of educational studies regionally, nationally and internationally. In particular, it will prepare students to contribute meaningfully to the advancement of theory and practice related to curriculum studies, literacies, lifelong learning, inclusive education, education foundations and leadership, and psychological aspects of education. All of these fields of study are of growing importance in education. As well, given our rapid development as a knowledge society, all are ripe for further advanced research and study.

Students will leave this doctoral program prepared to be educational researchers and leaders in their own right, in many situations. The Association of Canadian Deans of Education (ACDE, 2007) is in the process of drafting an Accord on Research in Education, most recently meeting at a Research Summit on Educational Research at UBC <u>http://educ.ubc.ca/ACDEResearchSummit2007</u>. Still under development, the Accord will both conceptualize research in education and offer a framework for understanding and documenting the impact of educational research. The intent is to use the Accord to help communicate the nature, scope, value and influence of research and scholarship in education; it is a statement of intellectual agreement among Canadian educators and a political enterprise as well. Both this work on an educational research accord and that of the General Accord on Education (ACDE, 2006) inform this section of the proposal (Heap, 2007a, b).

To date, educational research and attendant leadership roles include attempts to better understand and improve the learning and educational process. Educational research is (a) a political activity, (b) an act of communication (with a purpose, audience, tools and impact), and (c) entails knowledge mobilization. It is important to education because (d) it brings credibility from experiences grounded in practice and (e) it can synthesize research and make it accessible to the academy, the education system and the public at large. As well, (f) the education system needs data to support statements about the future (in addition to reports of the status quo) - educational research generates these data and insights. Good educational research is not just about methodology and methods; it is also about what questions are considered to be important (and what questions are not asked). These questions change in different contexts (Yates, 2004).

Four types of educational research will be fostered in this doctoral program (Boyer, 1990): (a) the *scholarship of discovery* or inquiry, often called basic research, is intended to generate knowledge for the sake of having more knowledge; (b) the *scholarship of application* involves using knowledge or creative activities to address pressing societal problems and significant social issues; (c) the *scholarship of integration* creates new knowledge by making connections between and among disciplines leading to synergy and the creation of large intellectual patterns; and, (d) the *scholarship of teaching* assumes that teaching itself is scholarly work that generates valuable knowledge. This form of scholarship frames classroom work as ceaseless and generative enquiry and values it as a worthy academic enterprise.

Couched within this rich context, educational research has a composite effect on society (consciously and unconsciously). This powerful *impact* on, *influence* over and *insights* into society (Heap, 2007a) imply a deep responsibility and hence a need for a specific set of knowledge, skills and attitudes. Indeed, the ability of the graduates of this doctoral program to step into the role of educational researcher is contingent upon several factors: what they know when they leave the program (knowledge), what skills and competencies they acquire during the program (skills), and the affective gains that they experience (principles, attitudes, new meanings, value systems, beliefs). The Knowledge-Attitudes-Skills (KAS), outlined below, reflect outcomes perspective required by MPHEC. They are designed to augment doctoral students' development in preparation for them to become educational researchers who will be public intellectuals concerned with supporting education and learnings for social change. To reiterate, this degree was designed with the 2007 CMEC *Pan-Canadian Ministerial Statement on Quality Assurance of Degree Education in Canada* in mind. As well, student outcomes will be predicated on recent

work undertaken by the Tri-Council granting agencies (in collaboration with CAGS and STLHE [The Society for Teaching and Learning in Higher Education]) (2007) relative to key professional skills for new researchers graduating from doctoral programs in Canada ("Tri-Agency Statement of Principles", 2007).

Knowledge

- A comprehensive, detailed and well-founded understanding of educational theory, especially the historical and philosophical study of education;
- A sophisticated theoretical grasp of the history and philosophy of inquiry in the social sciences and education;
- In-depth, focused knowledge of several issues in educational studies related to curriculum studies, literacies, lifelong learning, inclusive education, education foundations and leadership, and psychological aspects of education;
- A thorough understanding of a substantial body of knowledge that is at the forefront Educational Studies; and,
- A substantive knowledge of a wide range of methodological approaches to research and attendant methods for data collection and analysis.

Attitudes

- Respect and appreciation for the scope of the area that they are exploring within the context of the limitations of their own work as well as the discipline of education, including an appreciation for the complexity of knowledge and the potential contributions of other interpretations, methods and disciplines;
- Intellectual independence and autonomy to remain engaged and current and be able to evaluate the broader implications of applying educational knowledge to complex leadership situations (capacity to be a professional, educational researcher and leader);
- A keen sense of self-awareness leading to engagement in meaningful reflection about their place in the discipline;
- Respect for the need to follow a flexible course of action leading to personal selfsufficiency and professional achievements;
- Awareness of, and adherence to, professional codes of conduct and standards as they practice and engage in research;
- Leadership through successful guidance and mentoring of co-workers and co-learners, and do so by articulating an empowering vision and helping others reach their full potential (transformative leadership instead of transactional leadership); and,
- Contributions to society through active citizenship engagement (local, national and global) thereby respecting the link between research and civic and social responsibilities.

Skills

- Apply advanced analytical and creative skills, particularly in relation to theory development, leadership and evaluation;
- Demonstrate full expertise in one or more specific research methods;
- Demonstrate a well-honed capacity to teach in the university context;
- Demonstrate excellent writing and research skills essential in contemporary scholarly contexts;

- Apply conceptual understanding and methodological competence to: generate new knowledge at the forefront of the field of education, make informed judgments about complex disciplinary issues that might require conceptualizing new methods and perspectives, and produce original research or advanced scholarship that qualifies for peer review and merits publication;
- Undertake pure, applied and/or interpretative research conducted at an advanced level, and apply the knowledge gained in ways that contribute to, advance and push the intellectual boundaries of the discipline;
- Communicate complex and/or ambiguous ideas, issues and conclusions, clearly and effectively (in this case, through course work, the Comprehensive Portfolio (with over 10 knowledge artifacts) and a dissertation);
- Communicate effectively, concisely and correctly in written, spoken and visual forms to a variety of audiences using a variety of media;
- Employ interpersonal skills with advisors and fellow colleagues thorough one-on-one as well as network relationships, at the university and in the wider community;
- Use reflective, rational, and critical thinking to gather and interpret information in order form judgments;
- Analyze and solve problems by understanding and synthesizing current knowledge (entails appreciating the relationships between disciplines, ideas and contexts);
- Apply creative and divergent thinking leading to the conception of new ideas and practices with the intention to improve and advance current knowledge (they will be intellectually curious and will value interdisciplinary inquiry);
- Demonstrate teaching competence explaining complex concepts in various contexts and adjusting instructions fully respecting their teaching style and others' learning styles;
- Manage research environments (manage finances, people, processes) and be able to report to appropriate officials;
- Translate research into knowledge that is understandable to non-specialists so as to bring highest benefits to society; and,
- Actively strive to bring their research to appropriate knowledge users and decision makers.

A prime factor that will contribute to these outcomes will be students' ready access to the strong faculty base at the three participating institutions (see Section 8.1 and Appendices II and III) and, given the willingness of other academics in education throughout Nova Scotia to participate in our program, to expertise throughout the region.

3.2 Graduates' Outcomes

Students can expect personal benefits as graduates of this program. First, they will have the powerful opportunity to grow personally and professionally in a community of scholars, studying core issues and questions of education while making the content professionally, personally and socially relevant to them.

Second, this Ph.D. will prepare them for immediate employment in faculties of education throughout Canada and beyond. As well, given the comprehensive nature of the degree and its insistence on theoretical rigor, comprehensive intellectual understandings and research

excellence, graduates will be of interest to a very wide range of university and community college departments seeking faculty with a sophisticated understanding of the challenges of a knowledge society.

Third, some graduates will opt to return to their positions within the Nova Scotia public school system as teachers, administrators or both. Educational studies is concerned with the study of education in a broad sense and conceives education as extending through the life span and encompassing all of the institutional and non-institutional ways in which people learn, from early childhood through mature adulthood. Doctoral work in educational studies offers intriguing intellectual growth and insights that can deeply inform their continued work with students and teaching colleagues.

Fourth, in addition to university or public school employment, graduates will be prepared for leadership roles and employment in numerous government, business or civil society organizations. Educational research positions, particularly in the curriculum studies, literacies, lifelong learning, inclusive education, education foundations and leadership, and psychological aspects of education are increasingly available. Graduates from this Ph.D. program would be ideally placed to obtain these jobs.

Fifth, furthermore, graduates obtain a valuable opportunity to bring a Nova Scotia sense of place to their work upon completion of the degree because the degree provides 'at home' opportunities for educational scholars to contribute to within-province educational policy and practice concerns. Without this program or something like it, graduate students are seeking higher degrees elsewhere (Canada, United States, the United Kingdom and Australia). Being able to study in a local context mitigates brain-drain and builds brain-gain for the provincial educational system.

3.3 Other Outcomes (research culture, strengthened relationships with public education institutions, and leadership)

A very positive outcome of this doctoral program will be the opportunity to participate in, and actively help to create and sustain, a strong culture of research and development in the province. A Ph.D. program in Educational Studies in Nova Scotia, particularly one that is shared by three major higher education institutions, will connect scholars (students, faculty, community members) into an increasingly coherent, collaborative and contributing research community serving the broader welfare of Nova Scotia and Canada. Indeed, professional and scholarly linkages forged in the context of a doctoral program often develop into lifelong personal, professional and scholarly relationships. In addition to generating connections among scholars, as the program develops over time, it will have the potential to foster links in a widening professional and scholarly community that will include a range of partners in schools, communities, government, industry, non-profit institutions and universities.

Second, of particular significance is the likelihood that research initiatives emerging from doctoral studies in this program will enhance linkages between the three universities and the Nova Scotia Department of Education, Nova Scotia school boards, and the Nova Scotia Teacher's Union. The positive effect will be to build the capacity for collaborative research and development around issues germane to education in Nova Scotia and Atlantic Canada.

Third, graduating students will be placed to take on significant and central leadership roles in research, development and administration within and outside the public school system (see

Preface). Better yet, these new leaders from the program will be able to propose 'home grown' solutions to thorny educational issues because they were provided an opportunity to ground their studies in Nova Scotia and Atlantic Region contexts (if so desired).

Fourth, as noted earlier, graduate students interested in education are seeking higher degrees elsewhere (Canada, United States, the United Kingdom and Australia). Being able to study in a local context mitigates brain-drain and builds *brain-gain* for the provincial educational system. This brain-gain bodes well for economic and social growth and progress in the province and the region.

Finally, with the introduction of a PhD in Educational Studies, senior and new scholars at each of the three institutions will gain an advantage when applying for Tri-Council funding because there will be community of doctoral candidates who can play an active role in funded research. Training of doctoral students is a key component of applying successfully for Tri-Council grants and the presence of students to train can only bode well for faculty members applying for research monies. This training enables doctoral students to contribute to unique and pivotal research. These students might otherwise have lost any ability to contribute to the knowledge society in Nova Scotia and the Atlantic Region.

4.0 **RESOURCE IMPLICATIONS**

4.1 Human and Physical Resource Implications

This following discussion is framed within the first five years (or the time frame in which the program is expected to be fully operational) of the proposed program.

4.1.1 Extent to which current resources in terms of academic and support staff, library, space, equipment, etc. would be used.

- Courses will be taught by existing faculty (see Section 4.2 for financial implications).
- Dissertation will be supervised by existing faculty (see Section 4.2 for financial implications).
- Current support staff for graduate programs includes three departmental secretaries with varying levels of designated support for graduate education at each institution.
- Library resources: the current collections have holdings in all six doctoral study themes. See Section 8.6 for a detailed discussion of the extensive Library resources that would support the proposed program.
- Space: Ph.D. students will be assigned shared office and carrel space at their University of Record.
- Equipment: The existing complement and level of computer equipment and other hardware will not be unduly taxed with the addition of doctoral students (see Sections 8.5 and 8.6).

4.1.2 Additional resources needed in the same areas

Teaching new courses:

- In the first summer of the program an extra 1.0 units or 6 credit hours will be required to support 14 doctoral students.
- In the next 12 months, 4.0 units or 18 credit hours of instruction needed for 14 students.
- This will require three, additional full-time faculty (one at each institution) in the first year and a total of one additional faculty in the second year.
- This will require a budget to replace these units or credit hours in the undergraduate and M.Ed. programs and to supervise comprehensive portfolio and dissertations.

Thesis supervision:

• By year four, every six completed theses will require 1.0 unit of course relief. This course relief will need to be budgeted.

Support staff:

• The new program requires a 0.5 support position in the first year, increasing to one full support position for the second and subsequent years.

Student Support:

• The expenditure and revenue for student support is budgeted at \$6000 per student. This money will be from research grants of participating faculty.

Library resources:

• An extra allocation from the program budgets will be devoted to improving library resources in the themes of the Ph. D. program: curriculum studies, literacies, inclusive education, lifelong learning, educational foundations and leadership, and psychological aspects of education.

4.1.3 Impact of the use of these resources on other programs, including the elimination or the reduction of the scope of programs to accommodate the new program

Currently, the three Faculties or Schools of Education have very active M.Ed. and M.A. programs in all six interrelated doctoral themes. The resources from these programs will actively support the Ph.D. program.

4.1.4 Estimate of resource needs and allocation beyond the first five years

The increase in scholarly and research activity in the Faculties of Education beyond the first five years will require increased office space and research space for these programs. MSVU is planning a new academic building that will help to address these needs, and also recently procured property adjacent to the campus. The other two institutions also have favorable resource allocation plans. It is also feasible for the three universities to procure

Canadian Innovation Funds for research infrastructure and to access existing CFI funded centers on respective campuses, as well as Canada Research Chair (CRC) initiatives.

4.2 Financial Implications

4.2.1 Full and incremental costs of the program (based on 14 students admitted first year, 10 second year, etc see Table 3 p. 20) for the first five years (or the time frame in which the program is expected to be fully operational), broken down by major cost areas, academic salaries, other salaries, equipment, library acquisitions, space, et cetera

	Year 1	Year 2	Year 3	Year 4	Year 5
FT Faculty	\$300,000.00	\$400,000.00	\$410,000.00	\$420,000.00	\$430,000.00
Support Position	\$17,000.00	\$35,000.00	\$37,000.00	\$40,000.00	\$40,000.00
- benefits					
TOTAL	\$317,000.00	\$435,000.00	\$447,000.00	\$460,000.00	\$470,000.00
Charlent Course and	\$84,000.00	\$144,000,00	¢108.000.00	\$264,000,00	\$200,000,00
Student Support	. ,	\$144,000.00	\$198,000.00	\$264,000.00	\$300,000.00
Library support	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00
Office space	\$25,000.00	\$45,000.00	\$60,000.00	\$70,000.00	\$70,000.00
Office equipment	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
other operating costs*	\$30,000.00	\$50,000.00	\$60,000.00	\$60,000.00	\$60,000.00
Total operating expenditures	\$179,000.00	\$279,000.00	\$358,000.00	\$434,000.00	\$470,000.00
TOTAL EXPENDITURES	\$496,000.00	\$714,000.00	\$805,000.00	\$894,000.00	\$940,000.00

* Other operating costs include travel for instruction and meetings, visiting speakers and costs for external examiners.

The following text interprets the line items for the previous table.

• FT Faculty means "Full Time Faculty paid with monies from NS government", clarifying that salary dollars will not come from existing university monies. Year 1 represents three new faculty positions. Year 2 is the salary for these three positions and the addition of one more faculty person, plus inflation. Years 3 and onward reflect salaries for four people plus small increments due to CPI/inflation built in. Collective agreements will also come into play vis-à-vis salary increments. On October 1st 2008, ICTE reported an encouraging development to GSPPC - the NS Department of Education is preparing a Critical Issue document to fund the PhD program for submission to the NS Department of Finance. This development reflects the support of the Minister of Education.

• The Support Position for the PhD program is paid from doctoral tuition fees, and not from existing university monies. Year one is salary for a half time position (Administrative Assistant for IDAC, Section 2.2.4). Year two is for a full time position. The remaining years reflect salary and benefits for this person, with CPI increments.

• Student Support will read "Student Support from Research Grants obtained by faculty members." Again, this line item reflects the assumption that additional monies will be drawn upon to support doctoral students, rather than sole reliance on existing monies. The increments each year are predicated on the assumption that more money from research grants will be going to PhD students because faculty will be able to apply for Tri-council funding that requires a doctoral student. As well, ICTE anticipates that faculty will be getting more and more grants, given their past track record of \$20 Million in the last five years. Also, the \$84,000 reflects the assumption that each of the 14 first students will receive \$6,000 from grants. Year two totals assume 14 additional students et cetera across the years, reflecting predicted enrolment patterns in Table 3 at page 20.

• The next four line items are stand alone line items and should not be interpreted as being paid for using grant monies for student support. This erroneous interpretation occurred at one university, simply because of table formatting. The Table is now reformatted.

• The Office Space line item reflects the reality that more PHD students each year will require office space (per Table 3, p. 20), and the costs will be spread over three campuses. These dollars represent operating costs and inflation, expenses often incurred as return to the university for housing programs and rent for space, etc. Table 3 at page 60 predicts we will have 61 students in 2015, with about 30 of them on campus, taking courses. The others will be working on their research and/or be at the writing up stage, some on campus and some at home. As with other aspects of this table, this is a projected line item.

	Year 1	Year 2	Year 3	Year 4	Year 5
Tuition Fees \$8000 for first two years; \$1000 thesis completion	\$112,000.00	\$192,000.00	\$173,000.00	\$212,000.00	\$246,000.00
Support from research grants	\$84,000.00	\$144,000.00	\$198,000.00	\$264,000.00	\$300,000.00
Support from NS Government	\$300,000.00	\$400,000.00	\$410,000.00	\$420,000.00	\$430,000.00
TOTAL Revenues	\$496,000.00	\$736,000.00	\$781,000.00	\$896,000.00	\$976,000.00

4.2.2	Expected sources o	f revenue to cover th	ne costs (based on 1	14 students admitted each year).
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The following text interprets the line items for the previous table.

• The first line reflects predicted admissions from Table 3, p.20. It now says Year 1 (n=14), Year 2 (n=10), Year 3 (n=10), Year 4 (n= 14), Year 5 (n=14)

• Then, the first line item, Tuition Fees, deals with expected income from tuition fees and reflects the assumption of a 2 year (14-16 month) residence and then a \$1,000 "continuation fee" starting in year three (to maintain ongoing enrolment in their dissertation course). So, Year 1 dollar amount reflects Tuition fees from 14 students for first residency at \$8,000 per year = \$112,000. Year two dollar amount will change when the tables are aligned and will represent the first 14 students paying \$120,000 again, the next 10 new students paying \$8,000 per (\$80,000) =

\$192,000. Year three will reflect the second intake's payment of \$80,000 again, plus the next intake of 10 (10 x \$8,000 = \$80,000) and, with the planned attrition, 10 students from the first intake paying \$1,000 each to work on their dissertation, totaling \$173,000 for Year three. Et cetera.

• Again, the third line item reflects Student Support from Research Grants, per the Table in Section 4.2.1. Acadia University was concerned that the Proposal did not account for enough money for doctoral students. The assumption shaping this line item is that, if we follow the policy set out in Section 2.3.3, students will initially be NS teachers on sabbaticals or paid leaves, drawing salaries or partial salaries. It will be a different context than at other Canadian schools. Our clientele will be different. Also, ICTE members at Acadia University have assured their colleagues that PhD students will not draw from the AGA Scholarship. Also note that, per both the Evergreening Principle (Section 2.2.6), and Planned Attrition (Section 2.3.4), ICTE anticipates that in the fourth to fifth year, we will have found our academic niche and fiscal rhythm, necessitating a considered revision of budget projections. For now, these are projected line items for expenses and revenues.

• The fourth line item (Support from NS Government) is the dollar figure from Table 4.2.1 reflecting government funding for 4 additional faculty positions for the program, with built in CPI.

4.2.3 Expectations in terms of additional capital or operating funding. Institutions are normally expected to find the financial resources for new programs from increases in the regular budget, through reallocation, or from other sources)

Revenue for the program will come from tuition fees, research grants and government funding.

5.0 RELATIONSHIP TO OTHER PROGRAMS AND INSTITUTION

5.1 Relationship and impact on existing programs in the same institution.

The proposed Ph.D. program, when underway, will be the only Ph.D. program offered at any of the participating universities. Graduate programs in education at all participating institutions have grown strongly in enrolment over ten years (and 23% in general, MPHEC, 2007b). The impact of a doctoral program on existing graduate programs in education at the three universities will be two-fold: to provide talented students (who often return for a second and third Masters degree in education) with a doctoral program that meets their needs; and to enhance the research and scholarly climate for all graduate-level students and attendant faculty.

The impact of the proposed Ph.D. program on other Masters level programs in the province will be to offer qualified students in those fields a post-graduate degree opportunity unavailable to them locally. Because the proposed Ph.D. in educational studies is broadly based, Masters level programs in areas other than education will find natural areas of fit with their own curricula in the proposed program. Meetings with faculty in these program areas have resulted in expressions of support for a doctoral program in educational studies.

Most importantly, the doctoral program is designed so that it will not require funds currently supporting undergraduate programs at each university. At the time of writing this proposal, Nova Scotia universities have entered into a three year Memorandum of Understanding (MOU) with the provincial government. Based on the MOU signed in March 2008, the bin rating for a PhD student is 4 followed by a bin rating of 7 for the next three years. Given that we have a three-year MOU, it will take at least five to six years for changes to funding based on the funding formula. Within this context, this proposal budgeted for government money to start the program (with funding estimates directly approved by cabinet). These monies will be allocated for additional faculty and support for the PhD program.

5.2 Comparison with other Ph.D. programs and rationale for introduction of new program

In Atlantic Canada, the Ph.D. Program in Education at The University of New Brunswick is the only on-site doctoral program in education currently offered in the Maritime region. Memorial University introduced a Doctoral program in 2004. Students from the Maritimes have enrolled in doctoral programs (Education Doctorate (Ed.D.) and Ph.D.) from offshore universities drawing on onsite supervision while receiving the degree from off-shore (see Section 6.4)

The proposed Ph.D. in educational studies differs from the Ph.D. program offered at the University of New Brunswick, which described in much more detail with supporting statistics in Section 8.9, in three important ways:

- The proposed Ph.D. in educational studies provides students, not with a general degree in education, but with specific expertise in one of six inter-related and critically important fields of study in contemporary education under the guidance of experts in those fields. This feature both guarantees students' fluency with issues in their chosen field and employability in any leading educational institution or organization.
- The proposed program puts in place mechanisms and structures for creating and maintaining research and scholarly relationships within the doctoral and faculty community to ensure student retention in the program. A report of the Canadian Association for Graduate Studies (CAGS), in October 2003, cites academic isolation, lack of constructive supervision, and too extensive a scope for research as being as key reasons for the high doctoral program attrition rates (up to 45% in the social sciences, which includes education). The proposed Ph.D. program will provide students with an energetic collegial and scholarly community; specific supervision tailored to their chosen field of study, and, as previously noted, the requirement to develop focused expertise and facility in one of six critical fields in contemporary education.
- The proposed program will meet the needs of prospective students in Nova Scotia: the province with both the largest urban population in the Maritime region and the largest population of graduate and post-graduate education students in the Maritime region.

The proposed Ph.D. program is competitive nationally and internationally, meeting the same exacting criteria for excellence of larger and highly recognized institutions in education such as University of British Columbia, University of Alberta, University of Calgary, and the Ontario Institute for Studies in Education at the University of Toronto, among others. The

proposed Ph.D. program incorporates the rigorous requirements (see Section 2) of national and international programs, but equally important, offers the focus and innovation that currently marks leading programs in education (inclusion of a portfolio comprehensive examination, and attention to leading edge and critical issues in the discipline) (see Section 2.2.3).

5.3 Possibilities of collaboration with other institutions in the region

This proposal reflects the type of collaborative processes recommended in the Post-Shapiro report (2000). Aside from the productive relationships that are being forged amongst faculty at Acadia, MSVU, and StFX, the possibilities for collaboration with other institutions in the region are very high and, in fact, are underway, both informally and formally. Université Sainte-Anne has been consulted throughout the proposal formation process, and faculty at that university intend to participate actively on dissertation committees.

5.4 Evidence of consultation/collaboration with other institutions

Following the 1994 Shapiro report, the Inter-University Council on Teacher Education (ICTE) was formed. ICTE worked actively for several years to develop an inter-university doctoral program that could include the education faculties and schools at Acadia University, St. Francis Xavier, Université Sainte-Anne, Nova Scotia College of Art and Design, and Mount Saint Vincent University. On March 23, 2002, the Senate of Mount Saint Vincent University approved in principle the development of a Ph.D. program in education to be offered jointly with St. Francis Xavier University. Then, in 2005, MSVU developed a proposal for a stand alone Ph.D. in Education: Learning and Culture Program. Further meetings with Acadia and StFX in the fall of 2006 resulted in the development of this current proposal.

6.0 PROGRAM NEED

This section provides evidence regarding ways graduates from the program will meet local, regional and national social needs, and describes the potential job market for doctoral graduates. It also discusses the priority placed on a doctoral program within the three participating education faculties, and the student demand for the program. Finally, it provides information on anticipated enrolments.

6.1 How Local, Regional and National Needs are met by Graduates from this Program

The study of education at the highest level is of vital importance in any mature society to ensure that theories, issues, trends, and strategies affecting education and learning at every level and in every context are examined in a rigorous manner. The study of education has evolved into an enormously complex enterprise with many disciplines, and sub-disciplines and it now requires the engagement of our most talented scholars. It is important that leaders capable of giving direction and guidance receive the sophisticated training and preparation they need, especially through doctoral studies. The absence of a doctoral program in education in Nova Scotia is a serious gap in our otherwise excellent commitment in this field. Eighty percent (80%) of the faculty members to be involved with the delivery of this doctoral program obtained their doctorates from Canadian universities in other provinces (namely in Ontario and Alberta), partly because no program is available locally. To place this in the national context, almost three quarters (71%) of all doctoral students in Canada studied in just two provinces (Ontario and Quebec) (Williams, 2005).

6.1.1 Retirement Needs

In recent years, the demographic situation in Canada has resulted in a wave of retirements that have seriously affected universities and created more job opportunities in faculties of education than have been seen since the 1970s. With this retirement trend, there will be openings for 30,000-40,000 new professors in Canada by 2011 (3 years from now). This amounts to approximately twice as many graduates as Canada would normally generate in that time frame (Canadian Association for Graduate Studies (CAGS), 2003/2004). In 2004-2005, less than ten percent (7%) of all professors in Canada were education professors (there were 34,017 full time university professors in Canada) (CAUT, 2007). Locally, in 2002, MPHEC predicted that, over the next ten years, the Maritime universities will have to replace 50% of the number of faculty employed in 2000 in order to accommodate retirement and attrition. This equates to approximately 1,800 full time positions.

In this evolving context, there is a pressing need for a doctoral program in education in the Maritimes, especially in Nova Scotia, which houses five universities offering education programs. This need can be best met if we have a local (provincial) doctoral program. MPHEC (2007b) found that undergraduates from 2003 were more likely to enroll in graduate school if they had left the region (36%) than if they stayed in the Maritime Provinces (22%). By extension, this comparison indicates that if there was a doctoral program, graduates from Maritime universities would choose to stay in the region, rather than to leave.

6.1.2 Regional Draw

There is keen competition for well-qualified candidates for the academy, and it is increasingly a challenge for smaller universities, especially those located away from the major urban centers in the country, to attract high-quality applicants. A local doctoral program will draw scholars to the region and it may be possible to retain a number of them on completion of the program. Given that 87% of education graduates intend to stay in Canada, the likelihood of retaining doctoral students in the Maritime region is high. One third of all Ph.D. graduates in Canada intend to work in education or teaching. As well, the educational services industry¹ is one of the four prime areas of employment identified by the 90% of earned Canadian Doctorates who had firm employment plans while they studied for their degrees. Among this group, 84% were graduates from education and professional programs and they intend to return to teaching and administration. In fact, 39% of education doctoral graduates were returning to, or continuing on with, the same employment position they held prior to or during their studies (Gluszynski and Peters (2005), a Statistics Canada study). These Statistics Canada findings are further confirmed in discussions with colleagues on the ICTE, at other professional and academic meetings, and in recent reports about the state of Ph.D.s in Canada (CAGS, 2003/2004, CAUT, 2007; Elgar, 2003).

6.2 Current and Anticipated Job Market (Employability Date) Garnered via Consultation with Government and Professional Associations

Nearly two-thirds (57%) of all doctoral graduates in Canada will work in the educational services industry (Williams, 2005). With the aforementioned retirement trend, and potential future employment in five universities in Nova Scotia alone that offer education degrees, there is a job market for educational studies doctoral graduates. Consultation with professional associations such as the Nova Scotia Teachers Union, the Nova Scotia School Boards Association, and others indicates that the current and anticipated job market supports involvement in doctoral studies. Colleagues at the Canadian Society for the Study of Education (CSSE) and other educational organizations in Canada support this conclusion. In 2003-2004, 3,600 students graduated with a Ph.D. from 47 Canadian universities (Gluszynski & Peters, 2005). The Maritime Provinces graduate approximately 120 new Ph.D.s per year, with one third of these Ph.D.s entering the academy (35%). Few of these doctorates are in education, despite the growing need (MPHEC, 2003). To fill this gap, almost all of the new hires in the three participating universities were recruited from outside the province (80% received their Ph.D.s from Ontario or Western universities) (see Section 8.1). Given the increasing enrolment in graduate education programs (23% increase in the last six years [MPHEC 2007c]) and currently over 1,600 graduate education students in the three participating institutions (see Section 8.8), there is a job market for education doctoral graduates in the Maritime Provinces.

¹ As defined by North American Industrial Classification System (NAICS) in 2007, the *educational services sector* (NAICS 61) comprises establishments whose primary activity is education, including public, not-for-profit and for-profit establishments. Included are elementary and secondary schools, community colleges and CEGEPs, universities, business schools and computer and management training, technical and trade schools, other schools and instruction and educational support services.

6.3 Priority for a Ph.D. in Education within Each Institution's Education Unit

The 1994 Shapiro Report, a review of teacher education in Nova Scotia undertaken nearly 15 years ago, established today's education system in Nova Scotia, including the post-secondary system. As a result of the recommendations, the province eliminated the Nova Scotia Teachers College and the teacher education programs at Dalhousie University and St. Mary's University (SMU), resulting in the current arrangements at MSVU, Acadia and StFX University. Pertinent to this proposal was the concurrent closure of the doctoral program in education at Dalhousie University, leaving no residential degree program in the Maritime Provinces (one was subsequently established at UNB, see Section 8.9) (Shapiro et al., 1994).

A post-Shapiro review in 2000 made 32 recommendations for further improvements to teacher education in Nova Scotia. Recommendation 24 reads:

Acadia University, Mount Saint Vincent University and St. Frances Xavier University should quickly develop a joint doctoral program in education. This program should be funded at up to six students per year as soon as all three universities can agree on a proposal. (Gaskell, Majhanovich & Tymchak, 2000, p.27)

The authors of the post-Shapiro report speculated that the largest barrier to developing a joint degree "seems to be the inability of the three major institutions ... to cooperate ... [delaying] progress in taking any proposal to a university senate or to the government for funding" (Gaskell et al., 2000, p.26). Further, they asserted that "an active commitment to developing a program proposal is needed," "a collaborative program would best serve the province," and "beginning a joint program is feasible ... " (p.26). This current proposal is evidence that the barrier identified in the Post-Shapiro report has been overcome. It reflects the high priority placed on a doctoral program in education. The ICTE established a tri-university committee to draft this proposal, and committee resources (people, time, course relief, meeting times and places) to sustain the committee's work. The recent Review Panel for Teacher Education in NS (O'Brien et al., 2007) affirmed the progress being made toward enacting the post-Shapiro recommendation in their recent report to the Minister of Education.

Notwithstanding the existence of well established B.Ed. and Masters programs in education in the participating institutions (see Section 8.8), the three education units identified the following compelling reasons to reintroduce a doctoral program in education in Nova Scotia (see an additional, related discussion of this topic in Section 8.9):

- Grant and attendant research opportunities will mean that greater attention will be given to educational problems and issues that are especially important in the regional context;
- The ability to attract and retain excellent faculty in education will be improved by a larger pool of qualified doctoral applicants;
- The creation of an exciting research climate and a culture of scholarship in Nova Scotia Faculties of Education will be greatly enhanced by the presence of graduate students who are pursuing original research at the doctoral level;
- Faculty members' own interests and talents are better served with the experience of teaching and supervising students at the highest academic level (see Section 8.4);

- Doctoral programs will increase the likelihood of attracting grants and funding that make possible more extensive and ambitious research projects;
- Since 2000, the Canada Research Chairs (CRC) Program has been in place to promote leading edge research and innovation in the academy. Monies from Tier I and II research chairs are already flowing into the three institutions, who collectively hold 21 CRCs (see Section 8.3). Entrenching a doctoral program in education opens the door for future CRCs in education (one is being approved at Acadia in 2008 and MSVU holds a crossappointment and has appointed a Tier I Chair whose research is directly relevant);
- Aspiring doctoral candidates in the province will have access to a program that is available locally, making such studies a realistic possibility for many who would otherwise be unable to continue beyond the Masters level (with many already opting for multiple Masters degrees as a default option);
- Because doctoral candidates contribute to instruction and supervision, and also participate from time to time in joint courses or seminars with Masters students, a doctoral program will enhance the Masters education programs; and,
- Colleagues in other departments (History, Sociology, Philosophy, English, Family Studies and Gerontology, Women's Studies and others) will have opportunities to be involved through membership on doctoral committees, thereby fostering greater interdisciplinary connections.

The three participating institutions fully appreciate these considerations and have made the development of a doctoral program a high priority. To that end, Faculties of Graduate Studies and other graduate infrastructures have been created (see Sections 8.5 and 8.6), indicating increased attention to graduate work at universities that were once primarily undergraduate institutions.

