Memorial University’s Teaching and Learning Framework:
A Report by the Academic Support Advisory Group

The Academic Support cohort of Memorial University’s Teaching and Learning Framework Committee consists of personnel, from a variety of units, who assist students who are at various stages of their academic careers. Whether students are undecided about which program of study they wish to pursue, uncertain of their academic goals, are thinking about exploring new academic opportunities, seek assistance with their course curriculum or the development of the academic skills required for success in their courses, the departments represented by the Academic Support Advisory Group furnish students with sound, accurate, academic advice. Through such avenues as effective and information-rich recruitment strategies, spring academic advising sessions offered in high schools, and the Establishing Student Relationships Program, members of the Academic Support cohort aim to ease students’ transition from high school to university. In addition to, and in conjunction with, giving guidance to prospective and new registrants, the members of the group counsel current students of Memorial University: Memorial’s Writing Centre offers in-person and online peer tutoring in elements of academic writing to students in all disciplines and at all levels of study; Distance Education, Learning and Teaching Support (DELTs) develops and provides service and support for distance education courses/students, as well as the on-campus use of technology; the Retention Manager (Faculty of Arts) and the Maintaining Student Relationships Program aim to implement strategies to ensure student success and the retention of new and high risk students; and the libraries of Memorial University offer access to the world of scholarly resources in digital and print formats, expertise in information seeking, teaching and evaluation methodologies, innovative spaces and technology, and opportunities to engage in unique research and learning.

On many levels, the work of the various units represented by our group can be differentiated. In principle, however, our objectives are the same. Both individually and collectively, the membership of the Academic Support cohort recognizes its obligation and is committed to providing comprehensive academic support and guidance to all students throughout their academic career. We are committed to communicating to students, in a genuinely effective way, the availability of academic supports and the importance of proactively seeking guidance. We also recognize the importance of community and will actively create new forums with the intention of fostering collegiality among all of its members. In the interest of reifying, through courses of action, our mandate of accountability and responsibility to our students, we wish to bring attention to current obstacles to its realization, as well as offer recommendations for its optimal fulfilment.

First and foremost, a comprehensive assessment of the academic support services offered on all Memorial campuses would provide a foundation upon which to determine the practices of each academic support unit, the nature of the service each offers, and the resources each needs to provide effective assistance to students. Such a review would also lead to the disclosure of each unit’s student communication plan, so as to help us identify information that is overly disseminated to students and
issues that require increased publication. One manner in which we might better coordinate the information provided to students is through the creation of an academic support website that would supply descriptions, in detail, of all advisory units and the nature of the assistance they offer students. By design, the website would publish a wealth of important information organized in accordance with the kind of information students seek at various stages of their academic life. Such a website, which would serve as a central location at which students could find information, might be conceptualized as a virtual “mall.” A virtual “mall,” such as the one described above, would work to alleviate student anxiety regarding where to go for help should the need for assistance arise. At present, academic support units are not only varied in nature and in terms of the services they provide, but are also geographically spread out over our campuses so as to potentially alienate a new student who seeks academic assistance. Given this reality, the creation of an Academic Support Centre (both virtual and on-campus) is required. Beyond the need for a central location at which students can acquire information and the guidance they seek, an assessment of the effectiveness of the ways in which we currently communicate with our students is necessary. Specifically, it is paramount that we explore alternative modes of communication afforded by recent developments in technology and in the habits of the younger generations.

Collectively, the Academic Support Group would like to implement strategies to help facilitate, in a more fluid fashion, communication among units providing assistance and disseminating information to students. To help coordinate administrative processes associated with prospective and first-year students, the group recommends the development of a First-year Experience Office. Such an office would ensure that the dissemination of information to prospective and first-year students is timely, appropriately measured and distributed. Said office would also serve to ensure consistency among units involved with first-year programs, and that the unique needs of first-year students are met. An office designed to focus its attention on the first-year experience would foster greater retention of first-year students by facilitating early detection of, and pre-emptive alerts to, at-risk students at the first-year level. It would also foster consistency among units by ensuring that all personnel involved in assisting prospective and first-year students are authorized to employ the same student data base, so timely access to a complete student record and history of student contact might be possible. An office of a similar nature devoted to students who are beyond their first year of studies would promote greater retention at the upper levels and ensure effective, consistent and fluid dissemination of information and academic support for students at all stages of their academic careers.

It is the Academic Support Advisory Group’s belief that students of Memorial University are not currently provided with sufficient occasions and venues that could encourage them to become fully engaged in university life. One manner in which we might foster such engagement is by implementing compulsory Orientation and class attendance policies. Compulsory attendance at Orientation would provide a reliable forum through which the vast majority of first-year students could be apprised of the various academic support resources available to them. Required class attendance would promote greater student investment in, and engagement with, their studies.

The Academic Support cohort has noted that the dearth of informal gathering spaces for students, faculty and staff makes it difficult to build a sense of community among these groups on campus. An
increase in informal gathering spaces, like those mentioned above, would inspire the propagation of both organized and impromptu learning communities. Another manner in which to propagate a sense of community, consistency and cohesion within the institution would be to expand the research, computing, writing and tutoring support currently available in the Commons, as well as to broaden the Commons reach, with its peer support services in the areas of technology and tutoring, beyond the Library to other campus spaces (including Labnet classrooms). By hosting seminars and lecture series, the Library could offer faculty and students the opportunity to share ideas and disseminate research; it could also provide faculty and students with virtual platforms to enhance scholarly communications (e.g. open access publications and a research repository). One seminal aspect of the Library’s mandate is to link the learner and teacher to the body of research available (in digital or print) at the point of need. A manner in which to facilitate this process would be to embed subject liaison librarians into all academic programs.

It was noted frequently during our discussions that inadequate space is an on-going concern for the majority of our help centres, as is the need for a substantial increase in peer tutors. It is evident that the Directors of our centres do not have sufficient support, and, in some cases (the Writing Centre’s being one), it is recommended that a full-time assistant/coordinator be hired. A further recommendation is that funds be made available to hire a substantial additional number of writing tutors. Problems stemming from university-wide space constraints are compounded by the fact that the majority of departmental resource centres have to be used for multiple purposes, including, in many cases, classes and committee meetings. Such space limitations present obstacles to an effective, fluid teaching and learning environment, as does the fact that many classrooms are poorly equipped, inconsistently maintained and are thus woefully inadequate.

In the interest of ameliorating student engagement in academic study and university life, as well as developing students’ proficiency in critical reading and writing skills, members of the Academic Support Advisory Group recommend the creation of a compulsory, first-year, multi-disciplinary course designed to cultivate the skills necessary for effective academic research and writing. Fortunately, some potential groundwork for the above has already been formulated in, and could be adapted from, a pilot course that was once created for the Faculty of Arts as a single-term venture. (For a detailed explanation and outline of said course, please see Appendix A.) It is important to note that the proposed course, entitled “Critical Inquiry in the Arts,” was given that name when its authors were constrained to create a model specifically for the Faculty of Arts. Nevertheless, given its learning objectives and multi-disciplinary context, there is no reason why this model could not be used for critical inquiry into other academic areas, as well. Of further note is the fact that the proposed course in Appendix A was designed with a one-semester, thirteen-week curriculum in mind. What the Academic Support Advisory Group advocates is the expansion of said curriculum into a compulsory, year-long, multi-disciplinary course designed for all incoming students, the first term of which would concentrate on critical reading, writing, and thinking, and the second term of which would embrace research skills, as well. The many sections of the course would be taught by instructors who genuinely wish to embrace this new paradigm, and who would receive appropriate in-service training in advance.
The Academic Support Advisory Group also recommends the creation of a mandatory course/section of a course in which students are apprised of all the academic supports available to them. It was mentioned that this information could be presented to students through a required fourth credit hour attached to all sections of English 1080, conducted on a rotating basis by appropriate instructors, focused on university success. Through this mode of delivery, the information offered to students regarding the academic supports available would be supplemented with instruction on time management and study skills development. Emphasis would be placed on the importance of students accepting their own responsibility in proactively seeking advice and in planning their program of study. Such a course would offer students the tools necessary to establish a sense of independence and to stake a greater claim in their post-secondary education.

In the interest of filling a perceived lack in student engagement and sense of community, the group’s attention was brought to an excellent first-year model (designed and adopted by Longwood University of Farmville, Virginia) that embraces students in the university community from admission through to the end of their first-year of study. The group feels said model is worthy of review by those who are interested in engaging first-year students in the academic learning process. As you will see in the program’s explanation in Appendix B, the aforementioned model includes a ten-week, online, extended summer orientation in which peer mentors work with a group of twenty-five students, discussing the contents and complexities of a single work of literature all incoming students read in common. In the Longwood model, this forum also serves as a platform through which students’ queries and anxieties regarding university life are addressed. Such a program can only foster student engagement and a sense of community, as well as breed a better understanding of the levels of academic inquiry, textual engagement, argument and written expression expected at the university level.

In addition to the above recommendations, the Academic Support Advisory Group sees the need for the creation of a full-time, senior management position, such as a Vice-President or Associate Vice-President, for the supervision and coordination of student support services. Such a position would ensure effective, appropriately measured, efficient and consistent communication with students. The successful implementation of said supervisory post would inevitably lead to the necessary assessment, on a regular and systematic basis, of the effectiveness and cost-efficiency of the various academic supports and services provided. Paramount to the implementation of all the above communication strategies, learning tools, educational programs, human resource and office expansion is the establishment of an Academic Support Advisory Committee.
Appendix A

Critical Inquiry in the Arts:
A Collaborative Project to Address the Needs of Memorial’s First-Year Students
A Framework

Developed Winter/Spring 2008

Maureen Dunne, Instructional Development Office
Janet Goosney, Queen Elizabeth II Library
Shannon Gordon, Queen Elizabeth II Library
Ginny Ryan, Writing Centre

Central Goal of the Course:

To actively engage students in the process and standards of student scholarship within their prospective disciplinary areas.

Course Objectives:

1. Students will read and respond critically to selected texts.
2. Students will identify and practice skills that will enable them to engage independently with self-selected texts (both in reading and writing).
3. Students will contrast and compare a variety of texts on a particular topic.
4. Students will determine a ‘position’ from which to develop an argument or line of reasoning.
5. Students will identify an information need and develop and focus a valid research query.
6. Students will identify and apply a variety of university-level research tools.
7. Students will engage in ideas through writing that is fluent and effective.
8. Students will apply standards of academic integrity, including correct use of citation styles.
9. Students will demonstrate competence writing in a variety of academic genres: summary, critique, position paper, research paper, annotated bibliography, etc.

Module 1: Introduction to student scholarship/structure in the discipline/values of scholarship

<table>
<thead>
<tr>
<th>Time:</th>
<th>Course Objectives - students will:</th>
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<tbody>
<tr>
<td>1 week</td>
<td>8. apply standards of academic integrity, including correct use of citation styles.</td>
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<td></td>
<td>9. demonstrate competence writing in a variety of academic genres: summary, critique, position paper, research paper, annotated bibliography, etc.</td>
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Content:

1. *Introduction to Academic Integrity at the University Level*

**Students will:**

- Examine their personal expectations of the experience of a university education
- Read and respond to Memorial’s statement of students expectations, (currently in draft form)
- Respond to text and discussion of the role of a university and its concurrent responsibilities to the society it serves
- Discuss the concept of scholarship in the context of the pursuit of knowledge
- Identify the reasons why ethics and academic integrity are important in scholarly work

2. *Overview of the focus discipline*

**Students will:**

- Examine the breadth of the field of study in this discipline, and its dominant research issues or questions
- Survey the research approaches generally applied in this discipline
- Read samples of texts in the various genres of the discipline
- Identify the principal sources of information [both popular and scholarly] for this discipline
Module 2: Engaging with text

<table>
<thead>
<tr>
<th>Time:</th>
<th>Course Objectives - students will:</th>
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<tbody>
<tr>
<td>2 weeks</td>
<td>1: read and respond critically to selected texts</td>
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<tr>
<td></td>
<td>2: identify and practice skills that will enable them to engage independently with self-selected texts (both in reading and writing)</td>
</tr>
<tr>
<td></td>
<td>4: determine a ‘position’ from which to develop an argument or line of reasoning.</td>
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</tbody>
</table>

**Content:**

1. **Pre-Reading & Re-Reading**

**Students will:**

- Explore the structure of research sources – e.g. books, periodical articles, etc.
- Develop strategies for pre-reading books and articles to determine their appropriateness as a research tool
- Use reflective note-taking strategies to conduct an in-depth re-reading of an article, recording significant quotations and ideas and recording their own corresponding thoughts, responses, and questions

2. **Summarizing & Critiquing**

**Students will:**

- Develop a narrative-style response in which they organize and synthesize the significant quotations, questions and ideas recorded in the reflective notes.
- Develop a statement that summarizes their own position on the article

3. **Peer Review and Dialogue**
**Students will:**

- Read and respond to each other’s narrative response and statement of position, developing higher-order questions about the work of their peers

**Module 3: Writing effectively for different purposes**

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<tr>
<th>Time:</th>
<th>Course Objectives - students will:</th>
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<tbody>
<tr>
<td>4 weeks</td>
<td>1: read and respond critically to selected texts</td>
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<tr>
<td></td>
<td>2: identify and practice skills that will enable them to engage independently with self-selected texts (both in reading and writing)</td>
</tr>
<tr>
<td></td>
<td>3: contrast and compare a variety of texts on a particular topic</td>
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<tr>
<td></td>
<td>4: determine a ‘position’ from which to develop an argument or line of reasoning</td>
</tr>
<tr>
<td></td>
<td>5: identify an information need and develop and focus a valid research query</td>
</tr>
<tr>
<td></td>
<td>7: engage in ideas through writing that is fluent and effective</td>
</tr>
<tr>
<td></td>
<td>8: apply standards of academic integrity, including correct use of citation styles</td>
</tr>
<tr>
<td></td>
<td>9: demonstrate competence writing in a variety of academic genres</td>
</tr>
</tbody>
</table>

**Content:**

1. **Discipline-specific styles of writing**

**Students will:**

- Summarize one assigned text (article, textbook chapter, case study, etc.), with feedback
- Summarize and responding to one assigned text, with feedback
- Compare/contrast two assigned texts, with feedback and peer review
- Compare/contrast two or more assigned texts and develop/justify personal position on topic
- Create other short text(s) in accordance with specific disciplinary demands (i.e., short proposal, case study, lab report, etc.)
2. Research/Writing process, examined

Students will:

• Engage in the process, using assigned readings, of developing a tentative research question from a given topic
• Engage in strategies to refine a broad research question into a narrowed one
• Explore the process, using the assigned readings, by which a research question can be developed into a working thesis statement

3. Writing with fluency and academic integrity

Students will:

• Employ appropriate documentation style
• Integrate and utilize quotations
• Learn how to paraphrase
• Effectively incorporate quotations and paraphrasings from two or more sources into a piece of writing

4. Peer/Professor/Assistant Review and Dialogue

Students will:

• Engage in review of their own and other’s work, with peers, faculty and/or writing centre assistants, at various stages throughout this module

Module 4: Researching critically and effectively

<table>
<thead>
<tr>
<th>Time:</th>
<th>Course Objectives - students will :</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 weeks</td>
<td>1: read and respond critically to selected texts</td>
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<tr>
<td></td>
<td>2: identify and practice skills that will enable them to engage independently with self-selected</td>
</tr>
<tr>
<td></td>
<td>texts (both in reading and writing)</td>
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<td></td>
<td>4: determine a ‘position’ from which to develop an argument or line of reasoning</td>
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</table>
Content:

1. Elements/stages of research process

Students will:

- Understand the nature of different types of sources (books, articles).
- Identify their research needs, and engage in effective research strategies. These include:
  - applying basic search techniques for finding books and articles
  - using intelligent search strategies to refine basic searches
- Evaluate sources to determine whether they are appropriate and meet their information needs.

2. Citation styles

Students will:

- Build upon citation styles and standards of academic integrity introduced in Module 3
- Develop reference citations according to the accepted style(s) of the discipline
- Create an annotated bibliography based on a research question of their choice (with instructor’s input/ approval)

5. Professor/Peer Review and Dialogue

Students will:

- Review and respond to each other’s annotated bibliographies, posing higher-order questions and considering possible ways to strengthen the body of research
- Engage in one-on-one feedback sessions with the instructor and TAs, to examine the annotated bibliography and discuss research progress
Module 5: Evidence/demonstration of the development of student scholarship

<table>
<thead>
<tr>
<th>Time:</th>
<th>Course Objectives - students will :</th>
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<tbody>
<tr>
<td>3 weeks</td>
<td>1: read and respond critically to selected texts</td>
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<td></td>
<td>2: identify and practice skills that will enable them to engage independently with self-selected texts (both in reading and writing)</td>
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<td>9: demonstrate competence writing in a variety of academic genres</td>
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Content:

1. Reflection & Application

Students will:

- Produce a short piece of work in one of the genres of the discipline explored during earlier modules
- Develop a line of argument in that piece that is supported with properly cited resources, located during module 4
- Demonstrate critical analysis of the selected texts
- Participate in reflective activities on the process of critical reading, writing and research. This process may use online technologies.
- Publish a selected piece of work – publication format to be decided

1. Peer/Professor/Assistant Review and Dialogue

Students will:
• Develop a set of rubrics for use in peer review
• Participate in peer review of class work
• Work in groups to apply the rubrics and to give each other feedback
• Participate in one-on-one writing conferences with the instructor or Writing Center teaching assistants

Works Cited


Stassen, M. (2000). "It's hard work!": Faculty development in a program for first-year students. In M. Kaplan and D Lieberman (Eds), To Improve the Academy, 18, pp. 254-277. Bolton, MS: Ankar Publishing.
Appendix B
Retention (Faculty of Arts):

*Longwood University, Farmville, Virginia has an excellent first year model that embraces students in the community from admission and through to the end of first year. Their model is worthy of review by those who are interested in engaging students (especially first year) in the academic learning process.