6.4 Student Demand

There is abundant evidence that there is high student demand for a doctoral program in education in Nova Scotia. We know that from 1979 until 1995, when the 1994 Shapiro Committee imposed a moratorium, a large number of excellent students were enrolled in the Ph.D. program in education at Dalhousie University and there was every reason to believe that this trend would continue. At the time of closure, 25% of all SSHRC scholarships at Dalhousie University were held by education students. Today, despite not having a doctoral program, MSVU Education faculty hold much of the university's SSHRC monies. At Acadia, during the last three years, there were more SSHRC grant recipients in the School of Education than in any other department at Acadia. Many of the Dalhousie graduates have gained important academic and administrative positions in various Canadian universities. Four hold faculty appointments at Mount Saint Vincent University, and one at Acadia.

Since 1995, in the absence of a local Ph.D. program, many Nova Scotia students, at least 35-40, have enrolled in the offshore Ph.D. program offered by the University of South Australia (students are co-supervised by local faculty while obtaining their degree off-shore), and inquiries continue at the rate of 1-2 per month. Other students have accessed off-shore Ph.D. programs offered elsewhere such as through Indiana University, the University of Nottingham and the University of Bath, both in the UK.

A number of students proceed to take a second and third Masters degree because there is no local Ph.D. program and because the cost of an offshore program is prohibitive in their case. Faculty members are constantly asked when the proposed Ph.D. program will be available and experience first-hand the frustration expressed by students. A reasonable estimate is that more than 200 expressions of interest in a doctoral program have been received. This estimation of student demand may be affected by the fact that there are currently over 1,600 Masters students enrolled in the three university's education graduate programs (see Section 8.8), meaning the pent-up demand may be higher than envisioned. Graduate student enrolment in the Maritime Provinces increased 23% from 2001-2007 compared to a 14% increase at the undergraduate level, followed by a 3% decrease in the last two years (MPHEC, 2007c).

6.5 Clientele (anticipated enrolment profiles and limits)

Students will be drawn primarily from Masters programs in the region, with some also coming from elsewhere in Canada and from other countries. The program will attract teachers and administrators in the school system, future academics seeking a qualification to teach in a university faculty of education, adult educators, and policymakers within the school system and in the wider community. We would expect to admit 14 students per year, with supervision to be shared and allocated among the three institutions participating in the program (see Section 5).

7.0 PROGRAM DEVELOPMENT PROCESS

7.1 Description of the Institution Program Development Process Leading to the Submission of the Proposal

Section 5.4 described the collaborative work of this committee, which entailed the involvement of peers and experts in-house and external to the institutions in the development of the proposed program. In the process of developing this proposal, many in-person meetings were held across the various campuses. Consultations with institutions offering similar or equivalent or comparable programs were conducted, both orally and using the Internet. Because the proposal development process spanned 10 years and 21 fluctuating committee members, with lapses of years between proposal development activities, it is not possible to provide specific letters or direct evidence of communication from other institutions or individuals that informed the final proposed degree structure and focus. Nonetheless, the proposal reflects the highest standards for a doctoral program and is in compliance with the CMEC (2007) standards for Degree Qualification Framework and for assessing the quality of new degree programs (see Preface).

The ICTE committee received positive support for the doctoral proposal from both UNB and UPEI (see Appendix 6). As well, subsequent to an October 2008 meeting of Dr's Jim Sharpe and Mary Lyon with the Dean of Graduate Studies at Dalhousie University (Dr. Carolyn Watters) (per the Interdisciplinary PhD), Dr. Donna Woolcott (MSVU) has directed relevant personnel to develop a Memorandum of Understanding with Dalhousie. This MOU will acknowledge our mutual interest in respective faculty teaching courses and sitting on committees and for students to take courses in both PhD programs. At such time as the MOU is finalized, it will be added as an Appendix to this proposal.

7.2 Description of Response to External Reviews

Per MPHEC's (2005) terms of reference for a new graduate program, details of a comprehensive external review of the proposal are set out in Section 8.11.

7.3 Accreditation Requirements

There are no accreditation requirements for this doctoral program. To reiterate, the program does not provide the type of clinical experiences one would find in programs that prepare individuals for licensing in the areas of school or clinical psychology or in the area of psychological therapy, per Section 2.2.3.

8.0 ADDITIONAL ASSESSMENT CRITERIA AND INFORMATION REQUIREMENTS IN THE CASE OF A PROPOSAL FOR A NEW GRADUATE PROGRAM

8.1 Identify Academic Staff to be involved in the Doctoral Program and Attendant Research Support and Publication Records

Using the template suggested for the MPHEC (2005) proposal, each of the three universities prepared a profile of the academic staff to be involved with the proposed doctoral program and the research support accorded to the professors in the past (with a record of publications, especially in, but not restricted to, refereed journals. The discussion that follows provides an integrated profile of the research community in the three universities that are partners in this proposal (See Appendix 2 for profiles of each institution). The following key will be used to categorize publications:

> Key for Publications B/C: books/chapters J: refereed journals C: refereed conferences PR: abstracts & papers read TR: technical, government reports KI: keynotes, invited talks O: other

8.1.1 Number of Faculty

At the time this proposal was prepared, there were 58 faculty members available for the doctoral program (and both StFX and Acadia intend to hire two additional faculty each in 2008, bringing the total to 62). There were 29 faculty members at MSVU, 14 at Acadia University and 15 at St. F. X. University. The larger complement at MSVU reflects the reconfiguration stemming from the 1994 Shapiro Report, with the closure of Dalhousie and St. Mary's University Faculties of Education.

8.1.2 Rank and Status

Table 5 profiles the academic ranks of the 58 faculty members, relative to the national average, to education faculties in particular. The three universities matched the national education faculty standard for both Full and Associate level ranks. The higher proportion of Assistant level professors (38% compared to 29% for education in general) reflects the level of new hires at all three universities and the absence of faculty at the Lecturer rank. All of these faculty members will be coming up for Tenure within the next 3-4 years and then will be eligible to apply for promotion to Associate (time frames vary according to respective Collective Agreements but likely by 2015 or sooner). Concurrently, some Associate Rank professors will have the option to apply for Full Professor, as smaller numbers of Full Professors retire.

The even distribution of faculty across the ranks demonstrates two characteristics important to the maintenance and continuing development of research capacity. First, meeting the discipline standard of accomplished, continually committed senior research faculty in education (29% Full Professor and 32% Associate), in conjunction with the research commitment and scholarly activity of the junior faculty (38% Assistant), means the three universities in this partnership are well positioned in terms of research culture and accomplishment to contribute to a doctoral program. Second, all three universities, as previously noted, are in growth phases, evidenced in the rate of new hires in the last five years (41% of faculty are Assistant rank, new hires). With growth come energy, vitality, and strength in scholarship and teaching.

Rank	National	Education Faculties in General	MSVU Education	Acadia Education	StFX Education	Total
Full Professor	33%	27%	21%	40%	27%	Full 29%
Associate Professor	31%	35%	38%	27%	33%	Associate 32%
Assistant Professor	29%	29%	41%	33%	40%	Assistant 38%
Lecturer or Other	7%	9%				

Table 5 - Profile of Academic Ranks relative to National Averages

8.1.3 Tenure Status

On average, nearly three quarters (70%) of the faculty members are tenured, compared to 45% for the national average (CAUT, 2007): 60% percent are tenured at MSVU, 72% at Acadia and 73% at StFX. Again the dynamic of recent hires affects this aspect of the research profile. Most, if not all, Assistant Professors are tenure track, meaning they are up for tenure in the next 3-4 years (with all five Acadia new hires seeking Tenure in 2008-2010). If the tenure process unfolds as expected, close to 100% of the faculty will be tenured when the Doctoral program is in full swing, a very positive development. This higher than national rate of tenured faculty bodes well for retention and stability of the complement of faculty available to deliver the Ph.D. program during its inaugural, formative and growth periods.

8.1.4 Highest Degree Held

Almost all 58 faculty members hold a Doctorate in Education or a related field, in the form of either a Ph.D. or and Ed.D. Close to two thirds of the faculty members earned their Doctorate before 2000 (59%), mainly from Canadian universities (approximately 80%).

8.1.5 Specialities

In Appendix 2, each professor's areas of interest is outlined. Faculty members engage in research reflective of educational studies and the six interrelated doctoral study themes (Sections 2.2.1 and 2.2.3):

- curriculum studies
- literacies
- inclusive education
- lifelong learning
- educational foundations and leadership
- psychological aspects of education

The profile of research interests for the 58 faculty members reflects a number of dominant threads: gender equity, social justice and marginalization, citizenship, rural education, Indigenous peoples, abilities, communities, leadership, alternative philosophies and pedagogies, poetry and other ways of knowing, cultures and cross-cultural interests, critical perspectives and inquiry, human resources, policy, science and technology, postmodernism, history, transformation, and educational change.



Figure 2 - Number of Grants per University (average 56), N=169 Grants (\$20.1 Million)

8.1.6 Sources of Grants Received

As set out in the MPHEC proposal guidelines, discussion is related to scholarship in the last three years (2004-07). Levine (2007) advised that any educational enterprise offering a doctoral program should have at least \$3 million in external funding. This partnership *exceeds* his recommended level of funding. In the MPHEC time frame, the faculties of education at the three universities obtained over \$20 million dollars in grant monies, and hold far in excess of this if life totals are considered. Between them, faculty members obtained 169 grants (external and internal). MSVU had 65 grants, StFX had 57 and Acadia had 48 (See Figure 2).

Nearly all of the funding in the faculties of education at the three universities comes from external sources (approximately 99%, with \$228,157 in internal funding (1%)). External grants were obtained from six well-known, expected sources for educational studies research, as well as many foundations and government agencies (see Table 6 and Figures 3 and 4). The category foundations, government agencies etc. includes foundations; councils; Ministers of Education; government agencies, commissions and departments; teacher's unions and professional associations; publishers; corporations; and university grants, aside from internal grants.
Grant Source ²	Total \$20.1 Million	Percentage 100%	MSVU \$14,467,987 72%	Acadia \$2,107,331 11%	StFX \$3,488,794 17%
Tri-Council:	\$4,700,613	(23%)			
SSHRC	\$3,683,489	18%	\$2,005,151	\$1,102,713	\$575,625
NSERC	\$1,000,000	5%			\$1,000,000
CIHR	\$17,124	.1%	\$17,124		
CFI	\$6,425,743	32%	\$5,937,749	\$487,994	
CCL	\$251,453	1.3%	\$251,453		
CFSSH	\$7,000	.03%		\$7,000	
Foundations, government agencies, etc.	\$8,353,343	42%	\$6,097,126	\$417,591	\$1,838,626 (includes \$1MIL CIDA)
Internal	\$228,157	1%	\$83,581	\$92,033	\$54,543

Table 6 - Grant Sources

² SSHRC – Social Sciences and Humanities Research Council of Canada NSERC – Natural Sciences and Engineering Research Council of Canada CRYSTAL – Centres for Research in Youth, Science Teaching and Learning CIHR – Canadian Institution of Health Research

CFI – Canadian Foundation for Innovation

CCL – Canadian Council on Learning

CFSSH – Canadian Federation for the Social Sciences and Humanities



Figure 3 – University's percentage of \$20.1 Million

The Tri Council agencies are the major federal sources of funds for research and scholarship in academic institutions. Close to one third of the monies held by the three faculties of education is Tri-Council funding (27%), with more than two thirds of these monies from SSHRC (65%). By way of comparison, for example, between 2000-2006, the entire MSVU faculty combined won \$3.2 million in SSHRC funding, with the education faculty holding \$1.8 million of these monies (over 50%). At Acadia, half of the entire grant monies held by education came from SSHRC. In fact, during the last three years, there were more SSHRC grant recipients in the School of Education than any other department at Acadia. StFX has steadily increased its SSHRC funding over the past decade (as reported in the 2007 Strategic Research Plan). It has three SSHRC funded Tier II Canada Research Chairs (CRCs) in areas germane to the proposed interrelated themes of doctoral studies (to be discussed in Section 8.3).

The NSERC grant is a CRYSTAL grant, intended for scholars interested in developing and enhancing the skills of, and resources available to science and mathematics teachers, and in enriching the preparation of Canadian children in these foundation subjects. CIHR is the Government of Canada health research-funding agency for research that improves Canadians' health, health care system and quality of life. It also fosters commercialization, moving research discoveries from academic setting to the marketplace. The CIHR awards were held at MSVU, in the manner of Health Professional Student Research Awards, available to Canadian schools offering a program for a regulated health profession, in this case, for school psychologists.

One third of the monies were Canadian Foundation for Innovation (CFI) grants, used to fund research infrastructure consisting of state-of-the-art equipment, buildings, laboratories, and databases required to conduct research. Canadian Council on Learning (CCL) funding serves as a catalyst for lifelong learning and for promotion and support of evidence-based decisions about learning throughout all stages of life. These monies are held at MSVU, where there is a long-standing graduate degree in life long learning (previously called adult education). Most of the CCL grants were obtained in the last six months to a year.

A full 42% of monies obtained for research came from external agencies aside from the Tri-Council agencies, especially: (a) foundations (notably half a million dollars from the Stirling McConnell Research Foundation for Research Into Teaching; (b) government agencies local, provincial and federal including CIDA, ACOA (including the Atlantic Innovation Fund [AIF]) and Health Canada, totaling over five million dollars); (c) volunteer non-profit organizations (notably the Knowledge Development Center and Imagine Canada); and, (d) professional associations.

Some universities had a higher number of internal grants than others. Seventeen percent of the grant money at MSVU came from internal grants, 35% at StFX, and 49% at Acadia. In all cases, the monies gained from this source amounted to less than 1% of all grant money held by the education faculty at the respective institutions (in total, \$228,157 of \$21.1 Million). Close to half of the recipients of internal grants were new hires holding a position of tenure track, Assistant Professor (47%), followed by Associate Professors (33%) and Full Professors (22%). Close to half of the Assistant rank scholars used the grant monies or release time to prepare proposals to obtain external funding. This is an exciting and desired pattern of scholarship. These internal SEED monies, aid to new scholars, start up grants, and other internal funds are helping young scholars move into stronger positions to obtain external monies.



Figure 4 – Grant Source

8.1.7 Grants - Total Amount in Last Three Years

In the time frame 2004-2007, the three universities obtained over \$20 million dollars in grant monies. MSVU faculty procured \$14.5 million; while Acadia faculty members obtained \$2.1 Million and StFX secured \$3.5 million (one million from CIDA for collective work with the Royal University of Bhutan) (see Table 6 and Figure 3). MSVU holds the largest share of this, mainly because it has twice the faculty complement of the other two schools (n=29 versus n=14 and n=15).

On average, a very respectable 85% of the 58 faculty members obtained grants within the last three years. Even more faculty members received grants before this time frame, evidence of their ability to prepare rigorous proposals and research programs. On average, each faculty

member received three grants during the three-year time frame, with a range of one to 10. The average grant was for \$118, 791, with a range of \$700.00 to \$5.5 Million. This history suggests that continuing success with grants will support a sustainable and dynamic doctoral program, and ongoing and viable funding for doctoral students.

8.1.8 Refereed Publications in Last Five Years (2002-1007)

Appendix 2 contains a detailed chart for each institution that shows publications generated by the 58 faculty members who will be involved with the doctoral program. The chart includes refereed articles; refereed conference papers, peer reviewed books and chapters; commissioned work and technical reports; public speaking engagements and workshops (keynote and invited); papers read and attendance at professional meetings and seminars; creative works and performances, and hosting, organizing and other forms of participation at conferences and symposia (indicated by 'Other') (see Table 7 and Figure 5).



Figure 5 – Profile of Publications and Scholarly Activity (N=1400)

As is evident in Figure 5, half of the scholarship tendered by the 58 faculty members is peer reviewed (journal articles, conference papers and books and book chapters) (n= 689, 49%). Another third is papers read and attendance at professional meetings and seminars, where a significant level of networking occurs, and where new ideas can be vetted with peers, ultimately leading to richer peer-reviewed work. During the past five years, professors published, on average, five peer reviewed papers each, one per year, a respectable and sustainable publication rate. The same pattern holds for peer reviewed conference papers, an average of five papers each, one per year, meaning each faculty member published on average two peer-reviewed works per year.

Faculty sustained this level of scholarly activity while teaching three full units or 18 credit hours (a full load), with some assuming administrative responsibilities. Others completed doctoral work and many engaged in committee work as well as proposal and report writing. Twenty-four (41%) published five or more peer reviewed journal articles (with a range of 5-23) and, following the same pattern, 23 (41%) published five or more conference papers/proceedings (with a range of

5-34). The general pattern is 10 peer journal articles/conference proceedings every five years, per person.

Nearly half of education faculty members (n=26) have been invited to deliver keynote addresses or invited talks (8% of all scholarly activity). Collectively, 29 faculty members (50%) have prepared over 100 government or agency reports including curricula, manuals, and policy analyses, in Canada and abroad (namely in education, social and consumer policy). Another complement of faculty (nearly half) has been actively engaged in symposia, workshops and as discussants at conferences and professional meetings. Another cohort of education faculty play a key role in shaping the knowledge base of the field via their engagement as editors (or associate editors) of peer reviewed journals or conference proceedings. Indeed, a large percentage of the faculty are simultaneously engaged in several of these research and research dissemination activities. All of these forms of scholarship serve to bring intellectual and conceptual contributions to other education scholars, theorists, the education sector, policy makers and the public. They are a strong supplement to the peer reviewed contributions and provide further evidence that there is a strong research and practice base to inform the doctoral program.

Activity	Total	Percentage	MSVU	Acadia	StFX
Refereed Journals	286	20%	113	98	75
Refereed Conferences	287	20%	131	64	92
Books and book chapters	116	8%	62	24	30
Abstracts and papers read at conferences and professional meetings	431	31%	211	117	103
Technical and government reports	98	7%	39	28	31
Keynotes and invited talks	112	8%	46	43	23
Other (especially creative works, monographs, symposia, panel presentations, discussant)	70	5%	39	12	19
TOTAL	1400	100%	641	386	373

 Table 7 - Profile of Publications and Knowledge Transfer Activities

In summary, within the proposed program doctoral candidates will be working with accomplished scholars who have reputable publication records. The faculty are fully qualified to guide advanced graduate work in educational studies.

8.2 Curriculum Vitae for all Faculty Members directly involved with the Doctoral Program

See Appendix 3 for CVs for the 58 faculty members.

8.3 Additional Evidence Demonstrating Critical Mass of Research-active Faculty with Disciplinary Experience and Strongly Supported Research

Section 8.1 provided a very detailed accounting of the research community comprising the three universities in this partnership. The university partnership has a critical mass of research-active faculty, that provide breadth of disciplinary experience, and that have created a strong research focus (grants, publications and seminars, etcetera) vis-à-vis the six interrelated themes of doctoral study.

In Section 8.3, MPHEC invites evidence, in addition to that set out in Sections 8.1 and 8.2, which demonstrates that there is a critical mass of research-active faculty with disciplinary experience and strongly supported research. What follows is information about three additional items: the presence of graduate studies in each university's Strategic Plan or Strategic Research Plan, the key role of the Canada Research Chairs, and faculty awards.

8.3.1 Strategic Plans

MSVU

MSVU's recently released Strategic Plan, *Destination 2012* contains several ideas pertinent to this doctoral program. The newly crafted Mission attests that the Mount is dedicated to the pursuit of knowledge via scholarship, teaching and intellectual endeavors of the highest quality. There are four goals, with goal 1 pertaining to quality: "to provide the highest quality teaching, learning and research experience for students, faculty and the community" (p.3). One part of the action plan in goal 1 involves exploring options to enhance teaching-research links in undergraduate programs (with the potential to contribute to graduate enrolments). Another is to develop and implement a mentorship program for faculty and students to support research. A third is to implement a plan to coordinate and streamline services and processes that support teaching and research. There is also reference to an expanded Learning Commons under goal 1.

Goal 2 (Advancement of Women) involves plans to promote interdisciplinary research by enhancing integration and collaborative links across research centers and research chairs at MSVU. A strategy in goal 3 (Engagement) is to create opportunities for students, faculty and staff to participate in the intellectual life of the university. An anticipated action relative to goal 3 is to increase the research capacity of community organizations through collaborative partnerships. Within goal 4 (Accessibility), strategy 1 targets recruitment and retention of students, and strategy 3 references fund raising for support of graduate students.

Acadia

The 2006 Strategic Plan, *Personalized Education for a Complex World*, flags undergraduate research as one of the five distinguishing features of an Acadia University education and also identified research at the undergraduate and graduate levels as one of eight components of its action plan. Both levels are given equal weight in Acadia's efforts to "increase support for and commitment to research excellence." Part of the core vision of the university is to prepare graduate level students to become leaders in a complex world. Specifically on page 11, the Strategic Plan notes that "the University community will continue to develop strong programs of graduate study and research." The main objective of Acadia's 2006 Strategic Research Plan is to develop and maintain major research facilities and initiatives that support multiple disciplines (including education) and will build institutional research capacity. Six identified research themes provide strategic direction for developing research infrastructure, entry points for participation of individual faculty members, interdisciplinary research network opportunities and community integration in support of the social and economic agenda of the region.

StFX

The 2007 Strategic Research Plan notes, "StFX has a long tradition of research and education ... and supports a small but vigorous graduate program." Graduate programs are available in eight areas, including education and adult education. The Master in Education program is grounded in two main purposes: a space for students to understand their professional knowledge and to make meaningful links among this knowledge, and the conceptual and theoretical knowledge of educational research. Of relevance to this proposal is that StFX has articulated a strong commitment to introducing undergraduate students to research by arranging their extensive involvement in faculty members' research programs. The intent is to "graduate students who are exceptionally well prepared to begin graduate studies or research." The process entails working with faculty in the summer school following their first academic year, continuing through other summers, culminating in a senior project and honors thesis.

8.3.2 Canada Research Chairs

In 2000, the Canada Research Chairs Program was launched by the Government of Canada to promote leading-edge research and innovation in Canadian universities. Tier 1 Chairs, tenable for seven years and renewable, are for outstanding researchers acknowledged by their peers as world leaders in their fields. For each Tier 1 Chair, the university receives \$200,000 annually for seven years. Tier 2 Chairs, tenable for five years and renewable once, are for exceptional emerging researchers, acknowledged by their peers as having the potential to lead in their field. For each Tier 2 Chair, the university receives \$100,000 annually for five years. The CRC Program invests \$300 million a year to attract and retain some of the worlds most accomplished and promising minds.

In 2007, 98 Canadian academics received funding as a CRC. Between the three universities in this proposal, there are 21 Canada Research Chairs (five Tier 1) which, in combination with the continuing development of state-of-the-art infrastructure through the Canada Foundation for Innovation CFI) program, serve to enhance Atlantic Canada's research environment (See Figures 6 and 7).

MSVU

MSVU identified three research clusters: gender, human development and technology enhanced learning. MSVU holds four CRCs (two Tier 1), with one Chair cross-appointed with the Faculty of Education. The Tier II CRC for Gender, Identity and Social Practices is crossappointed with Education and the Department of Women's Studies (Dr. Marnina Gonick). She also won a CFI award (one quarter million dollars) to support the development of a research and education center for girls and women. This center will provide doctoral students with an interest in inclusive education (gendered) with optimal research training opportunities.





Figure 6 – Tier I and Tier II Canada Research Chairs held at three Universities in this proposal



The MSVU Tier I Canada Research Chair in Equity and Technology (Dr. Dianne Looker) has a value of \$1.4 million over seven years. She also received a CFI award of \$339,000 to establish the Atlantic Centre for the Study of Information Technology in Society. Her research on youth access to information and communication technology, especially remote rural youth and their ability to be integrated into digital society, will be of interest to some doctoral students eager to study rural education. She has indicated her support for this proposal by sharing her CV.

The other Tier I CRC is held by Dr. Patty Williams, in Food Security and Policy Change (she is in the Department of Applied Human Nutrition). In conjunction with CFI funding, she will be establishing the Participatory Action Research and Training Centre on Food Security at MSVU. Issues of food security deeply impact students' ability to function effectively and with self-efficacy within the public school system. Doctoral students with an interest in educational foundations and leadership may find links with this centre as they relate to power relationships in society that perpetuate food insecurity and how insights from related research could inform school administration and community linked policies. She also conducts research related to rural Nova Scotia, opening doors for doctoral students interested in rural education

Dr. Janice Keefe, within the Department of Family Studies and Gerontology, is the Tier II CRC for Care-giving and Gerontology, and her half million dollar funding has just been renewed for another five years, as has a CFI grant for upgrading the research equipment at the Maritime Data Centre for Aging Research and Policy Analysis, (<u>http://www.msvu.ca/mdcaging/index.asp)</u>. Her focus on the experiences, assessment, compensation, and rural/urban issues faced by caregivers may be of interest to educators with an interest in the interface between rural education and lifelong learning.

Dr. Áine Humble, also within the Department of Family Studies and Gerontology, is Director of the CFI funded *Atlantic Research Centre for Family-Work Issues*. This Centre examines the intersection between employment and home life and the division of labor within homes, from a women's (gender) perspective. It houses equipment set up to conduct large survey research (computer-assisted telephone interviewing and web surveys and software to conduct both qualitative and quantitative data). Dr. Humble is fostering strong links with the Faculty of Education, and currently teaches Qualitative Research Methods, at http://www.msvu.ca/ARCFamilyWork.

Acadia

Acadia University holds seven appointed Canada Research Chairs (two Tier I and five Tier II). The School of Education has been allotted a Tier II CRC in Education, Community and Culture. A candidate has been identified and her application will be forwarded to Ottawa prior to the April 2008 deadline. The other seven CRCs represent environment, cultures, civilizations and citizenship, materials science, modeling, health and wellness, and information technology and society.

Of relevance to doctoral candidates is the work within the Cultures, Civilizations and Citizenship Chair, where scholars are studying the changing nature of citizenship, human rights, the homogenization of the global village, marginalization of youth, rural communities, aboriginal and remote regions in a service economy. As well, the Health and Wellness Chair is exploring health literacy and health and wellness education from a multi-dimensional approach (spiritual, physical, mental, occupational and social well-being). Part of the way wellness is conceptualized involves using the mind constructively, expressing emotions effectively and interacting creatively with others, all within the purview of educational studies. The study of culture and civilization is one of the major research themes at Acadia, as is a commitment to gender and equity analysis.

StFX

StFX University holds nine CRC's (one Tier 1) organized around four major research clusters: (a) oil and gas, oceans and environment (four CRCs); (b) new economy, governance and human development research (4 CRCs); (c) humanities research (one CRC); and, (d) health and human activity (does not have a specific CRC chair but benefits from the others). Although the School of Education does not yet hold a CRC, doctoral students will have access to rich research emerging from several of the research chairs: culture and human development, indigenous peoples and sustainable development, public policy and governance, and health and human activity (especially for rural Nova Scotians). The School of Education is making plans to establish a Center for Equity and Leadership over the next two years, which will complement and support their work in educational administration and policy and in social justice and inclusion. (See Figure 8, Nature of Faculty Awards: N=70 awards received by 27 people).

StFX is committed to deepening its research and educational engagement with indigenous peoples and rural Nova Scotia, and a key player in this is the School of Education. The Center for Research on Culture and Human Development draws attention to child development, youth international internships and mentoring of young graduates in research that will inform local education and policy decisions. Doctoral students will have access to the resources of the CRC. There would also be opportunities for doctoral candidates to draw intellectual energy from the Public Policy and Governance Chair, with her focus on social justice and community development, in which education and schools play a central role. StFX's CRC strategic plan for 2008 references the World Health Organization's (WHO) 12 determinants of health, with education and literacy being key factors. People with higher levels of education have better access to healthy physical environments for their families. Canadians with low literacy skills are more likely to be unemployed and poor, to suffer poorer health and to die earlier than Canadians with

high levels of literacy. Doctoral candidates will be able to turn to this Chair for challenging lines of inquiry.

8.3.3 Faculty Awards

Appendix 4 provides detailed information about the 70 awards received by 27 faculty members, over half of the faculty complement (see also Figure 7). Faculty received awards (or were nominated, short listed or a finalist) for: (a) outstanding research (45%), (b) teaching innovation and excellence (20%), (c) the caliber and contributions of their doctoral work (13%), (d) distinguished leadership and service to the profession and discipline (13%), or (e) books published (6%). Two thirds of the faculty received recognition for two or more of research, teaching, service, dissertation and books.

Awards or nominations were given for early, mid and lifetime career achievements. Faculty were associated with very prestigious initiatives including the 3M Teaching Fellowship, the Dawson Scholar, Canadian Professor of the Year, the National Reading Conference in the UK, the Rutherford Award, the Poets Corner, and Canadian Who's Who. The awards represent local, provincial, national and international recognition. They are sponsored by: professional associations and societies, university administration, publishers, conferences, honor societies, provincial and federal government agencies and representatives (including provincial Premiers). The caliber of the work includes outstanding, excellence, innovative, leadership, distinguished, honorary, prestigious, significant and superb. One professor is Poet Laureate for the Halifax Regional Municipality.



Figure 8 – Nature of Faculty Awards (N=70 awards received by 27 people)

8.4 Evidence of Dissertation and Theses Supervision and Committee Membership

Enhanced research activity can be measured by the number of thesis and non-thesis graduate degrees completed or in progress, and the number of graduate independent studies and graduate projects (for non-thesis M.Ed. degrees).

All three participating schools of education possess solid, long-running and emergent supervisory experience with dissertations, theses and other graduate level work. Table 8 summarizes their collective involvement. In total, faculty have experience with 1275 graduate level supervisory dissertations (10%), theses (55%), graduate independent studies (10%) and graduate projects (24%) (see Figure 9). All three schools have achieved, sustained and continue to cultivate a strong and rich culture of academic inquiry and innovation through collaborative work with graduate students.



Figure 9 – Supervision of Graduate Work (N=1275)

Table 8 -	Evidence of	Supervision of	f Graduate Work
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	Ph.D. Dissertations		Masters Theses		Graduate Independent Studies	Graduate Projects			
	Completed Supervisio n of Ph.D.	Completed Ph.D. Committee member or External Reader	In Progress: Ph.D. supervision or committee work	Completed MA supervision	Completed MA Committee Member or External Reader	In Progress MA supervision	Graduate Independent Studies	Graduate Projects in course- based MEd degrees	Total
MSVU	36	58 12 faculty engaged in Ph.D. work in general	10	257	164	25	131	131	813
Acadia		20 (7 faculty)		92	120	5		71	308
StFX		7 (7 faculty)		33		9 (5 faculty)		94	127
Totals	36	85	10	382	284	39	131	296	1275

8.4.1 Ph.D. Supervision

As evidenced in Table 8, 26 faculty have been involved in supervising doctoral work (45% of all faculty who will be involved with the proposed program). Note that that 41% of the faculty are new hires, completing their own Ph.D. within the last few years. This means that nearly all of the seasoned faculty have experience supervising doctoral students in some capacity (despite not having a doctoral program at any of the schools). In total, they have been (or are) involved with 131 dissertations, in Canada and abroad.

Given that some members of the faculty at Acadia and MSVU taught at both Dalhousie and St. Mary's University (Dalhousie had a doctoral program), there are several MSVU faculty with direct experience supervising Ph.D. students to completion. Overall, 13% of the supervisory work at MSVU is related to doctoral studies (n=104), and was completed (92%) or under way (8%) by 12 faculty members (43% of the faculty). Of the 12 people involved, 36% had experience being a main supervisor, 57% had experience sitting on a committee or as an external reviewer (57%), and 36% had experience doing both. Those faculty members engaged in the doctoral level for graduate supervision are a mix of tenured, Full Professors (42%), tenured Associate Professors (50%) and tenure track Assistant Professors (8%). The average number of dissertations supervised per active faculty member is nine.

Close to half of the faculty members at MSVU (43%) have been involved with both doctoral and masters level supervision, and close to half of them hold the rank of tenured, Full Professor (42%). The other faculty members involved at both levels of graduate studies theses/dissertation supervision are all tenured, Associate Professors (57%). This is a healthy situation given that MPHEC (2003) projected that Maritime universities will have to replace 50% of retiring professors by 2010. While the older complement of Full Professors is likely to retire in the next 10 years, there is much larger pool of younger tenured and tenure track Assistant and Associate ranked faculty to continue on with the Ph.D. program delivery. These individuals will bring their experiences with masters level thesis supervision to their work with doctoral students.

In the absence of a doctoral program, faculty at Acadia and StFX have not had the opportunity to directly supervise doctoral students (although 14 faculty members have experience serving on a committee or as an external reader, half of the faculty complements at these two schools). With nearly half of the 58 faculty holding dissertation supervision or committee membership experience, it is evident that the three institutions have the capacity to assume this role in the proposed Ph.D. program. More significantly, there is a seasoned complement of faculty available to mentor the already active junior ranks into this role.

8.4.2 Masters Supervision

All three universities have strong and long standing masters programs (see Section 8.8). As noted earlier, faculty have experience with 1266 graduate level supervision experiences, over half of these being masters theses (55%). Virtually all faculty members (93%) have experience supervising masters theses, sitting on committees or serving as an external reader (all faculty at Acadia and StFX have this experience and 79% at MSVU). Of the 22 MSVU faculty members involved to date, close to two thirds have gained experience doing both main supervision and committee work (59%). At MSVU, for example, the average number of theses involvement per active faculty member is 20, with a range of 1-51 and a median of 12. The record of involvement

provides a powerful confirmation that members of the education faculties in this three university partnership have long-term supervisory capacity and supervisory committee membership experience.

8.4.3 Graduate Independent Studies

Sixteen percent of the work at MSVU involves supervising graduate independent studies. Ten people were engaged in this work, namely those holding the rank of Assistant Professor (60%). The average number of independent studies supervised by a faculty member was 19, with a range of 9-48, and a median of 15. These courses are designed by the student in consultation with an interested faculty member and can involve directed research, directed readings, and other forms of work undertaken by the student in a self-sufficient, self-initiative climate of supported study. The usual intent is to provide an opportunity for the student to engage in learning and scholarship in an area not usually covered in regular courses, or in an area related to thesis work.

8.4.4 Graduate Projects

Two thirds of the 58 faculty (n=36) have rich and extensive experience supervising graduate projects for students enrolled in a M.Ed. without a thesis. There were 296 projects supervised. Each person supervised, on average, eight graduate projects during the last five years. The graduate project is the culminating academic experience leading to an advanced degree, the M.Ed. It provides a demonstration of a graduate student's ability to explore, develop, and organize materials relating to a specific problem or an applied orientation within education. The student presents the results in an extended scholarly statement in a clear, direct, and concise manner. The term graduate project is used to describe a piece of original, creative work, for example, innovative curriculum guides, full-service instructional websites, multimedia instructional products, development and implementation of technology plans or curriculum-based computer programs, and development and assessment of unique laboratory experiments.

8.4.5 Development of Graduate Programs Overseas

Also noteworthy is the involvement of StFX and MSVU faculty in the development of graduate degrees at international universities. Drawing on over \$1 Million CIDA dollars, with the help of StFX, the Royal University of Bhutan established its first-ever masters level program modeled after StFX's M.Ed. program. The 2006 graduates received StFX degrees, but future graduates will acquire M.Ed. degrees from the Royal University of Bhutan. It will be the first ever in-country masters program of any kind in Bhutan. StFX intends to renew and extend this project in collaboration with two universities that have large graduate programs, and the new project proposes to include both Masters and Ph.D. degrees.

At MSVU, faculty have been active in creating and delivering graduate education programs in the Caribbean, namely in Barbados, Trinidad and Tobago and Jamaica (see Section 8.8). Working with government authorities, teacher's associations and/or education councils on site, MSVU faculty designed a context-specific M.Ed. program for each nation. MSVU faculty teach on site in the Caribbean, students gain an MSVU degree (it has not been transferred to local control as in the ST.F.X model), and some students come to campus for convocation. All but the Jamaican degree are course based, with the former involving a graduate project.

8.5 Graduate Infrastructure (including Office of Graduate Studies) and

8.6 University Support Facilities beyond Those Needed for Undergraduate Programs

Tables 9 and 10 provide a concise portrait of the infrastructure. Table 9 profiles the graduate infrastructure at each university (and also includes information for Section 8.6, about the support facilities that are present beyond those needed for Undergraduate Programs). Table 10 sets out the graduate infrastructure that is in place for each respective faculty or school of education.

As is directly required under Section 8.5, each university in this partnership has an Office or Faculty of Graduate Studies operating as a central, coordinating body. Each university also has a Graduate Senate Committee, as well as a Research Office and a University Research Ethics Board. Also pertinent to this proposal (which envisions a component of distance learning as part of the delivery model), each university has an office of distance or continuing education and a Student Affairs or Enrichment Office (at the Dean or Director level).

A new Inter-University Doctoral Governance Committee as described in Sections 2.2.4 and 2.2.5, will be put in place to work and liaison with the universities' infrastructures. The Academic Vice-Presidents will sit on the Governance Committee. Each university will identify a Doctoral Program Coordinator (n=3) who will sit on the Administrative Committee. The Administrative Committee will, among other things, recommend policies to the Governance Committee, which will in turn route policy matters through appropriate upper levels of administration and governance (Senate) approval. As evidenced in Table 9, each Faculty or Office of Education already has its own Dean and a Director of Graduate Education, dedicated personnel for graduate studies, a Graduate Committee and regularly scheduled meetings to develop policy and programs. MSVU has a Graduate Admissions Officer (installed a year ago to deal only with applications to graduate programs). This was deemed necessary because over one quarter of students enrolled at MSVU are graduate students (27%), compared to a national average of 8% (CAUT, 2007).

Table 9 - Graduate Infrastructure as well as Support Facilitiesbeyond Those Needed for Undergraduate Programs

	MSVU	Acadia	StFX
Faculty or Office of Graduate Studies	Office of Graduate Studies, with Dean	Faculty of Research and Graduate Studies (Graduate Studies Officer)	Chair of Graduate Studies (operates like a Dean)
VP-Academic	v	~	~
Research Office	(Associate VP)	✔ (Dean, See above)	~
Faculty of Education with Dean	~		
School of Education (with Director) within a larger Faculty		✓ (School within Faculty of Professional Studies)	(School within Faculty of Arts)
Director of Graduate Education	✔ Elected	~	Chair of Graduate Education Department
Graduate Program area Coordinators	v		
University Research Ethics Board	v	~	
Senate Graduate Studies Committee	v	~	v
Senate Graduate Scholarship, Awards, and Assistantship Committee	~		~
Graduate Studies Calendar (paper and online)	v	v	✔ (no separate calendar)
Graduate Admissions Officer	~		

Table 9 continued - Graduate Infrastructure as well as Support Facilitiesbeyond Those Needed for Undergraduate Programs

	MSVU	Acadia	StFX
Reference to Graduate Studies in Strategic Plan	~	~	
Graduate library holdings	(dedicated Education Librarian)	(dedicated Education Librarian)	(dedicated Education Librarian)
Center for Teaching and Learning	~	~	Committee
International Education Office	✔ (Associate VP)	✔ (Director)	~
Canada Research Chairs (Tier 1 or II)	✓ one joint Tier II cross-appointment in Education	✓ Hiring a Tier II CRC in Education, Community and Culture	There are nine CRCs but none yet in education
Distance (Continuing) Education office	~	✓ Education School has its own Distance Coordinator	•
Learning Commons	✓ (referred to in 2008 Strategic plan)	~	v
University Book Store	~	v	~
Information Commons (ITC user support services)	~	v	~
Office of Technology Transfer and Innovation (to support links with industry and government)	~	~	~
Center for Community Engagement		~	Extension Department
Student Affairs/Enrichment Office	🖌 (Dean)	V (Director)	✓ (Vice President and Dean)

	MSVU	Acadia	StFX
Director of Graduate Education	~	~	v
Dedicated personnel for graduate studies	✔ (n=4)	~	✔(n=2)
Graduate Education Committee	~	~	v
Administrative Council (Dean, Directors and Staff)	~		✔ (Senior Academic Committee)
Monthly Graduate Education Meetings	~	Strategic meetings	 ✓
External Advisory Board	~	In Progress	V
Graduate Student Handbook	Being developed	v	V
Faculty of Education website	~	~	V
Graduate Student Lounge	~	v	
Graduate Student Association or Society		v	
Office Space for Doctoral Students	v	v	v
Curriculum Resource Center	~	v	 ✓
Education Technology Lab	~	~	v

Table 10 - Graduate Infrastructure within Faculty or School of Education

In the following sub-sections other elements identified relevant to facilities available to support the Doctoral program are described: the Distance e-Learning Platforms, graduate library resources, graduate student services, and learning commons.

8.6.1 Distance e-learning Platforms

The intent is for doctoral students to take some courses on-site and others via technological distance platforms through pedagogically sound e-learning and collaboration among the three academic institutions. Each course platform will be developed via the ICTE Interuniversity Doctoral Program Proposal Committee, with approval by all three Senates, for submission to MPHEC. Course delivery will be live, via synchronized distance technology. All three universities have well-established distance education centers offering televised, video-based, online and other modes of distance courses and programs. All three universities use multiple technology platforms and each have experienced and dedicated personnel to make this work for the proposed program. Each university has sections that are WIFI zones (Wired and Wireless Internet), including the Library (see Table 11 for an overview of the wide range of computer platforms available to deliver this doctoral program). Personal video teleconference systems based on a web cam, personal computer system, software compression and broadband Internet connectivity will also be taken advantage of to ensure ongoing communication with students. All three universities also have information technology departments and user support services (computers, back-ups, software, hardware, and technical support) as well as help desks, with fully qualified staff to deal with technology-based issues.

	MSVU	ACADIA	StFX
Distance Education Offices or Departments	http://www.msvu.ca/distance/graduate.asp	<u>http://conted.acadiau.ca/</u>	✓ <u>http://blackboard.stfx.ca/</u>
Information Technology Departments or Units	 	~	V
User Services Support	v	v	v
	Main Distance e-Learning	g Platforms	
WebCT/Blackboard/Moodle	~	 ✓ 	~
Elluminate live! [©]	~	~	~
Videoconferencing (VTC) systems		~	~
	Additional Distance Pl	atforms	
Teleconferencing (live phone bridges)	~	~	~
Teleconferencing (Multi Mode)	~	 ✓ 	~
Courses on DVD or Video Tapes	~	~	
WIFI Zones for wireless Internet connections	~	~	~
E-MAIL accounts (free)	v	 ✓ 	~
Instructional Television Live or Taped	~		

Table 11 - Overview of Distance e-Learning Platforms

In particular, WebCT/Blackboard/Moodle are web-based e-learning educational platforms that are suited for distance engagement of doctoral students who have diverse learning styles, lived educational experiences and research interests. These technologies allow students to access courses through a website purposely designed for each course. Learning communities, chat clubs, integration of Wikis, and the ability to multi-institutional brand so that each institution can have its own URL and unique look and feel for a course, if so desired. As well, one URL for the proposed program could be created and managed. Creative use of technology will support the collaborative and flexible learning envisioned in this proposal. These platforms also facilitate sharing of course artifacts, the creation of reflective blogs and journals, and the development and sharing of portfolios created by learning groups and project teams. Another useful feature is the

ability to create e-Reserves, digital versions of copyright cleared reserve articles that libraries create for faculty.

Elluminate live![©] (voice over the Internet) technology was designed for many-to-many communication via distance education and for collaboration in and among academic institutions. It can extend the physical boundaries of a traditional classroom or add live discussion and dynamic interaction to asynchronous distance learning (teaching using communication technology). It links students and teachers through the Internet in a live, virtual classroom resulting in engaged students, enhanced learning, and improved comprehension. The technology includes two-way audio; live video web cam, shareable interactive whiteboard; interactive, indexed recorded playback; handover of control to students; breakout rooms, the ability for disabled students to participate, and instant messaging.

Videoconferencing (VTC) systems use telecommunications of audio and video to bring people at different sites together for a meeting. This interactive distance-learning mode can be as simple as a conversation between two people in private offices (point-to-point) or involve several sites (multi-point) with more than one person in large rooms at different sites. Besides audio and visual transmission among people, videoconferencing can be used to share documents, computerdisplayed information, and whiteboards.

8.6.2 Graduate Library Resources/Access to Scholarly Communications

Faculty and doctoral students will have access to a wide range of library resources and other modes of scholarly communications, most notably using Novanet (a consortium of libraries) and attendant technology. In addition to online and in person access to the consortium holdings, individuals now can Instant Message the librarian or use LifeHelp to communicate online. Also, each library subscribes to consortia arrangements that hold entire groups of journals, including those pertinent to education. These are all available to doctoral students. Furthermore, most faculty members belong to professional associations and attend respective conferences that generate proceedings or online versions of the conference papers, all of which augment access to scholarly communications for faculty and doctoral students.

MSVU Library Resources for Education Researchers

The MSVU's Library has a staff of 20 and one librarian is dedicated to Extended Services, which includes web-based and distance programs. This Librarian is also the Liaison Librarian for Education and Child and Youth Studies. She has an e-Resource assistant, as well. The Library's budget for education comprises 11.6% of the university's total library budget (\$49,345 of \$424,930). Spending on electronic assessable materials is not included in this since it is interdisciplinary (via the aforementioned consortia). The library has approximately 9,400 holdings in the education (L Class) section of the stacks, representing 4% of the total book collection http://www.msvu.ca/library/index.asp. The MSVU Library Special Collection Showcase includes ERIC http://www.msvu.ca/library/collpoleric.asp, comprising the entire microfiche collection of 483,046 education reports published from 1996-2006 (the year the fiche was replaced by electronic distribution). ERIC stands for Educational Resources Information Center established by the U.S. Department of Education to collect, index and abstract various types of material of interest to teachers and researchers in education: research reports, issues papers, instructional materials, and tests and evaluation instruments.

In 2007, MSVU renewed 173 print education journals, 31% of the total current print subscription list. It also renewed 21 education continuations (annuals mainly) or 21% of the total continuations list. It ordered 154 education books in 2007, 9% of the total book orders. education researchers also have access to the full-text of e-journals from the following databases: Education Research Complete: 903 titles, CBCA Education Full-Text: 50 titles, and Sage Fulltext Education: 29 titles. There are also Education related titles in other databases e.g., JSTOR, Project Muse, PsycArticles and others.

Within the Faculty of Education, there is a Curriculum Resource Center (CRC)/library with a designated, full time Librarian/Coordinator and several student assistants. The Centre contains thousands of volumes of curriculum support material, such as teacher resource books, text books, curriculum guides, picture books, educational kits, vertical files, periodicals, videos, computer software, assistive technology, and theme material from preschool to high school, as well as adult education and ESL books. Housed within the CRC is the Education Technology Lab. Technology education courses are held in this facility and it is available to students and faculty when not in use for courses. Graduate students have access to this facility. The lab includes 17 PCs running on WindowsXP, two scanners, a laser printer, and a LCD projector. Major applications include Microsoft Office 2003 and Inspiration/Kidspiraton 8. The CRC also has six MacIntosh computers, which may be used for word processing and searching the Internet.

Acadia Library Resources for Education Researchers

The Vaughan Memorial Library at Acadia University has 8 academic librarians with one librarian serving as liaison to the School of Education and coordinator of services to distance education students. One of the liaison's primary roles is to teach students and professors about research tools and strategies within their specific disciplines. Liaison librarians can be contacted for research assistance and individual instruction in their offices, at the reference desk, and by phone or e-mail. The education liaison librarian is responsible for managing the acquisition of library materials in support of education programs. This is assisted greatly by extensive consultation with and input from professors in the School of Education.

The library has approximately 21,000 holdings in the education (L Class) section of the stacks. In 2006, the library added 353 books to the education collection and renewed 94 individual journal subscriptions. The total journal collection for education gives students and faculty access to more than 600 titles. The School of Education allocation for books is \$17,600, which is 5.5% of the overall university book budget. The allocation for paper subscriptions is \$17,118, which is 9.5% of the total. The allocation for electronic resources is \$200,000, but this is very approximate due to the interdisciplinary nature of these databases. This represents 26.5% of the total electronic allocation.

Liaison librarians create and maintain Internet guides for each subject area. There is a new Library Guide for Education, http://libguides.acadiau.ca/content.php?pid=1277, which includes recommendations for reference sources and journal indexes, instructions for connecting to licensed library resources from off-campus, online tutorials, and Internet links for relevant websites and citation style guides.

The Library provides excellent, free interlibrary loans services to acquire monographs, microforms, theses, and other publications, as well as copies of journal articles from other institutions and libraries. Their major partners are the East Coast Relais Consortium and the Canadian Institute for Scientific and Technical Information (CISTI). Finally, Acadia University

students and professors may take advantage of reciprocal borrowing agreements with other Atlantic Canadian university libraries through the Atlantic Scholarly Information Network (ASIN) or through the Canadian University Reciprocal Borrowing Agreement (CURBA), which includes most Canadian university libraries.

StFX Library Resources for Education Researchers

At St. Francis Xavier University, the Angus L Macdonald Library, the Marie Michael Library of the university's Coady International Institute, and the School of Education's Curriculum Resource Centre, provides information resources for education. Collectively, these facilities have a staff of 37, including 7.5 librarians. The liaison librarian for education has also served as Extended Library Services Coordinator, with a support staff assistant. ST.F.X has invested approximately half of its library budget to the acquisition of journals and monographs in the area of educational administration. There are two support staff that assist faculty and graduate students in accessing and learning through distance education modes. Faculty and staff have full access to Novanet at the Angus L. MacDonald Library.

The collections of the Angus L. Macdonald and Marie Michael libraries include approximately 8000 monographs in the area of education. As with MSVU, the Angus L Macdonald library also has a selective range of ERIC documents on microfiche dating back to 1979, and a reference collection of 148 education volumes. The two libraries have print holdings of more than 140 journals in this field. Researchers also have access to a growing number of fulltext electronic journals in education-focused collections, such as Sage Fulltext Education and CBCA Education, and to numerous individual titles in the more general JSTOR, Project Muse, Taylor & Francis, and Wiley databases. As well, educational administration journals are included in the Emerald Management Xtra database, and educational psychology journals in PsycARTICLES. More than 150 e-books with publication years 2000+ are available through NetLibrary (not included in the print monograph numbers above), and are of particular assistance to students at a distance.

Over the period 1997 -2005 library budget allocations for education almost doubled (97% increase) to support a growing and diversifying collection. More than 700 new books were added to the collection in this period. In the last fiscal year (2006-07), the Education Department was allocated the third largest budget in the Faculty of Arts. It comprised 7.75% of that Faculty's total budget, and 157 new books were received. In the first nine months of the current fiscal year alone 170 new titles have been ordered.

The Education Curriculum Resource Centre, with a staff of 1.5, holds a further 17 000 volumes, most of which are for classroom support, such as children's literature and other resources. There are 30 museum and science kits as well as a DVD/video collection of 600. There is workspace for students in the Centre, which is equipped with computers and other technology.

8.6.3 Graduate Student Services

As described earlier, the newly established Governance Committee will review and set policies related to doctoral student admissions. The Administrative Committee will review and recommend to established admissions departments at all participating institutions all admissions to the program, and will review all student programs of study (Section 2.2.4 and 2.2.5). This

arrangement does not preclude the more general need for graduate student services for doctoral students.

All three universities have long-standing Student Affairs offices, with their own Deans or Directors. All student service offices exist to provide students with resources to help to develop the students' potential. Because all three universities already have graduate programs, these offices will be able to handle issues faced by doctoral students: time management, perhaps housing, finances and money, stress management, personal counseling, health, writing resources and specialized support for students with disabilities. The Acadia Writing Center offers special services to graduate students and Acadia has a designated Graduate Students Association with its own website http://axe.acadiau.ca/clubs/agsa/index.html.

One issue central to doctoral studies is completion time and rates. Existing Student Affairs offices will be made aware of the nuances of issues often faced by doctoral students, who normally are mature, fully employed, career-focused adults (with families) temporarily leaving paid employment to complete doctoral studies over a period of four to five years. This inservicing will benefit doctoral candidates. Obviously, all three universities will need to work to put Graduate Student Services in place that can meet the needs of doctoral students.

At the Faculty or School level, as noted earlier, each university has dedicated educationoffice personnel (secretaries, clerks and office administrators) focused solely on graduate students. They ensure face-to-face, personal and truly informed, program specific contact with students. Acadia and StFX have graduate student handbooks and MSVU's is under development. At the university-wide level, MSVU has a dedicated Graduate Admissions Officer to handle the huge number of applications for Masters programs (effective January 2007). She works with the Dean of Graduate Studies, an Associate VP of Enrolment Management and International regarding graduate enrolment processes and issues. She also works closely with Education's Dean, Director of Graduate Education, and the six/seven program Coordinators and respective support and administrative staff in the Education office. The Admissions Officer is one of the University's principal contacts with prospective graduate students.

8.6.4 Learning Commons

Acadia has the new Sheldon F. Fountain Learning Commons, http://www.acadiau.ca/fountaincommons/. It provides a dynamic environment that brings together students, faculty and staff, and extends active learning to the local communities. It consists of four centers. The Centre for Teaching and Learning provides resources to enhance the quality of learning experiences and to explore new and innovative approaches to teaching. The Centre coordinates workshops and support for faculty members who want to test out new ideas to support student learning. The Centre for International Education promotes and supports international activities, the exchange of ideas, respect for diversity, and facilitates international research and partnerships. An Enrichment Centre provides a range of valuable services to students and faculty in writing, numeracy, and other support areas to build skills needed for today and the future. The Coordinator, Dr. Stephen Ahearn offers individual support and workshops specifically for *graduate students*. Finally, the Centre for Community Engagement provides a place where faculty, students, and staff consider their roles and responsibilities in our society, while facilitating meaningful community/university teaching and research projects and providing service to agencies and organizations. MSVU has a Senate-approved Teaching and Learning Center (2006) http://www.msvu.ca/tlc/index.asp , with a Coordinator who receives advice from the Senate Committee on Teaching and Learning (SCOTL). The TLC is a new resource for academic departments and individual faculty with a two-fold mandate: 1) instructional design and 2) instructional (professional) development, http://www.msvu.ca/tlc/ProgramsServices.asp. The TLC Coordinator represents the university externally as a member of the Association of Atlantic Universities, the Canadian Association for Distance Education, the Society for Teaching and Learning in Higher Education and the Educational Developers Caucus.

8.7 Financial Support Available for Doctoral Students

This section describes available student financial support, including sources and amounts. In general, three quarters of doctoral students in Canada receive funding (75%) towards completing their studies. Holding adequate funding accounted for 65% of their completion rate (50% do not finish their degree) (Elgar, 2003). The optimal completion rate is 75% (Martha Cargo, Past President CAGS (see Berkowitz, 2003)). Section 8.7.1 focuses on the national situation, illustrating the ongoing debate about the inadequacy of federal funding for graduate studies in Canada. Insights from this debate will inform this doctoral program. Section 8.7.2 provides information about financial support currently available at each participating university.

8.7.1 National Conversation about Financial Support Available for Graduate Students

We respectfully share information garnered from a December AUCC (2007a) brief to the Federal Finance Minister, arguing the case for more and sustained financial support for graduate studies in Canada. In this brief, leading up to the 2008 federal budget, AUCC recognizes the current level of under funding for graduate studies in Canada. They recommend that the federal government allocate \$369 million over three years to, among other things, create an additional 4,000 Canada Graduate Scholarships. This would build on the 2007 federal government *Advantage Canada* initiative that created 1,000 new Canada Graduate Scholarships to encourage more students to acquire advanced studies.

ACCU (2007a) also recommends that a portion of the \$369 million be used to fund more faculty research grants so that masters and doctoral students can participate in research projects and receive funding. Currently, only 30% of Tri-Council grant monies flow to graduate students. To offset this gap, AUCC proposes that faculty research grants include monies for 12,000 more students at an average level of \$12,000 per student, per year.

AUCC (2007a) further recommends that the federal government immediately commit \$70 million, and another \$270 million by 2011, to fund institutional costs of research (invest in the research enterprise in Canada). Right now, many universities incur indirect costs while conducting university research, costs that cannot be recouped; they lose, on average, 75ϕ on the dollar (recouping only 25% of costs through the federal Indirect Costs Program). In a recent discussion about the need to instigate a national debate about the character of PhD training in Canada, Nicolas (2008) agrees, arguing that it is necessary to convince governments and granting agencies to financially invest in improving the human and intellectual potential of Canada's new researchers.

On a fourth front, AUCC recommends that, in the 2008 budget, the federal government renew the endowment of the Canadian Millennium Scholarship Foundation (scheduled to run out in 2008-2009), thereby continuing to provide needs-based, non-repayable financial assistance to students. The ICTE and the three universities partner to this proposal will closely follow the import of these four recommendations and gauge their impact on this joint doctoral proposal. The issue of funding support for doctoral students was discussed at the October 2007 (Moncton NB) meeting of the Canadian Association of Graduate Studies (CAGS). A slogan bantered around was "Get them - Keep them- Help them finish." This slogan means making available scholarship, fellowships, bursaries, grants, awards or stipends (each with different tax implications for doctoral students) to recruit students, support them during their studies and provide enticements to help them persevere to completion. In addition to hiring a doctoral student as a sessional, a research assistant, or both, the Canadian experience is to: (a) use monetary top ups from the Education or Graduate Office budgets for students receiving external funding (top ups range from \$4,000-6,000.00); (b) thesis completion awards (one per semester, per student, usually not a competition); (c) reduced tuition after a certain time frame, fostering completion; and/or, (d) pay for thesis binding.

From another perspective, also discussed at the 2007 October CAGS meeting in Moncton, many Canadian universities with doctoral programs opt to motivate the *professor* to stay engaged with the student to better ensure completion, by: (a) providing course relief *only after* the thesis proposal has been approved; (b) providing a monetary award for the professor *only if* the student finishes and convocates; or (c) spreading out a monetary award for the professor (40% up front, 20% in the middle and 40% when (if) the student finishes). These options are all available for this proposed doctoral program in educational studies.

8.7.2 Financial Support for Graduate Students at Universities in this Partnership

Many faculty members party to this proposal currently (and potentially) hold SSHRC grants, which provide funding for research assistantships. As well, Table 12 summarizes the current level of graduate funding available at each university in this partnership. Because each university in this proposed partnership already has an Office or Faculty of Graduate Studies, arrangements are in place for students to procure funding for studies and to attend conferences. Each university's graduate website describes sources and processes for procuring graduate funding. Part of implementing the proposed program will be ensuring that funding resources and processes are responsive to the needs of doctoral students.

Each university's Financial Aid Office acts as a liaison between students and the various provincial student assistant offices and maintains a supply of provincial loan applications and information. As well, these offices deal with private bank loan lines of credit, and scholarships and bursaries. All three schools are committed to creating further teaching assistantships, a minimum of \$5000 per doctoral student. Given the external research grants and contracts held by faculty at present, it is anticipated that there will be ample additional opportunities for graduate research assistantships for full-time doctoral students to the amount of \$10,000 per student.

Finally, and significantly, each university in the partnership also has a Research Office that is a central connection for information and processes relevant to Tri-Council funding and other major external and internal funding sources.

Table 12 - Current Sources and Types of Graduate Funding at Three Universities in this Partnership

MSVU http://www.msvu.ca/graduatestudies/#funding	Acadia http://ace.acadiau.ca/rgs/gradstudies/StudentFunding .htm	StFX <u>http://www.stfx.ca/academic/graduate_studies/awards.html</u>
 Graduate Thesis Funding for certain expenses related to thesis work Graduate Student Funding Assistance program Senate Graduate Studies Scholarships, Assistantships, and Awards Committee Graduate Conference Funding to support presentation of Masters Thesis research at scholarly conferences Internal Graduate Merit Scholarships Graduate Teaching Assistantships and Fellowships are available for full time students, who then work with individual professors Research Office for access to Tri-Council and other major graduate funding sources 	 Acadia Graduate Awards Collective Agreement (Article 25.55) provides Graduate Research Grants to attend conferences to present work Research Office for access to Tri-Council and other major graduate funding sources 	 Graduate Scholarships Graduate Teaching Assistantships Senate Graduate Studies Scholarships, Assistantships, and Awards Committee Outstanding Graduate Student Research Award Research Office for access to Tri- Council and other major graduate funding sources

8.8 Evidence of Support Network of Related Programs: B.Ed. and Graduate Programs

This section, describes the existing appropriate support network of related programs (undergraduate as well as graduate) at each submitting institution. Table 13 profiles the Bachelor of Education and Masters programs available at each university, including cohorts.³

 $^{^3}$ In the cohort model, students are admitted to a pre-designed course of study and take the courses at the same time, in the same sequence, all graduating at the same time. These tend to be 5 full unit MED degrees (no thesis, sometimes a project) and often extend over a two-year period, including summers. Each cohort usually has between 15-20 students and full time faculty coordinator. Courses are offered by a complement of full-time and part-time faculty.

	B.Ed. (All offer Science, Mathematics, Social Studies and English at the Secondary Level)	Masters Includes: thesis (M.A.), course based (M.Ed.), course plus project (M.Ed.)	Graduate Cohorts
MSVU	9 areas: Elementary and Middle School, including: Family Studies, French, Business Education, Visual Arts	Over 1000 students in 7 areas: Curriculum Studies, Educational Foundations, Educational Psychology (includes two M.Eds in conjunction with APSEA ⁴ , Elementary and Middle School, Lifelong Learning, Literacy Education, School Psychology	Approximately 30 in Progress: (A Literacy cohort is available via web-distance)
Acadia	7 areas: Elementary, Secondary, including: Music Education & Technology Education	566 students in 5 areas: Counseling, Curriculum Studies, Inclusive Education, Learning & Technology, Leadership	8 in Progress
St.FX	6 areas: Elementary, Secondary, including: Physical Education	Over 300 students in 2 areas: Educational Administration and Policy, Curriculum and Instruction	4 in Progress (Large part-time distance graduate education community

Table 13 - Profile of B.Ed. and Masters Programs at Universities in this Partnership

⁴ In 1997, MSVU and the Atlantic Provinces Special Education Authority (APSEA) signed an MOU, http://www.apsea.ca/about.htm, renewed again in 2003. There is a Program Advisory Committee that meets at least twice a year. APSEA is an interprovincial cooperative agency established in 1975 by joint agreement among the Ministers of Education of New Brunswick, Newfoundland, Nova Scotia, and Prince Edward Island. APSEA is authorized to provide educational services, programs, and opportunities for persons from birth to 21 years of age with low incidence sensory impairments. The APSEA agreement is the only one of its kind in Canada. Operational costs are shared among the four provinces. MSVU now offers two M.Ed. degree programs in collaboration with APSEA, in Educational Psychology, in two concentrations: (a) Education of Students who are Blind or Visually Impaired; and (b) Education of Students who are Deaf or Hard of Hearing, see http://www.apsea.ca/courses.htm and

http://www.msvu.ca/calendar/Graduate/Programs/educationalPsychology.asp

Based on statistics related to the movement of undergraduate students into graduate work, this robust infrastructure of existing programs will have a positive impact on the proposed doctoral program. An MPHEC (2007b) study noted that 61% of students who graduated from universities in the three Maritime Provinces are from Nova Scotia. Half of all Maritime graduates went on to further study within two years of graduating. Even more significant is that one quarter of them chose graduate studies (including doctoral work), up from 21% ten years ago (a 14% increase). Also pertinent is that they tended to leave the region to study at the graduate level (36%) rather than remain (22%). If they did stay in the Maritimes to get further post-secondary education, they opted for another bachelor's degree rather than graduate studies (54%). At present, there is no local doctoral program available for those interested in further graduate work. The proposed program would work to fill that gap, giving more graduates the chance to stay in the region and enter graduate studies, especially doctoral work.

8.9 Evidence That Nothing Else Exists in the Region, That Replication Is Justified, or That Market Demand Justifies Further Capacity

As stated earlier, no doctoral program exists within Nova Scotia and, save for a Ph.D. in education at UNB, which is different from what is herein proposed, nothing comparable to a Ph.D. in Educational Studies else exists in the Maritimes (see Section 5, which briefly addressed the criteria of Relationship to Other Programs and Institutions). The discussion that follows adds to the information provided in Section 5.

Ph.D. enrolment in Canada has grown 48% since 2000, from 24,000 to 35,000 in 2006 (Nicolas, 2008, referencing Association of Universities and Colleges of Canada (AUCC) data). Based on the most recent statistics, 3.9% of the 27,340 enrolled doctoral students in Canada in 2001, attended schools in the four Atlantic Provinces. Of these, there were 445 Ph.D. students or candidates in Nova Scotia (1.6% of all doctoral students in Canada) (Williams, 2005). The three Maritime Provinces graduated 120 new Ph.D.s per year, as of 2003, and only one third enter the academy (MPHEC, 2003; Nicolas).

In 2004, 3,600 people in Canada actually graduated with a Ph.D., from 47 Canadian universities (Gluszynski & Peters, 2005). Almost three quarters of all doctoral students receive their degree from universities in one of two provinces, Ontario or Quebec. Nearly two thirds of all doctoral graduates in Canada work in the educational services industry (57%) (Williams, 2005). In 2007, only 6% of all graduate students in Canada (Masters and Ph.D.) were in education (AUCC, 2007b). Those who do graduate with a Ph.D. in education are most likely to have firm future plans (84%), return to, or continue with, the same position they held while studying (39%, compared to 21% overall) and tend to be women (65%) (Gluszynski & Peters, 2005). There is very limited opportunity to attain a Ph.D. in the Atlantic Provinces, let alone a Ph.D. in education.

There is only one Ph.D. in English educational studies in the Maritime Provinces (housed at UNB, described below) and one other in Newfoundland (not under the auspices of MPHEC). There is a Francophone Ph.D. in education at the Université de Moncton. There is no Ph.D. in education at Mount Allison University, St. Thomas University, Acadia University, StFX University, MSVU, Université Sainte Anne, Cape Breton University, Saint Mary's University, Dalhousie University, NASCAD, the Atlantic School of Theology, University of Kings College, or the NS Agricultural College.

8.9.1 UNB Fredericton

UNB Fredericton has a full time (3 days a week for two years) Ph.D. in education studies (http://www.unbf.ca/education/grad/Ph.D.html) UNB has 36 full time faculty members, a cadre of Honorary Research Associates, six centers or institutes, and 700 undergraduate and graduate students. The Graduate Studies Coordinating Committee of the Faculty of Education administers programs. Students have between 5 and 7 years to complete their Ph.D. They make accommodation for individuals who have completed a course-based Masters degree: a Qualifying Research Paper. The QRP is an independent research study that clearly demonstrates the applicant's potential for undertaking the advanced research activity of the doctoral program. The applicant assumes complete responsibility for the study, including identification of a research problem, project design, as well as collection, analysis, and interpretation of data.

8.9.1.1 Comparative analysis of UNB versus this Ph.D. Proposal

While this Ph.D. proposal identifies six interrelated themes of study (with room for overlap), the UNB degree is intended to help candidates "develop in-depth knowledge and understanding of a specific area or several related areas within the field of education" through the development of an official Learning Contract. No particular areas or themes of study are specified; rather, candidates are expected to develop theoretical expertise in a content area identified in consultation with supervisors, and aided through a mandatory seminar on educational issues (trends and major concerns in the field of education).

UNB's degree requires, in addition to the Learning Contract and the Seminar, a comprehensive examination, and the successful completion and defense of a dissertation. The Learning Contract can include work equivalent to two graduate term courses (10 hours per week over two terms, or 260 hours): courses, workshops, conferences, institutes, independent reading courses, and library/database research. Work has to be related to at least two of the three following categories of competence: disseminating knowledge, conducting research or developing projects, and leadership. While UNB has a Learning Contract and a comprehensive examination, this proposal does not include a comprehensive examination. Instead, it proposes a Comprehensive Portfolio Process/Examination

UNB has focused its attention on the development and illustration of professional competence in three categories while this inter-university proposal focuses on the learning context and learning community, expecting candidates to declare a focus from among or between six, notwithstanding productive overlap that will occur due to the interrelated nature of the six doctoral study themes. While UNB made explicit three professional competencies, this proposal entrenches these competencies in the program philosophy (Section 2.2.2), conceptualizing them as guiding principles rather than end results. These principles are intended to be reflected in the principal area of the Comprehensive Portfolio Process and Examination; knowledge, research, professionalism and teaching.