In summary they provide:

- A seamless transition for new students from recruit through to the end of first year. This effort is coordinated by the Office of First Year Experience [http://www.longwood.edu/newstudent/](http://www.longwood.edu/newstudent/).
- They place a “focus on the overall success and holistic development of new students”

What they offer:

- Early Orientation Program for all students in June
- A 10 week, online, extended summer orientation (Peer mentors work with a group of 25 students. The same peer mentor stays with the same group throughout the entire first year [http://www.longwood.edu/newstudent/33528.htm](http://www.longwood.edu/newstudent/33528.htm)) – The 1839 Experience
- First Year Reading Experience – all first year students are to read the same piece of literature over the course of the summer. The book is discussed on-line as well as during orientation. The book is required component of Longwood Seminar and has additional programming and course integration [http://www.longwood.edu/newstudent/firstyearreading.htm](http://www.longwood.edu/newstudent/firstyearreading.htm).
- New Lancer Days – Four Day, required welcome program – academic credit (10 – 15% of grade through a reflection paper) [http://www.longwood.edu/newstudent/newlancerdays.htm](http://www.longwood.edu/newstudent/newlancerdays.htm).
- Longwood Seminar – 1 credit, required general education goal [http://www.longwood.edu/newstudent/firstyearreading.htm](http://www.longwood.edu/newstudent/firstyearreading.htm).

This information was gathered from an Academic Impressions WebConference entitled “Effectively Incorporating Peer Mentors Across First Year Student Programs”.
1. Theoretical / philosophical foundation

1.1 Working definition of the focus topic

The focus topic is how teaching and learning complement MUN’s research agenda as expressed in MUN’s Strategic Research Plan. This topic is often referred to as the teaching-research nexus, implying that there is a connection between the two areas. The actual degree of overlap between the two activities will likely vary from a little to a large amount depending on the academic discipline.

1.2 Underlying philosophy

The two main functions of a university are teaching and research, which are complemented by the university’s commitment to community service. While it is possible to see these as distinct activities, the history of university education shows that they are complementary. Engagement in research enlivens teaching. The engagement of students and the knowledge gained through teaching contributes to research activities. Rather than seeing one of these activities as subordinate to the other, it is when both activities are aligned to contribute to the other that a university community is able to make its biggest contribution to its faculty, students and society.

To use a metaphor, the nexus can be viewed as a reef knot. Just as both ends of the string get to be on top at more than one point in the knot, so it is not a matter of whether teaching/learning or research is privileged; the knot relies equally on both ends of the string, which are in constant contact and interaction. Similarly, the reef knot is only viable when the two ropes it is meant to link together are of the same size; otherwise, it slips and fails.

Academic conceptions of the relationship between research and teaching will vary according to departmental and other academic and social groupings. Individual members of a university community may, in practice, make a greater contribution in one area than another. However, common ground can result from a focus on knowledge creation, rather than on knowledge as a ‘thing’ or just information. From this perspective, knowledge is inseparable from the knowers.

Teaching and research intersect when we focus on the experience of research, on the discovery process, on meaning-making and skill development. A university, as a community, needs to pursue excellence in both of these activities and enhance the ability of each to support the other. In this regard, it is crucial that the plans that Memorial is developing to respond to the changing demands in education and research complement each other and support the overall goals of its strategic plan.
1.3 Value for student learning

The enterprises of teaching, learning, and research share the goal of contributing to the intellectual development of students (and other participants) as well as enhancing significant learning and consequently lifelong learning of students. Encouraging some integration between teaching and research by both instructors and students helps promote intellectual curiosity and enquiry.

For students, the process of conducting research (even small scale research projects) promotes critical thinking, an understanding of knowledge creation, and a higher level of learning. Research experience is also essential for graduate studies and career advancement. An understanding of research is achieved by encouraging the development of skills such as autonomy, independent thinking, judgment making, reflection, and the promotion of changing and evolving beliefs (i.e., the promotion of open-mindedness).

2. Application

2.1 General description of recommended approaches for the teaching-research nexus

Research-informed teaching and learning practices can be classified in various ways, which are not necessarily opposing or mutually exclusive. Teaching approaches include, but are not limited to (a) the implicit ‘knowledge transfer’ theory of teaching, which is described as a more teacher-centered approach; and (b) the implicit ‘shaping’ or formative theory of teaching, which is described as a more student-centered approach. Learning approaches include but are not limited to (a) acquiring basic knowledge of facts or curriculum content; and (b) formative learning, or learning how to acquire and create knowledge within one’s discipline or across disciplines.

The types of teaching and learning approaches used may depend on the objectives of the course, on the materials involved, and on the class size. Some approaches are appropriate for the goal of attaining a high level of current subject competence. In contrast, other approaches are more appropriate for conveying the experience of research, the discovery process, knowledge creation, and the development of skills such as autonomy and independent thinking. In general, teaching and learning approaches will balance the need for subject mastery (learning the subject matter) with the need to learn how to process, evaluate, and use the subject matter. Substantial differences in approach may be appropriate within the context of diverse student experiences and discipline-specific or interdisciplinary subject matter.

In our experience, students tend to like teacher-centered approaches because they represent the traditional model with which they are most familiar. Moreover, many students expect that the purpose of teaching and learning approaches is to provide students with all of the knowledge required to get an ‘A’. (We need help change student expectations to allow faculty members to feel able to move toward a student-centered approach.) However, a sizeable percentage of students also recognize the value of student-centered teaching and learning approaches. Such students take responsibility for their learning path or goals through completing activities, assignments, readings, etc., outside of the lecture setting. Within a student-centered context, the role of the teacher can perhaps be viewed as more of a facilitator or mentor, in that the student
has to engage in dialogue (written or oral) with a person in order to ascertain if his/her learning path and goals make sense.

### 2.2 Examples of how the research-informed teaching and learning approaches could be implemented

#### 2.2.1 How could research-informed teaching and learning approaches be demonstrated at the lesson level in the classroom? Over a full course?

Regardless of the approach, teaching and learning are usually best facilitated through clear, organized, and interesting class sessions.

In addition to promoting basic subject competence, class sessions can promote a research culture through the following mechanisms.

- Assignments that investigate the status of a current research question; students comment on the nature of the question, the various approaches to addressing the question, and the differing conclusions of various researchers.
- Discussing current research-related topics or controversies covered by the media within lectures.
- Activities that enhance the understanding of research methods through meaningful application; using discipline-specific or interdisciplinary methodologies and skills on real-world data (for example, through labs).
- Assignments that build in a small-scale research activity.
- The modeling of values in the classroom: “[higher education] is grounded in a deep understanding of the provisional nature of knowledge. … From this understanding flow values that should characterise [sic.] any learning activities at this level (research, after all, is a form of learning).” [Baldwin 2005:9] Values such as respect for evidence, objectivity, skepticism, openness to the new, tolerance of ambiguity, etc. can be modeled by the teachers in the classroom.
- Lectures or modules that incorporate the teacher’s current research into the curriculum; the lecture/module introduces new knowledge, and demystifies the processes involved in creating new knowledge.
- Lectures or modules that contextualize current research findings, conveying to the students a sense that the discipline (or interdisciplinary approach) is dynamic and evolving.
- Structuring learning experiences that require students to develop research-relevant values.

In order to ensure that the above suggestions are student-centered, we need to conduct (or review) discipline-specific research in order to find out which teaching practices best promote learning.

Outside of the classroom, an understanding of research culture can be implemented through:

- Involving students in departmental research projects.
- Encouraging students to utilize the research-focus employment programs, e.g. MUCEP or SURA, as employment options.
Complementarity with the MUN Research Plan
Final document, April 11, 2011

- Designing activities outside of the classroom that involve students in the research culture of the department (e.g., seminars, research groups);
- Incorporating such activities into the class curriculum (e.g., through building assignments that require reflection about a departmental seminar).
- Experiencing ethical review procedures, which allow both students and teachers to develop the ability to deal with sensitive topics, and the ability to balance personal and professional relationships between students, faculty, and research participants in an appropriate way.

It is an ethical responsibility for teachers to be informed about the most appropriate methods of assessment and teaching strategies. Teachers should aim for a match between core objectives, methods of teaching and methods of assessment in the classroom. This ideal can be achieved through research, for example, engaging in reading the research literature on teaching practice in a specific discipline or in an interdisciplinary context. In addition, the university has a responsibility to make these resources available to staff, e.g., through staff development courses.

2.2.2 What would be the observable cumulative effect of research-informed teaching and learning approaches if they were consistently applied throughout a full program (degree, diploma, etc.)?

The cumulative effects of research-informed teaching and learning approaches would be subject mastery, a deep understanding of knowledge construction, lifelong learning, and an increased interest in post-graduate studies.

2.2.3 What are the anticipated implications for graduating students?

Through research-informed teaching and learning approaches, graduating students will acquire:

- A deeper understanding of the subject material.
- An understanding of the impermanent nature of knowledge.
- Tools for constructing and evaluating knowledge.
- An understanding of the values underpinning knowledge construction.

2.2.4 What is the anticipated impact on the institution?

The anticipated impact of implementing research-informed teaching and learning practices at Memorial is that the university will meet its mandate to deliver higher education. Memorial will gain a reputation for being an institution of knowledge co-creation. Faculty, postdoctoral fellows, lecturers, students, and staff will be fully engaged in the related processes of teaching, learning, and research.

3. Evaluation: How could the success of research-informed teaching and learning approaches be measured?

There is no easy answer to this question.
Quantitative studies typically reveal no correlation or a weak correlation between faculty research productivity and classroom performance. However, such studies have been the subject of substantial criticism. Quantitative studies typically look for correlations between (easy to obtain?) research indices (such as a weighted number of publications) and, for example, student surveys that use Likert scales to quantify the relationship between research and teaching/learning. One main criticism of such approaches for evaluating the teaching/learning/research nexus is that the potential correlations examined are too narrow, and consequently, fail to capture the true nature of the relationship between research, teaching, and learning. For example, students may respond more to local or regional research issues that may not result in larger numbers (or any number) of peer-reviewed publications. This example illustrates that good teaching/learning experiences can arise from research that is less valued from a strictly quantitative viewpoint.

For present purposes, perhaps the best way forward is to examine best practices in evaluation. To this end, we list ideal characteristics of good evaluation metrics, instead of focusing on the quantitative vs. qualitative debate. The following points are partly drawn from Zubrick et al. (2001:71-81).

- Distinguish between summative and formative evaluation in teaching, learning, and research.
- Develop systems that effectively evaluate the quality of teaching, research, and learning outcomes. In order to promote the teaching/research/learning nexus, it might be desirable to develop professional ‘nexus’ portfolios that integrate teaching, learning, and research. This could build upon or compliment the teaching dossier by including artifacts and reflections on teaching and research which faculty could selectively share with others.
- Effective evaluation systems for research, teaching, the impacts of research on teaching/learning, and vice versa, cannot be solely quantitative. Evaluation at the institutional level needs to be heavily informed and influenced by the individual, discipline-specific, interdisciplinary, or local context. This will help to avoid the imposition of institution-wide standards that can only compare apples and oranges; it will also help to preserve academic freedom. Here are some examples to illustrate that evaluation systems should be context-dependent:
  - A research program that deals with matters that interest only a few students will have lesser impact on teaching and learning than research efforts that capture the broad interest of the students.
  - Researchers may be erroneously judged as ‘unproductive’ during a period when they are developing a book publication. Meanwhile, such a publication might constitute a major contribution to their field of research and teaching.
  - A quantitative measure of an individual’s publications and grant applications should be counterbalanced by a (subjective?) assessment of the quality of the publication or publisher, or the relative success rate of the grant competition.
  - Effective evaluation systems for teaching and learning will be similarly heavily context-influenced, and will involve:
    - A critical understanding of the kind of information provided in student course evaluation questionnaires; consensus about how to interpret such information.
• Peer-review systems that critically review how teaching relates to research interests. (One
caveat is that a teacher/researcher may be assigned to teaching that does not reflect his/her
research interests. In such cases, one could perhaps document how one’s research interests
have broadened, or been influenced by, teaching outside of one’s area of interest.
• Peer-review systems that critically review how scholarly approaches to one’s field
influence teaching and learning outcomes.
• Peer-review systems that critically review how applied practice in one’s field influences
teaching and learning outcomes. For example, applied practice nursing, medicine, social
work, and psychology is extremely beneficial to informing teaching, and also has the
benefit of ensuring subject and skill competency for both teachers and learners.
• Suggested evaluation mechanisms that could be appropriate to each level are:
  • At the lesson level in the classroom: summative, formative
  • Over a full course: summative, formative
  • Over a program, in our graduating students, and at the institutional level: general
evaluation models such as Stufflebeams' CIPP model; Kirkpatrick’s learning and training
evaluation theory.

4. Alignment of the Strategic Research Plan with the Teaching and Learning Framework

4.1 Which aspects of the Strategic Research Plan enhance the teaching/research nexus?
• Some of the Guiding Principles of the Strategic Research Plan could enhance the teaching-
research nexus. They include:
  • “Valuing ... the translation of knowledge into ... other forms of community engagement.”
  • “…building capacity for research that … [c]ontributes to education through the provision
     of academic programs of international calibre.”
• Some of the specific goal objectives also would definitely enhance the teaching-research
nexus. They include:
  • 1.4 and 1.5 which call for increased support for student participation in research activity
  • 2.6 and 2.7 which call for increased availability of research information tools and support
    as well as development and maintenance of top-quality research infrastructure, spaces,
    equipment, and support technologies. Support for teaching/learning could be included in
    such infrastructure development

4.2 Which aspects of the Strategic Research Plan should be carefully monitored to ensure
    that the Research Plan does not undermine teaching or the teaching/learning nexus?
• The Mission Statement for the Strategic Research Plan says nothing about teaching and
learning. Similarly, the Strategic Research Plan itself is totally research–oriented; it
downsells teaching/learning by ignoring it totally. There is, however, specific mention of
community service.
• There are valid reasons for having separate Research and Teaching frameworks. However,
having separate Research and Teaching frameworks also promotes an unhealthy culture of
compartmentalization. We reiterate that teaching and research are integrally linked, and are
not completely separate entities.
To ensure that both teaching and research are equally valued, Objective 1.2 of the Strategic Research Plan should be monitored particularly carefully: “In hiring, consider prospect for research success in Memorial’s research environment.” While consideration of a potential faculty member’s prospects for success in Memorial’s research environment is important, it must be balanced with an appropriate (disciplinary or interdisciplinary) consideration of the candidate’s potential contributions to teaching and learning. In addition, depending on the nature of the position, the expectation of equality in research and teaching should be emphasized for incoming faculty members.

5. Implementation

In the face of pressures to split apart the teaching/research nexus, the relationship between teaching, learning, and research needs to be deliberately and actively managed and supported. We include the following suggestions for how to promote knowledge construction and an understanding of knowledge construction, both of which are at the heart of the nexus.

- Goal 1, Objective 1.1: “Increase promotion of Memorial’s research opportunities”
  - Include students on research projects.
  - Report on student research projects.
  - Supervise grad student theses, comprehensive papers.
  - Improve resources and administrative support available for promoting research in the classroom. For example, enable the development of a course-based research manual, so that professors can bring research materials into a class.
  - Increase supports for sessional teachers, so that they can, for example, avail of instructional development grants in order to incorporate research and best teaching practices into the classroom.
  - Increase supports for sessional lecturers by sharing resources, freeing up time to enable them to teach and research effectively.
  - Ensure that faculty, postdocs, students can manage their commitments in order to meet deadlines.

- Goal 1, Objective 1.4: “Increase support for graduate students to engage in research activity.”
  - Provide access to software applications, technologies needed, research space (office space)
  - Encourage and support student research positions (e.g., through GradSWEP opportunities). Grants to students can have the effect of freeing up students to learn about research instead of having to pursue monetary support (jobs) outside of the university.
  - Consider increasing funding to grad students, in order to compete with mainland universities for top quality graduate students.
  - Consider implementing a flexible university timetable for courses.
  - Provide financial incentives for graduate students to disseminate research findings, including conference presentations and publications.