8.9.2 Memorial University

Memorial University has a full time Ph.D. in education (offered outside the jurisdiction of MPHEC, within the three Maritime Provinces, but still within the geographic region)

[http://www.mun.ca/regoff/calendar/sectionNo=GRAD_0376]. The Doctorate of Philosophy in Education Program at Memorial University received Senate approval in 2004. A small cohort of new full-time students is admitted each Fall Semester (there is no part-time status). Residency entails students taking courses and engaging in research within a community of learners *on campus*. On an exceptional basis, residency can be fulfilled in an off-campus location, provided the Dean is satisfied that the student is immersed in a *community of learners* joined by the practice and standards of a profession or academic discipline. *Normally*, no more than four courses may be undertaken in a candidate's program. Two courses are required (Doctoral Seminar in Education: Area of Specialization (none are specified) and Advanced Educational Research). Students *may be* required to complete as many as two additional research methods courses. An Education Special Topics course is offered as required.

At the time of admission, students have to spell out their research interests and objectives *and* identify faculty member(s) who might appropriately supervise their doctoral program. To help students with this task, the Faculty of Education posted faculty interests at its website, http://www.mun.ca/educ/phd_program/research.php. There is a written and oral Comprehensive Examination and an Oral Dissertation Defense (see Doctoral Studies Handbook, http://www.mun.ca/educ/phd_program/PhD_Handbook_August_2006.pdf).

This proposal moves beyond the conventional approach, offering doctoral students the unique opportunity to develop a comprehensive portfolio comprising a rich collection of knowledge artifacts demonstrating competency in each of five principal areas.

8.10 Demonstration that the Proposed Ph.D. can best be offered through this Consultative, Cooperative Tri-university Partnership

Section 5.3 was intended to address the possibilities of collaboration with other institutions in the region in the delivery of a program and the steps taken to that effect. This proposal is the evidence of an ongoing collaboration among three universities. This Section 8.10 is intended to provide evidence that the "nature of the proposed program is such that it can best be offered at the institution in question." The nature of the proposed Ph.D. in educational studies, as described in earlier sections, is such that it can best be offered via a consultative, cooperative triuniversity partnership among the teacher education programs at MSVU, Acadia University and StFX University.

This joint degree will be the first doctoral degree of any kind at each of the three universities. It will provide academic enrichment for each university, enhancing the ongoing efforts of the three partner institutions to enrich their research cultures. Levine (2007) found that as the research cultures of universities increase, the likelihood of offering a Ph.D. program increases. The timing of this joint initiative reflects that recognized and empirically supported pattern. The scholarship that will emerge from this partnership will inform policy, practice, other scholarship and the public enterprise. Graduates will be mentored to create new knowledge, to use their research to transform their practices and the educational system, and to communicate their research findings effectively. This three-pronged benefit can best be gained through a joint doctoral program rather than three strong but separate Masters programs. The program will foster a new generation of Nova Scotia educational researchers. And, given that recent studies have shown that those who study in NS tend to stay in NS, the system will be less likely to experience a brain-drain and instead benefit from brain-gain. Within the collaborative, joint program, doctoral candidates will be socialized to view educational research as socially situated, making them more inclined to examine local educational issues from a deeply rigorous intellectual stance.

Joint doctoral programs are partnerships that build on the strengths of the participating institutions to generate tailored, region-relevant programs that could not otherwise be realized. The program strengths and research interests of the three proposing institutions complement and reinforce each other to create a doctoral program of high quality. The combination of faculty expertise and experience, university research cultures and funding experience broaden the base upon which the doctoral program has been developed and provide a wider, richer range of curricular options. Within the proposed program, all partners will equal status and all program decisions will be made jointly and by mutual agreement via the proposed administrative structure (a Doctoral Governance Committee with an attendant Administrative Committee, Section 2.2.4 and 2.2.5). This arrangement respects the reality that the administration of joint doctorates has special needs above and beyond those of graduate programs on a single campus. The proposal addresses the usual issues of decision making process and authority, program coordination, criteria for who can teach and work within the program, admission processes, program

The needs of the faculties, doctoral candidates, institutions and society can best be met (vis-à-vis the six interrelated study themes) through an infusion and sharing of intellectual energy and monetary as well as physical resources via a strong, new partnership rather than by existing programs standing alone. By combining the intellectual and material resources of the three institutions, the joint doctoral degree program provides opportunities for research collaboration, sharing and joint mentoring. In the six identified areas of study, doctoral students will enjoy ready access to a strong faculty base at the three participating institutions and to expertise throughout the region (in part thanks to the willingness of other academics to contribute to and inform the program). Together, the three institutions will be much stronger than any single one could be, making this proposed joint program the most viable option for the Nova Scotia context.

This joint doctoral program will necessarily involve three institutions with different organizational cultures, perspectives and priorities, but all three partners have a strong, deep history and commitment to education in Nova Scotia. These differences will yield a doctoral program richer in academic opportunities than any single institution could create, but we also realize that we have to be respectful and ingenious. To ensure this aspect of the partnership, this proposal demonstrates many features that Levine (2007) recommends for a very strong doctoral program, providing further demonstration that the program is best offered through this triuniversity partnership:

- The program will be staffed by faculty who are productive scholars with expertise, funding and experience to impart in doctoral candidates the skills, knowledge and attitudes required to be productive researchers and scholars (Sections 8.1, 8.2 and 8.3);
- In total, the faculty have almost 600 peer reviewed publications, an average of 12 per person over the five year time frame, equivalent to 2.5 per year per faculty member (with some more prolific than others). This is a very sustainable and desirable publication pace and rate. Doctoral candidates will be working with accomplished scholars, with reputable publication records. The faculty are fully qualified to guide advanced graduate work in educational studies;
- Together, the three faculties provide a rich venue for scholarship in any of the six areas of

study (Section 8.3). Also, the joint program opens up avenues for rich joint research projects in these six areas of study, with funding more assured when faculty who have been successful in obtaining funding opt to prepare collaborative funding proposals;

- Joint programs provide more opportunities for sharing of instructional and educational materials and resources to help students pursue doctoral studies;
- The faculty complement (N=58) has experience supervising doctoral students and extensive experience supervising masters students (Section 8.4);
- Each university has a rich and growing research culture that can support doctoral studies (Sections 8.5 and 8.6). Because the province is small, and thanks to conferences that Atlantic educators can attend together, this research culture has a rich opportunity to continue to expand and intertwine;
- The program requires full time participation (Section 2.4) meaning there is ample time for candidates to learn the trade of research and there is less chance of attrition (degree can be completed within 3 ¹/₂ to four years);
- Collectively, the faculty holds close to \$20 million dollars in grant monies. Levine (2007), when examining and evaluating educational doctorates, noted that any educational enterprise offering a doctoral program should have at least \$3 million in external funding. We are far in excess of this minimum standard. These monies enable faculty to contribute to funding for doctoral candidate's research;
- These grant monies are predominately from the Tri-Council granting agencies, CCL and CFI, totaling millions of dollars. The better the track record, the better the chance of securing funding in the future from these agencies;
- Faculty members from all three universities have received academic rewards and serve(d) as editors of educational and related journals, another standard of a strong educational doctoral program (Levine, 2007);
- The admission standard is high, with each candidate requiring a Master's degree with a minimum of A- (80%) (preferably with a thesis, and in its absence evidence of proof of research competence). Three letters of reference, a letter of intent and proposed program of study, a recent CV and an interview with the Selection Committee are used to screen applicants and even if the candidate is qualified, s/he will not be accepted if there is not a suitable supervisor. As recommended by Levine (2007), these layers of admission are needed to gauge capacity, potential and motivation of the candidate;
- Faculty members do not have automatic graduate faculty status. Section 2.2.8 sets out the criteria to be met in order for a faculty member to be accredited as doctoral faculty, supervisor and committee member (recommended by Levine, 2007); and, finally,
- Levine (2007) also comments on the faculty workload, recommending that faculty in educational doctoral programs teach no more than 8 hours per week. This proposal respects his recommendation. Section 2.2.9 clarifies that each individual doctoral faculty member normally will be permitted to supervise no more than 3 students, participate on no more than 2 committees and teach no more than one doctoral seminar, at any given term (.5 credit). They will also have to continue to offer courses to masters level students, but there are 58 faculty with which to mount the five GEDU courses (9001-9005) and share the workload for GEDU 9006-9009 (special topics and independent studies). GEDU 9010 is a shared load between the members of the Supervisory Committee, as is GEDU 9100 (the Dissertation).

8.11 Description of External Review Process

Per MPHEC's requirement that the Proposal be reviewed by an external expert, the Interuniversity Doctoral Program Proposal Committee arranged for an external reviewer. The Committee, working with Dr. Mary Lyon, Dean of Graduate Studies at MSVU, facilitated the identification of an external reviewer for the proposal, following institutional policies for arranging external program reviews. Dr. Cecilia Reynolds at the University of Saskatchewan was approached and agreed to undertake the review (i.e., read the proposal, participate in a 3-day site visit and write a report). Again, per MPHEC requirements, she is a recognized scholar in the field of the proposal (Education), has not studied at, collaborated with or worked for the submitting institutions within the past seven years, and is not in any potential conflict of interest.

Dr. Reynolds has been an academic in the field of education for over 20 years. She has held several administrative roles. She is currently Dean of Education at the University of Saskatchewan, since 2003. From 1999-2003, she was Associate Dean of Academic Programs at the Ontario Institute for Studies in Education (OISE). And, from 1986-1999, she was Chair of the Graduate Department and, before that, Director of an interdisciplinary undergraduate program at Brock University. Of relevance to this review is her direct involvement, from 1994-1999, with a team across four universities (Brock, Western, Lakehead and Queens) to gain approval for a Joint PhD in Educational Studies. It was approved and the first cohort of students was accepted in 2000.

Dr. Reynolds conducted a three-site, three-day visit between April 7-9th, 2008. She met with the ICTE Inter-University Doctoral Program Proposal Committee on April 7th on the MSVU campus. Following this meeting, she and the Committee drove to Acadia University where she met with appropriate administrators and Education faculty members the same morning. She returned to Halifax, where she met with MSVU administrators and Education faculty members in the afternoon. On April 8th, the Committee and Dr. Reynolds drove to St.F.X. university where she met with administrators and Education faculty members. On the morning of April 9th, Dr. Reynolds met again with the ICTE Inter-University Doctoral Program Proposal Committee (at MSVU) before she departed from the Halifax International airport. Using the Terms of Reference in Appendix V (pp. 43-46) of the MPHEC *Policy on Quality Assurance - Programme Assessment*, Dr. Reynolds prepared a detailed and insightful seven-page written report, which she submitted April 21st, 2008 (see Appendix 5).

Dr. Reynolds commented very positively about the program content, its overall structure, the workability of the governance and administrative structures, and the accounting for the current need for the degree. She characterized the proposed delivery mode as very appropriate for adult learners. She was clearly satisfied that there is a critical mass of active scholars with funding and supervisory experience across the three institutions. She was very positively impressed during the site visits by the physical resources at each institution (libraries, e-learning platforms, et cetera). She maintained that external assistance start up monies will assure program stability. Vis-a-vis labour market opportunities, she agreed that the timing of the program is excellent in terms of the growing need in the education professorate in Canada and internationally and research oriented/prepared leaders in the K-12 systems. She was satisfied with the external scan, the accounting of student demand, and market need. Dr. Reynolds agreed that the program is non-duplicative, and best offered at these three institutions.

Dr. Reynolds **recommends approval of the program with specific changes** (one of four options set out in Section 6 of MPHEC's Appendix V). The ICTE Inter-University Doctoral Program Proposal Committee is deeply grateful for her incredibly thorough review. The Committee addressed all of the 11 recommended changes or clarifications she identified at pages 5-6 of her report, and made several other changes as well. The following text sets out how the Committee addressed each of her concerns, organized by the numbering system she used in her report (Appendix 5):

Section 4 - Standard Elements of Assessment

4.1 Programme – Metrics

- We developed policy around the collection and use of comparative metrics and data collection re: programme elements to better ensure regular reviews, improvement and quality controls (see Section 2.2.7 and also Sections 2.5.2.3 (In-Progress Assessment of Portfolio)). The original proposal included Annual Student Progress Reports (Section 2.6.11).
- 4.1 Programme Admission Policy and Procedures and Section 6, Recommendation One
- the Admissions Requirement and Standards (Policies and Procedures) section has been thoroughly reworked (Section 2.3). We added policies for: an Admissions Quota, Competitive Admissions, a Strategy for Expanding the Pool of Candidates, Planning for Attrition, Canadian Charter of Rights and Freedoms, English Language Proficiency, Arm's Length Admission, a Many Ways of Knowing Policy, and policy for International Student Visas.

4.1 Programme - Residency Policies and Section 6, Recommendation Four

• She recommended that the Committee give further consideration to the flexible residency requirements that can accommodate leaves and other student realities that interrupt their studies. This new language can be seen at Section 2.6 on *Method of Delivery*. The original proposal had policy for residency requirements in general (2.6.1), and for the portfolio (2.6.9) and dissertation (2.6.10) in particular.

Leaves, Extensions and Reintegration

• In particular, there are new sections on Leave of Absence (2.6.2), Extensions (2.6.3) and Reintegration into the Program (2.6.4).

4.5 Programme - Appropriateness of Organizational Environment and Section 6, Recommendations Three and Seven

Anticipated Attrition and Graduation Time Frames

• Per her recommendation, the proposal now includes information showing anticipated student numbers that account for anticipated attrition and graduation time frames (Section 2.3.4).

Systematic Formative and Summative Evaluations

• We appreciated her recommendation that we design a flexible and innovative program by building in systematic formative and summative evaluations predicated on an *evergreening principle* (see Section 2.2.6). Each university currently has a policy for mandated, cycled external reviews of the Education schools or faculties, which will include the doctoral program.

Section 5 - Assessment Criteria

5.2 Anticipated Outcomes and Section 6, Recommendation Two

• We augmented the section on desired program outcomes, adding more outcomes, drawing on three ongoing Canadian educational research initiatives, and organized them into Knowledge-Attitudes-Skills (KAS), as she recommended (see Section 3.1). We also strengthened Sections 3.2 and 3.3, Graduate Outcomes and Other Outcomes, respectively.

5.9 Financial Supports for Doctoral Students

Section 4, Resource Implications, now reflects her recommendation that it is "critical for this programme that some form of external financial assistance" (p.7) be forthcoming. She maintained that "the resources seem adequate for the programme to begin as soon as possible but as it grows, external financial assistance from government or other sources will be critical to ensure sustainability" (p.5). As well, she argued that such financial assistance will help the proposal gain internal support within the three universities to augment concerns that the doctoral program might "siphon of resources currently designated for undergraduate programmes" (p.5). She supports the request for financial support for additional faculty and salary for the coordinator, to ensure a sustainable and stable program. She urged the province to provide assistance with scholarships or bursaries.

Section 6 - Specific Recommendations not already been addressed in the previous discussion:

Recommendation Five - Workload Assignments, Course Administration and Supervisory Duties

• She raised a significant issue, that being how assignments for teaching will happen and how supervisory duties will be counted across the three sites. While the original language at Section 2.6.5 remains, there is new language in a new section on Course Administration (2.6.6). As well, Section 2.6.7 now reflects policy on Course Outline Deadlines, and 2.6.8 sets out policy for Course and Instructor evaluations.

Recommendation Six - Portfolio grading schemes

• Dr. Reynolds' recommendation for the addition of more information about the Portfolio was invaluable. This part of the proposal is much richer now, evidenced by new policy at Section 2.5.3, especially the principles that guided the evaluation process for the portfolio (Section 2.5.2.1). New language is now included pertaining to: Constituting the Portfolio Examination Committee (*with an external, as she recommended*) (2.5.3.1), Preparing the Portfolio (2.5.3.2), Submitting the Portfolio (2.5.3.3), Mode of Participation (2.5.3.4), Expectations for Attendance (2.5.3.5), Grading the Portfolio (including information on appropriate rubrics as she recommended) (2.5.3.6), and Policy for a Failed Portfolio

(2.5.3.8).

Student Evaluation and Grading

Although she did not specifically recommend additions to Student Evaluation and Grading (2.3.10), the proposal now contains language for: a Grading Matrix that respects the three universities existing Academic Regulations (Section 2.3.10.1) and procedures for student appeals (2.3.11), Grade changes (2.3.12), Grades of incomplete (2.3.13), and Grades for Work in Progress (2.3.14).

Recommendation Eight - Evergreening Principle

• We heeded her suggestion to develop mechanisms for an *evergreening principle* for the programme, now set out in Section 2.2.6.

Recommendation Nine - How Educational Studies can have Specified Themes

• New language is now at Section 2.2.3 addressing her recommendation that the proposal clarify how a degree in educational studies can have specified themes. While students' research interests might well be in one or more of the theme areas, doctoral students will graduate with a *PhD in Educational Studies*, not with a PhD in a particular topic or theme.

Recommendation Eleven - Tighter Operating Procedures for IDAC

• The operating procedures for IDAC have now been tightened up, per her recommendation, at Section 2.2.5. The proposal now addresses issues of rotating membership to ensure corporate memory, and other terms of reference for the Committee.

Recommendation Eleven - Detailed Procedures for Thesis and External's Role

• Very detailed procedures have been developed for the Dissertation defense (incorporating the arm's length principle, per her recommendation) and setting out the role of the external examiner for the Dissertation defense, at Section 2.5.4.2. She is satisfied with the four possible assessments and appeal procedures for pass/fail of the dissertation defense (also Section 2.5.4.2).

Additional refinements to the proposal stemming from her site visits, but not in her direct report:

Course Titles and Descriptions

• The titles and course descriptions in Section 2.4.1 were refined, reflecting oral comments tendered by Dr. Reynolds, and those attending the site visits. Table 1 was edited to reflect these changes as well as the new information added about workload assignments at Section 2.6.6.

UNB and Memorial University Programs

• She suggested the inclusion of more information about UNB and Memorial University's programs, now available in Section 8.9.2.

Ontario Joint PHD in Educational Studies

As well, although not a condition in Dr. Reynolds' recommendation for approval, during the site visits, she suggested that the Proposal include more detail about the Joint PhD in Educational Studies offered in Ontario (see Section 2.2.1 and Appendix 1).

8.12 Other Information to Facilitate MPHEC's Assessment of this New Graduate Program

The Inter-University Doctoral Program Proposal Committee feels that the proposal in its entirety provides ample, current and compelling information substantiating the request for MPHEC approval of the first joint doctoral degree in Educational Studies in Nova Scotia.

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Appendix 1 - Overview of Joint PhD in Educational Studies in Ontario

Students can choose from three fields of study: (a) educational leadership and policy studies, (b) social/cultural/political contexts of education or (c) cognition and learning. Students complete seven of nine courses (10 Full Course Equivalent credits), including a Comprehensive Portfolio Examination and a Dissertation. The other courses include: one specific field of study specialization course (via distance), a Specialization Elective (may be a directed study), a Research Proposal Colloquium (via distance, non-credit), and two Core Seminars on Current Research, Theories and Issues (face-to-face, rotating across home universities). Courses are delivered via multiple approaches using inter-university teams of instructors.

Students can engage in full-time studies or a combination of full-time/part-time. The former are in residence for the duration of their program. The latter are required to be in residence for four terms: the Core 1 summer course, the Core 2 summer course, and a subsequent two consecutive term period of full time study *in residence* at the home university. It is recommended strongly that students complete the two consecutive terms of residency after they have defended the portfolio and proposal and are authorized to commence doctoral research. Part time students must apply to spend two terms in residency no later than January 31st in the academic year prior to the year in which the intended residency will take place. For example, for a residency period during the 2007-2008 academic year, the student must apply by January 31st 2007 to be in residence. Planned residency periods must be included in the Plan of Study Form as well as in the Annual Progress Report Form.

The students' Program Committee comprises: a Supervisor (first reader) from the home institution, a Committee Member from the home institution and another Committee Member from a partner institution (both second readers). For clarification, normally, the first reader is the person who will work closely with the student throughout the writing, shaping, and revising of the dissertation in its successive drafts. The second readers also read the dissertation in draft form and confer with the student prior to distribution of the penultimate draft of the dissertation to them as Committee Members. In exceptional situations, an external committee member can serve with approval from the Program Committee and the Associate Dean or Chair of Graduate Studies in Education. All Committee members attend Comprehensive Portfolio and Proposal meetings and both the Portfolio examination and Dissertation defense, in person or via video or teleconference.

In addition to the regularly constituted Program Committee described in the previous paragraph, an additional External examiner serves on the Examination Committee for the Comprehensive Portfolio. S/he may be a faculty member at one of the participating universities, including the student's home university. The Examiner is identified by the Supervisor in consultation with the Doctoral Committee and the Associate Dean or Chair of Graduate Studies in Education at the home university. The Examiner is not known personally or professionally to the student. The Examiner attends in person or via video or teleconference.

As well, in addition to the regularly constituted Program Committee, a different External examiner serves on the Examination Committee for the Dissertation. In this case, the examiner must be from a university outside the Program. The appointment of the External Examiner is subject to the approval of the Dean of Graduate Studies at the home university. The External Examiner is not known personally or professionally to the student. The External Examiner attends the Dissertation Defense Examination in person or via video or teleconference.

Appendix 2

8.1 – Academic Staff to be involved in the Doctoral Program and Attendant Research Support and Publication Records

Key for Publications

B/C: books/chapters J: refereed journals C: refereed conferences PR: abstracts & papers read TR: technical, government reports KI: keynotes, invited talks O: other

Mount Saint Vincent University

Name, Rank and Status alphabetically N=29	Highest Degree (granting University and year)	Specialities	Sources of Grants received	Grants Total amount last 3 years (2004-2007) N=74 \$14,559,222.68	Number of refereed publications in last 5 years (2002-2007)
Jane Baskwill Assistant Tenure-track Full-time	PhD University of South Australia 2003	 Gender and educational administration Parent/community involvement in education Arts-informed research methodologies and representation Educational leadership and administration Volunteerism in rural school 	Adult learning literacy grant from CCL (Principal 07) Adult Learning, Knowledge Development Center (Co- investigator 07) Imagine Canada, Knowledge Development Center (Principal 05) CCL (Co-investigator 06)	\$30,000 \$5,000 \$36,669 <u>\$4,638</u> \$76,307 (n=4)	B/C-4 J-2 PR-7 TR-1 KI-1 n=17

Name, Rank and Status alphabetically N=29	Highest Degree (granting University and year)	Specialities	Sources of Grants received	Grants Total amount last 3 years (2004-2007) N=74 \$14,559,222.68	Number of refereed publications in last 5 years (2002-2007)
Robert Bérard Professor Tenured Full-Time	PhD McMaster University 1978	 Educational foundations (history, politics and philosophy) Independent education and home schooling Educational policy and interest groups in education 	None in the last three years		B/C-1 J-1 PR-4 TR-3 n=9
Derek Berg Assistant Tenure-track Full-Time	PhD Queen's University 2006	 Development of math skills Learning disabilities Childhood and adolescent depression Memory 	SSHRC Doctoral Fellowship 04 Ontario Graduate Scholarship 05	\$20,000 <u>\$15,000</u> \$35,000 (n=2)	B/C-1 J-2 C-1 PR-22 TR-2 n=28
Catherine Broom Assistant Tenure-track Full-time	PhD Simon Fraser University 2007	 Social studies issues and methodologies History of education and of social studies Development of public schooling Alternative pedagogies and holistic education Philosophy of history and education 	None in the last three years		J-5 C-3 PR-9 KI-3 n= 20
Geneviève Boulet Associate Tenured Full-time	PhD Université de Montréal 1993	 Mathematics Using virtual environments to explore children's math learning (leading to new theory) Rational number concepts 	Quebec Ministry of Education (co-investigator 02-05)	\$150,000 (n=1)	B/C-3 PR-4 n=7

Name, Rank and Status alphabetically N=29	Highest Degree (granting University and year)	Specialities	Sources of Grants received	Grants Total amount last 3 years (2004-2007) N=74 \$14,559,222.68	Number of refereed publications in last 5 years (2002-2007)
G. Mike Bowen Associate Tenure-track Full-time	PhD Victoria University 1999	 Science education Sociology/ethnography of science Informal science Online collaborative communities of learning Inquiry activities Gender issues in science education Writing-to-learn science 	SSHRC Strategic Research Grant (Collaborator 07) New Brunswick Innovation Fund 05 CFI Infrastructure Grant (Collaborator at Lakehead University 04) SSHRC CURA Award (Co- applicant 05) UNB grants to hire graduate students (2 grants 04)	\$48,000 \$15,000 \$5,590,729 \$195,000 over 3 yrs <u>\$10,000</u> \$5,878,729 (n=5)	B/C-7 J-13 C-8 PR-56 TR-1 KI-5 n=90
Susan Brigham Assistant Tenure-track Full-time	PhD University of Alberta 2002	 Lifelong learning International/intercultural education Critical feminist pedagogy Immigrant teachers in Canada Women migrant (domestic) workers Mail-order brides School to work transitions Africentric leadership theory 	SSHRC (Co-investigator 06) AMEC (Co-principal 05) AMEC (Co-principal 04) Internal 05	\$61,319.00 \$4,766.75 \$2,991.92 <u>\$8,517.55</u> \$77,595.22 (n=4)	B/C-4 J-3 C-2 PR-25 TR-6 KI-1 n=41
Elizabeth Church Professor Tenured Full-time	PhD University of Toronto (OISE) 1989	 School psychology Rural mental health Interdisciplinary and inter-professional practice Self-help Feminist psychology 	Health Canada, (Co-applicant 05) SSHRC Standard Research Grant (Principal 07) CIHR* 05 CIHR* 04 CIHR* 07 CIHR* 06 *Health Professional Student Research Awards	\$1,200,000 \$7,495 \$4,281 \$4,281 \$4,281 <u>\$4,281</u> \$1,224,619 (n=6)	B/C-3 J-1 PR-9 KI-4 n=17

Name, Rank and Status alphabetically N=29	Highest Degree (granting University and year)	Specialities	Sources of Grants received	Grants Total amount last 3 years (2004-2007) N=74 \$14,559,222.68	Number of refereed publications in last 5 years (2002-2007)
Nezihe Elik Assistant Tenure-track Full-time	PhD University of Toronto 2006	 personality and human development school, clinical and educational psychology teachers' attitudes towards children with disabilities and exceptionalities intentional conceptual change 	SSHRC Doctoral Fellowship (Research Assistant 03-05) OGS (Ontario Graduate Scholarships 01-04)	\$38,000 <u>\$30,000</u> \$68,000 (n=2)	B/C-1 C-1 PR-2 n=4
Michelle Forrest Assistant Tenure-track Full-time	PhD Dalhousie University 1997	 Philosophy (aesthetics in experience) Chance operations (poetry generation) Arts and media in education Collaboration and invention in education 	None in the last three years		B/C-2 J-7 C-6 n=15
Frederick French Associate Tenured Full-time	PhD University of Alberta 1985	 Educational and school psychology Youth cognition, abilities and behaviors Exceptionalities and inclusive practice Educational legislation and policies (justice, equity) 	Internal (Co-investigator 07) NS Gaming Commission (Collaborator 06 - ongoing) Woodcock Foundation (05- ongoing) Internal 05 Riverside Publishing and Thomas Nelson Grant (Collaborator 01-ongoing) B.C Kiwanis Foundation Learning Research Clinic (Collaborator 99-ongoing)	\$6,890 \$70,000 \$5,000 \$2,000 \$15,000 \$15,000 \$103,890 (n=6)	J-2 PR-2 TR-3 KI-5 n=12
Marnina Gonick Associate Tenured Full Time	PhD University of Toronto (OISE) 2000	 feminist pedagogies girls studies feminist cultural studies qualitative research 	SSHRC grant MSVU <i>Research</i> <i>Chair Tier II</i> 06 CFI 06	\$500,000 <u>\$244,174</u> \$744,174 (n=2)	B/C-5 J-5 C-4 KI-2 n=16

Name, Rank and Status alphabetically N=29	Highest Degree (granting University and year)	Specialities	Sources of Grants received	Grants Total amount last 3 years (2004-2007) N=74 \$14,559,222.68	Number of refereed publications in last 5 years (2002-2007)
Patricia Gouthro Associate Tenured Full-time	PhD Dalhousie University 1998	 Lifelong learning Learning at home Cross-cultural research Citizenship Philosophical and critical theoretical perspectives Critical feminist theory and pedagogy Sociological imagination 	SSHRC (Principal 04) CCL (Principal 06) CCL (Principal 07) Internal Research 05 Release Stipend Internal 05	\$57,100 \$45,651.92 \$55,000 \$3,000 <u>\$7,723.60</u> \$168,475.52 (n=5)	B/C-2 J-9 C-15 PR-7 KI-2 n=35
William Hare Professor Tenured Full-time	PhD University of Toronto 1971	 Critical thinking Open mindedness Moral aspects of education Philosophy 	Internal 06	\$8,000 (n=1)	B-2 J-13 K-2 n=17
Mary Jane Harkins Assistant Tenure-track Full-time	PhD Dalhousie University 1997	 Youth and violence via inter-sectoral approach Assistive technology Inclusive education Exceptionalities 	SSHRC (Co-investigator 07- 10) Knowledge Development Center (Principal 07) Internal New Scholars Grant (Principal 05-06) ACOA (Principal 05-06) Rural Secretariat (Principal 05- 06)	\$213,400 \$5,000 \$9,322 \$30,000 <u>\$26,500</u> \$284,222 (n=5)	C-12 PR-1 TR-3 KI-4 n=20
Eva Knoll Assistant Tenure-track Full-time	PhD University of Exeter 2007	 Mathematics education Mathematics and art Creative engagement in the mathematics learning process Origami mathematics Mathematics research in-situ 	Internal 06	\$7,791 (n=1)	B/C-3 J-1 C-7 PR-9 n=20

Name, Rank and Status alphabetically N=29	Highest Degree (granting University and year)	Specialities	Sources of Grants received	Grants Total amount last 3 years (2004-2007) N=74 \$14,559,222.68	Number of refereed publications in last 5 years (2002-2007)
Valda Leighteizer Assistant Tenured Full-time	PhD Dalhousie University 2002	 Curriculum and pedagogy Social justice and marginalization Gay, Lesbian, Bisexual, Transgendered (GLBT) Youth and sexuality (especially suicide ideation) Critical theory 	Internal 05	\$8,512.40 (n=1)	J-1 C-5 PR-5 TR-1 n=12
Anne MacCleave Associate Tenured Full-time	PhD Pennsylvania State University 1985	 Cultural psychology Research methodologies Research across disciplinary boundaries Professional ethics Values reasoning Learning theories Curriculum/program planning and evaluation Innovative ways to address human development: puppets, costumes, theater, drama 	None in the last three years		J-6 C-28 O-1 (monograph) n=35
Andy Manning Associate Tenured Full-time	PhD University of Ottawa 1977	 Literacy Literacy and new technology e-learning in communities of practice 	CFI Infrastructure grant (Principal 00-04) AIF SIMergency Project extended (ACOA Principal 03- 07) MCRI SSHRC Grant 02-07 University of Montreal managed research; managed Halifax site) Jamaica Educational Management Diploma (Co- investigator 04)	\$347,020 \$3,200,000 \$40,000 <u>\$369,200</u> \$3,956,220 (n=4)	C-8 n=8

Name, Rank and Status alphabetically N=29	Highest Degree (granting University and year)	Specialities	Sources of Grants received	Grants Total amount last 3 years (2004-2007) N=74 \$14,559,222.68	Number of refereed publications in last 5 years (2002-2007)
Sue L.T. McGregor Professor Tenured Full-time	PhD University of Strathclyde 1993	 Transdisciplinary inquiry Transformative learning and leadership Paradigms and ideologies Critical philosophical and theoretical perspectives Peace, global, and citizenship education Consumerism and peace Home economics philosophy 	Canadian Home Economics Foundation (CHEF) (Principal 05)	\$7,000 (n=1)	B/C-8 J-23 C-5 KI-14 TR-3 O-1 (peer reviewed monograph) n=53
Jamie Metsala Associate Tenured Full-time	PhD University of Toronto (OISE) 1993	 School psychology Reading acquisition Reading disabilities Development of speech perception and phonological awareness (early word learning) Learning disability definitions 	Internal Grant 06 Investors Group Fellowship and Integra Foundation (Principal 03-05)	\$10,000 <u>\$120,000</u> \$130,000 (n=2)	J-1 KI-1 n=2
Allan Neilsen Professor Tenured Full-time	PhD University of Minnesota 1977	 Literacy Teachers' work Teachers' sense of place and self in school settings Educational inquiry 	Internal Grant 05	\$4,999.90 (n=1)	B/C-2 C-1 n=3
Lorri Neilsen Glenn Professor Tenured Full-time <i>Currently HRSB</i> <i>Poet Laureate</i>	PhD University of New Hampshire 1988	 Literacy Writing as inquiry Arts informed inquiry Poetic inquiry Qualitative research and alternative forms of inquiry Feminist inquiry Reading cultures 	SSHRC (Principal 04) Canadian Council for the Arts (Principal 04)	\$68,349 <u>\$10,000</u> \$78,349 (n=2)	B/C-4 J-3 K1-2 O-18 (poetry) n=26

Name, Rank and Status alphabetically N=29	Highest Degree (granting University and year)	Specialities	Sources of Grants received	Grants Total amount last 3 years (2004-2007) N=74 \$14,559,222.68	Number of refereed publications in last 5 years (2002-2007)
Donovan Plumb Associate Tenured Full-time	PhD University of Alberta 1993	 Lifelong learning Lifelong learning in cross-cultural contexts Social theory Education technology and distance education Sociology and philosophy of education Adult education futures Communities of practice 	CCL (Principal 05) Canada Corps Internship Program CIDA (Principal 05) Canada Corps Internship Program CIDA (Principal 05) Internal (Principal 04)	\$10,500 \$13,000 \$13,000 <u>\$4,574</u> \$41,074 (n=4)	B/C-4 J-2 C-7 TR-1 O-1 n=15
Robert Sargent Associate Tenured Full-time	PhD Dalhousie University 1984	 Technology education Global education International development Comparative international education Human resource development to ensure community and national development in the Caribbean, South Africa and Pacific Rim 	Ministry of Education, Trinidad and Tobago's Secondary Education Modernization Program (2 grants, Principal) (03-04 Technology Education) (02-04 Diploma Program)	\$37,000 <u>\$598,000</u> \$601,700 (n=2)	B/C-1 PR-1 KI-4 TR-11 O-2 n=19
Cornelia Schneider Assistant Tenure-track Full time	PhD Université René Descartes - Paris 2006	 Inclusive education (mainstreaming) Disability studies Early childhood education Sociology of childhood Comparative research (inclusive education in Europe) 	SSHRC 06 EU Comenius 06 French Teachers' Union (UNSA France 07) National Social Assistance Fund (France CNAF 04) <i>Co-Investigator on all grants</i>	\$74,269 \$430,000 \$14,000 <u>\$28,000</u> \$546,269 (n=4)	J-4 C-7 O-10 (Symposia, panel presentations) n=21
Jim Sharpe Dean Associate Tenured Full-time	EdD University of Toronto (OISE) 2001	 Lifelong learning Continuing education as social capital, social knowledge and social agency Education in the knowledge economy Educative workplace Lifelong learning in cross-cultural contexts 	CCL (Principal 05)	\$95,664 (n=1)	C-4 PR-1 n=4

Name, Rank and Status alphabetically N=29	Highest Degree (granting University and year)	Specialities	Sources of Grants received	Grants Total amount last 3 years (2004-2007) N=74 \$14,559,222.68	Number of refereed publications in last 5 years (2002-2007)
Susan Walsh Assistant Tenure-track Full-time	PhD University of Alberta 2003	 Language and literacy Women and teaching Internationally educated teachers Writing as inquiry process Embodied and relational ways of knowing Arts informed research 	SSHRC (Principal 06-09) Faculty Release Time Award (07) AMEC (Co-principal 05) AMEC (Co-principal 04) Internal - New Scholar's Grant 04	\$61,319 \$4,766.75 \$2,991.92 <u>\$4,257.85</u> \$73,334 (n=4)	B/C-2 J-6 C-2 PR-27 KI-2 TR-2 O-6 n=46
Hong Wang Assistant Tenure-track Full-time	PhD Queen's University 2006	 Teaching English as a second or foreign language (TESL/TEFL) ESL/EFL policies, pedagogy, curriculum implementation and evaluation ESL/EFL teacher education and professional development Immigrant teachers in Canada 	Internal (New Scholar's Grant 06) SSHRC (Postdoctoral Fellowship 06-08) SSHRC (Postdoctoral Fellowship 04) Ontario Graduate Fellowships 03-06	\$9,996.12 \$81,000 \$20,000 <u>\$45,000</u> \$137,996 (n=4)	B/C-3 J-3 C-3 PR-26 TR-2 n=37

Acadia University

Name, Rank and Status alphabetically N=15	Highest Degree (granting University and year)	Specialities	Sources of Grants received	Grants Total amount last 3 years (2004-2007) N=47 \$2,107,331	Number of refereed publications in last 5 years (2002-2007) B/C: books/chapters J: refereed journals C: refereed conferences PR: abstracts & papers read TR: technical, government reports KI: keynotes, invited talks O: other
Lynn Aylward Assistant Tenure-track Full-time	PhD University of South Australia 2006	 Inclusive education Teacher education practices Community/culture based schooling 	SSHRC Aid to small universities (Co-applicant) 05 SSHRC Northern research development initiative grant (Collaborator) 04 SSHRC Aid to Small Universities grant (04) Internal (Innovative Teaching)	\$7,970 \$9,930 <u>\$4,415</u> \$22,315 (n=3)	B-2 J-5 C-8 TR-4 PR-2 n=21
Michael Corbett Associate Tenured Full-time	PhD University of British Columbia 2001	 Educational sociology Literacy Accountability History of Canadian education Social theory Educational policy Rural schooling Early school leaving and resistance 	Canadian Federation for the Social Sciences and Humanities, Aid to Scholarly Publication Program 06 Municipality of the County of Cumberland, N.S. 06 SSHRC Research grant, 04 – 07 Internal: 07 Internal: 07 Internal: 07 Internal: 06 Internal: 05 Internal: 04 Internal: 04	\$7,000 \$20,000 \$69,700 \$2,496 \$3,000 \$2,200 \$1,500 \$5,800 \$5,800 \$5,000 <u>\$965</u> \$117,661 (n=10)	B-4 J-7 C-6 TR-8 PR-14 n=39

Deborah Day Assistant Tenure-track Full-time	PhD University of Toronto (OISE) 1990	 Resilience Counseling and life-threatening illnesses and bereavement Brain compatible strategies Career transition counseling 	NS Department of Education (Principal) 07 Internal: research 06 Internal Teaching innovation 05 Internal: research 04	\$25,000 \$2,163 \$6,000 <u>\$5,000</u> \$38,163 (n=4)	J-2 PR-7 KI-4 n=13
Leo Elshof Assistant Tenure-track Full-time	PhD University of Toronto (OISE) 2001	 Science and technology education Environmental Sustainability 	SSHRC Research (Principal) 06 Internal: Innovative teaching 05	\$67,315 <u>\$15,895</u> \$83,210 (n=2)	B-1 J-9 C-2 TR-1 PR-26 n=38
Heather Hemming Professor Tenured Full-time	PhD Dalhousie University 1997	 Literacy Critical thinking Electronic-based literacies Health and literacy Critical literacy 	* see last entry in this table Canadian Foundation for Innovation/NS Department of Economic Development (co- applicant) The Acadia Digital Culture Observatory 04-06 SSHRC – (Co investigator) 02– 05 SSHRC–(Principal) 01–05	\$487,994 \$150,000 <u>\$103,000</u> \$740,994 (n=3)	J-10 C-11 TR-4 PR-11 n=36
Gary Hepburn Associate Tenured Full-time	PhD University of British Columbia 1997	 Curriculum and instruction Use of computers in educational institutions Nature of innovation in educational institutions Learning in/for out-of-school settings Open source software 	SSHRC – Aid to small universities (Principal) 04	\$3,200 (n=1)	J-6 C-2 PR-3 n=11

Heather Higgins	PhD	- Counseling	NS Health research Foundation	\$6,700	J-2
Assistant	University of	- Portfolio development	(Principal) 07		PR–6
Tenure-track	British Columbia	- Experiential learning in groups	Internal: PD 07	\$2,500	
Full-time	1990	- Emotional intelligence	Internal: PD 06	\$2,500	n=8
		- Temperament theory	Internal: 06	\$2,200	
		- Learning styles	Internal: Research 04	\$2,500	
		- Confidentiality in groups		\$16,400 (n=5)	
Christine	PhD	- Mathematics education	SSHRC: research program	\$83,207	B-5
Knipping	University of	- Philosophy of mathematics	(Principal) 07		J-4
Assistant	Hamburg,	- proof and proving	Internal: start-up 05	\$5,000	C-5
Tenure-track	Germany	- dynamic geometry software	-	\$88,207 (n=2)	PR-5
Full-time	2002				
					n=19
Ronald Lehr	PhD	- Counseling ethics	NS Department of Education	\$5,700	B-1
Professor	University of	- Ethical decision making	(Principal) 04		J-6
Tenured	Alberta	- Confidentiality	SSHRC (SIG) (Principal) 06	\$3,000	TR-2
Full-time	1988	- Counselor supervision	Internal: research 04	\$1,750	PR-9
		- School counseling	Internal: innovative teaching 04	\$3,269	
			Internal: research 04	<u>\$2,500</u>	n=18
				\$16,219 (n=5)	
David	PhD	- Educational administration and leadership	SSHRC–Aid to Small	\$5,100	B-1
MacKinnon	University of	- Human sexuality	Universities grant (04)		J-4
Professor	Alberta	- Organizational theory and school culture	SSHRC-(Co-researcher) 02-04	<u>\$76,900</u>	TR-1
Tenured	1987	- Rural schools and communities		\$82,000 (n=2)	PR-5
Full-time		- Schooling and social justice			KI-24
Director, School					
of Education					n=35
Gregory R.	PhD	- Science education	* see last entry in this table		В-6
MacKinnon	University of	- Science curriculum development	Internal: research 05	\$2,200	J-16
Professor	Waterloo	- Impact of instructional technologies on	Internal: innovative teaching 05	\$15,895	C-15
Tenured	1987	classroom instruction	Internal: PD 05	\$1,000	TR-3
Full-time		- Constructivist approaches in the classroom	Internal: innovative teaching 04	<u>\$700</u>	PR-10
		and laboratory		\$19,795 (n=4)	KI-14
					n=64

David Piper Professor Tenured Full- time	PhD University of Alberta 1981	 Social psychology in education Linguistics ESL Postmodern philosophy Curriculum theory 	None in the last three years		J-3 O-3 n=6
David Reid Associate Tenured Full-time	PhD University of Alberta 1995	 Mathematics education Deductive reasoning in students Proof and proving Enactivism Problem-based teaching 	SSHRC: Research (Co applicant) 07 SSHRC: Research (Principal) 04	\$83,207 <u>\$38,760</u> \$121,967 (n=2)	B-1 J-9 C-6 TR-1 PR-9 O-7 (symposia) n=33
John Sumarah Professor Tenured Full-time	PhD University of Toronto 1984	 Counseling Comprehensive guidance Ethics and counseling Spirituality L'Arche and human services 	NS Department of Education (Co researcher) 04	\$5,700 (n=1)	J-7 TR-1 n=8
Ann Vibert Associate Tenured Full-time	PhD University of New Hampshire 1991	 Critical literacies and language education Critical perspectives on curriculum and assessment Students "at risk" Equitable schooling Social justice question in education Gender, sexuality and schooling 	SSHRC (Principal) 05–08 NS Department of Education (Principal) 04–05 SSHRC (Co investigator) 01-04	\$200,000 4,500 <u>\$197,000</u> \$401,500 (n=3)	B-4 J-2 C-9 TR-3 PR-1 KI-1 n=23
			* McConnell Foundation: grant to Acadia School of Education: Co-applicants (Dr. Heather Hemming & Dr. Greg MacKinnon)	\$350,000	

StFX University

Name, Rank and Status alphabetically N=15	Highest Degree (granting University and year)	Specialities	Sources of Grants received	Grants Total amount last 3 years (2004-2007) N=38 \$2,115,180.38	Number of refereed publications in last 5 years (2002-2007) B/C: books/chapters J: refereed journals C: refereed conferences PR: abstracts & papers read TR: technical, government reports KI: keynotes, invited talks O: other
Ottilia Chareka Associate Full-time	PhD University of New Brunswick 2005	- Human rights and citizenship education - Political participation of recent African immigrants to Canada	None in the last three years		J-3 PR-4 O-3 (non-refereed publications) n=10
Andrew Foran Assistant Tenure-track Full-time	PhD University of Alberta 2006	 Service learning Experiential applications within public-school programs Curriculum development at the secondary level Teachers' engaged in experiential courses and instruction outside of school settings 	Physical activity grant from NS Dept. of Health Promotion & Protection (Collaborator with B. Mwebi & A. Stewart Stanec) 07 Program grant from NS Dept. of Health Promotion & Protection (Renewed 07) Internal SEED grant (07) Program grant from NS Dept. of Health Promotion & Protection (06) Internal research grant (06) Internal research grant (05) Internal research grant (04)	\$4,600* \$3,000 \$5,000 \$3,000 \$2,500 \$6,750 <u>\$7,500</u> \$32,350 (n=7)	J-4 C-5 KI-18 O-6 (non-refereed publications) nN=33

John Grant Professor Tenured Full-time	EdD University of Toronto (OISE) 1987	 African-Canadian history and Edward Mitchell Bannistio History of Canadian education and curriculum change Patriotism, nationalism, and the curriculum 	None in the last three years		B/C-5 J-1 n=6
Janice Huber Associate Tenured Full-time	PhD University of Alberta 2000	- Narrative, relational, temporal, and contextual aspects of teachers' and principals' identities	SSHRC Research grant (Principal) 06 SSHRC Aboriginal Research Grant (Principal) 05 SSHRC Small Institutional grant (Collaborator) 04 Internal grant (05)	\$129,167 \$226,150 \$1,005 \$1,000 \$357,322 (n=4)	B/C-4 J-12 C-19 KI-3 n=38
Leo MacDonald Associate Tenured Full-time	PhD St. Francis Xavier University 1997	- Integration of computers into the secondary school curriculum	McConnell Foundation grant (Collaborator) 07 CRYSTAL (NSERC)* Collaborator) 05 UCR grant (04)	\$5,000 \$1,000,000* \$2,120 \$1,007,120 (N=3)	J-3 C-12 TR-7 n=22
Irène Mailhot- Bernard Professor Tenured Full-time	PhD Pennsylvania State University 1982	 Core French/French immersion curriculum & program development Franco-American, Acadian, and Québec culture Life stories of Acadian women in Nova Scotia 	None in the last three years		B/C-18 n=18
Matthew Meyer Associate Tenured Full-time	PhD McGill University 1998	 Performing arts in educational research Teacher and administrator professional development Educational leadership 	SSHRC (Co-principal) 02-06	\$127,700 (n=1)	B/C-5 J-6 PR-33 TR-5 O-5 (non-refereed publications) n=54

Anne Murray- Orr Assistant Tenure-track Full-time	PhD University of Alberta 2005	 How children's literature and other aspects of literacy can be used in classrooms and schools to make space for talk about students' and teachers' lives Intricacies of how literacies and identities are intertwined. 	SSHRC research grant (06)	\$129,770 (n=1)	J-6 C-15 n=21
Bosire Mwebi Assistant Tenure-track Full-time	PhD University of Alberta 2005	 Schools and health promotion Peer education HIV/AIDS prevention Narrative inquiry research. 	NS Health Promotion & Protection physical activity grant (Collaborator with A. Foran & A. Steward Stanec) 07*	¢2 (20	KI-1 n=1
			Internal grant (07) Internal SEED grant (07) Guysborough Antigonish Strait Health Authority (GASHA) Wellness Fund (06) Internal research grant (04)	\$2,630 \$5,000 \$825 <u>\$5,313.38</u> \$13,768.38 (n=5)	
Joe Norris Professor Tenured Full-time	PhD University of Alberta 1989	- Teacher education - Arts-based research	URPTA-Internal grant (05)	\$2,300 (n=1)	B/C-3 PR-30 O-13 (performances) n=46
Margaret Olson Associate Tenured Full-time	PhD University of Alberta 1993	 Teacher education and professional development How pre-service, in-service, university teachers shape, and are shaped by the contexts in which they work 	None in the last three years		B/C-2 C-13 n=15
Jeffrey Orr Professor Tenured Full-time	PhD University of Alberta 1995	 Issues related to First Nations educators' life history and First Nations school culture and reform Classroom-based citizenship education and anti-racist school culture First Nations and anti-racist approaches to school reform Action research for school improvement. 	Indian and Northern Affairs Canada (INAC) (Principal) 07 Indian Affairs Canada (Principal) 06 Indian Affairs Canada (Principal) 04 Internal grant (07)	\$15,000 \$13,500 \$12,000 <u>\$4,500</u> \$45,000 (n=4)	B/C-3 J-1 C-7 O-3 (curriculum development writing projects) n=14

Jeffrey Orr Professor Tenured Full-time Amanda Stewart	PhD University of Alberta 1995 PhD	 Issues related to First Nations educators' life history and First Nations school culture and reform Classroom-based citizenship education and anti-racist school culture First Nations and anti-racist approaches to school reform Action research for school improvement. Effective administration of fitness 	Indian and Northern Affairs Canada (INAC) (Principal) 07 Indian Affairs Canada (Principal) 06 Indian Affairs Canada (Principal) 04 Internal grant (07) Canadian Association for	\$15,000 \$13,500 \$12,000 <u>\$4,500</u> \$45,000 (n=4) \$50,000	B/C-3 J-1 C-7 O-3 (curriculum development writing projects) n=14 B/C-1
Amanda Stewart Stanec Assistant Tenure-track Full-time	The University of Virginia 2006	assessments and using results to advocate for more physical education in the schools	Health, Physical Education, Recreation & Dance (CAHPERD) (Principal) 07 NS Health Promotion & Protection (Collaborator with A. Foran & B. Mwebi) 07*	\$60,000 (n=1)	J-6 C-14 n=21
Joanna Tompkins Associate Full-time	PhD University of Toronto (OISE) 2006	 Issues related to equity and justice practices in schools Bilingual education Cross-cultural and anti-racist education School-wide approaches to creating more caring school environments Use of cooperative learning in classrooms Teacher activism, student writing and publishing, and teaching strategies which respond more to the individual needs of students How schools can become sites of social justice Leadership and teaching practices that promote active learning and critical thinking on the part of teachers and students 	Government of Nunavut (Collaborator) 06 L'nui'sultinej – Mi'kmaw Language Conference (Collaborator) 06 Government of Nunavut (Collaborator) 04	\$100,000 \$10,000 <u>\$10,000</u> \$120,000 (n=3)	B/C-1 J-1 PR-1 n=3

Robert White	PhD	- Critical Pedagogy	SSHRC (Principal) 06	\$90,000	B/C-10
Assistant	University of	- Leadership and social justice issues	Internal grant (Principal) 06	\$2,000	J-4
Full-time	Toronto (OISE)	- Development of student voice and the critical	Internal grant (Principal) 05	\$2,350	C-19
	2003	interface between leadership and literacy	Internal grant (Principal) 05	\$500	KI-4
		- Educational issues relating to globalization	Internal grant (Principal) 04	\$2,000	O-6 (non-refereed
		- Corporate investment in educational	Internal grant (Principal) 04	\$5,000	publications)
		institutions	Ontario Principals Council	\$8,000	-
		- Leadership succession and rotation from a	(Principal) 04		n=43
		variety of perspectives	SSHRC (Principal) 03	\$110,000	
				\$219,850 (n=8)	

Appendix 3 CV's for each Faculty Member from all three Institutions

Appendix 4 Awards (last five years 2002-2007, or noteworthy awards prior to this time frame)

<u>MSVU</u>

Dr. Michael Bov	ven
a.	2003 Lakehead University Merit Award for Research
Dr. Susan Brigh	am
b.	2007 Teaching Innovation Reward (inaugural). Central role in development of first Africentric
Leadership gradu	ate program, MSVU
c.	2002 National Michel Laferrière Award for outstanding doctoral research in the field of
comparative and	international education
Dr. Frederick Fi	rench
d.	1985 Outstanding Achievement Award for Excellence in Program and Policy Development
(Alberta Learning	g Disability Association)
Dr. Marnina Go	nick
e.	2005 Nominee for Canadian Women's Studies Book Award
Dr. William Har	e
f.	2007 Award for Research Excellence (contribution to MSVU research community and culture)
g.	2007 Helen De Witt Jones Lecturer (Texas Tech University) for educational leadership
h.	2005 Distinguished Service Award from the Canadian Philosophy of Education Society
i.	1999 Mary Anne Raywid Award and Lecture for outstanding contributions to the study of
education	
j.	1995 Distinguished Service Award, Canadian Association of Foundations of Education
Dr. Anne MacCl	leave
k.	1985 Inducted into Kappa Omicron Nu honorary leadership society (home economics)
1.	1984 Inducted into Pi Lambda Theta education honorary society
Dr. Sue McGreg	jor
m.	2005-2008 Listed in Canadian Who's Who
n.	2005 Nominated for <i>Commemorative Lecturer</i> , American Association for Family and Consumer
Sciences conferen	nce (honorary)
0.	1999 - ongoing Kappa Omicron Nu Research Fellow (one of six in the world)
р.	1997 Nominated for the American Council on Consumer Interest (ACCI) Mid-Career Award for a
consumer affairs	
q.	1994 Finalist, Outstanding Dissertation Award, ACCI
Dr. Lorri Neilser	
r.	2007 Long list, International Poem of the Year (Arc Poetry)
s.	2005 Award for Research Excellence (contribution to MSVU research community and culture)
t.	2005 Appointed Halifax Regional Municipality Poet Laureate
u.	2003 Poets Corner Award for first book of poetry (one of six winners of this award)
V.	2001 Richard Meade International Award for Research in English education
Dr. Robert Sarg	
W.	2005 Nominated for prestigious Scotiabank International Achievement Award (for work with the
•	tion Modernization Programme in Trinidad and Tobago)
Dr. Susan Casey	
х.	2003 Doctoral Dissertation Award Phi Delta Kappa (University of Alberta Chapter)
у.	2003 Nominated for Outstanding Dissertation Award, Canadian Association for Curriculum
Studies	
Dr. Hong Wang	
Ζ.	2006 Finalist for AERA (prestigious) Dissertation Award

<u>Acadia</u>

Dr. Michael Cor	bett			
aa.	2006 Faculty of Professional Studies Award for Best Research Project			
bb.	2005 Acadia University President's Award for Innovation			
Dr. David MacK				
cc.	1996 Faculty of Management and Education Outstanding Researcher Award			
Dr. Gregory Ma				
dd.	2007 Alumni Excellence in Teaching Award			
ee.	2006 Faculty of Professional Studies <i>Research Excellence Award</i>			
ff.	2001 Society for Information Technology and Teacher Education Conference <i>Best Paper Award</i>			
(from field of 800				
	2000 Faculty of Professional Studies <i>Outstanding Research Award</i>			
gg. hh.	1998 Acadia University President's Award for Innovation			
Dr. John Sumar				
	Listed in Canadian Who's Who			
Dr. Ann Vibert				
JJ·	2000 Alumni <i>Excellence in Teaching Award</i> (while at MSVU)			
kk.	1991 Finalist in Dissertation of the Year Award (National Reading Conference, UK)			
<u>StFX</u>				
Dr. Irene Mailho				
11.	2002 Outstanding Teaching Award			
mm.	2000 Pat Douglas Award and Lifetime Membership Award from the Nova Scotia Language			
	tion (for work with and support for second language instruction in Nova Scotia)			
Dr. Ottilia Char	eka			
nn.	2007 Co-winner (with renowned Dr. Alan Sears) of the CERA/ACCE prestigious R.W.B Jackson			
Award for best E	nglish-language article published in the Canadian Journal of Education			
Dr. Andrew For	an			
00.	2006 Nominated for the Teacher of the Year Award			
pp.	2004-2006 University Research/Publication/Teaching Award (for six articles)			
qq.	2000 Nova Scotia Outdoor Leadership Development Award. Recognition for the leadership			
	tdoor educational programming in Nova Scotia. Halifax, Nova Scotia Department of Sport and			
Recreation Comm				
Dr. John Grant				
rr.	2007 Sir John Cope Sherbrooke Heritage Award from the Historic Sherbrooke Village			
	ciety (significant role in the Sherbrooke Village restoration)			
ss.	2005-2006 <i>Dawson Scholar</i> , Little White Schoolhouse Museum (Truro)			
tt.	2002 Short listed for the Dartmouth Book Award for non-fiction			
	1997, 1996, 1994, 1990 <i>Faculty Award</i> of the Nova Scotia Teachers College for contribution to			
uu. students	1997, 1990, 1994, 1990 Facuary Awara of the Nova Scotta Teachers Conege for contribution to			
	_			
Dr. Janice Hube				
vv.	2006 Outstanding Narrative and Research <i>Early Career Award</i> (AERA SIG)			
WW.	2002-2005, 2007 University Research/Publication/Teaching Awards			
XX.	2002 Nominated for AERA (prestigious) Outstanding Dissertation Award			
Dr. Matt Meyer				
уу.	2001-2006 University Research/Publication/Teaching Awards			
ZZ.	1999 Honorable Mention in the Thomas Greenfield Award (CASEA) competition for most			
outstanding Doctoral Dissertation in the field of Canadian Educational Administration				

Dr. Joe Norris	
aaa.	2007, 2005 University Research/Publishing/Teaching Awards
bbb.	2002 Finalist for Research Award (American Alliance for Theater in Education)
ccc.	2002 Presidential Citation for Outstanding Service (American Alliance for Theater in Education)
(also in 1996)	
ddd.	2000, 1999 Nominated for Canadian Professor of the Year (Council for Advancement and
Support of Educa	tion)
eee.	2000 Nominated for 3M Teaching Fellowship (University of Alberta)
fff.	2000, 1998 Faculty of Education nomination for <i>Rutherford Award for Excellence in Teaching</i>
ggg.	1999 Honorable mention for Premier's Award of Excellence (Safe and Caring Schools Project,
Alberta)	
hhh.	1998 Undergraduate Teaching Award (University of Alberta)
Dr. Margaret O	lson
iii.	1996 American Association of Colleges for Teacher Education Outstanding Writing Award
Dr. Ann Murray	/ Orr
jjj.	2003-2004, 2006-2007 University Research/Publication/Teaching Awards
Dr. Amanda Ste	wart Stanec
kkk.	2006 Outstanding Doctoral Student Award
111.	2004 AHPERD Outstanding Graduate Student Award (chosen from all related scholars in the state
of Virginia)	
mmm.	2004 Semi-Finalist for Seven Society (Alumni) Graduation Fellowship (for superb teaching at The
University of Vir	ginia)
Dr. Joanna Tom	pkins
nnn.	2005, 2001-2003, 1999 University Research Teaching Publishing Awards
000.	2000 Honorable Mention CAFÉ Book Award (Canadian Association of Foundations in Education)
ppp.	2000 Voice of Women Peace Award, Antigonish, Nova Scotia
qqq.	1996 Outstanding Educator Award, Baffin Divisional Board of Education
Dr. Robert Whit	te
rrr.	2004, 2005, 2007 University Research, Publishing and Teaching Award (for publishing a book, a
journal and prepa	ration of another book)

journal and preparation of another book) sss. 2005 Nominated for AERA Division J, *Distinguished Publication Award* (for book)

Appendix 5 Report from External Review

External Reviewer's Report to the Nova Scotia Inter-University Committee on Teacher Education on Proposal for a Joint Ph.D. Program- Mount St. Vincent University, Acadia University and St. Francis Xavier University

by Cecilia Reynolds, PhD University of Saskatchewan

Background

I was contacted by Dr. Mary Lyon, Dean of Professional Studies of Mount St. Vincent University and asked to act as an external consultant re this proposal. I agreed to read the proposal, participate in a three-day site visit April 7-9, 2008 and write this report.

Dr. Lyon forwarded the written proposal to me, along with a cd of the cv's of faculty from the three institutions. Dr. Jim Sharpe contacted me concerning the itinerary for my visit and I was able to specify particular people or places I wished to see. I made site visits to all three institutions and had ample time to meet with administrators and faculty at each site.

I have been an academic in the field of education for over 20 years and have held several administrative roles. At Brock University from 1986-1999 I was a Director of an interdisciplinary undergraduate programme and then Chair of the Graduate Dept. From 1994-1999, I worked with a team across 4 universities (Brock, Western, Lakehead and Queens) to gain approval for a Joint PhD program. We were successful and this programme has been running now for many years and has had distinguished graduates, although the participating universities have shifted over time and Brock, Lakehead, Western and Windsor now participate. From 1999-2003, I was Associate Dean of Academic Programmes at the Ontario Institute for Studies in Education at the University of Toronto. In this role, I had oversight of all graduate and undergraduate programme development. Just prior to leaving this role, I assisted in preparing for a review of all OISE/UT graduate programmes by the Ontario Council of Graduate Studies. Since 2003, I have been the Dean of Education at the University of Saskatchewan. We have approximately 1,200 undergraduate and 300 graduate students, including a PhD programme with about 50 students. I have just been reappointed for an additional 5 year term as Dean. This role allows me to work collaboratively with the many Western universities with regard to research, as well as graduate and undergraduate programmes. My current research area is leadership succession and as part of my SSHRC funded study, we used a pan-Canadian lens to examine leadership development policies and programmes in k-12 systems and in colleges and universities.

For this report, I have used Appendix V pp. 43-46 from the booklet provided to me by Dr. Lyons on Policy on Quality Assurance- Programme Assessment.

SECTION 4- Standard Elements of Assessment

4.1- Programme:

My examination of the report and subsequent site visit confirmed that the proposed **content** of the joint programme is not only suitable, but reflects the current interdisciplinary directions within the field of education. In the discipline of Education, scholars, graduate students and potential employers are increasingly dissatisfied with narrow-banded programmes in one of the sub-disciplines in our field, such as for example educational philosophy, and are encouraging interdisciplinary approaches such as is proposed in this programme. Increasingly, for example, we are looking for educational philosophers who can work with educational leaders, curriculum specialists, educational historians and sociologists, to help create and disseminate new knowledge in the major discipline of Education. Since this program proposes a focus on Educational Studies, using a cross-section of possible interrelated "themes", its content is timely and appropriate.

The overall **structure** of the programme also seems appropriate with 42 credit hours, five core courses and the required portfolio, proposal and thesis. Indeed, the portfolio is an improvement over the more traditional comprehensive exam and is more in line with the discipline of Education where demonstrations of acquired knowledge skills and attitudes are frequently difficult to measure through "exams".

The governance and administrative structures appear to be workable but the current draft should be re-worked to include a description of metrics to be used to ensure quality and to build in ongoing programme improvements. Comparator programmes could be selected and used for measurement comparisons on such metrics as time to completion, etc. and data lines should be established so that programme comparisons can be made over time on a variety of indicators. This approach should include systematic quantitative and qualitative data collections, as well as formative evaluations and means for adjusting the programme based on data inputs.

The draft of the proposal that I read would be improved if more detail were provided re admissions structures and **requirements**. I urge the programme designers to consider how to keep requirements such as the residency period and course taking both rigorous and flexible. An overly rigid set of requirements will no doubt lead to high rates of non-completion, while an overly flexible approach may negatively impact the quality of the graduates. I believe there also needs to be further clarification in the proposal document as to how the "theme" areas will work in an Educational Studies doctoral programme. Students and/or employers need clarity on this. This improvement to the draft would help ensure continued attention to **standards**.

The proposal correctly spells out the current **need** in Canada for additional PhD graduates who will contribute to research culture enhancements in the discipline of Education and its various subfields, who will take on roles across the country and internationally in both the professoriate,

educational policy arenas such as government and leadership roles in k-12 school systems, as well as colleges and universities.

The proposed **delivery modes** spell out "blended" approaches that mix face to face and distributed or e-learning elements. Literature on adult learning points out that such blended approaches are superior than single delivery mode platforms that rely too heavily on face to face delivery or too heavily on e-learning techniques.

4.2- Comparison with other programmes

This proposed programme mirrors many of the elements of the successful joint programme I worked on while at Brock. There too, summer seminars were used and a similar governance structure across institutions became operational. On page 65, the proposal outlines comparisons with the programme at the University of New Brunswick and at Memorial. Comparisons to both of these point out both similarities and differences. Overall, I believe this joint programme will permit a larger cohort of students than is possible at UNB or at Memorial because the number of participating professors is greater when three institutions are involved. Also the breadth and depth of resources is enhanced when all three universities are made available to these doctoral students.

4.3- Adequacy of human resources

My examination of the cv's of faculty across the three institutions and the useful charts provided in the proposal, assured me that indeed there is a current critical mass of active scholars and that many of them have funded research projects as well as some experience supervising not only masters but also doctoral students. I was impressed when I met with faculty at the sites with their overall enthusiasm for this joint programme. They felt that increased interactivity between the three sites would bode well for increasing research productivity and their ability to recruit new scholars. Many of the newer scholars already hired and some senior scholars pointed out that their funded projects require that they find suitable doctoral students to work with and that not having a doctoral program in their home institutions was a detriment to their scholarly success. I believe that retaining such active scholars may prove increasingly difficult at all three sites if this proposal does not move forward in a timely manner.

While the current faculty complements seem to encompass the appropriate distribution of expertise and strengths for a PhD in Educational Studies to begin in the next year or so, sustainability of a high quality programme means that the professoriate will need to grow as the programme grows. The presence of one or more Canada Research Chairs would greatly enhance the credibility and stature of the programme.

4.4- Physical Resources

I was positively impressed during my site visits by the physical resources at each institution. Clearly, there have been sustained efforts to build library strength and e-learning technologies. Suitable learning environments and supports have been in place for a number of years to meet the needs of undergraduates and existing graduate programmes at the masters level.

A major difficulty, however, is that without the infusion of some visible external financial support from government and/or donors, the professors, students and parents of these universities will worry that undergraduates are somehow footing the bill for the doctoral students. I firmly believe that the addition of doctoral students will effectively raise the bar for undergraduates by improving the scholarly stature and atmosphere at all three sites. Politically, however, the acceptance of communities is unlikely unless overt external supports are in place as the programme begins.

4.5- Appropriateness of organizational environment

As already indicated, procedures for regular review and evaluation of quality need to be spelled out more clearly. My suggestion is that there should be on-going internal formative evaluation steps built in to the programme structure and a cycle of both internal and external summative evaluation procedures should be established. Perhaps in the fourth year, when hopefully some students will have completed the programme, such a summative evaluation should be undertaken and then in the sixth or seventh year, an external review would be wise.

4.6- Stability of programme and resources allocated

Given the track record of the three institutions, I believe that with some external assistance at start up, the required stability can be assured.

4.7- Opportunities in labour market for graduates

As is spelled out in the proposal, the timing of this programme is excellent in terms of the growing need in the education professoriate across Canada and internationally. There is also a high need for research oriented and well prepared leaders in the k-12 school systems and in colleges and universities across the country. My work on leadership succession spells out many of the details of these current and future needs and supports the section of this proposal that addresses labour market trends. I want to point out that it is also important to the province to be providing "at home" opportunities for educational scholars who can not only contribute to within province educational policy and practice concerns but who can work in other sites in Canada but bring a Nova Scotia sense of place to their work. Without this programme or something like it, graduate students are seeking higher degrees elsewhere in Canada, in the United States or in places like Australia or the United Kingdom. They then are likely not to return to the province but to practice their scholarly work "away". This "brain drain" has economic as well as social consequences that are negative for the province, especially in terms of finding "home grown" solutions to thorny educational issues. We are particularly aware of this need in Saskatchewan.

SECTION 5- Assessment Criteria

1. Programme objectives and structures are clearly spelled out and seem appropriate.

2. Anticipated student outcomes are not yet as clearly indicated as I believe they should be. The proposal writers need to do more work in the areas of learning outcomes (knowledge, skills and attitudes and rubrics used to measure these outcomes), graduate outcomes in terms of the qualities and attributes they wish to ensure, and other outcomes in terms of impact on local communities, including each of the institutions and impacts across Canada and internationally.