- Goal 1, Objective 1.5: “Increase support for undergraduate students to engage in research activity.”
  - Include undergrad students on research projects.
  - Report on undergrad student research projects.
  - Supervise Honours student research projects and papers.
• Promote student research in undergraduate courses (through, for example, research assignments and papers).
• Conduct research through offering upper-level seminar/research courses to undergrad and grad students.
• Encourage and support student research positions (e.g., through MUCEP opportunities). Grants to students can free up students to learn about research without having to pursue monetary support (jobs) outside of the university.
• Consider implementing a flexible university timetable for courses.
• Goal 1, Objective 1.6: “Increase support for research fellows and trainees to engage in research activity.”
  Consider implementing incentives to enable ASMs to restructure courses with the goal of enhancing the teaching-learning-research nexus.
• Goal 1, Objective 1.8: “Increase mentoring for researchers.”
  Offer discipline-specific or interdisciplinary research methods courses.
  Offer meaningful supervision to students.
  Offer cross-discipline research opportunities to students.
• Goal 2, Objective 2.2: “Increase fostering of interdisciplinary collaborations and research.”
  Offer more cross-listed courses. This would, however, require changes in faculty (and particularly department) perspectives as to course ‘ownership’.
  Develop mechanisms to compensate faculty for supervising interdisciplinary students.
  Create more cross-discipline research opportunities for students.
• Goal 2, Objective 2.9: “Increase supports for sharing research findings and outputs.”
  Share research findings through teaching, workshops, seminars, and conferences with student participation.
  Encourage faculty, staff and students to share publications and research data through an Open Access institutional research repository. For more information see the library web page about scholarly communications support tools at http://www.library.mun.ca/scholarly/index.php.
  Alternatively, since the above is time-consuming, encourage people to post materials directly to department websites.
• Goal 3: Engage with community partners and collaborators locally, nationally and internationally to create, share and apply research.
  Research and teach with community partners.
  Promote applied practice in one’s field. Applied practice in one’s field (e.g., in nursing, medicine, social work, and psychology) is extremely beneficial to informing teaching, and also has the benefit of ensuring subject and skill competency for both teachers and learners. It also adds to the ability to understand community based-needs and what is important in the area of research.
• Goal 3, Objective 3.1: “Increase recognition and value given to research collaborations and sharing of research findings with external partners and collaborators.”
  Offer teaching workshops, conferences, and seminars with moral support, recognition.
  Become more visible, more adept at knowledge transfer. (For example, the community sometimes does not recognize the caliber of individuals at Memorial and will go elsewhere to bring in speakers when there are significant competencies available at MUN.)
Complementarity with the MUN Research Plan
Final document, April 11, 2011

- Goal 3, Objective 3.2: “Increase facilitation of external engagement activities”
  - Offer webinars, seminars, guest lectures on subject of research
- Goal 4, Objective 4.1: “Track and assess the outputs, outcomes and impacts related to the Themes”
  - Track how knowledge gained from research is applied in teaching and how this may create further research opportunities.
- Goal 4, Objective 4.3: “Increase opportunities for Memorial researchers to communicate and collaborate with one another and with external partners and collaborators on research interests, activities and findings related to the Themes.”
  - Use tools like Yaffle to find colleagues who can share their research, experience, and expertise with a class.
  - (Monitor the effectiveness of Yaffle.)
  - Increase seminar series and webinars for researchers to teach others about their work.
  - Encourage faculty, staff and students to share publications and research data through an Open Access institutional research repository. For more information see the library web page about scholarly communications support tools at http://www.library.mun.ca/scholarly/index.php.

6. Bibliography


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Teaching and Learning Framework Initiative
Advisory Committee Report – Critical Thinking

Critical Thinking is an active analytical process that involves a complex interplay of cognitive skills. It is a disciplined way of thinking that includes recognizing unexamined and contestable assumptions, bravely contesting them, and founding knowledge more deeply. Critical thinkers gather appropriate evidence, evaluate it along with their own prior knowledge, and form a judgment that leads to rational actions or conclusions.

The capacity to think critically is what distinguishes the university graduate. Critical thinking encourages students to have justifiable faith in their own ideas and fosters an analytical independence of mind which is essential for engagement with learning and for the germination of knowledge. But it reaches further, for the application of this approach to the world outside academe can develop a more responsible and engaged citizen. The development of this skill in the student and the professor’s fostering of it is at the heart of our endeavour.

Critical Thinking should be an integral feature of all courses at all levels, first year to final year, undergraduate and graduate. It benefits the student and the teacher alike by creating a climate of mutual engagement and empowerment in teaching and learning. The students’ discovery of ideas as well as the professor’s encountering and taking delight in the fostering of that discovery are what generate the intellectual fire of the university.

Critical Thinking shows students how to
1) identify and focus the problem;
2) identify and reflect upon the impact of their assumptions;
3) present, assess and analyze appropriate supporting evidence;
4) consider the implications of diverse perspectives;
5) develop their own perspectives on the problem;
6) identify and assess conclusions and consequences;
7) effectively communicate their findings.

Critical Thinking can be taught and developed in multiple ways in a university setting -- from the well-prepared lecture, through the seminar, to problem-focussed assignments, to individual consultations, and through laboratory exercises. There are, however, requisite conditions for Critical Thinking to work for students. Students should know what is expected of them in the course or program and what they can expect to learn from it. Courses should build upon what they have learned in earlier courses and set the factual matter in an analytic or theoretical structure.

Disciplines vary. In some it is possible to include extensive Critical Thinking in the earlier years in what might be considered “cornerstone” courses or components of courses. For example, Philosophy currently offers a course in Critical Thinking for First-Years. In other disciplines where stress is first placed upon content, "capstone courses” could be created which both require an application of Critical Thinking in all aspects of the course and integrate all the skills required for the specific degree. Engineering 6101: Assessment of Technology is an example of such a capstone course.

All disciplines are encouraged to examine their course offerings and methods of instruction to explore ways in which Critical Thinking can be deepened. The University can emphasize the
importance it ascribes to Critical Thinking in its graduates by explicitly making Critical Thinking a focal point of Academic Program Review. By so doing it will be asking academic units to show how they integrate Critical Thinking into their courses and programs. The University can also ensure that academic support units (Library, IDO, DELT, and others) have adequate resources to support the integration of Critical Thinking into academic programs.
Teaching and Learning Advisory Group on Diversity at Home and Abroad March 18, 2011

Diversity@home/Abroad Scope:

• International students
• Students with disabilities
• Aboriginal
• Visible minority
• First generation immigrant
• LBTG
• Older than average
• Senior
• Rural
• Part-time
• Out-of-province
• Non-traditional
• Marginalized
• Limited English Proficiency
• Students interested in
  o Diversity experiences
  o International experiences
    ▪ @ home
    ▪ Abroad
• Younger than average (minors)
• Distance learners
• Religious minorities

Diversity@home/Abroad Definition: Graduates must be ready for diversity of world from becoming engaged with diversity in an inclusive and meaningful context. Diversity is the description of the mix of differences while inclusion is how the mix is leading to meaningful learning.

Diversity@home/Abroad Basic Principles

1. Students reflect many aspects of diversity

2. Students benefit from meaningful interaction with diverse people, at home or abroad.

3. Faculty and staff can be equipped with skills to accommodate diversity

4. Faculty and staff should have opportunities to experience diversity at home or abroad.

Diversity@home/Abroad Underpinning Philosophy:

1. the importance of social justice and responsible citizenship
2. the value of experiences to both teaching and learning
3. the improved creativity of a group made up of diverse backgrounds

**Diversity@home/Abroad Value to teaching and learning**

All students need to be equipped to face life in a diverse and globalized world, and this goal can be met through meaningful interactions with diversity in its multitude of forms, either on campus or abroad. It is important to highlight that students from diverse backgrounds may need extra supports in place, either academic or non-academic, in order to enjoy the full scope of the university experience on or off-campus. In order to enhance the classroom experiences of all students, we need to consider ways to allow all professors to increase skills in teaching students who learn in diverse ways and may require classroom accommodations. We also need to find mechanisms whereby professors can access diverse experiences on-campus and abroad in order for their classroom teaching to be more reflective of our diverse and globalized world.

**Diversity@home/Abroad Challenges**

- Coordination
- Plan for resource allocation
- Classroom and exam accommodation – physical needs, language needs, religious needs
- Implementing a culture change around valuing all forms of diversity.
- Diversity should not be presented as remedial or negative
- Quality and integrity of academic standards maintained.
- Balance between accommodation / human rights
- Professors are subject specialists but not necessarily trained in multi-need students
- Recognition of good teaching in terms of diversity

**Diversity@home/Abroad - some solutions**

- Graduate teaching program could require module in diversity awareness and teaching methods recognition for faculty that go abroad
- value specifically of study/work abroad
- specific academic courses that could address diversity issues
Sub-Committee on Experiential Learning
Report to the Advisory Group of the Teaching and Learning Framework Initiative

Introduction

Experiential Learning at Memorial University is far more ubiquitous than most people know. The consultations thus far have unearthed a huge continuum of activities that appropriately belong under this title. Although, it should be noted at the beginning, that some members of the sub-committee expressed a preference to call the committee Experiential Education. Through the discussions of the sub-committee a complex mixture of shared attitudes, pedagogy, audience, approach and value systems has emerged regarding experiential learning/experiential education at Memorial University.

One might hazard the view that experiential learning is the most ‘student centered’ pedagogy available to academics, practitioners and community partners. The sub-committee was adamant that the faculty and staff of the university should understand that experiential learning is not just ‘about professional schools’. Rather, it is present in almost every academic unit in some form, and is especially supported and refined by many of our colleagues in Student Services. Experiential learning is central to teaching and learning.

There was richness to the two focus group discussions which this deliberately short report no doubt fails to capture. Nonetheless, we have attempted to record the main themes, values and areas of discussion. The two face-to-face meetings on February 22nd and April 1st were further supplemented by Dr. Neville’s meeting with Co-operative Education Coordinators on March 30th, and by a number of e-mails to and from the committee members to Peter Rans, the Chair of this group. Accordingly, the comments in these pages represent a convergence of all of these attempts at discourse. All of the comments about Memorial should be understood to include the Marine Institute, Grenfell Campus and Harlow.

The Continuum and Definitions

There is of course no single definition of experiential learning that any one committee member would risk offering as conclusive and all encompassing. Nevertheless, appendix one offers a handful of statements that the committee believes approach such a consensus. Many practitioners would also agree that the theoretical underpinnings of experiential learning were well expressed by David Kolb in his famous model of four elements. Some would say David Kolb was the first to articulate this theory of learning. Suffice it to say that most experiential learning practitioners would recognize what they think they are doing in Kolb’s model. Another contender for the title of the Modern Father of Experiential Education is John Dewey, who wrote, ‘The belief that all genuine education comes about through experience does not mean that all experiences are genuinely or equally educative.’
Experiential Learning, properly understood, includes the following continuum of activities and models:

- Internships
- Preceptorships
- Practicums
- Co-operative Education Work Terms
- Service Learning
- Study Abroad
- Laboratory Work
- Volunteerism
- Field Work & Field Courses
- Mentorships
- Case Studies
- MUCEP Campus Employment
- Practice Learning
- Rural Placements

We have deliberately not attempted to order these either by their intensity, or duration. Nonetheless, it is noted that the model of Co-operative Education is the most complex, resource intensive and ‘longest’ of these experiential learning models, and in a visual model would appear at one end of the continuum. What also complicates the discussion of experiential learning is that there is no ‘absolute’ definition which encompasses all these models. For example, in some cases, an Internship is paid, or not paid. An internship might be as short as a few weeks when it is part of an academic course, or as long as the full-time 16 month, Computer Science Co-operative Education work placement. This lack of an agreed nomenclature often leads to misunderstandings for and between students, administrators, community partners and funding bodies.

In view of the variety of models in experiential learning, it is often possible for practitioners from one part of the university to be inadvertently competing with another program, especially where they share a common list of community partners, including government partners. Thus the marketing of our collective ‘services and programs’ needs to be more carefully coordinated once we recognize there is a possibility of two or more programs contacting the same employer.

**Shared Values**

There were three themes (values) that emerged, in particular, through our discussions. The first was that practitioners of experiential learning are not sufficiently valued or resourced on campus. Sometimes the view was that people, who see themselves as ‘research’ active, do not place as high a value on teaching. In addition, people who are primarily ‘in class’ teachers do not always view experiential learning activities inside of academic courses as suitably rigorous
(or academic). These attitudes create a hierarchy in which experiential learning practitioners finish at the bottom.

The second value, or view, was that until teaching is equally measured and equally rewarded in tenure and promotion decisions then the message is delivered that research activities trumps ‘teaching’. The absence of widely accepted quantifiable measures of teaching competence and excellence stalls the careers of many Faculty (and administrators).

A third value that appeared to gain widespread agreement was that experiential learning is one of Memorial University’s key forms of community engagement and community service. The patterns of relationship established by those active in experiential learning profoundly influence governments attitudes to operating funding, to recruitment and retention of students and faculty, to fund raising from the private sector and to an appreciation in the not-for-profit sector that students, faculty and administrators are available to engage.

Much of experiential learning’s contribution to community engagement was unknown or understated, perhaps inadvertently, throughout the university, in favor of assertions by others of the value of research. Some experiential learning practitioners suggest that our activities and models are actually applied research, or praxis. It is the interface with the community whereby experiential learning is creating innovators, or being the bridge to innovation.

**The Attributes of the Students We Want**

When experiential learning works the following is a list of the attributes we would expect to see in a student who has followed this path:

- Reflective
- Self Aware
- Places Value on Community
- Adaptable
- Holistic
- Confident
- Critical Thinker
- Comfortable Applying Knowledge
- Responsible (Citizen)
- Caring (Social Justice)

Many of these same attributes were recorded again when experiential learning practitioners were asked what experiential learning includes or fosters.

**Other Observations or Messages**

The sub-committee suggested that we have not yet sufficiently explored how we can use the technical and human resource capacities of DELT to support, record or reinforce experiential
learning. Indeed, there is an absence of measurement of the collective outcomes and varieties of experiential learning. Some of this capacity is being explored in learning e-portfolios, but e-portfolios are new to faculty, staff and students at Memorial so only a small portion are using them, in the same way that Yaffle is under used but growing. Despite the best efforts of experiential learning practitioners students do not always understand the true value of the experiential learning they have received until they graduate.

Accordingly, we should spend more time in showcasing, marketing and recording the achievements of our experiential learning students to demonstrate, to a broader community the value added of our services and programs. We should also note that our community partners make it possible to ‘educate’ our students in some things that cost Memorial little or no resources. The community partners make massive contributions to our students’ learning.

One committee member noted the importance of emotion to the learning process. That is, everyone is more able to access memories when strong emotion is attached to an event. Consequently, experiential learning adds more emotion to the learning process, thereby strengthening a student’s ability to access knowledge gained sometime in the future. These views represent a distillation of Dr. Mark Winston’s recent workshop.

There is no place within the academic and administrative structure where experiential learning is explicitly accountable, and no ‘champion’ within the senior administration to provide further impetus for development of more programs. Such a ‘champion’ could also ensure that there is an atmosphere across the University to encourage and facilitate experiential learning opportunities, rather than focusing exclusively on the “risks” these sometimes entail. Some members of the committee believe that we should celebrate that we are an Experiential Learning University, and that this understanding should be part of our collective “branding”. We are failing to distinguish what makes Memorial a superior learning institution.

In this regard an annual Memorial reward recognizing an outstanding student, a supportive employer or an innovative program administrator or faculty member working in experiential education, would be a significant advance and would bring more profile. Moreover, if MARCOM could focus on obtaining an inventory of current photographs of students in the workplace we could better promote experiential learning in all Memorial’s future communications with potential employers.

The CEC’s in Co-operative Education would welcome a mechanism across the university which would recognize Co-operative Education expertise, in a parallel promotion and tenure process. Indeed, such a mechanism might be extended to experiential learning coordinators in the disciplines not engaged in Co-operative Education.

Such ideas have led the sub-committee to conclude that an organization, like the sub-committee should continue beyond the delivery of the report of the Teaching and Learning Framework. If it did it should have an explicit mandate to more fully ‘map’ and document all of the experiential learning initiatives in progress at Memorial and create a living data base.
Moreover, the sub-committee should be an advocate for the creation of additional programs, resources and the interconnectedness of experiential learning, and act as a resource for educators and students at the University. Under certain conditions this body might make further explicit recommendations on the operation and growth of experiential learning and in programs where it does not exist.

The experiential learning sub-committee expressly wanted to note the value of this teaching and learning framework, but to also record a cautionary note. Failure to turn this exploration of teaching and learning into realizable actions would only encourage more cynicism and be a further demonstration of the imbalance between research and teaching and the value placed on each.

We appreciate the opportunity to make a serious contribution to your deliberations.

Respectfully submitted by Dr. Peter Rans.
Appendix 1

Experiential Learning Definitions:

"occurs when individuals engage in some activity, reflect upon the activity critically, derive some useful insight from the analysis, and incorporate the result through a change in understanding and/or behaviour. (Kolb, 1984, p.3)

David A. Kolb (with Roger Fry) created his famous model out of four elements: concrete experience, observation and reflection, the formation of abstract concepts and testing in new situations. He represented these in the famous experiential learning circle that involves (1) concrete experience followed by (2) observation and experience followed by (3) forming abstract concepts followed by (4) testing in new situations (after Kurt Lewin). It is a model that appears time and again.

Kirk also lends a simple definition:

![Diagram of the Kolb Learning Cycle](image-url)

(Kirk, 1987)

Experiential learning involves a, 'direct encounter with the phenomena being studied rather than merely thinking about the encounter, or only considering the possibility of doing something about it.' (Borza 1981: 9 quoted in Brookfield 1983).

Experiential learning occurs when students are immersed in an activity that is usually closely related to curriculum involving a reflective component. It offers the greatest model for preparing students for the workforce. (Cantor, 1995).
## Appendix 2

Sub-Committee – Experiential Learning

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TEACHING ACHIEVEMENT SHOULD BE VALUED, CELEBRATED AND REWARDED BY THE UNIVERSITY.

Introduction

The overarching theme of the deliberations of this committee is “culture.” In fact this element transcended the work of our committee; it seemed that every conversation at every meeting and every consultation abutted against the notion that the university culture needs to experience a significant shift so that teaching is valued and recognized, celebrated and rewarded by the university.

This point was often presented in contrast to how the university values and rewards research. Our committee does not see that the recognition (and value) of research and that paid to teaching is a zero-sum game but rather that the model of how research is rewarded and recognized can inform how teaching can be valued, rewarded and recognized.

We are heartened that teaching is front and centre in Memorial’s mission, which says that “Memorial University is an inclusive community dedicated to creativity, innovation and excellence in teaching and learning, research and scholarship, and to public engagement and service” and that the quality of teaching is reflected in the core principle: “Quality and Excellence – Memorial seeks to achieve the highest possible quality in the delivery of programs and services and the research it conducts, striving for excellence in all that it does.” Indeed, it would appear that Memorial recognizes the value of quality and excellent teaching to the institution and positions teaching and research as complementary activities.

However, as will be discussed in more detail below, there appears to be a contradiction between mission and reality as evidenced by a number of factors including the number of comments that presented this point of view. An indicator is the amount of teaching undertaken by non-tenure track instructors. For example, in the Sociology department, 69 percent of the students in 1000 and 2000 level courses are taught by people who are outside of the P&T evaluation process (i.e., teaching term appointments and per course instructors). Sociology does not seem to be an anomaly; in the university overall as of March 31, 2010, contractuals make up 51 percent of instructional staff, up from 40 percent in March 31, 2000. We suggest that this conveys a message to all constituents that teaching is an activity that can be undertaken by part time, lesser-paid instructors – and it is not valued. In fact, mechanisms for rewarding and recognizing teaching accomplishments will have to transcend the P&T process or else a large number of instructors will be overlooked.

Another example occurs when faculty are given teaching remissions for research output; the message is that teaching can be “filled” and takes second place in a hierarchy of the two primary (and supposedly equal) activities of research and teaching. This practice as it applies to new faculty serves as an enculturation to the hierarchical positioning of research and teaching.

We therefore contend that it is right and proper to have mechanisms, as will be outlined below, in place to support our mission, indeed to put our “money where our mouth is.”

We also note with interest that the notion of properly valuing teaching and creating rewards is gaining traction with other institutions that are implementing remedies to redress any inequality. Memorial’s opportunity to create a differential advantage by
implementing ways to value teaching, which could be used to attract funding, faculty and students, may be timely but also time-sensitive.

This report will discuss three aspects of how to move the university towards valuing teaching: (1) How teaching is evaluated; (2) How teaching achievement is recognized in the promotion and tenure process; and (3) How teaching achievement is rewarded by the university.

(1) How teaching is evaluated

To demonstrate a commitment to valuing teaching, Memorial must implement effective and equitable teaching evaluations that extend beyond course evaluations. While student rating scores provide one aspect of teaching effectiveness, they do not provide information on what a professor does, why s/he does it, or how s/he does it. Therefore, rating scores need to be augmented by data from other sources so rationale for pedagogical choices, expectations realized, and circumstances that promoted or inhibited teaching success become explicit (Seldin, Miller & Seldin, 2010).

One source of additional data is peer evaluation. A number of methods have been employed in formative peer evaluation. They include direct classroom observation, videotaping of classes, evaluation of course materials, and an assessment of instructor evaluation of the academic work of students. While the thrust of these approaches is developmental rather than judgmental (Keig & Waggoner, 1995), evidence of use by instructors provide evidence of instructor commitment. Indeed, continuous improvement of teaching, the effectiveness of pedagogy in promoting learning and meeting the course objectives, contribution to scholarly thinking about teaching can be thought to provide a basis of evaluating teaching achievement. The teaching portfolio can be used to provide tangible, concrete evidence of teaching achievement and has become quite widely used in Canadian universities (Seldin, Miller & Seldin, 2010) as it has at Memorial (the CAUT template is included as an appendix in the collective agreement). There may need to be support and guidance for those tasked with evaluating teaching dossiers, as well as for the individuals preparing the dossiers.

(2) How teaching achievement is recognized in the promotion and tenure process

Our committee recognized that how Memorial values teaching is captured in the language of many documents of the university, including the faculty collective agreement. The language does suggest a value on the teaching enterprise. Criteria for promotion outlined in 12.13 is (a) documented effectiveness and scholarly competence as a teacher and (b) a demonstrated record of research, scholarship, or creative and professional activities and (c) demonstrated record of academic service. Promotion to the rank of Associate Professor as outlined in 12.16 (d) notes “a demonstrated record of sustained excellence in teaching may be used to modify the usual standards applied under Clause 12.13 (b),” such that the standards of scholarship can be modified to give more weight to teaching. We are not sure how frequently this is invoked. In fact, the committee heard that it was common for new faculty to receive advice from their academic heads that they should concentrate on research productivity as research rather than teaching would be their route to promotion and tenure. It would seem overall counterproductive for the institution as a whole to discourage emphasis on teaching when the new faculty are no doubt keen, up-to-date on current methodologies, and can evaluate from personal experience effectiveness of
teaching methods. As well, the MUNFA collective agreement allows promotion to Full Professor on the basis of either 12.17 (c) (i) a superior record of research, scholarship, or creative and professional performance along with a satisfactory record of teaching effectiveness...or (ii) a superior record of teaching effectiveness...along with a substantial record of research. Therefore, teaching achievement is also a route to promotion and should receive equal emphasis in advice from academic heads and teaching remissions could provide time for new faculty to focus on course preparation, which should also be emphasized. Perhaps if more faculties, schools and colleges applied 12.15 and adopted more detailed statements of criteria than those set out in Article 12, more consistencies in the application of the Article by different Promotion and Tenure Committees may occur and the perception of research being favoured over effective teaching would change.

We present a summary of how the activity of teaching is reflected in collective agreements of Canadian Universities comparable to Memorial and make special note that measures of teaching effectiveness are delineated in some detail in the cases of Carleton University and University of Victoria.

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"Teaching" in Collective Agreements in Canadian Universities ("Comprehensive Universities")...

The Collective Agreements of several Canadian Universities delegate the establishment of criteria for tenure to individual departments and academic units (for example, Carleton, Concordia, Guelph, and Victoria). The MUN-MUNFA Collective Agreement permits Faculties and Schools to adopt more detailed statements of criteria than those set out in Article 11 the MUN-MUNFA Collective so long as such statements are consistent with the Collective Agreement and adopted in accordance with clause 11.28 (a vote of Faculty and approval by the Vice-President (Academic)). This may be a way for academic units to define or reflect on teaching and learning measurement as it relates to their discipline.

Carleton University’s faculty Collective Agreement provides for 5 teaching awards per year, each valued at $15,000. The awards are intended to enhance the teaching of their recipients and the quality of instruction at Carleton. The award may be taken as a research grant or as a cash bonus.

York University’s faculty Collective Agreement provides for a teaching-learning fund (see clause 19.31). The fund provides for $30,000 towards innovative teaching and learning projects to be carried out by individual members of the bargaining unit or academic units. A University-wide committee is responsible for the distribution of the award.

York University’s faculty Collective Agreement also provides $60,000 for teaching fellowship “release” time for individuals to enhance teaching skills and to develop teaching programs.

The Collective Agreements of several Canadian Universities delegate the establishment of criteria for promotion to individual departments and academic units, but most collective agreements address teaching effectiveness in clauses pertaining to promotion. For example, in Appendix B of the Collective Agreement with faculty at Carleton University, teaching is evaluated during consideration for promotion to the rank of Associate Professor,

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1 Compiled by Amy Wyse, office of Faculty Relations. More detail is available on request
“It is recognized that the evaluation of teaching performance is not easy. Effectiveness as a teacher should imply a concentrated and successful effort to create the best possible learning situation for students. It should involve continuing attention to course design and to alternative modes of presentation. A variety of means will be used to assess a candidate’s development as a teacher including evaluation by established colleagues (peers), possibly using the agency of a departmental committee. Student appraisal at the departmental level should be employed to supplement peer evaluation.”

University of Victoria collective agreement with faculty defines teaching effectiveness as:

“...the effectiveness of all of a Faculty Member’s methods and forms of teaching and student supervision that are described and evaluated in accordance with the Evaluation Policy of the Faculty in which the Faculty Member holds an appointment. Teaching effectiveness includes contributions to the Departmental or Faculty’s teaching program and to scholarship related to teaching as described in the Evaluation Policy of each Faculty. Scholarship related to teaching includes, but is not limited to, the following: (i) scholarly works relating to teaching, curriculum development or learning in a discipline in which such works would not normally form part of the member’s scholarly and professional achievement; (ii) presentations and addresses related to teaching, curriculum development or learning in a discipline in which such activities would not normally form part of the member’s scholarly and professional achievement; and (iii) contributions related to the Unit’s teaching program in the form of curriculum development, course design or other contributions that advance the Unit’s ability to meet its teaching responsibilities.

We encourage Memorial to include and emphasize its commitment to valuing teaching in the language and intention of its documents and processes.

(3) How teaching achievement is rewarded by the university

Achievement in teaching is often recognized through awards. However, some institutions have programs and initiatives that encourage faculty to reflect upon their teaching, identify new teaching goals, and acquire new skills (Baldwin & Chang, 2006). Here we provide (a) a summary of teaching awards from a sample of Canadian universities\(^2\) and (b) other mechanisms to recognize teaching achievement.

a) Teaching Awards: A review was conducted of how ten Canadian universities define and recognize teaching excellence. While internal, faculty- or department-based awards are common among all institutions, the review focused on institution-wide teaching awards. Information derived from the institutional websites indicates that, although there is a variety in the number of awards and the monetary value of those awards, the goals, criteria and procedures related to the granting of teaching awards are comparable to those of Memorial’s President’s Award for Distinguished Teaching. Excellence in teaching at Memorial is defined, through the President’s Award for Distinguished Teaching, as the use of creative approaches, sustained commitment to teaching, the generation of intellectual excitement, and the fostering of the development of students’ skills and interest in their disciplines. Excellence also includes educational scholarship and leadership. Most all institutions require nominees to present evidence of both teaching excellence and teaching leadership and three specifically mention the integration of teaching and research. Half of

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\(^2\) Complied by Allyson Hajek, Instructional Development Office. More detail is available on request
the institutions either included sessional and per-course instructors among the eligible nominees or established teaching awards specifically for this group.

Memorial can expand the recognition of teaching achievements through teaching awards by: 1) encouraging more awards at the school, faculty and department levels which would complement institutional level awards; 2) establishing a teaching award for members of LUMUN; and 3) establishing a teaching award for early career faculty members which would emphasize the importance of teaching at this stage, promote a balance with research, and support tenure and promotion applications.

In addition, the committee felt that Memorial should explore increasing the monetary value3 of the teaching award, but especially examine the responsibilities of the recipients as a means of increasing the profile of the award. For example, University of Toronto provides teaching award winners a professional development allowance of $10,000 per year for five years. Recipients become members of a “Teaching Academy” which meets regularly to discuss matters relevant to teaching, offers advice to senior university administrators and participates in a range of university events including addressing convocation, delivering public lectures and facilitating teaching and learning workshops. Similar high profile initiatives at Memorial would signal the value of teaching while creating a network and resource of committed teachers.

b) In addition to provide recognition through awards, increasingly universities are allocating resources to recognize and encourage teaching achievement. We discuss both general resource allocation towards creating excellent teaching and a more specific initiative: creation of Chairs of Teaching (name to be determined).

**Resources for teaching:** Some universities provide support for teaching related development activities, such as collegial support. For example, they support collaborative team teaching and helping professors pursue course or program development (Baldwin & Chang, 2006). This would also include support for scholarly activities around the area of teaching and learning (SoTL).

Resources can help facilitate faculty professional growth. For example, funding can be provided to permit a professor to attend a teaching conference or a workshop on a new instructional technique. Sometimes, release time can permit a professor to engage in an exciting teaching project or prepare to teach a new interdisciplinary course (Baldwin & Chang, 2006).

**Chairs of Teaching**

In the United States the issue of teaching in higher education has been prominent for about 15 years. Indeed the statistics in the Boyer report (Scholarship Reconsidered 1990) make clear that an overwhelming majority of U.S. faculty put teaching first. However, the new federal emphasis on the Canada Research Chairs is creating a climate where research is increasingly valued to the detriment of teaching. The differences need to be

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3 Memorial’s $5,000 award is on par with other universities such as McGill, Mount Allison and UBC.

4 The idea for Chairs in Teaching was presented to and approved by Memorial's Senior Executive Committee by Professor Shane O'Dea in 2002.
bridged and, to achieve that, teaching needs to be given a higher value than it currently has to put it on a parallel with research.

Establishing a Chair of Teaching would position Memorial in the forefront within Canadian universities creating a differentiator that could be used to attract resources and students/faculty, and make a statement about Memorial’s commitment to teaching that would resonate positively throughout the greater community, including government, parents, alumni, corporations and students. In fact this would address an increasing demand for excellent teaching within Canadian universities as reflected in Maclean’s survey and imitated by the Globe and Mail. In summary, creating a Chair of Teaching would achieve the following objectives: (1) foster excellence in teaching and learning at Memorial and across Canada; (2) raise the profile of teaching and learning at Memorial and across Canada; (3) create a distinctive profile (a niche) for Memorial; and (4) raise the profile of Memorial as a student-centered institution.

Summary:

The issue of Faculty Recognition is two-fold: 1. recognition of the importance of teaching and 2. recognition of excellent teachers. There is important work being done at Memorial to support faculty recognition at both of these levels, primarily through the Instructional Development Office (IDO). The IDO supports the university teaching community in enhancing teaching knowledge and skills. All faculty members, sessional instructors, lecturers, graduate students, and other professional teaching staff are invited to participate in the programs, events, and services that are made available through the Office. Academic units are encouraged to contact the Office for support in organizing group processes and procedures that enhance teaching and learning. In conjunction with the Alumni Association, Memorial established the President’s Award for Distinguished Teaching in 1989 which is coordinated by the IDO. However, this recognition of the importance of teaching is not pervasive. To reiterate, the predominate theme of most conversations around faculty recognition was that the university culture needs to experience a significant shift so that teaching is valued and recognized, celebrated and rewarded by the university. The old adage “publish or perish” seems to still be handed down to new faculty despite Memorial’s collective agreement language to the contrary. By systematically recognizing effective teaching by faculty, Memorial will ensure it addresses the perceived disconnect between teaching and research.

References


While Teaching Chairs and Academic Centres of Teaching Excellence have been established at American universities for some time, we note that only recently and sparsely has the idea been introduced at Canadian universities: Acadia has created chairs within its Divinity College; in 2006 UBC announced that Nobel laureate Carl Wieman would lead the Carl Wieman Science Education Initiative, a program designed to reshape science education at UBC; Mount Allison has established the McCain Professorship in Teaching; and Simon Fraser University has created a Centre for Dialogue which commits resources to innovation in teaching.
Interdisciplinary Cooperation in Teaching and Learning at Memorial University

Report of the Working Group on Interdisciplinary Cooperation

Ellen Waterman (chair), Nicholas Hartmann, Donna Hardy-Cox, Marion MacLeod, Peter Mezo, Caroline Porr, Linda Rohr, Sharon Barter Trenholm
Interdisciplinary Cooperation in Teaching and Learning at Memorial University

Submitted by the Working Group on Interdisciplinary Cooperation: Nicholas Hartmann, Donna Hardy-Cox, Marion MacLeod, Peter Mezo, Caroline Porr, Linda Rohr, Sharon Barter Trenholm, Ellen Waterman (chair)

Statement of Principles
Interdisciplinary cooperation promotes the values of collegiality and collaboration among faculty and students and therefore contributes to good citizenship. Meaningful interdisciplinary teaching and learning brings together expertise from different fields in a way that retains and clarifies the fundamental building blocks of a given discipline while articulating its complementarity with one or more other disciplines. Tracing a common thread (a theme or issue) through these different viewpoints leads to valuable synergies among the disciplines and professional skills. At its best, by utilizing the strengths of each area, interdisciplinary cooperation leads to the optimal creation of something far greater than any one area could produce alone.

We believe that interdisciplinary cooperation is a valuable asset at Memorial University, and one that should be fostered and developed as an integral component of student education. In order for this to happen, however, University administration must place explicit value on interdisciplinary cooperation and establish institutional supports and rewards to acknowledge and sustain the commitment by faculty who teach in interdisciplinary contexts.

Defining Interdisciplinary Cooperation

Interdisciplinary cooperation:

- entails intentionally wanting to know and understand another’s discipline;
- involves cooperation, good communication, listening, and trust;
- requires a personal commitment to learn the terminology and frames of reference of another discipline;
- demands new skills, such as negotiating across these lines;
- fosters understanding, humility, curiosity, and respect;
- necessitates learning to embrace the other’s perspective;
- promotes knowledge of one’s own disciplinarity, enculturation, and beliefs.