3. The resources seem adequate for the programme to begin as soon as possible but as it grows, external financial assistance from government or other sources will be critical to ensure sustainability. Such financial assistance will also be necessary in obtaining the internal support of faculty, students and parents who may worry about the siphoning of resources currently designated for undergraduate programmes.

4. It seems from the proposal that peers and experts from New Brunswick, Prince Edward Island, Saskatchewan, and more locally from Dalhousie and St. Mary's have been consulted.

5. The proposal provides sufficient evidence of an external scan.

6. This is addressed in number 4 above.

7. The proposal makes a strong case of evidence of need.

8. There is sufficient evidence of student demand.

9. The case is made in the proposal and was supported in my site visit for the existence of a suitable academic environment with a critical mass of research active faculty, a sufficient breadth of disciplinary expertise, necessary support of related programmes, library and communications, an appropriate structure and an academic environment for the proposed research focus and supervisory capacity. There needs to be more work done in my view in mapping out further details re financial supports to doctoral candidates. The programme is non-duplicative and best offered at institutions in question. There is a strong case for student demand and employability of graduates.

SECTION 6- Recommendations

I recommend approval with the following specific changes:

-Further discussion and specifications regarding how admissions policies and procedures will ensure that top quality candidates from within Canada and from international locations can gain access even if they present themselves as non-traditional or "alternative" students. I encourage innovation in areas such as the admission of members of Canada's charter groups. -Further specification of desired programme outcomes and metrics, comparators, and formative and summative evaluations that will systematically ensure on-going improvement and quality controls.

-Development of a flow-through chart for each institution over the next six years showing anticipated student numbers that account for anticipated plan attrition and graduation time frames.

- Further consideration of flexibility re residency requirements that can accommodate pregnancy leaves and other student realities.

-Further discussion and planning that takes into account the workload assignment differences in collective agreement provisions around faculty workloads in each of the institutions. How will assignment for teaching happen and how will supervisory duties be counted across the three sites?

-Develop rubrics and specific criteria to assess portfolio, as well as developing a route for student appeals given the pass/fail option.

-Build in data collection re programme elements and begin data lines as soon as programme begins.

-Develop mechanisms for ensuring an "evergreen" curriculum for the programme.

-Clarify in the proposal how a degree in 'educational studies' can have specified 'themes'.

-Consider 'niche' marketing that will ensure strong application rates after the pent up demand period is over.

-Tighten operating procedures, for eg. use rotating terms on idac, and develop detailed procedures re thesis defence and external examiner's role and activities.

Additional comments

My site visit in April allowed me to observe first hand the commitment and enthusiasm not only of the members of the proposal writing team but also of administrators and faculty at all three institutions. It is clear to me that currently, senior and new scholars at each of the three institutions are being disadvantaged in their research efforts by the lack of a pool of doctoral candidates who can play important roles in funded research. In particular, opportunities for success with Tri-Council granting agencies- SSHRC, NSERC and CIHR- are limited because the training of doctoral students is a key component in applying successfully for such grants. Despite such limitations, the faculty cv's reveal a critical mass of highly productive scholars who could readily handle the course and supervision needs of a relatively contained number of doctoral students.

It was pointed out to me that the post-Shapiro report advocated for a joint doctoral programme. While there are complications in starting up and managing a programme across institutions, my personal experience in constructing a proposal for a similar programme in Ontario, taught me that there are also inherent strengths in such a program for students and for faculty in that a wide range of resources are available and inter-institutional collaborations can improve scholarly work in the larger arena. Indeed, it seems to me that Nova Scotia has much to gain. As one person put it during a site visit, Nova Scotia needs to create new knowledge in the field of education rather than continue to import it and be relegated to a consumer role. As he put it, "We need to produce educational research that can benefit our communities and the rest of Canada and not just be users of knowledge from elsewhere."

I believe that this joint programme is highly likely to afford opportunities for doctoral study and unique scholarship within a population of potential students who might otherwise not contribute their abilities in this direction. Among these students are many who have extended family ties to the province and/or financial barriers that preclude going away for doctoral study. I also believe that few of the distance or e-learning programs that such students could take would provide the content or flavour that a 'home grown', made in Nova Scotia programme can offer.

I have offered a number of suggestions that will strengthen the proposal and I realize that many other helpful edits will be part of the process of gaining approvals at the Senate level in each institution. Critical for this programme is some form of external financial assistance. This could come in many forms. The current proposal asks for help in terms of adding additional faculty and salary for a co-ordinator. Without this funding, there is little to ensure the sustainability of the programme over an extended period. Provincial assistance with scholarships or bursaries would be extremely helpful and would also help the success rates of students in later stages of the programme as they apply for federally funded doctoral fellowships.

In summary, this is a well-considered proposal that promises to blossom into a very fruitful endeavour of benefit to many.

Appendix 6

Comments relating to a proposal for a Doctor of Philosophy program in Educational Studies prepared by the Inter-University Doctoral Program Proposal Committees of the Nova Scotia Inter-University Committee on Teacher Education at MSVU, Acadia and St. FX.

From University of New Brunswick, Faculty of Education

I've enjoyed reading through your proposal. I think your group has done an excellent job putting together this PhD program. I particularly like the idea of an exit portfolio. It does help bring together all the pieces of the degree.

The only error in regards to our program is in section 8.9.1. Our students must be in residence 3 days a week for two terms - not two years.

A couple of areas you might want to clarify for MPHEC:

The supervisory committee are the only folk who 'examine' the student's work all the way along until they get to the oral. For our comps, we 'strongly encourage' an external person examine one of the questions. That outside check helps the student and the committee stay honest, so to speak. It is good to have someone outside the committee see the work before it gets to the oral.

For the final oral, you might want to spell out what you mean by the external needing to be at arm's length. We have very specific rules and it protects the student and the committee members.

I wish you good luck with the program. You will have our support when MPHEC asks

Ellen Carusetta Associate Dean of Graduate Studies University of New Brunswick

From University of Prince Edward Island Faculty of Education

We recommend the ICTE for preparing a solid and thorough proposal to establish a timely, needed and relevant PHD program in educational studies in Nova Scotia. Although the administration and delivery of such a program by three distinct institutions will be complex, this proposal demonstrates that the ICTE has the capacity (human resources, funding, expertise, organization) to deliver a rigorous and innovative program.

This proposal demonstrates that the Faculty members in the three participating institutions should be able to form qualified and balanced committees for supervision of students' dissertations. However, committee formation is sometimes challenging even in large institutions. We believe that collaboration among universities in the region is one way to tackle this challenge. As such, there are scholars in our Faculty who would be willing participants on dissertation committees. We also hope that we might be able to

solicit participation from scholars in your institutions to serve on doctoral committees in the Ph.D. program we hope to begin soon.

We commend the ICTE and the Faculty members from all three institutions who have obviously worked hard on this excellent proposal.

Best wishes with next steps in the approval process. Thank you for consulting the UPEI Faculty of Education.

Graham Pike, PhD Dean, Faculty of Education University of Prince Edward Island "The Senate Curriculum Committee hereby moves that the following proposals for changes to Acadia's Curriculum be adopted."

Submitted by A. Quéma, Chair Senate Curriculum Committee

Curriculum Committee Report for Senate, January 2009 Faculty of Arts

Art: (New Courses) (089-35-CRE)

These courses bring a new breadth to Acadia's studio offerings, enhancing the university's 'Environmental' sector (a pillar of the Strategic Plan), and will assist students who wish to pursue an Art minor as part of their undergraduate studies.

ART 2063 Art and the Environment 2 This course addresses environmental issues through art, with a focus on the landscape model. It allows students to undertake visual studies of local landscapes. Students will develop their own imagery employing both realism and abstraction of their work. This course explores the production of images using acrylic on both paper and canvas surfaces.

ART 2053 – Art and the Environment 1 This course addresses environmental issues through art, with a focus on the landscape model. It provides students with both "hands on" and academic assistance to allow them to undertake visual studies of local urban and rural landscapes, with the possibility of wilderness study. This course utilizes representational drawing and painting, working with drawing materials with an introduction to watercolour.

Comparative Religion: (089-36-CRE)

(Course Modification)

CREL 3123 Religious Ethnography

An examination of ethnographic and qualitative methods and approaches to the study of lived religion. Students will undertake field-based research documenting the lives of religious practitioners by means of various ethnographic methods including interviews, participant observation, life histories, and/or archival research.

Becomes:

CREL 3123 Writing Life: Worldviews and Experience

Students will conduct field-based research documenting life stories and engage in an on-theground introduction to interviewing, interpretation, and analysis of worldviews and experience. Students will learn culturally appropriate protocols involved in ethnographic research; including the requisite skills and methodologies for interviewing and participant-observation. These skills and methodologies apply to similar work in other disciplines.

Interdisciplinary Studies: (title change only) (089-37-CRE)

IDST 2423 World Literature 2: Realism, naturalism, and symbolism in prose fiction from 1850 to 1950.

Becomes: IDST 2423 Nineteenth and Twentieth Century World Literatures: Same description

Economics Department: (089-38-CRE)

New Course:

Econ 3833: Economics and Entrepreneurship

This course explores entrepreneurship from the perspective of modern economic analysis. Economic profit and the return to entrepreneurship. The economics of risk and uncertainty. The economics of asymmetric information and information technology. Pricing and investment decisions. Public policy and entrepreneurship. Entrepreneurship and the knowledge economy. Permission of the Instructor.

Department of English and Theatre: (089-39-CRE)

Course modifications:

ENGL 2386 The Romantics This course explores a series of texts written between the outbreak of the French Revolution in 1789 and the crowning of Victoria in 1837. It features poets such as William Wordsworth, Lord Byron, John Keats, nd Letitia Landon; novelists such as Mary Shelley and Jane Austen; and essayists like Mary Wollstonecraft.

Becomes:

ENGL 2386 The Romantics

This course focuses on the diverse literature of the British Romantic period (1785-1830), a period of social, political and artistic change and contradiction. Artists and writers combined nostalgia, self-aware immediacy and hopeful idealism into works that favoured imagination, emotion and vision. Featured authors include William Blake, William Wordsworth, Mary Wollstonecraft, Lord Byron, John Keats, Mary Shelley and Jane Austen.

ENGL 3483 Victorian Poetry

A study of Victorian poetry and poetic theory from the 1830s until the 1890s, including the works of Hemans, Landon, Tennyson, Browning, Barrett Browning, and Christina Rossetti. **Becomes:**

ENGL 3483 Victorian Poetry

This course provides a study of Victorian poetry and poetic theory from 1830 until 1900, introducing students to several important poetic genres in the Victorian Age: Victorian Lyric forms, the Victorian Sonnet, the Verse Novel, the Dramatic Poem, and the Victorian Epic.

THEA 1001 Production Credit 1

Participation in the Theatre Studies productions in the capacity of minor performance role, crew member or design or technical director assistant with a time commitment of 6 hours per week average over the term. (1 credit hour)

Becomes:

THEA 1001 Production Credit 1

Participation in a Theatre production in the capacity of minor performance role, crew member, stage management or technical director assistant, with an average time commitment of 6 hrs per week over the term. (1 credit hour)

THEA 1013 Acting and Performance 1

An introduction to the basic principles of performance, on and behind the stage. Prereq: Theatre majors

Becomes:

THEA 1013 Acting and Performance 1

A practical introduction to the basic principles of performance and acting. Prereq: Theatre Major or permission of the Theatre faculty

THEA 1023 Acting and Performance 2

An introduction to the basic principles of performance, on and behind the stage. Prereq: Thea 1013

Becomes:

THEA 1023 Acting and Performance 2

Continuing introduction to the basic principles of performance and acting. Prereq: Thea 1013

THEA 2002 Production Credit 2

Participation in Theatre Studies stage production in the capacity of crew head, designer, stage management or student technical director backstage or a major performance role. (2 credit hours) **Becomes:**

THEA 2002 Production Credit 2
Participation in a Theatre production in the capacity of a major performance role, crew head, assistant designer, stage manager or assistant technical director. (2 credit hours)

THEA 2013 Acting and Performance 3

Detailed work on acting and presentation skills, through improvisation and theatre games, and through monologues and scene studies chosen from a wide range of dramatic literature. Special focus on the skills needed for the theatre of Shakespeare and contemporaries. Course includes a technical component involving backstage work. Prereq: Thea 1023

Becomes:

THEA 2013 Acting and Performance 3

Intermediate development and training in performance and acting. Prereq: THEA 1023 or permission of the Theatre faculty

THEA 2023 Acting and Performance 4

Detailed work on acting and presentation skills, through improvision and theatre games, and through monologues and scene studies chosen from a wide range of dramatic literature. Special focus on the skills needed for the theatre of Shakespeare and contemporaries. Course includes a technical component involving backstage work. Prereq: Thea 2013

Becomes:

THEA 2023 Acting and Performance 4

Continued intermediate development and training in performance and acting. Prereq: THEA 2013

THEA 2753 Theatre Voice and Speech 1

Introduction to voice and speech for the actor, including preparation techniques, relaxation, intonation and emotional expression. The focus is on freeing the unique vocal qualities of each student and on training the actor's voice for performance. Prereq: Thea 1023 **Becomes:**

THEA 2753 Theatre Voice and Speech 1

Introductory exploration of voice and speech for the actor. Prereq: Thea 1023 or permission of the instructor

Department of History and Classics: (089-40-CRE)

New courses:

CLAS 3343 Roman Historians and Historiography

An in-depth study of the historiography of ancient Rome and the Roman Empire as written by the major Latin- and Greek-language historians from the first century BCE to the fourth century CE. The legacy of these historians to later historiography and modern scholarship will also be considered.

HIST 1413 Global History before 1500

Course description: This course uses a thematic and comparative approach to explore major issues in world history. Students will examine different cultural zones and historical eras, from the inception of the agricultural revolution to the emergence of Europe as a dominant region of the globe. Themes include trade, environment, cities, patriarchy, technology, and political systems.Pre-requisite: None. Co-requisite: none

HIST 1423 Global History after 1500

Course description: This course examines the intricate links among cultures that have arisen in the last five centuries. This period witnessed the rapid rise of the West to economic, political and cultural dominance. In response various forms of resistance and nationalism emerged, with remarkable ideological innovation and social transformations in China, India, the Middle East, Africa, and Latin America. Pre-requisite: None. Co-requisite: None.

HIST 2073 The Arab-Israeli Conflict

Course description: Arab and Israeli nationalism originated in the modern period and have been in conflict since the First World War. The course is a treatment of the origins and development of the conflict through the 20th century, investigating national ideologies, issues central to the contemporary peace process, such as borders, population transfers, and Jerusalem. Prerequisite: None. Co-requisite: None.

HIST 3513 America and the Spanish Civil War

The Spanish Civil War was a prelude to the Second World War and the first international conflict over the threat of fascism. This course will examine the coming of the war, its larger political and social significance, and the role that the international brigades played in the conflict. Our focus will be on the American response to the war.

HIST 3583 Anglo-Saxon England A study of the development of England in the early medieval period, from the fall of Rome to the coming of the Normans. Through an examination of the available evidence, both written and archaeological, we will explore topics such as Germanic and Viking invasions, paganism, the flourishing of Christianity, artistic achievement, and kingdom formation.

HIST 3593 The Vikings and their World

The people of Scandinavia, living between 780 and 1100, are often referred to as Vikings, but who were they really? Warriors with horned helmets? Misunderstood farmers and traders? Democratic poets? This course presents an interdisciplinary and balanced view of the Vikings and their culture, society and journeys of exploration, commerce, settlement and conquest.

Course modifications:

Hist 2113 Reformation Europe, 1520-1650

Political, social and religious causes of the Reformation; Luther, Zwingli, and Calvin and their respective Reformations; the Reformation in Germany, England, Scotland and the Netherlands; the Catholic Counter Reformation; the struggle between France and the Habsburgs for dominance in Europe; the Wars of Religion in France, the Thirty Years' War and the Treaty of Westphalia.

Becomes:

Hist 3243 Reformation Europe

Political, social and religious causes of the Reformation; Luther, Zwingli, and Calvin and their respective Reformations; the Reformation in Germany, England, Scotland and the Netherlands; the Catholic Counter Reformation; the struggle between France and the Habsburgs for dominance in Europe; the Wars of Religion in France, the Thirty Years' War and the Treaty of Westphalia.

HIST 2453 Women and the American Experience

Examining social movements, activists, intellectuals, and average people, this course explores the experience of women in modern America. Attention will be paid to women's civil rights, intellectuals that offered alternative visions of society and gender in America in America, the experience of African-American women, and the limitations of middle-class reform. **Becomes:**

HIST 3493 American Women and Social Reform

This course examines the experience of women in movements for social change. Emphasizing the early 20th century, it explores women's activism in a range of social movements, including the drive to end lynching and expand civil liberties. Particular attention is paid to the experience of American women in the movement for working-class democracy and racial equality in the 1930s.

Program Changes:

1. The requirements for the major in History will change as follows: 48h in History including History 1103, 1113 (or 1106), 2773, 2783, 6h from Hist 1223, 1233, Idst 1113, 1123, 18h at

the 3000-level changes to: 48 h in History including History 1413, 1423 (two new Global History courses), 2773, 2783, 18h at the 3000-level. The new requirements for the honours in History will be the same as for the Major, except that, as in the past, a total of 60h in History is required, with the addition, again as in the past, of 18h at the 4000-level, including Hist 4903 and 4996. History 1223 and 1233 will be dropped, effective in the academic year 2009-2010, but History 1103 and 1113 will be retained. Students who were enrolled at Acadia prior to 2009-2010 may adhere to the old requirements.

2. The Department of History and Classics has accepted a recommendation from the Academic Program Review Committee that it combine the existing Introduction to Western Civilization and Introduction to Non-Western History courses (1103, 1113, 1223, 1233) into a set of Global History courses, as has been done in History programs at many other Canadian universities; the two new Global History courses would then become part of the core requirements of the major and honours programs in History.)

Course deletions:

HIST 1233 Non-Western History since 1500 CLAS 2113 Greek Literature in English Translation

Department of Languages and Literatures: (089-41-CRE) Program change:

Bachelor of Arts with Spanish as a Second Major

Span 1013, 1023, 2013, 2023, 2113, 2123, 18 h Spanish electives (Span 3103 / 3203 is recommended) (42 h)

Students who do a double major in either French or Spanish are required to take 42 hours of courses. Students who do a Bachelor of Business Administration with a Major in Spanish are also required to take 42 hours of Spanish. We think that the requirements for double and second majors in all three languages should be the same.

New course

FRAN 4833 Le Roman au dix-huitième siècle

En France, le dix-huitième siècle est une époque importante pour l'évolution du roman, un genre qui est encore à ses débuts. Romans épistolaires, récits à la première personne, narrations encadrées, romans expérimentaux, les formes foisonnent. Nous étudierons un choix d'ouvrages qui permettront de suivre les transformations que cette forme encore jeune est en train de subir.

Course deletion

FRAN 4813 Tendances pré-révolutionnaires

School of Music: (089-42-CRE)

Program changes:

Bachelors of Music with a Concentration in Musicology. Students must achieve a minimum cumulative GPA of 3.33 and complete the piano proficiency requirement by the end of 2nd year to continue in this program to clearly show the GPA requirement needed to be accepted into various concentrations within the Bachelor of Music Programme. New courses: MUSI 2130L/2140L Laboratory Sections for 2133/2143 (Laboratory sections are being created for the core theory courses to replace Musi 2113 and 2123 which are being deleted. Ear-training and musicianship skills are better delivered as labs in the theory courses. This will allow for better integration of the two related subjects.)

Bachelor of Music with Concentration in Musicology (126h)

- 1. The Bachelor of Music core (54h + 6h)
- 2. Music 4113, 4213 or 4223, 4993 (9h)
- 3. 27h from 2183, 2193, 3133, 3156, 3163, 3193, 3223, 3233, 3283, 4103, 4113, 4123, 4156, 4213, 4223, IDST 3173, 3183, 4173 (27h)

- 4. 9h music electives (9h)
- 5. 21h non-music electives. (21h)

Students must achieve a minimum cumulative GPA of 3.33 and complete the piano proficiency requirement by the end of 2nd year to continue in this program.

New program:

The Bachelor of Music (comprehensive) program is designed to offer a more well-rounded degree opportunity for students who do not wish to declare an area of music specialization. This program may also be elected by students with a strong GPA but who, nevertheless are not admitted into the 3rd year of the performance programs because of a weak 2nd-year performance jury. **Bachelor of Music – Comprehensive (126h)**

- 1. BM Core (54+6)
- 2. Musi 3666, 4666 (12h)
- 3. 3h additional music theory, 3h additional music history, 3h methods or music education course, 3h composition. (12h)
- 4. 21h music electives
- 5. 21h non-music electives

Students must achieve a minimum cumulative GPA of 3.33 and complete the piano proficiency requirement by the end of 2nd year to continue in this program.

(Students are required to perform a public recital in third year of the BM in Instrumental and Vocal Performance programs. The School wishes to assign a zero credit course number (Musi 3660) to this requirement so it can be added to the Academic Calendar. This modification simply formalizes a practise within the School of many years standing.)

Bachelor of Music with Concentration in Vocal Performance (126h)

- 1. Bachelor of Music Core (54h + 6h)
- 2. Musi 3666 and 4666 (12h)
- 3. Musi 1363, 3660, 3673, 3683, 4363, 4673, 4683, 4943 (21h)
- 4. 12h music electives. Piano majors must elect Musi 3693 (12h)
- 5. 21h non-music electives (21h)

Students must achieve a minimum cumulative GPA of 3.33 and complete the piano proficiency requirement by the end of 2nd year to continue in this program.

Bachelor of Music Core

- Musi 1133, 1130L, 1143, 1140L 1253, 1263, 1666, , 2133, 2130L 2143, 2140L 2163 2263, 2283, 2666, 3203. Each of these courses must be completed with a grade of C- or better (42h)
- 2. 2. 6h Engl at 1000 level (6h)
- 3. 3. Hist 1103, 1113
- First year music students will take Musi 1600 and one section of either Musi 2701 or 2800. Students in each subsequent academic level will take one section of Musi 2701 and one section of Musi 2800. Students must successfully complete both the fall and winter terms of each ensemble. (6h or 8h)
- 5. Music majors must complete Musi 2870, Concert Credit, in each year of their program.

6.

The Bachelor of Music (General) program allows for maximum flexibility in the music student curriculum. Students complete the BM core, applied music requirements, and then may select from a wide range of music and non-music electives.

In recent years, students have not been admitted to specialized programs because of failed performance juries or lower GPAs (a cumulative 3.33 is required for entrance into third year of most BM programs. The General program allows students in these circumstances to continue with a BM degree.

Bachelor of Music – General (126h)

- 1. BM Core (54+6)
- 2. Principle Applied Study Piano 3666, 4666
- 3. 33h music electives
- 4. 21h non-music electives

Course Modification:

MUSI 3316 Teaching Music In Band Performance

This course focuses on the artful practice of teaching Instrumental Music in the school system. In the fall term students explore teaching instruments in junior high school and the needs of beginning music students. In the second term high school music performance is explored. Topics include repertoire, administration, non-performance music, curriculum, pedagogy and an evening lab with the New Horizons Band.

Becomes:

MUSI 3316 Teaching Music In Band Performance

This course focuses on the artful practice of teaching Instrumental Music in the school system. In the fall term students concentrate on the needs of beginning music students. In the second term high school music performance is explored. Topics include repertoire, administration, curriculum design, and pedagogy. All students participate in a Wednesday evening lab with the New Horizons Band. Prereq: Music Core and permission of the School

Course deletion:

Music 2113 – Musicianship 3

Philosophy Department: (089-43-CRE)

New courses:

PHIL 1213 Introduction to Philosophy

This course provides the students with a general introduction to philosophy through a survey of readings from ancient, early modern, and contemporary authors. We will deal with issues such as the existence of God, morality and the justification of moral claims

PHIL 1223 Introduction to Philosophy

This course provides the students with a general introduction to philosophy through a survey of readings from ancient, early modern, and contemporary authors. We will deal with issues relating to claims of knowledge and the problem of skepticism, the nature of the mind, and free will vs. determinism.

PHIL 1413 Introduction to Philosophy

In this course the student is introduced to philosophy through a series of shorter philosophical excerpts from a variety of authors and periods. The focus will be on three issues: whether a divine being exists, how to understand the nature of ethical standards, and what constitutes political justice. The goal throughout is to develop skills of critical analysis and self-expression, while coming to understand some of our culture's most influential thinkers

PHIL 1423 Introduction to Philosophy

In this course the student is introduced to philosophy through a series of shorter philosophical excerpts from a variety of authors and periods. The focus will be on three issues: whether humans genuinely exercise free choice, how to understand the relation between body and mind, and what constitutes human knowledge. The goal throughout is to develop skills of critical analysis and self-expression, while coming to understand some of our culture's most influential thinkers.

Program changes:

Bachelor of Arts with Honours in Philosophy 6h of Phil at the 1000-level, 2006 or both 3513 and 3533; 2016; 2306; 2823; 2913 or 3553; 3113 or 3223; 4996 and an additional 15h philosophy which must include 6h at the 3000-level (54h).

Bachelor of Arts with Major in Philosophy

6h of Phil at the 1000-level; 2006 or both 3513 and 3533; 2016; 2813 or 2823; 2913; 6h from among 2303, 2306, 2713, 3203, 3213; and an additional 12h of Phil which must include 6h at the 3000-level (42h). Second majors may take a 36h major comprising 6h of Phil at the 1000-level; 2006 or both 3513 and 3533; 2016; 6h from among 2303, 2306, 2713, 3203, 3213; and an additional 12h of Phil which must include 6h at the 3000-level (36h).

For all degrees: No more than 6hrs at the 1000 level may contribute toward the degree.

Course deletions:

PHIL 1206 Introduction to Philosophy PHIL 1406 Introduction to Philosophy

Political Science Department: (089-44-CRE)

Course modifications:

POLS 4143 Applied International Ethics

This course is a critical exploration of ethical dilemmas in contemporary international politics. A special emphasis will be placed on cosmopolitan and communitarian approaches to issues such as international justice; war; terrorism; global poverty; sovereignty; human rights; women's rights; humanitarian affairs and intervention; and the environment. Prereq: Pols 2683 or 2783 with minimum grade of B- or better or permission

Becomes:

POLS 4143 Applied International Ethics This course is a critical exploration of ethical dilemmas in contemporary international politics. A special emphasis will be placed on cosmopolitan and communitarian approaches to issues such as international justice; war; terrorism; global poverty; sovereignty; human rights; women's rights; humanitarian affairs and intervention; and the environment. Prereq: 54 credit hours with a CGPA of B or permission of Instructor POLS 4483 Pols of Global Technologies

This seminar explores the political issues and implications of new advances in science and technology. Upon classic explorations about the impact of mass media, robotics and nuclear technology on contemporary global politics, specific attention is paid to the impact of cyber-technology, bio-technology, nano-technology on political concepts like war and security, human rights and justice and global governance and democracy. In addition, we ask how the accelerating pace of mass technological life is changing the future of the world as we know it. Prereq: B+ in Pols 2683 or 2783 or permission of the instructor

Becomes:

POLS 4483 Pols of Global Technologies

This seminar explores the political issues and implications of new advances in science and technology. Upon classic explorations about the impact of mass media, robotics and nuclear technology on contemporary global politics, specific attention is paid to the impact of cyber-technology, bio-technology, nano-technology on political concepts like war and security, human rights and justice and global governance and democracy. In addition, we ask how the accelerating pace of mass technological life is changing the future of the world as we know it. Prereq: 54 credit hours with a CGPA of B or permission of Instructor

POLS 4883 Politics of Human Rights

This course examines what human rights mean, why they matter, and how they have come to influence contemporary global politics. We explore the political, legal and ethical dimensions of human rights standards from a variety of perspectives in Political Science and the subfield of International Relations. Prereq: Pols 2683/2783 with a grade of B or higher or permission of the instructor

Becomes:

POLS 4883 Politics of Human Rights

This course examines what human rights mean, why they matter, and how they have come to influence contemporary global politics. We explore the political, legal and ethical dimensions of human rights standards from a variety of perspectives in Political Science and the subfield of International Relations. Prereq: 54 credit hours with a CGPA of B or permission of Instructor

POLS 4293 Politics of Development

This seminar course critically explores politics and development in the global South. The geographic focus is on Asia, Africa, and Latin America, with comparisions to post-communist Europe. Topics covered include: legacies of colonialism, strategies of industrialization and their political impact regional economic integration, military coups, revolutions, transitions to democracy, and the role of religion and and ethnicity in politics

Becomes:

POLS 4293 Politics of Development

This seminar course critically explores politics and development in the global South. The geographic focus is on Asia, Africa, and Latin America, with comparisons to post-communist Europe. Topics covered include: legacies of colonialism, strategies of industrialization and their political impact regional economic integration, military coups, revolutions, transitions to democracy, and the role of religion and ethnicity in politics. Prerequisite: 54 credit hours with a CGPA of B or permission of Instructor

POLS 4693 Representation and Redistribution This seminar explores contemporary challenges to democratic and democratizing states in the contexts of globalization and multiculturalism. Theoretical analysis concentrates on the changing meaning of democratic representation how these changes have influenced the demands for and distribution of rights and material benefits. Theoretical analysis will be illustrated with case studies from the developed and developing worlds. Prereq: B or better in Pols 2893 or 2993 or any two Comparative Politics courses **Becomes:**

POLS 4693 Democracy and the Market

This seminar explores contemporary challenges to democratic and democratizing states in the contexts of globalization and multiculturalism. Theoretical analysis concentrates on the relationship between economic and democratic development and how this relationship has influenced the demands for and distribution of rights and material benefits. Theoretical analysis will be illustrated with case studies from the developed and developing worlds. Prerequisite: 54 credit hours with a CGPA of B or permission of Instructor

POLS 4893 Theory and Politics of Citizenship

This seminar course explores questions of what citizenship means, how it develops, and how it is practiced in societies influenced by globalization and multiculturalism. Theoretical debates about the meaning of citizenship will be complemented by case studies of issues such as migration/immigration, multiculturalism in advanced democracies, and national struggles for the rights of women and indigenous peoples. Prereq: B or better in Pols 2893 and 2993 or any two Comparative Politics courses

Becomes:

POLS 4893 Theory and Politics of Citizenship

This seminar course explores questions of what citizenship means, how it develops, and how it is practiced in societies influenced by globalization and multiculturalism. Theoretical debates about

the meaning of citizenship will be complemented by case studies of issues such as migration/immigration, multiculturalism in advanced democracies, and national struggles for the rights of women and indigenous peoples. Prereq: 54 credit hours with a CGPA of B or permission of Instructor

POLS 4643 Critical Political Theory

An investigation of current literature in Marxist, feminist, psycho-analytic and post-structuralist approaches to the study of politics. Prereq: Pols 2346 or 2643 **Becomes:**

POLS 4643 Critical Political Theory

An investigation of current literature in Marxist, feminist, psycho-analytic and post-structuralist approaches to the study of politics. Prereq: Pols 2346 or 2643 with B or higher, or permission of the instructor.

POLS 3183 United Nations

The role of the United Nations in the international system will be examined. The social, cultural, political and economic functions the U N performs will be analyzed in light of the increasingly politicized nature of the organization. Special consideration will be given to the growth of the humanitarian function.

Becomes:

POLS 3183 U.N. and Contemporary Global Governance

The social, cultural, political and economic functions the United Nations in the international system will be examined. Specifically, the growth of Human Security and Humanitarian will be explored in light of the U.N.'s recent politicization. Next, the emergence of global governance models that include other international institutions and actors will be explored. Finally, the emerging horizons of contemporary assemblages of governance will be explored

POLS 3583 New Issues in Security The course discusses new concepts and challenges for security. Security now embraces military, environmental, economic, social and political sectors. Securitizing problems such as terrorism, gender, human rights, narcotics trade, organized crime, pandemics, and internet abuse has major consequences for state policies, international relations and international organization.

Becomes:

POLS 3583 New Issues in Security The course discusses new concepts and challenges for security. Security now embraces military, environmental, economic, social and political sectors. Securitizing problems such as terrorism, gender, human rights, narcotics trade, organized crime, pandemics, and internet abuse has major consequences for state policies, international relations and international organization.Pre-requisite POLS 2683 or 2783 with B or higher or permission of instructor.

POLS 4943 Honours Seminar

This course will normally be taken by honours students in their fourth year and will focus on some of the central debates in the discipline. In particular, students will be exposed to different approaches in the study of political science. Students will be expected to present their thesis proposals in class.

Becomes:

POLS 3043 Honours Seminar

This course will normally be taken by honours students in the winter term of their third year and will focus on some of the central debates in the discipline. In particular, students will be exposed to different approaches in the study of political science. Students will present their thesis proposals in class. A grade of B+ is required to continue in the honours programme.

POLS 1303 Law/Politics & Government 1

These introductory courses in politics and government introduce students to concepts, institutions of government, political processes, international relations, law, and political thought.

Becomes:

POLS 1303 Law/Politics & Government

This introductory course in politics and government introduces students to concepts, institutions of government, political processes, law, and political thought. No prerequisites.

POLS 1403 Law/Politics & Government 2

These introductory courses in politics and government introduce students to concepts, institutions of government, political processes, international relations, law, and political thought. **Becomes:**

POLS 1403 Global Politics, Law, and Culture

This introductory course explores changing concepts such as development, war and peace, international law and justice, and social movements that help us understand contemporary global politics. No prerequisites.