Interdisciplinary cooperation includes the following dimensions:

- interprofessional education;
- students’ experiential learning in co-ops, internships, community-engaged projects;
- working across academic disciplines;
- working between academic and professional/community contexts;
- working across the sub-disciplinary fault lines within a unit;
- diversity of background, age and experience.
We believe that interdisciplinary cooperation in teaching and learning addresses many of the fundamental principles outlined in the Discussion Paper (15 February 2011). For example, we seek to produce graduates from Memorial who are supportive collaborators with particular regard to diversity of interests and who communicate effectively with others. We seek to attract and inspire students who will become versatile, adventurous leaders. Such students, we hope, will “help push the boundaries of a multitude of disciplines and professions.”

Interdisciplinary efforts support the Learning Paradigm and Key Components of student centred learning and teaching practice. For example interdisciplinary cooperation “facilitates student engagement and active learning – encourage[s] student engagement by providing a variety of ways to learn, appropriate to their discipline” and “incorporates an experiential component where appropriate.” Students should be provided opportunities to apply concepts and principles acquired through formal classroom teaching to real-life community and practice setting experiences during their tenure at MUN.

In relationship to a supportive institutional culture – interdisciplinary cooperation holds promise to be a “mechanism that will support and enhance the connections that exist between teaching, research and community engagement.”

We have focused our discussions primarily on four questions.

- What is meaningful interdisciplinary teaching and learning?
- What kinds of competencies do students and teachers need in order to engage in meaningful interdisciplinary teaching and learning?
- What outcomes do we expect from the interdisciplinary teaching and learning experience?
- What are the barriers (institutional, ideological) to interdisciplinary teaching and learning in the academy?

**Question 1: What is meaningful interdisciplinary teaching and learning?**

Interdisciplinary teaching and learning engages with the tenets of all good teaching and learning as described by Leblanc (1998). The mere presence of interdisciplinarity is not, in itself, a guarantee of engaged teaching and learning, but must be “passionate, motivating, relevant, meaningful and memorable.”

If done poorly, there is a risk that interdisciplinary education may reduce the depth of knowledge in a single discipline. One of the heralded strengths of interdisciplinary education is that it improves critical thinking skills (Ivanitskaya, Clark, Montgomery, & Primeau, 2002). However, much of the critical thinking literature refers to the need for education and training to be domain specific in order to achieve the largest improvement in critical thinking (e.g., Renaud & Murray, 2008). Some domains are naturally interdisciplinary and may thus benefit from an early introduction of an interdisciplinary
approach, whereas other domains that exist within a single discipline, may stand to benefit from a delayed interdisciplinary approach, after a strong single-subject knowledge base has been established.

Effective interdisciplinary cooperation depends on an institutional culture of respect for diverse points of view and support of exploration and risk taking. It requires “strong, visionary leadership and very tangible institutional support--resources, personnel and funds” and an “overarching vision that transcends the entire organization and has the actions to back that up”; that is, valuing contributions of everyone from full professor to part time instructor.

A good interdisciplinary course has focused goals or desired outcomes: a dilemma, an issue, a major theme that drives interdisciplinary cooperation from the outset. The common thread is such that it incites learners representing diverse disciplines to establish a spirit of collaborative inquiry and the theme, or subject matter, motivates constant consensus-taking to achieve tasks and to accomplish synergistic resolution.

There are several different teaching/learning models that may be employed in interdisciplinary courses: team teaching, modules within a larger program with consultation from different faculty, field and study abroad experiences, and community involvement (co-ops, internships). The model should be appropriate to the student level and context. Interdisciplinary courses position the teacher as a facilitator of discovery rather than as a deliverer of information or “sage on stage”. Problem-based learning that relies on teamwork and group learning as students work through scenarios may prove the most effectual for fostering interdisciplinary cooperation.

**Example 1. Interdisciplinary programs require supports for students to fill in knowledge gaps.** Ethnomusicology graduate programs embrace students from many backgrounds: music, anthropology, sociology, social work, indigenous studies, etc. Ethnomusicology is informed by aspects of all these areas, but that does not mean that students are equipped with the capability to tackle each of these areas with the same level of competence. We need to create opportunities (for example by providing flexible electives, directed readings, peer mentoring) for students to fill the gaps in their disciplinary competencies even as they undertake their interdisciplinary education.

**Example 2: Interprofessional education at MUN provides a model of successful interdisciplinary cooperation.** Interprofessional education has been successfully used at Memorial through the Centre for Collaborative Professional Health Education. Interprofessional education occurs when two or more students from the professional schools learn with, from and about each other to improve team collaboration and quality of care. The model uses intensive short units where students from different schools and faculties (nursing, pharmacy, social work, medicine) work together to address a health and social service phenomenon. Taken together, these modules provide students with an enhanced understanding of the contributions each of the professions makes to health care
services delivery. The focus in this model is on the needs of service users and carers and operates on the principle that the healthcare sector and system are complex, requiring the techniques, skill sets, theories and principles of multiple professional practice disciplines. Rather than a blurring of boundaries, this approach emphasizes the distinct contributions and requirements of each participating profession. Cross-professional understanding and cooperation leads to more effective care. “Participants, whatever the differences in their status in the workplace, are equal as learners. They celebrate and utilise the distinctive experience and expertise that participants bring from their respective professional fields” (Centre for the Advancement of Interprofessional Education, n.d.).

**Example 3:** The longstanding practice of cooperation among sub-disciplines within a field provides a model of interdisciplinary cooperation but also exposes some fault lines. In the fine and performing arts, students pursue applied, theoretical, historical, and pedagogical approaches to the discipline, beginning to specialize in years 3 and 4 of their undergraduate degrees. Typically, faculty have common roots in the same sub-disciplinary suite of competencies at the undergraduate level but have focussed their expertise quite specifically at the graduate level. In practice there is a spectrum of approaches within such professional schools from fierce demarcating of territory and competition for students within the unit, to high degrees of mutual respect and cooperation. Fostering sub-disciplinary cooperation promotes understanding of and respect for diverse specializations within a field. It is important that students be well informed about the various options and we may need more flexible pathways through such degree programs if we want to promote exploration, risk taking, and critical understanding.

In the sciences, sub-disciplinary pathways are taken from the beginning of study as students enrol in chemistry, physics, biology, etc. Meanwhile, trends in science research have moved towards high degrees of interdisciplinary cooperation as exemplified by the “buffet” approach to research laboratories where a number of different kinds of research may be practiced in one facility, encouraging cross-pollination of ideas. Initiatives such as the development of interdisciplinary minors in science and models such as the biology “stack” courses at Bonne Bay Marine Institute (where students work in the field and develop multiple skill sets) signal an interest in more interdisciplinary cooperation within the sciences.

**Question 2: What kinds of competencies do students and teachers need in order to engage in meaningful interdisciplinary teaching and learning?**

Our efforts to define interdisciplinarity demonstrated how differently language is understood from different disciplinary backgrounds. If we are to build clear, strong competencies within the interdisciplinary environment, we need to focus on a number of issues:
• Teachers require particular, interdisciplinary and often interprofessional communication skills.
• Students must be given ample opportunities to hone their own communication skills and demonstrate their understanding of the different but complementary elements that comprise interdisciplinary work.
• Managing conflict with others is a critical skill set--teachers must be equipped with advanced intrapersonal and interpersonal communication competencies to manage their own reactions and to address divergent beliefs, ideas, and opinions effectively.
• In some situations, there may also be a need to consider which teachers and students have the attributes to engage effectively. Are there prerequisites that speak to teacher/student attributes? Do they require inherent qualities of curiosity, humility and respect from the outset or are these predicted as potentially some of the benefits of participating?
• In team teaching and experiential learning situations the roles of team members must be clarified and leadership must be truly collaborative.
• Interdisciplinary cooperation requires a student-centred approach to teaching and learning.

Effective interdisciplinary courses will provide students with:

• exposure to different (even divergent) points of view;
• training in how to access and assess information from a wide variety of sources;
• assignments that require students to synthesize information from different disciplines;
• critical thinking skills.

Students will need to develop skills in team work, problem solving, and cooperation. Experiential learning is better than information delivery in fostering these skills.

**Question 3: What outcomes do we expect from the interdisciplinary teaching and learning experience?**

Effective interdisciplinary cooperation in teaching and learning should produce positive outcomes for students and teachers in the cognitive, affective, and psychomotor domains as follows:

• cognitive domain: expansion of knowledge and understanding, discernment;
• affective domain: earned respect, suspension of judgment, an attitude of acceptance, desire to embrace diverse approaches;
• psychomotor domain: intrapersonal control of own reactions, self awareness, interpersonal communication techniques and strategies.

These outcomes are only possible after transformative learning has occurred. A major goal of education is to prepare autonomous and responsible thinkers. Autonomous thinking is “is essential for full citizenship in democracy and for moral decision making
in situations of rapid change. The identified learning needs of the workforce implicitly recognize the centrality of autonomous learning” (Mezirow, 1997, p. 7). These outcomes are also related to critical thinking which “is a liberating force in education and a powerful resource in one's personal and civic life” thus good education develops critical thinking skills and nurtures the associated dispositions “which are the basis of a rational and democratic society” (Facione, 1990, p. 2).

**Question 4: What are the barriers (institutional, ideological) to interdisciplinary teaching and learning in the academy?**

There are many successful interdisciplinary programs at MUN including the graduate programs in Ethnomusicology and in Humanities, seven interdisciplinary majors and six interdisciplinary minors in Arts; the Interdisciplinary PhD program; five interdisciplinary Science graduate programs, and the Interprofessional Practice Based Learning program. Regular opportunities for encouraging and showcasing of interdisciplinarity are necessary and an example already in place is the annual Aldrich Interdisciplinary Conference and Lecture series. There are also many committees and working groups that successfully work together to benefit existing programs and promote student achievement, for example the Interdisciplinary Committee on Ethics in Human Research (ICEHR).

However, there remain significant barriers to developing interdisciplinary programs. Such initiatives must overcome resistance to crossing discipline boundaries ideologically, practically, and financially. This suggests both a need to promote a culture of risk taking and exploration, and a careful determination of which areas are best suited to interdisciplinary initiatives. The challenge becomes how to determine areas of interdisciplinary cooperation that are most fruitful.

Closer research/teaching links may benefit interdisciplinary teaching and learning at Memorial by engaging both undergraduate and graduate students in large interdisciplinary research teams. The question remains at what stage, and how teacher-directed need students’ interdisciplinary first steps be?

A major barrier to collaborative initiatives is scheduling, since undergraduate students in particular have densely scheduled requirements. Interdisciplinary initiatives may need to take advantage of online, flexible forums and evening or weekend classes.

We need to recognize and assess the degree to which our students are already engaged in self-directed interdisciplinary learning. For example, the geography student in the Spanish class, and the chemistry student who plays in the university orchestra. While taking diverse electives is not an obvious form of interdisciplinarity, the principle of gaining diverse knowledge sets is built into the university’s requirements for such electives in all undergraduate degree programs. We need a broader, more complex model of interdisciplinary teaching and learning. We might build interdisciplinary alliances with relationships already formed but not officially acknowledged/fostered.
Recommendations

1. Overcoming barriers to interdisciplinary cooperation between academic units and professional/community organizations

Institutes have an important role to play in building bridges between academic units and professions/community groups. We recommend that when investing in units like the Harris Institute and the Labrador Institute, the University build supports for interdisciplinary cooperation; for example, increasing opportunities for faculty and students from different units to work together on short and long term projects.

We also recommend that the University find meaningful ways to acknowledge the value of tradition bearers and other community members who contribute to interdisciplinary teaching and learning at Memorial.

2. Overcoming barriers to interdisciplinary cooperation between academic units

In the past, interdisciplinarity has often been evaluated as “diffuse” and lacking in rigour compared to work done within a single discipline. We need a paradigm shift in our approach to interdisciplinary cooperation. Interdisciplinary cooperation needs to be valued explicitly within the University’s mission statement, and through tenure and promotion processes.

We need to value the stretching and pulling (productive tensions) that come with cross-talk dialogue and debate. We need to state plainly that collaboration is a core value so that it creates a positive culture around team work, cooperation, and interdisciplinary working relationships as opposed to competition. We cannot expect collaboration to be fostered in our students if it is not supported philosophically as well as materially by the institution.

3. Sustaining initiatives in interdisciplinary cooperation

Too often, initiatives in interdisciplinary cooperation depend on one or two individuals with a particular vision. Such initiatives are vulnerable because they lack core institutional support. We recommend that at least some interdisciplinary initiatives be institutionalized by creating areas of inter-unit ownership and support. These structures are necessary to effectively deliver interdisciplinary courses and programs (Chandramohan & Fallows, 2009). Mechanisms need to be put into place to allow faculty to teach in interdisciplinary contexts and students need to be allowed sufficient flexibility in their programs to be able to take such courses.

We recommend that the University build on existing mechanisms for interdisciplinary cooperation, including: cross-appointments; adjunct
appointments and professional associates; co-op work placements and internships; Harris centre regional tours; Labrador Institute; student volunteer bureau.

4. Enriching student experience through interdisciplinary cooperation

We recommend that any cornerstone experience for first year undergraduate students should be interdisciplinary in nature. Successful initiatives have been explored in other universities, and Memorial might usefully look at models, including: the Foundational Year at King’s College; the Semester in Dialogue at Simon Fraser University; the Faculty in Residence program at the Université de New Brunswick; and the Living/Learning Centres at Indiana University.

5. Ensuring the integrity of initiatives in interdisciplinary cooperation

Appropriate interdisciplinary cooperation depends on context and a variety of models may be deemed necessary to complement student learning at different stages of their undergraduate and graduate educations. We also require mechanisms for evaluating the success of initiatives in interdisciplinary cooperation and we should be prepared to change and renew programs over time.
References


Theoretical/Philosophical Foundation

When designing student labs it is essential to have a clear set of pedagogical goals to guide the process. Labs must be structured with a clear instructional sequence that guides students through the key concepts of the lab and helps them to make logical connections between course content and the lab activities. Another essential consideration is that the practical components (i.e., techniques, skills and processes) of the lab must be readily transferable to real world applications for future use. Perhaps one of the greatest advantages the lab provides is a smaller, and hopefully, more personable learning environment for the students. The labs themselves should provide students with additional opportunities to explore the course content in a variety of modalities. For example, students can be engaged in the material by reading the lab manual, listening to instructions, discussing the material with their peers and instructors, asking questions, writing notes, collecting data, drawing diagrams, observing demonstrations, handling materials and conducting investigations. It should not be a revelation that the more instructional approaches available to the student in the lab setting, the greater the likelihood that students will be able to make meaningful connections with the course content.

Although the lab setting can greatly enhance the overall learning experiences for students, there are a number of challenges that limit the effectiveness of labs. Some common challenges that impact the effectiveness of lab experiences include the ability to complete lab work in a defined time period, designing experiments that will not be overwhelming for the students to write up and for the instructors to grade, safety concerns, and the cost and/or
availability of materials. These challenges pose real barriers to the ultimate goal of creating student-centred learning experiences that stimulate interest in specific lab courses, assist students with developing critical thinking skills and mastering practical skills, and reinforce content from lectures. It is necessary to reflect upon these challenges and seek simple, practical solutions to ensure that the beneficial attributes of the lab experience are fully realized. For example, if we intend to increase the level of student and inquiry-centred experiences for our students, we must seriously consider the need to reduce the amount of content that is currently found in labs so that we can dedicate more time, energy and resources for these types of experiences.

The world we live in is increasingly shaped by science and technology. Our students and indeed all members of a modern society will typically require at least a basic level of scientific and technological literacy in order to increase their likelihood of achieving successful careers. By relating our student lab work/experience to the larger world we stand a greater chance to instil our students with a passion for lifelong learning. This would not only benefit them in their future career pursuits, but it would also have broader societal impacts such as developing an understanding of how scientific knowledge is required to make informed judgements on matters ranging from the environmental impact of household purchases to making wise voting decisions. Practical lab experiences can serve as exciting learning opportunities that can provide students with the best possible learning experiences.
Application

The laboratory experience in general is different from a classroom experience in that it allows students practical, hands-on opportunities that create a vital link between theory and practice. The laboratory environment is a more relaxed and informal atmosphere, where students meet in smaller groups (an average of 20 to 30 students per lab group). Due to the smaller group size, we get to know all of the students by name, where they come from, and their previous academic and general life experiences. We are usually called by our first name and students view us as someone they can go to for academic and social support.

The teaching-learning approaches used for undergraduate laboratories include student-centred learning (SCL) and the use of technology. SCL focuses on the specific needs of the students by actively involving students in their own learning, and by encouraging problem solving, critical, and reflective thinking. Technology, when utilized effectively in laboratory teaching, has the potential to enhance both teaching and student learning. Technology such as simulations, clickers, computer software, applications for mobile phones, video and podcasts, and the use of social media networks like Twitter and Facebook, can stimulate interest in the topic and engage students in the content. While basic hands-on skills need to be taught in the lab, the use of technology can enhance the content that is being taught.

SCL is actively supported in a lab setting through hands-on practice using a combination of group and individual learning stations, where students work through a skill or task. Initially, students require a lot of guidance with working equipment and following procedures but as they advance through their program, they may still need some direction, but they are much better able to make decisions for themselves using previous knowledge and experience and they are able to critically think and problem solve to work through more complex situations.
Group work is also effectively used in labs to engage students and encourage teamwork. Students come from a variety of backgrounds and have diverse experiences. Group work encourages students to get to know one another and provides an opportunity for them to learn from each other. As well, through group work students learn vital employment world skills such as compromise, cooperation, and accountability. In some courses students are assigned a group lab project toward the end of their program. This project promotes critical and analytical thinking as they use information gained through various laboratory courses and work together as a group toward a common goal.