Department of Sociology: (089-45-CRE)

Program modifications:

6h from Soci 1006, 1106 or two of 1013/1023/1033/1113 (only 6h from 1006/1013/1033; only 6h from 1106/1023/1113); 2003 and 2013; 2103; one of 3013, 3033, 3043, 3053, 3093, IDST 3023; one of Soci 3103, 3113, 3163; and 21h additional sociology (48h), no more than 6 hours at the 1000 level; up to 6h IDST may be counted as Sociology credits)

Bachelor of Arts with Double Major in Sociology

6h from Soci 1006, 1106 or two of 1013/1023/1033/1113 (only 6h from 1006/1013/1033; only 6h from 1106/1023/1113); 2003 and 2013; 2103; one of 3013, 3033, 3043, 3053, 3093, IDST 3023; one of Soci 3103, 3113, 3163; and 21h additional sociology (42h, no more than 6 hours at the 1000 level)

Bachelor of Arts with Honours in Sociology

6h from Soci 1006, 1106, or two of 1013/1023/1033/1113 (only 6h from 1006/1013/1033; only 6h from 1106/1023/1113); 2003 and 2013; 2103; 3013, one of 3033, 3043, 3053, 3093, IDST 3023; one of 3103, 3113, 3163; 4003; one of 4113, 4123, 4133, 4143, 4153, 4163, 4173, 4183 or 4193; 4996 and 21h additional sociology (60h, no more than 6 hours at the 1000 level; up to 6h IDST may be counted as Sociology credits)

Bachelor of Arts with Honours in Sociology with 2nd Major

6h from Soci 1006, 1106, or two of 1013/1023/1033/1113 (only 6h from 1006/1013/1033; only 6h from 1106/1023/1113); 2003 and 2013; 2103; 3013, one of 3033, 3043, 3053, 3093, IDST 3023; one of 3103, 3113, 3163; 4003; one of 4113, 4123, 4133, 4143, 4153, 4163, 4173, 4183 or 4193; 4996 and 21h additional sociology (54h, no more than 6 hours at the 1000 level) Soci 2806: Gender and Sexuality

Course additions:

Soci 2403: Gender and Sexuality I

A survey of socio-cultural perspectives and research findings in the areas of gender differences, gender inequalities, gender relations and sexualities. Prereq: 6h of Introductory Sociology

Soci 3403: Gender and Sexuality II

An advanced course that examines socio-cultural perspective, research findings and theory in the areas of gender differences, gender inequalities, gender relations, and social organizations of gender and sexuality. Pre-req: 12h of Sociology, including 6h of Introductory Sociology and Soci 2403.

SOCI 3633 Issues in Health, Environment and Poverty: Communities at Risk The aim of this course is to introduce students to the issues of environmental health and poverty, which have created crisis conditions in communities and in family life. The course, which largely focuses on Canada, asks students to consider how communities manage their environments, which may be hazardous to the health and well being of their members.

Course deletion:

SOCI 3053 Gerontology Theories

Faculty of Professional Studies

School of Business Administration (089-46-CRE)

Program Modifications:

Bachelor of Business Administration with Computer Science

Please note: Students should notify the School of Business Administration after completing their first year when applying to: BBA with Computer Science programs. Students must meet the admission requirements for both BBA and BCS.

- 1. Required Business courses (45h): see #1 of the requirements for Bachelor of Business Administration.
- 2. Required non-business courses (21h): Econ 1013, 1023, Math 1413, Math 1613 or Math 1013, Math 2433, Comm 1213, Econ 2613, each completed with a C- grade or better.
- 3. Required Computer Science courses (18h): Comp 1113, 1123, 2103, 2113, 2203, and 2213.
- 4. 12h computer science electives; at the 2000+ level (except Comp 2903 and 2913) with at least 6h at the 3000+ level.
- 5. 15h business or computer science electives. For those in the second-year Core program, Busi 2993 is required and business or computer science electives are reduced to 12h.
- 6. 9h university electives (business or non-business)
- 7. A minimum program GPA of 2.67 at the end of each academic year is required to remain in the BBA with Computer Science program

New programs:

Bachelor of Business Administration with Major

Within the School of Business, students have the option to complete a major in the functional disciplines of accounting and marketing. In addition, the school has agreements with other units of the university to permit a BBA with major in Computer Science, English, French, German or Spanish. Students interested in taking a BBA with a major in one of these academic units outside the business school should so indicate at the time of application to Acadia, or should contact the school directly once the decision to pursue a BBA with major degree is made. Admission to a major is normally done at the end of the first year; however students are advised to plan their first year to ensure non-business courses within their degree requirements can be completed in the necessary sequence. The French, German and Spanish majors include a year overseas and so may take five years to complete. Other majors/options are under discussion; notify the school of your interests.

Bachelor of Business Administration with Major in Accounting

1. Required Business courses (45h): 1013, 1703, 2803, 2013, 2223, 2233, 2423, 2433, 2513, 2733, 2743, 3063, 3613, 4953, 4963, each completed with C- grade or better.

- 2. Required non-business courses (15h): Econ 1013, 1023, Math 1613 or Math 1013, Comm 1213, Econ 2613, each completed with a C- grade or better.
- 3. Additional required business courses from the accounting discipline (9h): Busi 2033, 3073 and 3083.
- 4. 15h business electives chosen from the following courses in the accounting and related disciplines: Busi 3113, 3223, 3623, 4013, 4073, 4083, and 4113 (or equivalents approved by the Business school).
- 5. 30 h non-business electives
- 6. 6 h university electives (business or non-business). For those in the second-year Core program, Busi 2993 is required and university electives is reduced to 3h.
- 7. A minimum program GPA of 2.00 is required to be eligible to graduate.

Bachelor of Business Administration with Major in Marketing

- 1. Required Business courses (45h): 1013, 1703, 2803, 2013, 2223, 2233, 2423, 2433, 2513, 2733, 2743, 3063, 3613, 4953, 4963, each completed with C- grade or better.
- 2. Required non-business courses (15h): Econ 1013, 1023, Math 1613 or Math 1013, Comm 1213, Econ 2613, each completed with a C- grade or better.
- 3. Additional required business course from the marketing discipline (3h): Busi 3433.
- 4. 15h business electives chosen from the following courses in the marketing discipline: Busi 3463, 4403, 4413, 4423, 4433, 4473, 4483, 4543, and 4653 (or equivalents approved by the Business school).
- 5. 30h non-business electives
- 6. 12h university electives (business or non-business). For those in the second-year Core program, Busi 2993 is required and university electives is reduced to 9h.
- 7. A minimum program GPA of 2.00 is required to be eligible to graduate.

Note: In addition, the following edits should be made to the description of areas of concentration in the BBA program;

Selection of areas of concentration: For their business electives, students may choose an area of specialization from one of the following: accounting, finance, marketing, information systems, or human resources. Students should discuss this with their advisor. A BBA with Major can be completed in two of these disciplines, accounting and marketing.

New Courses:

BUSI 2763 Organizations and Sustainability

Students will study frameworks, models, and tools for planning for and implementing sustainability focused strategies and activities within organizations. Perspectives on how organization impact social and environmental sustainability will be considered along with how aspects of sustainability impact the various dimensions of organization management (marketing, finance, operations, etc). Various organizational types (for profit, non-profit, etc) will be considered. Pre-requisites: ESST 1003 Sustainability Concepts and Systems; ESST 1023 Perspectives on Environmental Thinking and Practice

BUSI 4483 Strategic Brand Management This course is designed to introduce advanced concepts in branding and brand management to students concentrating in or with a keen interest in marketing. The course will cover the concepts, tools and techniques that are applied to successfully develop new brands and manage established brands. The course will involve lectures, case assignments and a comprehensive project. Prereq: Busi 2433 with C- or better. School of Education:

School of Education (089-47-CRE)

Program modification:

EDUC 4313 – INTRODUCTION TO PHYSICAL AND HEALTH EDUCATION will change from a required course to an elective course in the Bachelor of Education (elementary) program.

School of Recreation Management and Kinesiology (089-48-CRE) New Program:

This enables students to enrol in the Bachelor of Recreation Management and simultaneously develop specific expertise in Environmental and Sustainability Studies, graduating with a BRM with Environmental and Sustainability Studies. Students will meet all of existing requirements for the BRM. There is a strong linkage between Recreation Management and its focus on individual and community wellness and the Environmental and Sustainability Studies major that examines the interrelationships between culture, social institutions and the environment so as to shift communities and society toward sustainability. Both areas provide students with the conceptual knowledge and skills to make a difference in their communities, large and small, although in somewhat different spheres. This unique degree will attract a small number of strong academic students interested in community leadership to the University and the BRM program, who would not likely have come otherwise.

Current Calendar Description for BRM:

Bachelor of Recreation Management:

- Leisure Studies core (45 h).
- Management core (18 h)
- Liberal Education core (27h)
- Comm 1213 (3h)
- Electives at the direction of the School to represent an area of study (27 h).
- Non-credit requirements: Recr 1210, 2020, 4010. Recr 1210 and 2020 must be completed during the first year of the program.
- Students must successfully complete all RECR courses in the 1000, 2000, and 3000 levels to enter the core term or permission of the School.
- Grades of C- or better are required in the Leisure Studies Core, the Management Core and Comm 1213
- A minimum GPA of 2.00 is required to be eligible to graduate.

New Degree Option:

Bachelor of Recreation Management with Environment and Sustainability Studies:

- Leisure Studies core (45 h). Can only take one of Recr 2523 or Esst 3003, Recr 1263 or Esst 2003 based on advice of the school
- Management core (18 h)
- Communication courses: Comm 1213 (3 h)
- Electives at the direction of the school (27 h).
- Non-credit requirements: Recr 1210, 2020, 4010. Recr 1210 and 2020 must be completed during the first year of the program.
- Students must successfully complete all RECR courses in the 1000, 2000, and 3000 levels to enter the core term or permission of the School.
- Grades of C- or better are required in the Leisure Studies Core, the Management Core and Comm 1213

- A minimum GPA of 2.00 is required to be eligible to graduate.
- Environment and Sustainability Studies Core Courses (12 h): Recr 1163, Esst 1003, Esst 1023, Esst 4003
- Environment and Sustainability Studies Concentration Course based on a choice of concentration area; Esst 2023, or Esst 2033, or Esst 2013, or Phil 2303.
- Environment and Sustainability Studies Concentration Courses based on a choice of concentration taken from concentration lists in the Environment and Sustainability Studies (12 h)

New Courses:

KINE 3443 Psychological Aspects of Physical Activity and Sport

An examination of psychological factors that affect and are affected by participation in physical activity and sport. Topics include participation motives, exercise adherence, discontinuation, staleness and burnout, response to injury, and group processes, as well as psychological techniques to enhance the sport and exercise experiences such as goal setting, imagery, relaxation, self-talk and the regulation of arousal and attention.

KINE 2433- Psychological Aspects of Physical Activity and Sport

An examination of the primary psychological aspects important in understanding physical activity participation and sport performance. This course will focus on the role of theory in effectively promoting physical activity and exercise. The course will examine psychological factors that affect and are affected by participation in physical activity and sport, social influences on participation, as well as psychological techniques to enhance participation.

Course modificaitons:

KINE 4693- Physical Activity and Chronic Conditions

The course examines the psychosocial, physiological and pharmacological considerations important to the promotion of physical activity among individuals living with chronic conditions (e.g., cardiac conditions, diabetes, arthritis, spinal cord injury). Course work is primarily students directed. Students are assessed on their ability to integrate information in summarizing the issues important for exercise promotion for each given population.

Becomes:

KINE 4693- Physical Activity and Chronic Conditions

The course examines the psychosocial, physiological and pharmacological considerations important to the promotion of physical activity among individuals living with chronic conditions (e.g., cardiac conditions, diabetes, arthritis, spinal cord injury). Course work is primarily students directed. Students are assessed on their ability to integrate information in summarizing the issues important for exercise promotion for each given population. Prereq: Kine 2423 and Kine 2433

KINE 2243 Historical Aspects of Physical Activity and Sport in Canada An examination of the place of physical activity and sport in Canadian history.

Becomes:

KINE 1243 Historical Aspects of Physical Activity and Sport in Canada An examination of the place of physical activity and sport in Canadian history.

New course:

KINE 4493 Seminar in Health Promotion and Wellness

This course will be the culmination for the students in the health promotion and wellness concentration. This course will continue to provide opportunities for students to assume increasingly responsible positions in the field, as well as continue classroom learning in issues related to the field of health and wellness. Prereq: Kine 3493

This course aims to increase the depth and breadth of students' knowledge of issues in health promotion and offers students the opportunity to expand and apply skills they have developed in the area of health promotion and wellness in practical settings. This will be done using a

combination of readings and discussion, in-class activities and practicum opportunities. Prereq: Kine 2493

Faculty of Pure and Applied Science

Biology Department: (089-49-CRE)

Course Modifications:

BIOL 1813 Human Biology 1 The fundamental principles of biology with emphasis on humans. Topics include molecular and cell biology/evolution, mechanisms of inheritance, basic ecology and humans in their environment. This course is not recommended for biology majors. (3h lab for nutrition students only)

BIOL 1823 Human Biology 2 The fundamental principles of biology with emphasis on humans. Topics include reproduction and development, disease and the immune system, evolution, and homeostatis of human organ systems. This course is not recommended for biology majors. (3h lab for nutrition students only) Prereq: Biol 1813

Become:

BIOL 1813 Human Biology 1 The fundamental principles of biology with emphasis on humans. Topics include molecular and cell biology/evolution, mechanisms of inheritance, basic ecology and humans in their environment. This course is not recommended for biology majors. BIOL 1823 Human Biology 2 The fundamental principles of biology with emphasis on humans. Topics include reproduction and development, disease and the immune system, evolution, and homeostatis of human organ systems. This course is not recommended for biology majors

BIOL 2813 Human Physiology and Anatomy I Change the pre-requisite to read, 'BIOL 1813' (instead of BIOL 1823)

<u>School of Computer Science</u> (089-50-CRE) New Program:

Description – Mobile and Ubiquitous Computing

The Mobile and Ubiquitous Computing specialization stream is designed to provide our students with the knowledge and skills needed to work in this rapidly growing area of Computer Science. Recent years have shown that we are working towards an increasingly mobile computing environment with wireless laptops, smartphones, handheld computers and even wireless printers and digital cameras. All of these devices need to be programmed to interact correctly, increasing the demand for these programming and design skills. The stream will focus on core computer science fundamentals as well as courses in Human Computer Interaction and Mobile and Ubiquitous Computing. This stream requires four courses in Psychology, including one course on how to design data collection experiments and analyze data from those experiments, and the option to take a cognition course to learn more about how people process information. Our HCI course, combined with the psychology courses, will be useful when dealing with interface design issues for mobile devices and determining how well the interface is working. Our goal is to produce students who are capable of writing software for mobile and ubiquitous devices and properly testing such software.

Curriculum for specialization in Mobile and Ubiquitous Computing Items 1, 4, 5, 6, 7 from BCSS section are same as current specializations.

1. CS courses:

Comp 1113, 1123, 2103, 2113, 2203, 2213, 2663, 2903, 3343, 3403, 3613, 3663, 3703, 3713, 3753,

4983, and Math 1413 or 1313, and 2433, each with C- or better (54h)

2. A set of required specialty courses, each completed with a grade of C- or better. (36h total) <u>Comp: The four courses below (12h)</u>

COMP 2513: Web-centric Programming COMP 2523: Security COMP 3583: Human Computer Interaction COMP 4583: Mobile Computing

Psyc: Three courses below (9h) PSYC 1013: Intro Psychology (Experimental) PSYC 1023: Intro Psychology (Applied) PSYC 2013: Research Design and Analysis 1

One of the following two courses (3h) PSYC 2023: Research Design and Analysis 2 PSYC 2143: Intro to Cognition

<u>Other: (12h)</u> 12h from any department with permission of the School of Computer Science.

- 3. Math 1013, 1023, 2233 each with C- or better (9h)
- 4. 6h English or one language other than English
- 5. 9h of courses from the Faculty of Arts (not Econ 2613, 2623, or Soci 3103)
- 6. 6h of non-computer science courses
- 7. A minimum CGPA of 2.00 is required to be eligible to graduate

This specialization would end up with a minimum of 60h of CS (max 69h), 15h of Psych and 15h Math.

Honours has 63h CS (max), 24h Math and 12h FPAS/Business.

The specialization with honours would have a minimum of 63h of CS (max of 69h), 15h of Psych and 15h Math (we would add Automata).

New Courses:

COMP 3583 HUMAN COMPUTER INTERACTION

Examines the human factors associated with information technology and seeks to provide students with knowledge of the variables likely to influence the perceived usability, and hence the acceptability, of any information technology This course introduces a series of techniques for developing and evaluating usable software, with a focus on both mobile and traditional computing hardware. Prereq: COMP 2113

COMP 4583 MOBILE AND UBIQUITOUS COMPUTING

The skills required to develop applications for mobile and wireless devices are increasing in demand. This course provides the skills and background needed to understand the technologies used in mobile computing and how to apply this knowledge to real-world applications. This course will provide specific skills needed for designing, developing and deploying mobile applications. Prereq: COMP 3343, COMP 2513, COMP 3713

Course deletions:

COMP 3783 ADVANCED OBJECT-ORIENTED APPLICATION DEVELOPMENT WITH SMALLTALK

COMP 4773 DISTRIBUTED OBJECT-ORIENTED PROGRAMMING

1. CS courses:

Comp 1113, 1123, 2103, 2113, 2203, 2213, 2663, 2903, 3343, 3403, 3613, 3663, 3703, 3713, 3753,

4983, and Math 1413 or 1313, and 2433, each with C- or better (54h)

2. A set of required specialty courses, each completed with a grade of C- or better. (36h total)

Biol 1113/1123 (6h)

Envs: Four courses (12h) ENVS 1013 Intro Environmental SCI 1 ENVS 1023 Intro Environmental SCI 2 ENVS 3423 Environmental Impact Assessment ENVS 3313 Environment & Human Health or other ENVS or GEOL course with permission of the school

<u>Geol/Biol: Three courses (9h)</u> GEOL 1013 Our Dynamic Earth GEOL 2703 Applied Geomorphology (Pre-requisite for ENVS 3423) BIOL 2033 Principles of Ecology

Comp: Three courses (9h)

COMP 3503: Knowledge Discovery and Databases COMP 4523: Special Topics in Environmental Informatics And one COMP course at the 2000+ level

- 3. Math 1013, 1023, 2233 each with C- or better (9h)
- 4. 6h English or one language other than English
- 5. 9h of courses from the Faculty of Arts (not Econ 2613, 2623, or Soci 3103)
- 6. 6h of non-computer science courses
- 7. A minimum CGPA of 2.00 is required to be eligible to graduate

Program Titles: Bachelor of Computer Science with Specialization (Environmental Informatics)

Environmental Informatics can be considered to be the 'science and art of turning environmental data into information and understanding'. The Environmental Informatics specialization stream is designed to develop graduates with a strong understanding of computer science and information technology applied to environmental science issues. The major objective of this stream is to have students in their final year employ the latest computer science and information technology approaches to environmental science projects. The stream proposes courses that will develop student's interest in the theoretical and applied aspects of environmental information sciences, regardless of disciplinary boundaries.

In this proposal, we are targeting students who are interested in applying computer science techniques in environmental science. Environmental informatics program is an interdisciplinary field. It combines computer sciences, information technology and environmental sciences disciplines. The goal of this integration is to develop undergraduate students who understand how to transform environmental data into meaningful information and how to disseminate such information to decision makers and other users. Consequently, it will be possible to address many environmental problems. This is an active area of science because of climate changes that are impacting national and global interests. It is very important to note that a similar program is not

offered at any other Maritime universities at the undergraduate level. This provides a great opportunity for Acadia to introduce a unique and attractive program.

New course:

COMP 4523 Special Topics in Environmental Informatics

This course consists of intensive examination of selected specific advanced topics in computer science and information technology for environmental science. Prereq: permission of the school

Deleted course:

COMP 4933: Special Topics with Laboratory

Program Modification:

Bachelor of Computer Science with Specialization Electronic Commerce: Comp 2513, 2523, 3503, 3513, 4343, 4503, **(9h from Comp 3513, 3583, 4343, or 4583)**, Busi 1703, 2213, 2413, 2053, 2733, 2803 **3h other Busi, Comm 1213** (36h)

Electronic Commerce: Comp 2513, 2523, 3503, (9h from Comp 3513, 3583, 4343, or 4583), Busi 1703, 2213, 2413, 2053, 3h other Busi, Comm 1213 (36h)

<u>**Program Deletion:**</u> The Computer Systems: Software specialization from the Bachelor of Computer Science with Specialization.

Course Modifications:

COMP 3513 System Analysis and Design Introduction to the tools and techniques of information systems analysis and design and the project management process. The analysis and specification of systems requirements will be covered, as well as the design of system data, input, output and processes. A typical business case study project will constitute a major portion of the course. Prereq: One of Comp 1123, 1893 or 2863 with C- or better, or permission of school

COMP 3503 E-Commerce 3 Knowledge Discovery and Data Mining Philosophies and technologies surrounding the capture of organizational data, the conversion of data into information, and the dissemination of that information for the generation of human knowledge. Topics include: the knowledge discovery process, data warehousing and data mining. Prereq: Comp 3753, and Math (1223 or 2223 or 2233) each with C- or better

COMP 2873 Building Web Based Applications Development of dynamic Web applications using database technology. Topics include an introduction to Web development frameworks, and building Web sites which access data stored in a database backend. Prereq: Comp 2853 and 2863

COMP 2523 Security Topics include cryptography, security issues, and network and data level security, Prereq: Comp 1123, Math 1023 or Math 1223, and either Math 1413 or Math 1313 all with C- or better

COMP 2513 Web-Centric Programming Theory and hands-on experience with the Internet and Web infrastructure, E-commerce and M-commerce concepts, both client-side and server-side software technologies, database, E-payment, security and authentication, CSS, XML, and mobile data access and Web standards. Prereq: Comp 1123 with C- or better

COMP 1813 Computer Concepts and Applications Introduction to computer concepts and handson experience with. basic applications. Topics include how to create effective web pages, powerful presentations, dynamic spreadsheets, efficient word processing, and simple database applications. No prior computer knowledge assumed.

Deleted courses:

COMP 4503 Semantic Web COMP 1863 Computer Programming and General Applications COMP 1823 Computers in General Applications 2

New courses:

COMP 2863 How Web Sites Work Topics include an introduction to Web fundamentals, and programming techniques for Web site development. Prereq: Comp 1813 or permission of school

COMP 2853 Databases Introduction to the uses of databases for storing and querying information. Prereq: Comp 1813

COMP 1893 Multimedia Based Introduction to Programming An introduction to programming by writing computer programs to manipulate images and sound. No prior computer knowledge assumed.

<u>Department of Earth and Environmental Science:</u> (089-51-CRE) <u>Course Modifications:</u>

ENVS 2643 Human Activity and the Environment

An exploration and study of the relationships between humans and the environment. Topics covered will include the consumption of resources, the generation of wastes and changes in the conditions of land, water, air and other species. Prereq: Second year university standing. Cannot be used for major credit by ENVS majors

Becomes:

ENVS 2643 Human Activity and the Environment

An exploration and study of the relationships between humans and the environment. Topics covered will include the consumption of resources, the generation of wastes and changes in the conditions of land, water, air and other species. Cannot be used for major credit by ENVS majors

ENVS 3423 Environmental Impact Assessment

An interdisciplinary approach to the principles, practices, and methods involved in environmental impact assessments. Impacts covered include socio-economic, soils and geology, ecology, air, water and climate, and noise. The legal and regulatory framework within which EIA's are conducted will also be included. (3h labs/field work) Prereq: Biol 2033, Chem 2813 or 2853, Envs 2643, Geol 2703, or permission of Assistant Dean

Becomes:

ENVS 3423 Environmental Impact Assessment

An interdisciplinary approach to the principles, practices, and methods involved in environmental impact assessments. Impacts covered include socio-economic, soils and geology, ecology, air, water and climate, and noise. The legal and regulatory framework within which EIA's are conducted will also be included. Prereq: BIOL 1023; CHEM 1023; ENVS 1023 or 2643; GEOL 2703 or permission of the Department.

Program Changes:

Bachelor of Science with Honours in Environmental Science

- 1. 6h in English or one language other than English
- 2. 6h from the Faculty of Arts (not Econ 2613, 2623, or Soci 3103)
- 3. 6h from either the Faculty of Arts (not Econ 2613, 2623, or Soci 3103) or from the Faculty of Professional Studies or 3h from each.
- 4. 90h to complete science requirements
 - a) Biol 1113, 1123, 2033, and 6h additional biology at or above the 3000 level (15h)

- b) Chem 1013/1023 or 1113/1123, 2513, 2813 or 2853 (12h)
- c) Envs 1013, 1023, 3113, 3423, 3523 (or an approved alternative field course), 3613, 4423, 4996(27h) (Biol 3013 may be used as a free elective)
- d) Geol 1013, 1023, 2043, 2133, 2703, and 3h additional Geol at or above the 2000 level (18h)
- e) 6 hr additional from advanced level science courses chosen on an individual basis by consultation with the Department.
- f) Math 2233/2243 or 2213/2223 (6h)
- g) Phys 1013/1023 or 1053/1063 (6h)
- 5. 12h university electives
- 6. 120 hours are required in all. 48h of courses offered to fulfill science requirements 4 (a) through (d) must be completed with a grade of B- or better.
- 7. A minimum of 120h must be completed with a program GPA of 3.00 or better.

Bachelor of Science with Major in Environmental Science

- 1. 1. 6h in English or one language other than English
- 2. 6h from the Faculty of Arts (not Econ 2613, 2623, or Soci 3103)
- 3. 6h from either the Faculty of Arts (not Econ 2613, 2623, or Soci 3103) or from the Faculty of Professional Studies or 3h from each.
- 4. 87h to complete science requirements
 - a) Biol 1113, 1123, 2033, and 6h additional biology at or above the 3000 level (15h)
 - b) Chem 1013/1023 or 1113/1123, 2513, 2813 or 2853 (12h)
 - c) Envs 1013, 1023, 3113, 3423, 3523 (or an approved alternative field course), 3613, 4423 (21h) (Biol 3013 may be used as a free elective)
 - d) Geol 1013, 1023, 2043, 2133, 2703, and 3h additional geology at or above the 2000 level (18h)
 - e) 6 hr additional from advanced level science courses chosen on an individual basis by consultation with the Department.
 - f) Math 2233/2243 or 2213/2223 (6h)
 - g) Phys 1013/1023 or 1053/1063 (6h)
- 5. 18h university electives
- 6. 120 hours are required in all. 72h, including 48h of courses offered to fulfill science requirement 4 (a to d), must be completed with a grade of C- or better.
- 7. A minimum program GPA of 2.00 is required to be eligible to graduate

New Courses:

GEOL 2043 Techniques in Petrology Origin, occurrence, composition, and classification of igneous, sedimentary, and metamorphic rocks. An integrated overview of petrogenetic processes in a plate tectonic framework, including magma genesis, clastic and carbonate depositional processes, stratigraphic principles, and metamorphic zones and facies. Laboratory study of rocks in hand sample and thin section. (3h lab) Prereq: GEOL 2133

GEOL 2133 Mineralogy Crystal symmetry and structure. Mineral chemistry, physical properties, associations, and uses. Identification of common minerals in hand sample. X-ray diffraction, transmitted light optical theory ,and introduction to the petrographic microscope. (3h lab) Prereq: Geol 1013 (coreq with dept. permission) Coreq: Chem 1013.

GEOL 4013 Global and North American Geology

Global tectonics, processes at convergent plate margins, worldwide Phanerozoic orogenic belts and Precambrian tectonics. An integrative study of the geological evolution of North America, including stratigraphy, structural development, and Quaternary history but with an emphasis on comparative tectonic evolution of the Cordilleran, Appalachian, and Precambrian orogenic belts. Laboratory work includes map interpretation and petrological studies of rock suites (3h lab) Prereq: Geol 3603

Course deletions:

GEOL 2033 Mineralogy and Petrology.

- GEOL 2123 Optical Crystallography and Mineralogy
- GEOL 2303 Principles of Stratigraphy and Sedimentation
- GEOL 3613 Global Tectonics

New courses:

GEOL 4003 Geology of North America Rock structures and their geometric representation. Principles of stress and strain applied to brittle and ductile rock deformation. Fractures, faults, folds, and foliations: classification, mechanisms of formations, and tectonic environments. Practical work includes map interpretation, and graphic and computer techniques for analyzing structural data, and field studies of different types of deformed rocks. (3h lab) Prereq: Geol 2303

GEOL 3603 STRUCTURAL GEOLOGY AND TECTONICS Rock structures and their geometric representation. Principles of stress and strain applied to brittle and ductile rock deformation. Fractures, faults, folds, and foliations: classification and mechanisms of formation. Plate boundary and intraplate tectonics. Practical work includes map interpretation, graphic and computer techniques for analyzing structural data, and field studies of deformed rocks. (3h lab) Prereq: Geol 2043

Course Modifications:

Prerequisite course numbers need to be changed as a result of the other changes proposed in our courses and program, and just listed the current prerequisites, rather than including the whole course descriptions which are NOT changing.

GEOL 3103 Introduction to Geochemistry

Prereq: Geol 2303; Prereq or Coreq: Chem 1023

GEOL 3303 Clastic Sedimentology and Petroleum Geology

Prereq: Geol 2123 and 2303

GEOL 3323 CARBONATE SEDIMENTS AND RESERVOIR DEVELOPMENT

Prereq: Geol 2303 or Geol 2213

GEOL 3403 IGNEOUS PETROLOGY

Prereq: Geol 2123

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GEOL 3503 METAMORPHIC GEOLOGY

Prereq: Geol 2123, 3603; Geol 3403 recommended

GEOL 3823 EXPLORATION AND ENVIRONMENTAL GEOPHYSICS

Prereq: Geol 2303

To limit the amount of paper used, only names of the courses for which the prerequisite course numbers need to be changed as a result of the other changes proposed in our courses and program, added the new prerequisite course numbers are included.

GEOL 3103 INTRODUCTION TO GEOCHEMISTRY

Prereq: Geol 2043; Prereq or Coreq: Chem 1023

GEOL 3303 CLASTIC SEDIMENTOLOGY AND PETROLEUM GEOLOGY

Prereq: Geol 2043

GEOL 3323 CARBONATE SEDIMENTS AND RESERVOIR DEVELOPMENT

Prereq: Geol 2043 or Geol 2213

GEOL 3403 IGNEOUS PETROLOGY

Prereq: Geol 2043

GEOL 3503 METAMORPHIC GEOLOGY

Prereq: Geol 2043, 3603; Geol 3403 recommended

GEOL 3823 EXPLORATION AND ENVIRONMENTAL GEOPHYSICS

Prereq: Geol 2043

We propose to (1) delete Geol 2033 (Mineralogy and Petrology), Geol 2123 (Optical Crystallography and Mineralogy), and Geol 2303 (Principles of Stratigraphy and Sedimentation) and combine the material into two new courses, GEOL 2133 (MINERALOGY) and GEOL 2043 (TECHNIQUES IN PETROLOGY); (2) change the name of Geol 3603 (Structural Geology) to GEOL 3603 (STRUCTURAL GEOLOGY AND TECTONICS) and modify the course description; (3) delete Geol 3613 (Global Tectonics) and Geol 4003 (Geology of North America), moving some of the material to GEOL 3603 and most into a new course, GEOL 4013 (GLOBAL AND NORTH AMERICAN GEOLOGY); (4) modify the core program in Geology to include any three of Geol 3303 (Clastic Sedimentology and Petroleum Geology, Geol 3323 (Carbonate Sedimentology and Reservoir Development), Geol 3403 (Igneous Petrology), and Geol 3503 (Metamorphic Geology), and (5) change course numbers for prerequisites in the six courses for which the deleted courses Geol 2033, 2123, or 2303 were prerequisites to Geol 2133 or 2043, as appropriate.

Changes to Programs

Bachelor of Science with Honours in Environmental Science

- 1. 6h in English or one language other than English
- 2. 6h from the Faculty of Arts (not Econ 2613, 2623, or Soci 3103)
- 3. 6h from either the Faculty of Arts (not Econ 2613, 2623, or Soci 3103) or from the Faculty of Professional Studies or 3h from each.
- 4. 90h to complete science requirements
 - a) Biol 1113, 1123, 2033, and 6h additional biology at or above the 3000 level (15h)
 - b) Chem 1013/1023 or 1113/1123, 2513, 2813 or 2853 (12h)
 - c) Envs 1013, 1023, 3113, 3423, 3523 (or an approved alternative field course), 3613, 4423, 4996 (27h) (Biol 3013 may be used as a free elective)
 - d) Geol 1013, 1023, 2043, 2133, 2703, and 3h additional Geol at or above the 2000 level (18h)
 - e) 6h (with lab) additional from Apsc 3413 and/or Chem, or Geol at or above the 2000 level; Biol at or above the 3000 level (6h)
 - f) Math 2233/2243 or 2213/2223 (6h)
 - g) Phys 1013/1023 or 1053/1063 (6h)
- 5. 12h university electives
- 6. 120 hours are required in all. 48h of courses offered to fulfill science requirements 4 (a) through (d) must be completed with a grade of B- or better.
- 7. A minimum of 120h must be completed with a program GPA of 3.00 or better.

Bachelor of Science with Major in Environmental Science

- 1. 6h in English or one language other than English
- 2. 6h from the Faculty of Arts (not Econ 2613, 2623, or Soci 3103)
- 3. 6h from either the Faculty of Arts (not Econ 2613, 2623, or Soci 3103) or from the Faculty of Professional Studies or 3h from each.
- 4. 87h to complete science requirements
 - a) Biol 1113, 1123, 2033, and 6h additional biology at or above the 3000 level (15h)
 - b) b) Chem 1013/1023 or 1113/1123, 2513, 2813 or 2853 (12h)
 - c) Envs 1013, 1023, 3113, 3423, 3523 (or an approved alternative field course), 3613, 4013, 4423 (24h) (Biol 3013 may be used as a free elective)
 - d) Geol 1013, 1023, 2043, 2133, 2703, and 3h additional geology at or above the 2000 level (18h)
 - e) 6h (with lab) additional from Apsc 3413 and/or Chem, or Geol at or above the 2000 level; Biol at or above the 3000 level (6h)

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- f) Math 2233/2243 or 2213/2223 (6h)
- 5. Phys 1013/1023 or 1053/1063 (6h)
- 6. 15h university electives
- 7. 120 hours are required in all. 72h, including 48h of courses offered to fulfill science requirement 4 (a to d), must be completed with a grade of C- or better.
- 8. A minimum program GPA of 2.00 is required to be eligible to graduate

Environmental Geoscience Core:

The honours and Majors programs in environmental geoscience require the following core: 1013, 1023, 2043, 2080, 2133, 2213, 2703, 3103, 3303 or 3323, 3603, 3723, 3823, Envs 2643, 3113, 3423 (45h). No more than 3h non-lab geology courses at the 1000/2000-level may be offered towards the Major.