The SCL approach promotes self-directed learning and is the goal to strive towards and hopefully achieve by students by the end of their program. The learning opportunities provided throughout laboratory programs aim to actively engage students, stimulate their interest so they want to learn more about the subject matter, increase their knowledge base, and enhance their confidence. When a formal program ends we want the learning to continue. The ultimate goal for students is they become responsible members of society and from an institutional perspective, that we produce safe, competent practitioners who are able to meet certification requirements of the profession to which they belong.
Evaluation

SCL is measured in the laboratory in many different ways. During the lab period itself, it is observed through the hands-on work the students are engaged in which is seen by lab instructors as we walk around the lab and evaluate what and how the students are doing with whatever activities, techniques, etc., they are working on. SCL is measured as well throughout the semester through the various lab reports and assignments that they submit for grading, as well as midterm and final laboratory exams and/or practicums.

Generally, it is found that early in students’ university programs, they require a lot of guidance in order to guide them towards SCL, primarily because of their young age and lack of experience in self-directed learning. As they advance through their programs however, students work at a higher level of independence. For instance, in their first year laboratories, students tend to ask lots of questions about procedure and need lots of guidance in answering the assigned questions or writing up reports. However, by the time they are in their third and fourth year of their degree programs, questions or guidance of this nature become far less common and are replaced with more discussions of what they expect the outcomes should be. They are also able to identify what they need to do, what procedure and/or equipment to be used and how to complete the task. This is satisfying to us as instructors because it shows that the students are becoming critical thinkers and problem solvers; skills that will follow them through their chosen careers and life in general.
**Recommendations and Rationale**

1. Recognize laboratory instructors as independent, faculty teaching positions; not as staff or support positions as we are currently classified.

   - We have a variety of roles which include, but are not limited to: preparing course content and devising innovative and engaging teaching strategies to deliver the content; researching current evidence based trends in practice and incorporating this information into the lab content; developing innovative and interesting teaching aids; facilitating student-centred, self-directed learning; developing assessment tools that evaluate student performance; and assisting and providing in-services for faculty in the use of technology in our teaching. There is little or no recognition for our work.
   
   - We are the most familiar with the whole lab portion of the program from first year until graduation and students can benefit from our dedication and expertise.

Generally laboratory classes have relatively small numbers and we develop positive relationships with the students. The laboratories are where students enjoy the practical aspect of their education that helps make the information learned in the classroom relevant for them. Many times students identify that the laboratories as the best part of their program. Therefore the laboratory instruction needs to be valued as an integral part of the student’s program of study and the instructors recognized appropriately for the job that they do.

   - Since the laboratory instruction information and teaching strategies are subject to rapid change especially in the professional schools we need to have time to review current literature, conduct our own research, develop innovative teaching strategies to engage students, and attend professional development activities. If we were
classified as faculty a percentage of our employment responsibility would designed to be to engage in those activities. We need to be able to access the same benefits as someone in a faculty position.

2. Lower the number of first year students in each laboratory section and have more support through increased teaching aids and instructional staff.
   • Some students may come from rural areas where they may not have a highly technical lab facility in their high school and may not have, for example, ever manipulated a microscope.
   • Age appropriate learning strategies could be designed and implemented to effectively and efficiently to deal with this discrepancy in students’ previous high school experiences.
   • Increasing the amount of time we can spend with individual students will help begin the self-directed learning process by providing clear expectations and objectives for lab preparation
   • Starting in the first year, students are encouraged to problem solve and critically analyse in order to provide a solid foundation for students to build on in the second, third, and fourth year.

3. Laboratory instructors need to avail of professional development (PD) opportunities on a regular basis.
   • We need to encourage creativity in labs and incorporate technology into our teaching.
• PD opportunities could be used to learn how to improve our teaching, how to use new equipment and technology, and keep up-to-date with teaching techniques and ways to engage students.

• Laboratory staff needs time off to attend PD days. During the semester it is very busy and with labs running Monday to Friday at various times, there is little free time for lab staff to attend PD sessions.

4. Encourage staff to further their own education

• Similar to PD, this would expand our knowledge base, keep up-to-date with current research and technology, and improve our teaching.

• Recognition for achievement in teaching and provision of corresponding remuneration would increase job satisfaction.
Summary

Many programs and courses offered at Memorial are supported through instruction in a diversity of laboratory and other learning settings. In science, language, social science, psychomotor and technology-based laboratories we provide a student-centred approach to learning, and we strive to use the latest technologies to keep our students up-to-date with current industry, clinical, and research practices which in turn make them more marketable upon completion of their degrees. Laboratory faculty and staff provide safe and supportive environments for learners to strive towards mastering the most basic to the most complex laboratory and technical skills as well as assisting our students on their path to becoming critical and independent thinkers. The laboratory setting is one in which students can engage in more informal collegial interaction with peers, faculty and staff, and provides an opportunity for an exchange of ideas and sharing of experiences from a diversity of student backgrounds. Through their experiences in these learning settings we encourage students to become life-long, and self-directed learners.

At the present time, Laboratory Instructor positions (LI) are classified as staff or support positions. We feel strongly that the university needs to recognize that lab instructors should be afforded the same level of autonomy and academic freedom as existing faculty members who teach the lecture-based component of a course. Just as the faculty member is considered to be the content expert in the classroom, the lab instructor should also be considered the content expert in the lab. This can be taken a step further since the lab instructor needs to be able to link the course content with the practical or hands-on components of the lab so that students can adequately make meaning and construct their own knowledge. Thus, it would be mutually beneficial for lab instructors to collaborate with faculty as equal partners who share in the
common goal of enhancing the overall learning experience of their students. An increased level of teaching autonomy along with a shared responsibility in the learning of students would increase job satisfaction, motivation, and instil a sense of pride in that their contributions to the their students learning are valued. This would help to ensure a higher level of engagement in teaching and learning initiatives for lab instructors, faculty and students.

The university must also be cognizant that teaching strategies are subject to rapid change. Therefore, in order to keep pace with our changing world, lab instructors must be provided with opportunities to review current literature on best-teaching practices, conduct their own research, and engage in professional development activities to help them develop innovative teaching strategies to more meaningfully engage students in their learning experiences. Professional development activities need to be allotted as part of a particular Faculty, School or Departmental budget.

Respectfully submitted,

Christine Castagné (Chairperson)
Ashley Healey
Bruce Nolan
Judy Perry
Karin Thomeier
Kelly Brown
Mary Pippy
Valerie Power
Teaching Learning

Report from Advisory Committee on Lifelong Learning

March 31, 2011

Committee Members

Karen Kennedy, Chair (Lifelong Learning)
Anne Marie Penney (Faculty of Medicine, PDCS)
Fran Kirby (Faculty of Medicine, PDCS)
Bob Hooper (Faculty of Science)
Lynn Cadigan (Alumni Affairs)
Caroline Porr (School of Nursing)
Christine Molloy (Marine Institute)
Brian Hurley (Gardiner Centre)
Ivy Burt (School of Social Work)
Anne Morris (Faculty of Arts)
Joanne Philpott (Grenfell Campus)
Martha Mac Donald (Labrador Institute)
Lifelong learning is the continuous building of skills, knowledge and attitudes throughout the life of an individual. It occurs through experiences encountered in the course of a lifetime. These experiences could be formal or informal and involve the pursuit of knowledge for either personal or professional reasons. Lifelong learning may enhance social inclusion, healthy citizenry, active citizenship and personal development, as well as competitiveness and employability.

The European Commission on Lifelong Learning defines lifelong learning as, “All learning activity undertaken throughout life, with the aim of improving knowledge, skills and competence, within a personal civic social and/or employment-related perspective.” (European Society of Association Education, 2005)

Jacques Delors’ (1996) four pillars of education highlight the impact of lifelong learning for the future. These pillars can guide the planning and implementation of lifelong learning at Memorial:

- Learning to Know - mastering learning tools rather than acquisition of structured knowledge.
- Learning to Do - equipping people for the types of work needed now, and in the future, including innovation and adaptation of learning to future work environments.
- Learning to Live Together—peacefully resolving conflict, discovering other people and their cultures, fostering community capability, individual competence and capacity, economic resilience, and social inclusion.
- Learning to Be - education contributing to a person’s complete development: mind and body, intelligence, sensitivity, aesthetic appreciation and spirituality.

Commitment and Support by the University

A learning society gives rise to the capacity for lifelong learning, and lifelong learning allows, through socialization, for individuals to contribute back to the learning abilities of broader society in the form of wisdom. A learning society is an educated society, committed to active citizenship, liberal democracy and equal opportunities. It is generally considered to be the impetus from which lifelong learning can take place. Theoretically, a learning society provides the framework in which lifelong learning is allowed to flourish and both elements mutually support each other

Lifelong learning requires the same commitment and support from the university for teaching and learning as is found in other academic faculties and schools. Also engagement by faculties and schools to develop and foster lifelong learning opportunities is critical.

Impact and Success of Lifelong Learning

“Failure to promote lifelong learning is jeopardizing Canada’s future economic prosperity.” (Canadian Council on Learning, March 2010).
The Canadian Council on Learning’s Composite Learning Index (CLI) is a combination of 17 statistical indicators that are used to measure annual progress in lifelong learning in more than 4,500 Canadian communities. The yearly CLI report focuses on the four main pillars of learning mentioned above: Learning to Know, Learning to Do, Learning to Live Together and Learning to Be. The indicators include assessments of youth literacy skills, high school dropout rates, participation in secondary education, participation in job-related training, volunteering, access to community institutions, broadband internet access: and learning through sports, culture, media and cultural resources.

Most recently, the 2010 Composite Learning Index cited that lifelong learning activities have been on the rise in St. John’s for the last five years. (MacDonald, 2010). The university has a responsibility and a role to provide opportunities that support continued progress in lifelong learning across Newfoundland and Labrador in both urban and rural communities.

**Recommendations**

1. An Adult Learning Centre, located on campus and in communities as storefront operations, dedicated to supporting learners and responding to their needs. Examples of services for inclusion are:
   - A central website dedicated to adult learning
   - Prior Learning Assessment Recognition
   - Transition programs for all adult learners (i.e. aboriginal and other groups with identified needs)
   - High School transition programs for students with an admission average of 65-74%
   - Access to academic support for first year students
   - Services for older than average aged students
   - Mentorship program for both students and teachers.

2. Central marketing and promotion of the university’s role as a place that provides lifelong learning opportunities for the citizens of Newfoundland and Labrador. Promotion should identify with all age groups and educational levels – “This is Your University”

3. A university Council on Lifelong Learning to conduct research and evaluation in lifelong learning. The Council will make recommendations to the university on the development and implementation of comprehensive lifelong learning programming and on processes (standards) for course and program development.

4. Support from the university to provide accessible, responsive and flexible programming. Examples of demonstrating these principles may include:
   - Access – open access to credit courses for non-credit purposes (no evaluation), access to required courses for degree/certificate completion.
   - Access to professional development opportunities for teachers of adult learners.
   - Responsive – Lifelong Learning at Memorial has the ability to respond to the diverse learning needs of individuals and communities and therefore requires support to meet these needs.
- Flexible – create credentials that are increments to a bachelor’s degree or a master’s degree. Certificates would be used as building blocks toward a degree. Current degree programs would break down into smaller parts for students unable to commit the time and resources necessary for a multi-year program.
- Flexible - increased formats of delivery methods (e.g., technology) and customization of courses and programs.

5. Increase community engagement through programs that support lifelong learning specifically targeted for K-12 school system, adults and seniors, employees and alumni of Memorial. Examples may include the following new programming:
   - Summer U - access for grade 10 and 11 students in the summer to one credit course. Upon acceptance to Memorial, after high school graduation, students will receive credit for the courses completed in Summer U.
   - Mini University - Expansion of Mini University for junior high school students in both rural and urban areas to run in the fall and spring.

6. The implementation of a curriculum development process for program development and maintenance.

7. The implementation of a quality systems design process for course development.
Bibliography


MacDonald, Nancy (2010). St. John’s impresses in Maclean's magazine’s ranking of Canada’s smartest cities. (accessed March 2, 2010) www2.macleans.ca/2010/05/20/canadas-smartest-cities/

Teaching and Learning Framework
Non-Academic Student Support Services Committee Submission
April 5th, 2011
Submission Summary

Our vision for teaching and learning at Memorial is a holistic process that creatively involves academic and non-academic components to create a well-rounded, engaged, and knowledgeable graduate. The non-academic student support services at Memorial transcend all campuses and actively demonstrates commitment to the creation and development of a supportive community of learning.

The non-academic student services at Memorial University are just as diverse as the institution itself, ranging from the west coast to the east coast, from The Works to a center who’s mandate is to provide Answers; but in their functionality they serve students and as they look forward to a renewed and improved service entity, they have common goals.

As Memorial advances this initiative there has to be renewed collaboration across campuses and departments. Beyond the issue of developing space for academic and non-academic activities, the issue of committing to collaboration is essential. The institution has to identify why students are staying and why they are leaving while mandating a renewed transition program including orientation and a first year transitions course.
Committee Composition:

Co-Chairs:
- Tom Brophy – Director, Student Success Programs, SAAS
- Angie Clarke – Enrolment Management Coordinator, Marine Institute

Departmental Representatives:
- Jennifer Howell – Manager, Domestic Student Recruitment, Office of Student Recruitment
- Amy Butt – Manager, Answers, SAAS
- Shelia Freake – Coordinator, Native Liaison Officer, SAAS
- Jennifer O’Neil – Associate Director, Development, Alumni Affairs & Development
- Jennifer White – Career Development Coordinator (Grad Studies), CDEL
- Michael Doyle – Counseling Center, SAAS
- Linda Carroll – Student Services Officer, Grenfell Campus
- Judy Casey – Manager, Scholarship and Awards, SAAS
- Deborah Collis – Director, Finance and Administrative Services
- Glenn Gleeson – Student Services Coordinator, DELT
- Denise Hooper – Retention Manager, SAAS
- Darren Newton – Residence Life Office, Housing, Food and Conference Services
- Anne Richardson – Director/ General Manager, The Works
- Chris Hounsell – Acting Director, Career Development and Experiential Learning

What we do:

Our vision for teaching and learning at Memorial is a holistic process that creatively involves academic and non-academic components to form a well rounded, engaged, and knowledgeable graduate. The non-academic student support services at Memorial transcend all campuses and actively demonstrates commitment to the creation and development of a supportive community of learning.

The services offered are focused towards the physical, social, and emotional well-being of our students.
- Counseling offers strategic interventions in personal counseling and wellness that enhances students’ capacities to attend to their learning tasks.
- Student engagement including wellness, recreation, volunteering and leadership programs
- Student support including services directly designed to: address students with disabilities, visible minorities, financial support including both student aid and scholarships and campus card.
• Student transition from attracting a prospect to servicing enrolled students including orientation and first year transition programming. These services strive to develop knowledgeable students who are aware of and utilize necessary campus services.
• Provide a safe environment for our students which would include conduct and campus safety.
• Foster and recognize out of class learning through career support services, campus employment opportunities and a co-curricular record.
• Housing programming facilitates off-campus referral while providing an on-campus residential community experience.
• Health Services are available on campus for students attending the St. John’s campus via on-site Doctors and nurses
• Physical activities are available on all campuses through activity based programming available on all campuses with more extensive services and programs available through the Memorial University Recreation Complex (MURC)

Current gaps in the Non-Academic Student Services at Memorial

There were a number of very lively conversations concerning the gaps that exist in our specific departments and in the provision of non-academic student services at Memorial. The specific gaps were identified as follows:

• Lack of staffing resources in areas such as:
  - Counseling, to support the growing need for personal counseling and the increase complex issues that are being identified in our current student population.
  - Scholarships, to address the increased number of scholarship offers and to plan for the continued increase that will be imminent with the launch of the current capital campaign.
  - Areas offering student support based programming.
• Lack of adequate space to accommodate specific subsets of our student population (i.e., aboriginal and international etc...).
• Poor quality and availability of the student space, this detracts from the teaching-learning opportunities provided to students.
• Lack of understanding and open communication across institutions and academic and non-academic departments.
• Lack of consistency in how student focused areas track communication with students.
• Limited resources directed towards student engagement programming.
• Memorial has a rich array of to institutional data on student performance and other student experience based data closer collaboration with related units would allow for more assessment based quality improvement

Identified gaps in the University as a whole

There is a general consensus around stakeholders in our group that there is a lack of knowledge across the institution of the role of non-academic student services and the crucial link that those
services play in the area of teaching and learning as well as student development. Specific gaps were identified as follows:

- Lack of coordinated and collaborative programming between academic and non-academic units that interact with students.
- Lack of acceptance of learning outcomes from non-academic departments (i.e. e-portfolio and co-curricular record etc…).
- Lack of a coordinated mechanism to track student contact and student issues.
- No current “seamless” strategy that identifies the, who, what, where and why of student communication from a prospective student to a graduate.
  - Including identifying: at-risk students, undeclared students etc…
- Lack of coordination in departmental attempts to utilize a variety of technologies in communication with students.
- No current mechanism to effectively transition students to other campuses within the institution.
- Lack of general gathering and activity specific space on campus.
- No current mandatory post-secondary transition program
  - Orientation
  - Transitional course (first term)
- Lack of parking spaces on campus.

**Recommendations to improve Memorial (Unit perspective)**

Each unit who were engaged in this process has a vested interest in students and the teaching and learning activities at Memorial. The recommendations that are listed are listed as unit specific:

**Student Services:**
- Service integration
- Opportunities to bring together the academic and non-academic communities at Memorial to foster knowledge and understanding of what each community provides to teaching and learning (i.e. committees, presentations, consultations, etc)
- Increased marketing initiatives to ensure the student body is aware of all available engagement opportunities on campus and the benefit of becoming involved in such programs (ex: volunteering for Orientation etc..)
- Create an inclusive, welcoming environment
- Creation of more community/ gathering space on campus
- Link to career education included in an institution retention plan

**The Works**
- Expansion of current service
  - Development of a Wellness Center
  - Further expansion of the Fitness Center

**Office of Student Recruitment**
• Creation of a mandatory student success course to assist students with university transition.
• Mandatory Orientation
• Creation of a First Year Center (both virtual and on-campus) to ensure students have one-stop shopping for student support.
• The creation of more renewable scholarships for all students, provincial, national and international.

Recommendations to improve Memorial to make it a more holistic engaging community for our students

The non-academic student services group truly believes that Memorial University as a multi-campus institution has the promise to be a national forerunner in the area of teaching and learning. The exceptional opportunities available in terms of collaboration in the academic and non-academic envelopes are not only available but necessary to move a framework forward. The common recommendations of our group are as follows:

• **Space** – there is a need for the development of common gathering spaces on-campus and spaces that will allow for the accommodation of specific subsets of our student population.
• **True Collegiality** – Memorial as an entity has to define what collegiality is and the requirements for the academic and non-academic entities of the institution to feel valued in their partnership.
• **Promote success** – There are many successes at Memorial: successful students, successful staff and successful partnerships. Effort has to be made to celebrate that success.
• **Coordination** – There has to be defined and coordinated links in the academic and non-academic portfolios specifically as it relates to student transition and retention.
• **Promotion** – A marketing strategy has to be developed to identify and promote the available services internal to Memorial to students, staff and academic departments.
• **Mandatory Orientation** (Academic and non-academic)- University 101
• **Retention**
  - Early alerts at-risk
  - Link SAAS with on academic support programs
  - Development of mentorship programming to assist with student transitions
• **Enhance research**
  - Do we know why are students are staying or leaving?
  - Develop a research network that bridges the professional and academic expertise
  - Support institutional mechanism that identify and promote student relevant data and research both as an institution, a campus and by school and/or faculty
• **Development and full implementation of:**
  - e-portfolios
  - co curricular record
• **Seamless communication** with students (prospect – graduate)
• **Faculty engagement** - is critical to effective student based programming so a university commitment to reflect and reward this behavior in the promotion and tenure process
would send a clear message that Memorial sees faculty as pivotal to meaningfully 
retention programming

• **Welcome innovation** – how we engage students will continue to evolve and there are 
many best practices which we can look to and implement at Memorial and there are some 
unique ideas which originate with our university. We need to be open to piloting these 
various initiatives and realize that, within reason, we need to open our minds to creativity 
and take calculated risks.
Program Quality Assurance

Advisory Committee

Report

Committee Members:

Sally Ackerman  Faculty of Medicine
Susan Cleyle    Library (Co-Chair)
Toni Doyle      Education/Academic Council of the School of Graduate Studies
Andy Fisher     Faculty of Engineering
Matthew Janes   Grenfell Campus
Gerona McGrath  Faculty of Business Administration
Marc McKinnon   GSU
Christine Molloy Marine Institute
Eddy St. Coeur  MUNSU
Michael Walsh   Senate Committee on Undergraduate Studies
Rob Wells       Distance Education, Learning and Teaching Support (Co-Chair)

1.0 Introduction

In its strategic plan, a core value addresses the importance of quality at Memorial:

"Quality and Excellence – Memorial seeks to achieve the highest possible quality in the delivery of programs and services and the research it conducts, striving for excellence in all that it does."

Quality Assurance (QA) processes comprise an overarching system that, when implemented properly, ensures an institution is providing relevant and consistent learning opportunities for all students.

The purposes of this report are to propose a working definition of Program Quality Assurance, to provide a summary of current practices at Memorial, and to present recommendations that will enable Memorial to enhance its QA practices in all aspects of teaching and learning.

Examples of other QA initiatives underway at other institutions and higher education systems are presented in Appendix A.

The Program Quality Assurance Advisory Committee’s activities were grounded in the following foundational principle:

Memorial University is committed to the continuous evaluation and improvement of the quality of its programs.
2.0 Definition

To guide its discussions and analysis, ultimately leading to recommendations related to the adoption of Quality Assurance in the Teaching and Learning framework, the Program Quality Assurance Advisory Committee developed the following definition of Program Quality Assurance:

**Program Quality Assurance** is defined as a set of processes that:

- **ensures** the design and development of Memorial’s programs and courses result in measurable learning outcomes while respecting the teacher, the student and academic freedom;
- **supports** consistent program delivery through a high level of professional development, infrastructure and services;
- **evaluates** programs, courses and their learning outcomes in reliable and regular fashion and implements the results to ensure continuous improvement in Memorial’s teaching and learning activities.

This set of processes is regularly reviewed as part of the QA process.

3.0 Memorial’s Context

The following sections outline some of Memorial’s current practices related to Quality Assurance. It should be noted that this description is not complete but serves to highlight strengths that can be augmented and gaps that can be addressed in order to enhance Memorial’s QA practice.

3.1 Overview

Memorial University’s current QA practices are based on an iterative process of planning, evaluation and improvement.

**Planning**

Planning refers to the processes surrounding the development and enhancement of programs in consultation with students, faculty, administrators, staff, alumni and community.

- At the Faculty/School/Unit level, new programs are developed based on emerging needs and changes. The external environment is monitored for opportunities and challenges that impact the teaching and learning context. Many Faculties/Schools/Units have both management committees and curriculum-based committees that provide oversight for undergraduate and graduate programs.

- New programs and changes to programs (Calendar Changes) are initiated at the program unit level by appropriate faculty. Changes are initially proposed by faculty members familiar with or responsible for the courses and are agreed upon at the unit level. The proposed new program proposal or program changes are then
forwarded to the appropriate Academic Council for approval. Following this approval, the documentation is then sent to the Senate Committee of Undergraduate Studies (SCUGS) for undergraduate programs or to the Academic Council of the School of Graduate Studies for graduate programs. Finally, the documentation is sent to the Senate of the University for final approval. At each committee stage, proposals for new programs or for changes to programs are reviewed by members of the Council or Committee. A standardized form, available on the website of the Office of the Registrar, is used.

- The need for adequate support (student housing, library space, learning environments, IT infrastructure) for faculty members and students in their teaching and learning is also considered. New programs in support of teaching and learning such as initiatives for academic support (writing, tutoring, ESL), bridging and PLAR programs, international student programs, faculty development in pedagogy and learning technologies have also been implemented in recent years.

Evaluation

Memorial uses several evaluation mechanisms to monitor the quality of programs.

- Formal course quality evaluation includes use of CEQs, curriculum review committees, standardized industry-wide tests for students when appropriate.

- Existing academic programs are reviewed on a regular basis by the Academic Program Review (APR) process through the Office of the Vice-President (Academic) and the Center for Institutional Analysis and Planning (CIAP) internally to determine the relevance of the program and identify areas for improvement.

- The Promotion and Tenure process (P&T) is the process through which faculty are evaluated. The evaluation of faculty, as it will later be argued, often overlaps with the evaluation of programs.

- Many units with non-academic programs solicit feedback from users through surveys aimed at determining satisfaction levels.

- Informal feedback is used in evaluating programs. Informal feedback refers to unsolicited feedback to academic and administrative units that can be helpful in improving the teaching and learning environment.
**Improvement**

Improvement involves using the information from the various evaluations to enhance programs.

- Data from the assessment mechanisms itemized above are used to drive changes to programs and to the support systems which ensure that faculty and students are enabled to succeed. This is largely done internally at the Faculty/School level through the management team led by the Dean or Director.

- Programs are continually improved and refined at the course level in the form of instructor-solicited feedback.

There are other significant initiatives at Memorial that can inform the implementation of a systematic and consistent Quality Assurance model. Most of the professional schools undertake a rigorous accreditation process; formal and mature quality management systems, registered to the ISO 9001:2008 standard, have been implemented at the Marine Institute and DELTS; Computing and Communications and the Queen Elizabeth II Library, among others, are currently implementing the ITIL quality system.

### 3.2 Self Study

Memorial University currently uses a variety of instruments and processes that assist in evaluating both programs and individual course offerings within the institution. Many of these instruments overlap with the evaluation of individual faculty members. The following is a summary of some of the strengths and weaknesses of these instruments and processes.

**The Course Evaluation Questionnaire**

The Course Evaluation Questionnaire (CEQ) form is distributed during the final two weeks of every semester to students in every course section at Memorial. Students are invited to respond to a variety of questions and to provide their own qualitative feedback. The process is overseen by the Center for Institutional Analysis and Planning (CIAP) and steered by the Senate Committee on Course Evaluation.

**Strengths:**
- The form is standardized and has been approved by all relevant stakeholders (and is currently under review).
- All students are given the opportunity to participate in the process.
- Faculty have the opportunity to supply additional questions.
- The open-ended nature of the qualitative section allows students to provide their own insights.
Weaknesses:

• The quantitative results for most faculty members are remarkably similar, and as a result, they do not necessarily provide a realistic profile of the ASM’s strengths and weaknesses – or, indeed, those of the course and, by extension, the program.

• The Promotion and Tenure process (discussed below) does not specifically require that the CEQ forms be used. Indeed, faculty members can provide their own form of teaching assessment. In addition, the CEQ forms and results are not part of the Academic Program Review process.

• In addition, faculty members can be selective in the CEQ feedback that they provide in their Promotion and Tenure file. For instance, faculty can choose not to include negative comments while only including positive ones.

• The CEQ forms provide individual assessments of instructors rather than a more holistic evaluation of the program of which the course is a part.

It should be noted that the Course Evaluation form and associated processes are currently being reviewed through the Senate Committee on Course Evaluation. A subcommittee has been formed and tasked with assessing matters related to the CEQ administration and use. This Advisory Committee supports this initiative to enhance the course evaluation process.

Promotion and Tenure (P&T) for MUNFA Members

The majority of faculty members at Memorial are governed by the MUNFA Collective Agreement as it relates to being granted tenure or, in subsequent years, being promoted within the academy. Article 11.26 outlines the requirements for tenure; more specifically, the three components of teaching, scholarship, and academic service are outlined.

The section pertaining to teaching reads as follows:

“(a) documented effectiveness and scholarly competence as a teacher;

Recommendations and decisions shall be based on the evaluation of documentation compiled by the Faculty Member following suggestions in the CAUT Teaching Dossier (see Appendix B). The Faculty Member shall select the particular components suggested in the CAUT Teaching Dossier for inclusion in the file.”

This statement on teaching, quite broad in nature, outlines that the faculty member may choose to include whatever components she or he desires to include. Recommendations made by Promotion and Tenure committees are based entirely on that information submitted. In addition, there is no reference in this passage to the manner in which faculty members’ teaching relates to the overall program offerings. In addition, the contrast between this portion of the evaluation scheme teaching and the more substantial section on scholarship which follows makes clear the prime criterion for promotion and tenure is within the university.
Strengths:
• Teaching is assessed first and foremost by a group of peers, as outlined by the Collective Agreement. These peers are often from the same program unit or from a similar one (for instance, the same Faculty).
• Within the Collective Agreement, it is clearly stated that teaching and scholarship are the most important criteria for promotion and assessment.

Weaknesses:
• As outlined above, faculty members can be selective in the material that they choose to include for the assessment of their teaching (i.e. instructors and courses can only be evaluated based on information selected by the faculty member to include in the file).
• The fact that new faculty are granted a teaching remission in the first two years of a tenure track appointment (Article 3.22) sends a clear message that it is research that is the true priority of the university and not teaching.
• Recent emphasis on obtaining external research funding (particularly tri-council funding) also emphasizes that it is a key part of the P&T process.
• The P&T process is surely the most significant process in the life of a newly appointed faculty member at the University. As a result, the ‘tone’ that it sets is particularly important. The same can be said of faculty who are seeking promotion. The Collective Agreement is the binding contract between the university and the faculty member. The brevity of the passage on teaching as part of the P&T process is truly unfortunate and sends a clear message that scholarly research activity carries the most weight.

The Academic Program Review Process (APR)

The Academic Program Review process is overseen by the Office of the Vice-President (Academic). Every program unit within the university is subject to this program review process approximately every seven years. These reviews are done at a department, school or in some cases Faculty level and incite significant self-study and reflection. They have tended to be used more in the context of establishing a need for resources and sometimes for outlining strategic directions. The process in theory is a healthy one although the practice has not always been exemplary and the expectations of the APR process have not always been reasonable. Examples can be found at: http://www.mun.ca/vpacademic/academic_review_reports.php

Strengths:
• This is a review process and it does occur on a relatively regular basis.
• There is significant self-reflection as well as external participation.
• There is transparency to the process.
• The process has just undergone a significant change to address the implementation concerns.

Weaknesses:
• The process has been somewhat voluntary.
• It doesn’t seem to address the questions of effective teaching/learning on a course by course basis or provide a mechanism to respond to student/faculty/other concerns.
• The 7 year cycle is appropriate for some aspects of the review (e.g. Direction of an overall program) but not for addressing course delivery quality assurance.
• The “new” APR process has not yet been implemented and can’t therefore be commented on.

Accreditation

Many of our professional faculties and schools are nationally or internationally accredited by appropriate professional bodies. Programs within these accredited faculties or schools must meet all pre-established criteria and standards as proof of compliance. Once accreditation is awarded, there are required standards for the maintenance of the quality system. Accreditation assures students and other stakeholders that discipline-based knowledge is being provided to students.

Strengths:
• The university has nationally and internationally accredited programs that are aligned with particular faculties and schools.
• Memorial is meeting standards for the professional bodies and regulatory agencies core to each discipline.
• Accreditation provides credibility to potential students, their families, and employers.

Weaknesses
• Presently, quality processes and standards are set by external bodies.
• There is no institutional standard of curriculum development established across all programs.
• There are no defined processes and procedures (institutional system of instructional design) for course development and delivery that are institutionally initiated and administered. Without standards for programs and courses, student and faculty may experience inconsistent results.

4.0 Recommendations

Based on this Advisory Committee’s observations, the following recommendations would have an immediate impact on the quality of teaching and learning at Memorial. It is recognized that additional recommendations related to quality will come from other Teaching and Learning Advisory Committees. Combined with these recommendations, we hope that they will guide Memorial toward establishing a solid culture of quality assurance.

• In order to place research and teaching on equal footing, a senior executive position should be created and resourced to support a teaching and learning focus for Memorial.

• A quality assurance system at Memorial requires an effective course review process that includes input from both students and faculty. It is recognized that the CEQ process is an integral component of course review. This advisory committee fully supports the work currently underway by the Senate Committee on Course Evaluation (to be presented to Senate in fall 2011) to redesign the CEQ and the associated processes. Recommendations arising from this group should be considered very carefully and implemented in a timely fashion.
• Instructional support is a critical element to the continuous improvement of Teaching and Learning. Services such as those offered by the Instructional Development Office of DELTS need to be supported by the institution, and this and other similar services should be consistently made available across all schools and faculties.

• The Vice-President (Academic) should enforce the Academic Program Review (APR) cycle for all units ensuring consistent and regular review of all programs.

• All accredited and non-accredited programs at Memorial should meet internally established quality standards established by the APR process.

• Memorial should investigate introducing a standardized Curriculum Development Process and support for Instructional Design on all campuses.

Appendix A

Samples of Quality Assurance Initiatives

Quality assurance at Canada's universities (AUCC)  http://www.aucc.ca/qa/index_e.html

Ontario Universities Council on Quality Assurance  www.cou.on.ca

The Quality Assurance Agency for Higher Education (QAA)  http://www.qaa.ac.uk/
Student-Centred Learning Advisory Committee Report

April 1, 2011

Committee Membership

Joyce Fewer, Instructional Development Office (Chair)

Shawn Anctil, Graduate Student Representative
Faith Balisch, Department of English
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Student-centred learning is an approach that places students at the heart of educational practices (Attard et al. 2010). In recent decades of research on effective pedagogical approaches in post-secondary education, there has been a significant shift of focus away from what instructors do to what students are learning. As opposed to viewing students as vessels for the transmission of information by instructors, student-centred learning is premised on the notion that students are able to actively participate in the construction of knowledge with the facilitation of teachers. Robert Barr and John Tagg’s 1995 landmark article “From Teaching to Learning—A New Paradigm for Undergraduate Education” emphasizes the need for post-secondary education to shift towards a “learning paradigm” that encourages agency to be shared between the teacher and the student. This shift comes as a response not only to cognitive and educational research on factors that contribute to effective learning but also as a response to the need for institutional resilience in the face of increasing pressures from rising university costs, declining public investments, expanding enrollments, and a shifting landscape from which to draw faculty (Zundel & Deane, 2011). In the midst of these pressures, Barr and Tagg argue that the university has come to mistake its means for an end, operating on the assumption that the university exists to provide instruction. By contrast, they assert that the real purpose of a university is to produce learning.