Bachelor of Science with Honours in Environmental Geoscience

- 1. The environmental geoscience core, Geol 4996 and 9h elective geology, each completed with a minimum grade of B- (57h). 2. Chem 1013, 1023 (6h)
- 2. 6h in Math
- 3. Phys 1053, 1063 or equiv. with lab (6h)
- 4. Biol 1113, 1123 (6h)
- 5. 6h from Chem, Math, Phys, Biol or Envs

Participation in departmental seminars is required. This program is career-oriented and preparatory to graduate study in environmental geoscience. It is needed for registration as a professional environmental geoscientist.

Bachelor of Science with Major in Environmental Geoscience

- 1. The environmental geoscience core, and 9h elective geology, each completed with a minimum grade of C- (51h).
- 2. Chem 1013, 1023 (6h)
 - 3. 6h in Math
 - 4. Phys 1053, 1063 or equiv. with lab (6h)
 - 5. Biol 1113, 1123 (6h)
 - 6. 6h from Chem, Math, Phys, Biol or Envs

This program is career-oriented and is needed for registration as a professional environmental geoscientist.

Geology core: Geol 1013, 1023, 2043, 2080, 2133, 2213, 2703; three of 3303, 3323, 3403, 3503; 3603, 4013 (33h). No more than 3h non-lab geology courses at the 1000/2000-level may be offered towards the Major. Students intending careers in paleontology should offer biology. Computer science courses are recommended to all students.

Bachelor of Science with Honours in Geology

- 1. The geology core, Geol 4996 and 15h elective geology, each completed with a minimum grade of B- (54h)
- 2. 2. Chem 1013, 1023 (6h)
- 3. 3. 6h Math (6h)
- 4. 4. Phys 1053, 1063 or equiv. with lab (6h)

Participation in departmental seminars is required. This program leads to post-graduate study in geology and is needed for registration in professional bodies.

Bachelor of Science with Major in Geology

- 1. The geology core and 15h elective geology (48h)
- 2. Chem 1013, 1023 (6h)
- 3. 6h Math (6h)
- 4. Phys 1053, 1063 or equiv. with lab (6h)

This program is both career-oriented and consistent with the concept of a liberal arts education.

Bachelor of Science with Double Major: Geology as first Major: Geol 1013, 1023, 2043, 2080,

- 2133, 2703, 3603, 24h additional geology (42h), 6h chemistry; 6h Math
- 1. Geology as second Major: Geol 1013, 1023, 2043, 2080, 2133, 2703, 3603, 12h additional geology (30h)

SCHOOL OF NUTRITION AND DIETETICS (089-52-CRE)

Program Changes:

Based on the recommendation of the program reviewers, we are eliminating one Biology course (Biol 1823 - Human Biology 2), one Chemistry course (Chem 3723 - Metabolism) and Business 1703 (Introduction to Business) from our programs. We are also removing Nutr 1503 (Contemporary Issues in Nutrition) from the nutrition core and replacing it with Nutr 1513 (Food and People) and removing the double minor requirement for honours.

Bachelor of Science in Nutrition (Honours)

A CGPA of 3.0 or better in 120h is required for honours. A minimum 48h in nutrition courses must each be passed with a B- grade or better. A Minor consists of 12h in another science, each course passed with a grade of C- or better. A thesis is mandatory. Students in the Kinesiology option may use Kine 3013 and Kine 4333 as part of their nutrition requirement.

Nutrition core:

Nutr 1513, 2203, 2213, 2503, 2513, 3713, 3723, 4533, 4903; (27h)

Bachelor of Science in Nutrition

- 1. The nutrition core (54 27h)
- 2. Biol 1813, 2053, 2813, 2823;(12h)
- 3. Chem 1013, 1023, 2513, 2713 (12h)
- 4. Math 1213/1223 or 2233/2243 (6h)
- 5. Psyc 1013, 1023 (6h)
- 6. Nutr 3543, 4223, 4523, 6h Nutr electives (15h)
- 7. English or one language other than English (6h)
- 8. 6h from the Faculty of Arts
- 9. 30h university electives

Bachelor of Science in Nutrition with Biology

- 1. The nutrition core (54 27h)
- Biol 1813, 2013, 2023, 2033, 2043, 2053, 2813, 2823, 6h Biol elective, completed with a Cor higher (30h)
- 3. Chem 1013, 1023, 2513, 2713 (12h)
- 4. Math 2233, 2243 (6h)
- 5. Psyc 1013, 1023 (6h)
- 6. Nutr 3543, 4223, 4523, 6h Nutr electives (15h)

- 7. English or one language other than English (6h)
- 8. 6h from the Faculty of Arts
- 9. 12h university electives

Bachelor of Science in Nutrition (Kinesiology option)

- 1. The nutrition core (27h)
- 2. Kine 2033, 2493, 3013, 3343 and 12h Kine electives (other than Kine 2413, 2423) (24h)
- 3. Biol 1813; Biol 2813/2823 or Kine 2413/2423; 3h Biol elective (12h)
- 4. Chem 1013, 1023, 2513, 2713 (12h)
- 5. Math 2233, 2243 (6h)
- 6. Psyc 1013, 1023 (6h)
- 7. Nutr 3543, 4523, 9h Nutr electives (15h)
- 8. English or one language other than English (6h)
- 9. 12h university electives

Bachelor of Science in Nutrition (Health and Development option)

- 1. The nutrition core (27h)
- 2. Biol 1813, 2013, 2053, 2813, 2823 (15h)
- 3. Kine 2493 (3h)
- 4. Chem 1013, 1023 (6h)
- 5. Math 1213/1223 or 2233/2243 (6h)
- 6. Psyc 1013, 1023 (6h)
- 7. Nutr 3513, 3523, 3543, 4513, 4543 (15h)
- 8. English or one language other than English (6h)
- 9. 6h from the Faculty of Arts
- 10. 30h university electives

New courses:

NUTR 4083 Independent Study Substantial scholarly study chosen in consultation with a faculty advisor to reflect student interest. Such a study may be based on field, laboratory or library study. Intended primarily for qualified students with a defined and approved research interest.

NUTR 3883 Directed Readings in Nutrition

Readings and discussions in a selected area under the direction of a faculty member. Intended primarily for students in third and fourth year.

Course deletions:

NUTR 3413 BIOTECHNOLOGY NUTR 3423 FOOD MICROBIOLOGY NUTR 4413 BIOTECHNOLOGY AND FOOD: LEGAL AND REGULATORY ISSUES

Course modifications:

NUTR 1503 CONTEMPORARY ISSUES IN NUTRITION The scientific basis of food selection for health. The course stresses evaluation of personal nutrient intake, especially carbohydrate, fat, and protein, in relation to needs for active living, weight management, and chronic disease prevention.

Becomes:

NUTR 1503 CONTEMPORARY ISSUES IN NUTRITION The basis of food selection for health. The course stresses evaluation of personal nutrient intake, especially carbohydrate, fat, and protein, in relation to needs for active living, weight management, and chronic disease prevention. Issues will be discussed within a contemporary context. Open to non nutrition majors only with 1st or 2nd year standing.

NUTR 1513 FOOD AND PEOPLE A study of diet and changing food habits from an evolutionary, historical, cultural, religious and social context. Programs and methods for meeting the world's

food needs are evaluated, and current technology and resources directed to food security and food safety are discussed.

Becomes:

NUTR 1513 FOOD AND PEOPLE A study of the diet and changing food habits from a cultural, religious and social context. Both historical and modern food and cuisine will be examined. Programs and methods for meeting the world's food needs are evaluated, and current technology and resources directed to food security and food safety are discussed. Open to nutrition majors only.

NUTR 2203 FOOD COMMODITIES 1 A study of the basic scientific principles underlying the processing of food commodities including vegetables, fruit, meat, fish, poultry. Additional topics will include colloids, sols, gels and rheology. (3h lab) Prereq: Biol 1823, Chem 1023 **Becomes:**

NUTR 2203 FOOD COMMODITIES 1 A study of the basic scientific principles underlying the processing of food commodities including vegetables, fruit, meat, fish, poultry. Additional topics will include colloids, sols, gels and rheology. (3h lab) Prereq: Biol 1823, Chem 1023

NUTR 2503 HUMAN NUTRITION 1 The nutrients essential to human life and well-being, their function in metabolism, and their sources in food as it is consumed. Emphasis will be placed on vitamins and minerals. Prereq: Biol 1823, Chem 1023

Becomes:

NUTR 2503 HUMAN NUTRITION 1 The nutrients essential to human life and well-being, their function in digestion andmetabolism, and their sources in food as it is consumed. Emphasis will be placed on vitamins and minerals. Prereq: Biol 1823, Chem 1023

NUTR 3513 COMMUNITY NUTRITION Examination of the role of the community nutritionist in health promotion and population health. Assessment, planning, implementing and evaluating nutrition services and programs for high risk groups within the community. Prereq: Nutr 2513 **Becomes:**

NUTR 3513 COMMUNITY NUTRITION Examination of the essential principles in program planning, development, delivery, assessment and evaluation in community nutrition initiatives. Includes strategies for implementing programs across and within select populations. Prereq: Nutr 2513, 3543

NUTR 3523 NUTRITION AND AGING A study of the changing nutritional needs during the later years and the assessment of the nutritional status of elders. The factors that may influence food intake of elders within the community and in long term care are examined. Prereq: Nutr 2503 **Becomes:**

NUTR 3523 NUTRITION AND AGING A study of the changing nutritional needs during the later years and the assessment of the nutritional status of elders. The factors that may influence food intake of elders within the community and in long term care are examined.

NUTR 3533 SPORTS NUTRITION The scientific basis for the recommendation of nutrients to enhance athletic health and performance. Prereq; Nutr 2513

Becomes:

NUTR 3533 SPORTS NUTRITION The scientific basis for the recommendation of nutrients to enhance athletic health and performance. Prereq; Nutr 2503

NUTR 3543 NUTRITION EDUCATION This course will examine theories of behaviour change and methods in nutrition education including principles of effective message design. Health promotion and the effectiveness of various nutrition education strategies across the lifespan will be explored. Prereq: Nutr 2513

Becomes:

NUTR 3543 NUTRITION EDUCATION This course examines principles of nutrition education, including program design and implementation, theories of behaviour change, and methods and strategies across the lifespan. Prereq: Nutr 2513

NUTR 3713 INTRODUCTION TO COMMUNICATION This course will cover the principles of interpersonal, group and public communication, including verbal and non-verbal communication. The influences of values, beliefs and perception on communication are explored. Theories of teaching, learning, motivation, cognition, behaviour change and interviewing and counselling are introduced. This course does not serve as a science elective. Prereg: Nutr 1503 or Nutr 2513 and Psyc 1023

Becomes:

NUTR 3713 INTRODUCTION TO COMMUNICATION This course will cover the principles of interpersonal, group and public communication, including verbal and non-verbal communication. The influences of values, beliefs and perception on communication are explored. Theories of teaching, learning, motivation, cognition, behaviour change and interviewing and counselling are introduced. This course does not serve as a science elective. Prereq: Psyc 1023

NUTR 4013 MANAGEMENT IN DIETETICS 1 Food service production and distribution. sanitation, safety, quantity food preparation, strategic planning, menu planning, quality management, risk management, marketing and financial management are examined. Management principles and theory, human resource management and the use of computers as related to food service operations are introduced. (12 hours of Introductory Lab Tutorials and ten 6 hour labs - covering both first and second term - are required for both Nutr 4013 and 4023). Prereq: Nutr 2213 and fourth year standing, or permission of School

Becomes:

NUTR 4013 MANAGEMENT IN DIETETICS 1 Food service production and distribution. sanitation, safety, quantity food preparation, strategic planning, menu planning, quality management, risk management, marketing and financial management are examined. Management principles and theory, human resource management and the use of computers as related to food service operations are introduced. (12 hours of Lab Orientation and Safety Tutorials in Nutr 4013 plus six 6 hour labs - spread across Nutr 4013 and 4023). Prereg: Nutr 2213 and fourth year standing, or permission of School

NUTR 4023 MANAGEMENT IN DIETETICS 2 Organizational culture, behaviour and the management of human resources are examined. The planning and design of food service operations, including equipment selection, are reviewed. The procurement, production and storage of food in quantity are explored. Environmental and ethical considerations are discussed. (12 hours of Introductory Lab Tutorials and ten 6 hour labs - covering both first and second term are required for both Nutr 4013 and 4023). Prereq: Nutr 4013

Becomes:

NUTR 4023 MANAGEMENT IN DIETETICS 2 Organizational culture, behaviour and the management of human resources are examined. The planning and design of food service operations, including equipment selection, are reviewed. The procurement, production and storage of food in quantity are explored. Environmental and ethical considerations are discussed. (Six 6 hour labs – spread across Nutr 4013 and 4023). Prereq: Nutr 4013

NUTR 4523 ADVANCED HUMAN NUTRITION Recent developments in human nutrition. The integration of nutrition, biochemistry and physiology is stressed. Independent survey of periodical literature in this field. Prereq: Biol 2823, Chem 3723, Nutr 2513 **Becomes:**

NUTR 4523 ADVANCED HUMAN NUTRITION Recent developments in human nutrition. The integration of nutrition, biochemistry and physiology is stressed. Independent survey of periodical literature in this field. Prereq: Biol 2823, Nutr 2513

NUTR 4533 NUTRITION AND DISEASE 1 Epidemiology, pathophysiology and role of medical nutrition therapy in the management of several widespread chronic conditions including diabetes, cardiovascular diseases, disorders of energy balance and bone health. Practical applications are studied in case studies (3h lab/tutorial). Prereq: Biol 2823, Chem 3723 or Biol 2013, Nutr 3723

Becomes:

NUTR 4533 NUTRITION AND DISEASE 1Epidemiology, pathophysiology and role of medical nutrition therapy in the management of several widespread chronic conditions including diabetes, cardiovascular diseases, disorders of energy balance and bone health. Practical applications are studied in case studies (3h lab/tutorial). Prereq: Biol 2823, Nutr 3723

NUTR 4913 SPECIAL TOPICS IN NUTRITION Guided research in an area of particular interest under the direction of a faculty member. Such research may be based on field, laboratory or library study, or all three focusing on aspects of nutrition not ordinarily covered in the scheduled course offering. The student will have responsibility for programming the research, in addition to its conduct. Prereq: Nutr 2513 and permission of school.

Becomes:

NUTR 4913 SPECIAL TOPICS IN NUTRITION In depth study of a selected topic in the field. Designed to enable students to take advantage of a particular expertise of visiting or permanent faculty. Prereq: Nutr 2513 and permission of school

NUTR 4996 THESIS **Becomes:** NUTR 4996 HONOURS THESIS Prereq: Nutr 4743

Physics Department (089-53-CRE)

Course modifications:

PHYS 1053- General Physics I A general, non-calculus introduction to physics. Topics include mechanics, wave properties of sound and light. As the occasion arises applications from the fields of geology, biology, the health and environmental sciences are introduced. (3h lab/tutorial) Prereq: NS Grade 12 Mathematics.

Becomes: (change in course description)

PHYS 1053- General Physics I A general, non-calculus introduction to physics. Topics from classical mechanics such as one-dimensional kinematics, vectors, projectile motion, dynamics, energy, momentum, rotation, oscillations and vibrations, and an introduction to wave properties of light and sound. Applications from the fields of geology, biology, the health and environmental sciences are introduced as appropriate. (3h lab/tutorial) Prereq: NS Grade 12 Academic or Advanced Mathematics.

PHYS 1063- General Physics II A continuation of Phys 1053. Topics include electricity, magnetism, thermal properties of matter, and atomic physics. (3h lab/tutorial) Prereq: Phys 1053 or equiv.

Becomes:

PHYS 1063- General Physics II A continuation of Phys 1053; a general, non-calculus introduction to physics. Topics include a continuation of waves, sound, light and optics, electricity, magnetism, fluids, thermal properties of matter, and/or modern physics. Applications from the

fields of geology, biology, the health and environmental sciences are introduced as appropriate. (3h lab/tutorial) Prereq: Phys 1053 or equiv.

Department of Psychology: (089-54-CRE)

Course modification:

PSYC 3243 ADVANCED RESEARCH METHODS IN PSYCHOLOGY Advanced research design, methods and issues relevant to psychological research. Topics include observational, quasiexperimental, survey, between-subject, within-subject and single-subject designs. Opportunities will be provided to build skills related to research design and critique, as well as data analysis using computers. Prereq: Psyc 2013 and 2023

Becomes:

PSYC 3243 ADVANCED RESEARCH METHODS IN PSYCHOLOGY Advanced research design and statistics relevant to psychological research. Topics include observational, quasiexperimental, survey, between-subject and within-subject designs. Opportunities will be provided to build skills related to research design and critique, as well as data analysis using computers. This course is normally taken in third year, as it is required for admission to the

honours program. Prereq: Psyc 2013 and 2023

Program modification:

Psychology 3243 (Advanced Research Methods), with at least a B-, becomes a requirement for admission to the psychology honours program.

Rationale: Students' performance in this course is very helpful in deciding whether they will be able to handle the statistical analyses required for their thesis. It is also better for the students to have the information this course provides under their belt before beginning their thesis work, rather than acquiring it half-way through.

Course Additions:

PSYC 4343 Neurodegenerative Diseases

This course will focus on recent scientific findings concerning the neuropsychological and the neurobiological changes associated with neurodegenerative diseases, such as Alzheimer's, Parkinson's, Huntington's, and multiple sclerosis. Prereq: Psyc 2023, Psyc 2133, Psyc 3383 or Biol 3063

PSYC 4323 Developmental Cognitive Neuroscience

This course will focus on select topics related to how age-related changes in neuroanatomy have been linked to cognitive development throughout the lifespan. An emphasis will be placed on reading and understanding current research. Prereq: Psyc 2023, 2133, 2153

PSYC 2173 Sensory Processes

This course is an introduction to sensory and perceptual mechanisms of the five sensory systems. An emphasis will be placed on research and theory related to the link between physiology and perceptual abilities. Prereq: PSYC 1023

Course Modifications:

Psyc 3053 Cognition

This course will review the theories and methodologies used to study mental processes such as attention, memory, and language. Emphasis is placed on how the brain enables the mind. Laboratory assignments will explore the theories and methodologies, including human electrophysiology, used in studying human cognition. (1.5h lab) Prereq: Psyc 2023, 2143

Becomes:

Psyc 3053 Cognitive Neuroscience

The study of how the brain enables the mind is called Cognitive Neuroscience. This course will introduce you to Cognitive Neuroscience techniques (e.g., ERP, fMRI), as well as how such techniques have advanced our understanding of human cognition. We will cover topics such as object recognition, speech perception, memory, attention, reading, cognitive development, and cognitive disability. (1.5h lab) Prereq: Psyc 2023, 2143, Psyc 2133

Psyc 3383: Human Neuropsychology Explores problems in perception, cognition, developmental psychology, psycholinguistics, and clinical psychology in the context of human brain function. Examines ways in which the nervous system can become disordered, and methods for identifying and studying the disorders. Includes discussion of the general principles of brain function and general theories of organization, integration and elaboration. This course is complementary to Biol 3063. Prereq: Biol 3063 or Psyc 2013 and Psyc 2133; Psyc 2113 recommended **Becomes**:

Psyc 3383: Human Neuropsychology Neuroanatomy and brain-behaviour relationships in the intact, functional brain will be briefly reviewed before the focus of the course switches to the field of clinical neuropsychology. Clinical neuropsychology deals with the behavioural manifestations of brain dysfunction, and the assessment and treatment of these types of problems. Students will be introduced to causes of brain pathology (injury, tumours, degenerative diseases, and so on), the ways in which such neuropathology is often expressed (disturbances in memory, perception, attention, language, motor control, executive functioning, and so on), as well as neuropsychological assessment and rehabilitation techniques. This course is complementary to Biol 3063. Prereq: Biol 3063, or Psyc 2013, Psyc 2133, and Psyc 2143; Psyc 2113 and Psyc 3053 are recommended.

Level and Title:

PSYC4123 Advanced Seminar in Psychology of Gender becomes PSYC2163 – Psychology of Gender

PSYC4213 Advanced Seminar in Human Sexuality becomes PSYC2183 – Human Sexuality **Title, Description and/or prerequisite:**

PSYC2143 Information processing becomes PSYC2143 Introduction to Cognition PSYC3053 Cognition becomes PSYC3053 – Cognitive Neuroscience (new prereq: PSYC2133) PSYC3083 Sensation and Perception (new prereq: PSYC2173 – Sensory Processes)

ADDITIONS SENATE AGENDA OF 12 JANUARY 2009

Item 1

SENATE MEETING

Graduate Curriculum Changes for 2009-2010 Submitted by Research and Graduate Studies

* Approved unanimously at the Senate Graduate Studies Committee meeting on December 10, 2008 *

Course Modifications

Current Course Title and Description

EDUC 5073 -- Curriculum Adaptation for Inclusive Education This course examines the advantages and disadvantages of departing from standard curriculum. Discussion focuses on an ecological approach to value-based curriculum development. Topics include designing instruction in meaningful context, techniques for adapting standard curriculum materials and methods of instruction, the role of cooperative learning and curriculum overlapping, and team approaches to developing individual education plans in natural learning environments. Prereq: EDUC 5063 and 5633 or permission of Director

Proposed Course Title and Description

EDUC 5073 -- Curriculum and Instruction for Inclusive Education This course examines inclusive curriculum and instructional practices that will assist teachers in meeting students' diverse learning needs in educational settings. Students will explore and critique relevant research related to inclusive school communities as well as issues around equitable assessment and instructional practices. Prereq or Co-req: EDUC 5063

Reason for change: The modification is needed in order to update course descriptions to match the program changes from Master of Education (Special Education) to Master of Education (Inclusive Education).

Current Course Title and Description

EDUC 5163 -- Assistive Technology for Students with Exceptionalities 1 (3h credit) This is a course for teachers who work with students who have special learning needs. Its purpose is to enable teachers to use computers with their students as a tool for thinking, communicating and becoming more independent. Participating teachers will be given extensive hands-on experience with computers. They become familiar with a variety of adaptive devices; learn how to evaluate software for computerassisted instruction; and learn how to use a variety of software programs. Prereq: No prerequisite required

Proposed Course Title and Description

EDUC 5163 -- Assistive Technology: Access to Literacy Assistive Technology (AT) includes a wide variety of strategies, services and tools to support all students in the classroom. This course focuses on introducing the participant to current conceptual models and use of assistive technology supporting access to literacy skill development for students with learning differences as well as discussion of integrating AT into the Program Planning Process.

Prereq: No prerequisite required

Reason for change: The present calendar course description is significantly out of date and does not reflect current course offerings. The new course title and description takes into account current theory and practice in the area of Assistive Technology and Education.

Current Course Title and Description

EDUC 5173 -- Assistive Technology for Students with Exceptionalities 2 This course focuses on the integrated use of technology. Participants will review the issues involved in developing annual goals and instructional objectives for students' individual program plans which incorporate use of assistive technology. This will be done through case studies of the special learning needs of students with specific disabilities. Teachers learn how to use the computer as an administration tool and as a source of information for program planning purposes. They also learn how to develop a plan for the implementation of computer use on the classroom, school and district basis

Proposed Course Title and Description

EDUC 5173 -- Assistive Technology: Access to Learning and Leisure Assistive Technology (AT) includes a wide variety of strategies, services and tools to support all students in the classroom. Participants will be introduced to current conceptual models and use of assistive technology necessary for some students with disabilities to access classroom learning and leisure activities. Course participants will explore the processes involved in the assessment and planning for appropriate utilization of AT in the school environment.

Reason for change: The present calendar course description is significantly out of date and does not reflect current course offerings. The new course title and description takes into account current theory and practice in the area of Assistive Technology and Education.

Course Deletion

EDUC 5093 -- Change and Implementation In Inclusive Education This course examines the process of change in school systems: why change occurs and how change takes place. Discussion focuses on program development that includes strategies for the inclusion of students with challenging educational needs, as well as the identification of appropriate indicators of and techniques for measuring effective education in fully inclusive schools. Topics may include enhancement of generic educational strategies, application of creative problem-solving process, team approaches to education and support roles played by peers and classmates. Prereq: EDUC 5063

Reason: The relevant content of EDUC 5093 is taken up in other coursework of the M.Ed. program.

Item 2

Calendar Dates for the 2009/2010 Academic Year – Submission to Se	nate
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2009	
June 29	Classes begin – Intersession 2 (Summer)
July 1	Canada Day – no classes
Aug 7	Classes end – Intersession 2 (Summer)
July 17 & Aug 7	Examinations – Intersession 2
Aug 14	Last day to apply to graduate at fall convocation
Sept 2	Residences Open for New International Students
Sept 3-4	New Student Orientation Activities begin for International Students
Sept 5	Residences open (for all New Students) / New Student Orientation Activities (full schedule for all New Students)
September 7	Residences open – returning students
September 8	Graduate student registration / New Student Orientation Welcome Week ends
September 9 (Wed.)	Classes begin - fall term
September 9	Fee Deadline
September 9	Last day to submit honours thesis for fall convocation
September 11	Last day to receive grades for Fall Convocation
September 11	Deadline for approved Masters' theses for Fall Convocation
September 16	Last day for course additions
September 25	Deadline for approved Honours theses for Fall Convocation
September 26	Final Exam posted for December examinations
September 30	Last day to opt out of ASU Health Plan or add dependents
October 2	Last day to decrease Meal Plan for Fall Term
October 12	Thanksgiving Day - no classes
October 14	Senate meeting to approve fall graduates
October 17	Homecoming and Fall Convocation
October 30	Last day to drop 3h first term courses without academic penalty
November 11	Remembrance Day - no classes
November 20	Last day to apply for Spring Convocation 2009
December 4	Last day of classes before exams

December 5	Study day
December 7	Examinations begin - fall term
December 19	Last day of examinations - fall term
December 20	Residences close at 12:00 noon
2010	
January 8	Residences Open (Winter Term New Students Only)
January 8-9	New Student Orientation
January 10	Residences open (all Returning Students)
January 11 (Mon)	Classes begin - winter term
January 11 (Woll)	Fee Deadline
January 18	Last day for course additions Last day to drop full year courses without academic penalty
January 29	Final Exam Schedule posted for April examinations
January 29	Last day to opt out of ASU Health Plan or add dependents – Winter Term students
January 29	Last day to apply for Spring Convocation 2009 for Masters' Students
February 1	Last day to decrease Meal Plan for Winter Term
February 22-26	Study week
March 1	Last day to drop winter term courses without academic penalty
March 19	Honours theses deadline for Spring Convocation
April 2	Good Friday – no classes
April 12	Last day of classes before exams
April 13	Study day
April 14	Examinations begin – winter term
April 19	Deadline for approved Masters' theses for spring convocation
April 28	Last day of examinations – winter term
April 29	Residences close at 12:00 noon
April 26	Deadline for registration – Intersession 1
April 26	Last day to receive completed honours theses for spring convocation
May 11	Faculty Meeting to approve Spring graduates
May 12	Senate meeting to approve spring graduates

May 16	Baccalaureate service
May 16-17	Spring Convocation
May 10	Classes begin - Intersession 1 (Spring)
May 24	Victoria Day - no classes
June 4	Last day to submit an appeal to the Academic Appeals Committee
May 28 and June 18	Examinations – Intersession 1 (Spring)
June 11	Deadline for registration – Intersession 2
June 28	Classes begin - Intersession 2 (Summer)
July 1	Canada Day – No Classes
August 6	Classes end - Intersession 2 (Summer)
July 16 and Aug 6	Examinations – Intersession 2 (Summer)

Item 3

Environment and Sustainability Studies

New Courses:

EDUC 42A3 Media and the Environment

This course will examine the role traditional and emergent media play in constructing and transforming our cultural, political, scientific and personal perspectives and understanding of our environment. Drawing on contemporary critical themes of media theory and practice, the course will examine how media frames and discourses are created to enable particular cultural forms of political economy and power. Prerequisites: ESST 1023, ESST 2003; or by permission of instructor.

EDUC 42B3 Sustainable Technologies

This course will examine the role of technology in the context of sustainability. It will critically explore from social, political and historical perspectives, how technological development has contributed both positively and negatively to the environmental crisis. Emphasis will be placed on how innovation with information, solar, wind, tidal and biomass technologies provides a path toward a more sustainable future. Pre-requisites: ESST 1023, ESST 2003; or by permission of instructor.

ESST 1003 Sustainability Concepts and Systems

This course introduces the current state of our world with respect to environmental and sustainability issues, including core sustainability and ecological concepts, theory and analytical tools. It will use experiential and problem-based learning to investigate current issues. Co-requisite: RECR 1163

ESST 1023 Perspectives on Environmental Philosophy, Thought & Practice

This course looks at the history of environmentalism and conceptualizations of sustainability from a range of cultural and disciplinary perspectives. Pre-requisite: ESST 1003

ESST 2003 Applied Leadership in Sustainability

Fundamental principles and tools for leadership development will be explored in the context of moving societies and communities toward sustainability. Through case studies, field experiences, and other experiential learning opportunities, students will explore the various dimensions of leadership including group dynamics, and its role in support sustainable community development. Pre-requisite: RECR 1163

ESST 2013 Environmental Justice and Equity

Environmental problems do not affect all people equally, nor do solutions work equally well for affected groups. This course draws on a variety of case studies to explore how environmental issues are experienced differently across class, race, gender, and North-South lines, and critically examines the intersection of environmental and equity concerns. Pre-requisites: One year of university study

ESST 3003: Investigating Sustainability Issues: Research Methods

An applied and transdisciplinary research course focusing on information needs that inform and influence decision-making and practice in the environmental and sustainability fields. Students engage with communities or organizations to identify information needs, select appropriate methodology, collect and interpret data, and develop suitable research reports. Pre-requisites: ESST 1003 and ESST 2003

1

ESST 4003 Environmental and Sustainability Studies Project

This course will integrate concepts in Environment and Sustainability Studies across concentration areas related to organizations, communities, societies and worldviews. It will focus on students completing a major community based research and/or engagement project related to their area of interest. Pre-requisite: ESST 3003, or by permission of instructor

RECR 2033 Sustainable Community Development

This course explores the various dimensions of community capital (e.g., natural, environmental, economic, and socio-cultural capital) and how these can be managed for sustainable community. Tools and concepts for conceiving, planning, and managing sustainable community will be examined from a transdisciplinary perspective drawing on readings, case studies, and field experiences. Prerequisite: One year of university study.

Course deletion: RECR 2083 Introduction to Community Recreation

Program Change :

Environmental Arts Option

1. Biol 2033; 3h from Envs 2643, Recr 1163

2. 12h from Hist 2283, Econ 2713, Nutr 1513, 2613, Pols 3883, Envs 3113 or Idst 3103,

3. 15h with 3h from each of:

a) Engl 3523, 3533, 4313*, 4323*

b) Crel 2413, Phil 2303

c) Biol 3363, 4423; Econ 3713, 4813; Envs 3523; Geol 1063, 2753; Recr 3563, 4423, 4263; Chem 1013, 1023

4. Envs 4013

5. Students must take a minimum of 6h from each faculty

6. A 6h thesis may substitute for one of the 3h courses in section 3

7. Students fulfill the Environmental Arts Option (36h) while also completing a BA major, double major, or honours in regular subject areas.

Becomes:

Environment and Sustainability Studies Major

The Environmental and Sustainability Studies (ESST) Major develops environmental leaders, managers, and professionals who are critical and insightful thinkers as well as creative problem solvers skilled in leading transformational change toward a more sustainable and just society.

1. 18h prescribed below that represent the Core in Environment and Sustainability Studies:

ESST 1003; RECR 1163; ESST 1023; ESST 2003; ESST 3003; ESST 4003

2. 3h *Core Concentration Course based on a choice of concentration area;* BUSI 2763 for concentration in Innovation & Entrepreneurship for Sustainability ESST 2013 for concentration in Environmental Advocacy, Education & Activism PHIL2303 for concentration in EnvironmentalThought & Practice RECR 2033 for concentration in Sustainable Community Development

3. 12 hours of concentration courses based on choices for the concentration according to the following lists.

• Innovation & Entrepreneurship for Sustainability: BUSI1703, BUSI 2753, BUSI 2733, BUSI 3753, BUSI 4553, BUSI 4613, BUSI 4633, BUSI 4643, BUSI 4963, IDST 2706X0, ESST 3103, EDUC 4891, ESST 2013, ESST 2003, ECON 2713, ECON 3313, IDST 3103, IDST 3213, IDST 2213, ENVS 2643, ENVS 3113

• Environmental Advocacy, Education & Activism: CREL 2413, EDUC 4890, EDUC 4891, HIST 2283, IDST 3103, POLS 3213, POLS 3483, PHIL 2303, POLS 3883, POLS 4843, RECR 3563, ECON 2713, ECON 3713, ENVS 3423, SOCI 2233, SOCI 2563, SOCI 3223

• Environmental Thought & Practice: IDST 3103, CREL 2413, ECON 2713, ENGL 3523, ENGL 3533, ENVS 2643, ENVS 3113, ENVS 3313, HIST 2283, HIST 3383, PHIL 2303, POLS 3883, POLS 3213, POLS 4843, RECR 1163, RECR 3563, RECR 4263, SOCI 3223, SRMK 3573

• Sustainable Community Development: ECON 3713, HIST 2283, HIST 3383, IDST 3103, IDST 3213, PHIL 2303, POLS 3213, POLS 3483, POLS 3543, POLS 4603, POLS 4843, SOCI 2413, SOCI 2563, BIOL 2033, BIOL 3363, BIOL 4423, ENVS 2643, ENVS 3423, NUTR 1503, BUSI 2753, BUSI 3723, RECR 1233, RECR 2563, RECR 3453 RECR 3563, RECR 4083, SRMK 3573

4. 9 h of courses selected from the lists for the other three concentrations listed above.

5. Students must take a minimum of 6h from each of the Faculties of Arts, Professional Studies and Pure and Applied Science in their degree.

(An honours component to this program and will be submitted during the first year of this new program.)

Faculty of Arts Course deletion: SOCI 2806: Gender and Sexuality