In the learning paradigm, learning is viewed as an active process in which students learn how to think, not what to think. Built upon a constructivist philosophy of education which posits that the learner creates knowledge from experience, student-centred learning uses collaboration, assessment, respect for varied learning styles, and interpersonal relationships to encourage students to construct knowledge, make meaning, and develop skills while making connections with prior knowledge. As student-centred learning is process-oriented, students develop valuable skills to be lifelong learners, which means they will be much more adaptable and resilient in a world now defined by constantly changing work and learning environments.

Because learning is considered an active process in the learning paradigm, a new relationship develops between the university’s traditional pillars of teaching and research. No longer can they be considered separate undertakings. In the learning paradigm, research and scholarship are key and integral components of teaching and learning, whether in undergraduate, graduate or professional schools and faculties. While teaching and research have sometimes been viewed as competing interests in the university, the learning paradigm bridges that terrain more effectively because it views them as related components of an integrated learning environment.

But beyond adopting new teaching practices and pedagogical techniques, a focus on learning entails a fundamental paradigm shift and the adoption of a new mindset. Recently, growing interest in student-centred learning has translated into a wider focus on learner-centred institutions (Harris and Cullen 2010). The learner-centred classroom is viewed as a microcosm of the institution itself where there is a plethora of practices, resources and supports aligned with the learner-centred paradigm. In her book, Learner-Centred Teaching, Maryellen Weimer (2002) identifies five key changes in practice that materialize when instructors move to operating within a learner-centred paradigm. Harris and Cullen further maintain that the administrative application of these principles of learner-centredness throughout the institution is equally as relevant. A learner-centred institution will strive to attend keenly to how well its structures, practices, and policies uphold and respond to these principles.
To shift from the instructional paradigm to the learning paradigm, we need a clearly defined vision and strategy to advance a learner-centred agenda. Just as the practices that constitute student-centred education demand flexibility of teachers and students, so, too, our definition of the term itself requires a degree of flexibility. Memorial University now has the opportunity to define some hallmarks of student-centred learning. What follows are a set of examples, characteristics, guidelines, and recommendations that value and support students and learning.

1. Characteristics of Student-Centred Learning

   The hallmark of a student-centred environment is one that places the student at the center of policies, practices, and decision-making. However, student-centred learning is more than a set of specific practices or techniques; it has become an entire approach or philosophy regarding the learning enterprise and represents a paradigm shift occurring in many institutions of higher learning. As an integrative approach to learning, it exhibits certain core characteristics, regardless of discipline or content:

   **Emphasis on Active Learning**

   Student-centred learning employs active learning techniques, which include team learning, problem-based learning, peer evaluation, and self-directed learning. Active learning operates in an environment of mutual respect between instructor and student, and contributes to building a sense of community amongst participants. Instructors recognize that there are a variety of learning styles, and they employ techniques that effectively respond to that variety. Effort is put into building consensus rather than assuming consensus in class decisions. Course objectives take into account the need for interactivity. Active learning communicates a sense of participants’ personal excitement, passion and commitment toward the material. Relevant and interesting aspects of course material are emphasized, especially at introductory levels, to improve learning and retention. The instructor is regarded more as a facilitator, coach, or resource person, rather than a ‘sage on the stage’.

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- Balance of Power: Creating community through sharing power and control
- Function of Content: Creating relevance by focusing on what the learner learns as opposed to what the knowledge is to be disseminated.
- Role of the Teacher: Leaders assuming roles akin to the learner-centered teacher who is described as a facilitator, designer, or guide
- Responsibility for Learning: Fostering a climate for learning by creating community
- Assessment and Evaluation: Using assessment to monitor ongoing learning and gauge effectiveness

– Harris and Cullen 2010

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*My 3rd-level Psychology course studying Learning uses a unique combination of learning principles and assessment practices. The right kinds of notes (we need to fill in keywords and examples throughout the course slides) and constant evaluation (e.g., small quizzes at the beginning of every class) – combined with a professor who is engaging and down-to-earth – enables students to want to attend and learn every time.*

- R. Murphy

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*With the Human Patient Simulator, medical residents and students have a hands-on opportunity to practice individual and team-based skills. Faculty members and senior residents provide feedback throughout sessions and ask additional questions to deepen learning.*

- S. Shorlin, Medicine
Emphasis on Learning Outcomes and Assessment

Learning is the focus of all course and program activities, rather than covering content.

- Clearly defined learning outcomes provide both instructor and students with goals and expectations against which to measure progress.
- Prior knowledge and experiences of students are used to decide on appropriate learning activities to facilitate the meeting of learning outcomes.
- Learning outcomes connect content with student experience and with relevance to the world outside of academics.
- Learning outcomes focus on practical application as well as a sense of deep learning and understanding.
- Instructors ensure that methods of assessment align with learning outcomes.
- Students are assessed for achievement of specific learning outcomes throughout a course, both formally on assigned work and informally as part of each class.
- Assessment practices are as authentic as possible, incorporating real-world tasks and meaningful application of knowledge and skills.
- Students are given opportunities to examine their own cognitive development, focusing first on learning rather than grades.
- The learner has an opportunity to view himself/herself differently as a result of the learning experience (i.e. the student experiences transformative learning). Students assume more ownership of the learning process, with increased confidence and self-awareness.

Emphasis on Curricular Flexibility

My “choose-your-own-adventure” approach allows students to select their work for the semester, and to focus on the ways they learn best in order to ensure that they get the most out of the course.

- In order to attend to the various needs and learning styles of students, a certain amount of curricular flexibility may be required. Curricular flexibility may take a variety of forms, depending on what is appropriate to the situation. Instructors may incorporate flexibility in scheduling the day’s agenda or in class meeting times and places; students may be able to exercise some choice in how they are assessed, and may even have meaningful input into the course development, content, pace, and assessment criteria.
- Course design and outcomes are enriched when they draw on a diversity of disciplinary experiences.
- Overall, flexibility is a balance between structure and openness.
Emphasis on Student Empowerment and Responsibility

- Through flexible curricula design and active learning techniques, students are empowered to make their own decisions about how to achieve the expected learning outcomes.
- Student empowerment also instills a sense of responsibility and accountability because they feel ownership in their work and of the course agenda.
- Partnering empowerment with responsibility provides students the skills they need to be lifelong learners.
- Students are more successful when held to high standards and challenged to succeed.
- In general, students are more intrinsically than extrinsically motivated.

Emphasis on Community, Communication, and Collaboration

- Learning is understood as a communal and collaborative process where students have opportunities to learn with and from each other.
- Collaborative learning involves dialogue and deliberation between students and among students and teachers.
- Learning involves facilitation and discussion as much as expert instruction.
- Where appropriate, students are organized into flexible, cooperative groupings to demonstrate understanding of a task or concept through multiple perspectives.
- Class sizes and format are designed to maximize learning.
- Students are supported in meeting their personal goals by a strong array of services.

Emphasis on Developing Appropriate Thinking Skills

- Student-centred learning cultivates critical thinking as well as divergent thinking.
- Student-centred learning encourages participants to question in ways that critically assess theory and experience.
- Critical thinking connects and engages abstract concepts with practice, and enables learners to construct meaningful interpretations.
- Good thinking practice also requires time to reflect together in conversation as well as in silence.
- Catalytic experiences for student engagement lead to transformative learning in which the learner is changed and empowered.
**Emphasis on Process-Oriented Skills**

Instead of walking them through a procedure step by step, laboratory experiments are designed to give students tools to study physical laws more independently. Lab staff act as facilitators of the learning process, giving advice on solving problems rather than instructions.

- K. Shorlin, Physics

- Successful student-centred learning enables students to apply their understanding/knowledge to new situations.
- Student progress is informed by the model: **Think, Reflect, Apply, Critique, Repeat**.
- Students are provided ample **timely, constructive, and focused feedback**.
- Students have sufficient opportunities to **practice their skills** in light of continual feedback, and to engage in **continual self-reflection** about their progress.

### 2. The Memorial University Context

Universities are uniquely suited to and responsible for transformation through education. As a public university, and indeed the only university in the province, we have an ethical responsibility to our community to provide a high-quality educational environment. That responsibility is outlined in the university mission statement, with references to “public engagement and service” and “our special obligation to the citizens of Newfoundland and Labrador.” Committing to a student-centred learning philosophy therefore directly promotes and supports our ethical obligations as educators at Memorial University.

Although student-centred and teacher-centred learning environments should not be considered binary opposites (O’Neill and McMahon 2005) or conflicting modes, at its foundation, student-centred learning reflects a deeper desire to re-shape traditional relationships between teachers and students, in order to provide students with more responsibility and power to construct their educational experiences. As members of a student-centred community we strive to provide teaching and learning supports to enable students to achieve their academic and personal goals within the context of the university’s mission. Students are inspired to grow and develop knowledge, skills and attitudes that will auger well for them as life-long learners, leaders, and productive and valued community members.

This picture of student-centred learning may seem very idealistic. Nonetheless, a university focused on student-centred learning is both possible and necessary. There are already examples of student-centred learning at Memorial, by which we mean educational practices which present many of the characteristics identified in the previous section. Memorial also already has units which are well-poised to support the continuing transition to a student-centred learning environment. The University Libraries in particular have a special role to play in supporting student learning, and they are central to the success of student-centred learning. They offer access to the world of scholarly resources in digital and print formats, expertise in information seeking and evaluation methodologies, innovative spaces and technology, and opportunities to engage in unique research and learning.

Furthermore, our ethical responsibilities require us to look beyond what *is* and move toward continuous enhancement of our present reality to ensure what *should be*. The guidelines developed by the Society for Teaching and Learning in Higher Education, in their essay “Ethical Principles in University Teaching” state that student-centred learning is an ethical principle of university teaching.
3. Recommendations

As stated in its Strategic Plan “students are the central focus of Memorial University”. To provide a high quality education and to fully develop students’ potential to reach the institution’s goals for students and the graduate attributes as defined through the creation of a Teaching and Learning Framework we are challenged as a university community to fully embrace students and their learning. The following are recommendations to enhance and support student-centred learning at Memorial.

3.1 The Institution

Memorial University should

- Reflect that it values high-quality teaching at least as much as it values research through hiring, promotion and tenure and award practices.
- Promote scholarly research around teaching as a valid avenue of research for all faculty.
- Create and maintain an infrastructure in support of learning through a sustained capital outlay of funds for appropriate classrooms, learning spaces, technologies, staffing levels and other appropriate resources.
- Continue to support and/or establish a strong array of student support services to support students in meeting their personal goals.
- Evaluate institutional practices and programs and use evidence to improve them for student learning.
- Provide increased supports and resources for the professional development and training of instructors and staff.
- Align faculty orientation within the learner-centred paradigm with a focus on mentoring and cross-disciplinary support and collaboration.
- Emphasize the educational value of research in the intellectual development of both students and faculty, and include this as a prime consideration for university research goals.

3.2 Academic Departments and Faculties

Academic departments and faculties should

- Design courses and programs, with appropriate class sizes, to maximize learning.
- Continually evaluate and improve teaching, courses, academic programs, and student services.
- Engage in regular program and curriculum review to decide what their graduates need to know, value and be able to do, and align course activities and assessment practices with those intended learning outcomes.
- Create academic programs which engage undergraduate students at all levels in active research.
- Facilitate discussions of pedagogy and faculty development which reflect a focus on student learning, collaboration and teamwork, and which model learner-centred practices.
- Engage students in active and real research from the first year and throughout the undergraduate experience.

3.3 The Library

The Library should

- Link the learner and teacher to the body of research available (digital or print) at the point of need. This includes components of both discovery and delivery.
- Embed subject liaison librarians into all academic programs (i.e. physically located in the faculty and teaching portions of the course curriculum at relevant times).
- Create a first year course such as one that was previously proposed (*Critical Inquiry in the Arts*) which would be a collaborative effort of units such as the Library, Counseling Centre, Instructional Development Office and Writing Centre. The course would provide all first year students with the same exposure to university expectations around student success.
- Provide opportunities for faculty and students to share ideas and disseminate research in the library by hosting seminars and lecture series.
- Provide faculty and students with virtual platforms to enhance scholarly communications (e.g. open access publications and a research repository).
- Provide space to accommodate all learning styles: collaborative learning spaces, individual study rooms, open areas for group work, audio-visual and digital viewing rooms and quiet study space.
- Expand the research, computing, writing and tutoring support currently available in the Commons.

### 3.4 Instructors

Instructors should

- Involve students, where possible, in decision-making processes about course content, pace, assessment criteria and daily agendas.
- At all levels and with all class sizes, teach using a variety of instructional strategies, including active learning strategies.
- Make students aware of specific learning objectives at the lesson level and the course level, and align teaching and assessment practices with those objectives.
- Engage students in a variety of activities, including group work and experiential, service and project-based learning.
- Participate in professional development, training and discussion around good teaching practices and engage in scholarly research about teaching and learning.
- Constantly reflect on and evaluate the process and outcomes of their teaching practices.

### 3.5 Students

Students should

- Exercise personal responsibility for their learning as individuals and within learning communities.
- Be prepared for and engaged in their classes and assignments.
- Participate in class/course decision-making.
- Engage in self-advocacy and informal learning through learning communities, student clubs, societies, and associations.
- Be active participants and collaborators in decision-making and committee work within the university community.

### 4. Bibliography


European research study designed to assist policy makers in developing student centred learning approaches. The report is broken down into four main areas. It begins by defining the concept of SCL. It then moves on to a discussion on the conditions necessary to be in place for a SCL approach to be implemented. This is followed by the professional development and training needs required for the academic staff. Finally, an analysis of student understanding of and experience with SCL is provided.
The author discusses her approach in redesigning an introductory sociology course using student-centred learning practices.

This book brings together fifteen years of research looking at teaching in universities and provides humorous and inspirational insights as to what makes a great teacher.

The authors discuss the shift from instruction based to the “learning paradigm” model focusing on the learner and the learning outcomes. The article then details criteria for success, teaching and learning structures, learning theory, productivity and funding, and the changing role for all university employees. The article concludes with some of the challenges faced when making this shift.

Contents: Transforming teaching to be more learner-centred / Understanding the rubrics / Tools for facilitating change and assessment / The five dimensions of learner-centred teaching / The function of content / The role of the instructor / The responsibility for learning / The purposes and processes of assessment / The balance of power / Discussion and conclusion / Can all courses be learner-centred? / Strategies for overcoming obstacles and resistance / Conclusions.

The article presents a discussion of Carl Rogers and the postmodernist approach. The authors argue that his approach to student-centred learning was postmodernist. Examples from nursing and the health sciences are included.

The authors begin with outlining two major philosophical approaches — one based on ideas and the other based on experience. The body of the article reviews the three most influential theories in the Western world: Behaviourism, Cognitivism and Constructivism and demonstrates how current practice relates to these theories.

The author looks at mathematical education by examining the theoretical approaches of the constructivist and sociological perspectives.

Outlines the challenges of adopting a student-centred learning approach, including common faculty concerns and how to address them.

An instructional consultant with 25 years experience, Fink shows how to combine new and traditional techniques to create powerful learning experiences for students. Contents: Creating
Significant Learning Experiences / A Taxonomy of Significant Learning / Designing Significant Learning Experiences I: Getting Started / Designing Significant Learning Experiences II: Shaping the Learning Experience / Changing the Way We Teach / Better Organizational Support for Faculty / The Human Significance of Good Teaching and Learning / Appendix A Planning Your Course: A Decision Guide / Appendix B Suggested Readings.


In their book, the authors provide insight in how to lead institutional change and make the transition to student-centred learning.


A document produced specifically for the educators at the University of Adelaide developing student centred learning practices. All aspects of student-centred learning are covered including sections on strategies, assessment and evaluation. Designed as a working document practical tips and examples are provided.


Describes a methodology for increasing student participation in the learning process at the De Montfort University in Leicester, England between 1990 and 1991. Topics covered include approaches to teaching, engaging students into a more active role, gathering resources and gaining student feedback.


The article describes the experience of the University of Hong Kong with their efforts to promote student-centred learning across the campus.


The article presents the results of two studies to gain insights into perceptions and attitudes of students toward student-centred learning.


Discusses activating instruction (AI), a procedure to enhance effective study skills by stimulating active learning in students.


From the preamble, “the purpose of this document is to provide a set of basic ethical principles that define the professional responsibilities of university professors in their role as teacher”. Principles included are: Content competence / Pedagogical competence / Dealing with sensitive topics /
Student development / Dual relationships with students / Confidentiality / Respect for colleagues / Valid assessment of students / Respect for institution.

This article reviews the shift to student-centred learning for 145 primary teachers in Namibia in the early 1990s.

This book chapter evaluates student-centred learning by looking at the various definitions of this approach in the literature. The article then examines how it can be used for teaching and assessment practices. The effectiveness of the student-centred learning model is also explored as are some critiques with the process.


The author presents the results of two studies to discuss the relationship between learning environments, approaches to study and outcomes.


The author's work presents an overall approach to learner-centred teaching in the college and university classroom. Weimer begins with an overview of the literature on learning and then discusses in detail the five key areas associated with the learner-centred educational approach.

Current article on the need to transform Canadian post secondary education to a student-centred model.