Developing an effective first year experience for students with academic challenges

A proposal for a pilot program

Memorial University of Newfoundland
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Preface

This report is a reflection of the enthusiasm that Memorial University of Newfoundland has to create an inclusive learning community, where all students can find a sense of belonging and experience success. At each point in this journey, the authors encountered overwhelming support, a desire to help, insight into the needs of our students and a passionate commitment to respond. This typified our experience across campuses; St. John’s, Grenfell, Marine Institute and the College of the North Atlantic. Such energy and support helped make a tight timeline possible.

Susan Cleyle     David Philpott
Chapter One: Introduction

In today’s increasingly pluralistic society, it is imperative that the diversity that characterizes the contemporary university is addressed and incorporated into teaching and learning curricula to ensure the creation of a better learning environment for all students. Memorial University is committed to academic excellence through the active pursuit of knowledge and views a diverse student population as being central to this. Inclusiveness lies at the centre of excellence, as articulated in Memorial’s Mission Statement:

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. We recognize our special obligation to the people of Newfoundland and Labrador. Memorial welcomes students and scholars from all over the world, and contributes knowledge and shares expertise locally, nationally and internationally (MUNa, 2011)

Background

In May 2011 the University Senate unanimously approved a Teaching and Learning Framework (TLF) that articulated a renewed and refocused commitment to excellence in the culture of learning and teaching. Among the numerous recommendations and action plans that were outlined in the TLF was a commitment to address the needs of academically vulnerable first-year students. Memorial has recognized for some time that students with an admission average of less than 75% are at significant academic risk and will struggle. Approximately 30% do not pass their first semester and only 35% will have finished their degree in seven years (See Chapter Two). The mandate for the first initiative coming out of the TLF is to develop a pilot focused on academically vulnerable first-year students.

Submit a report by December 31, 2011 for a focused and effective support plan for first-year students whose entrance average is between 70-74.9% with the intent of starting a pilot in the fall 2012 semester.

To that end, the Associate Vice-President (Academic) brought together Susan Cleyle (Library) and David Philpott (Faculty of Education) as co-chairs to lead this initiative. A 60 plus member advisory group (Appendix A) was established to guide and inform their work through facilitated workshops and brainstorming sessions. Research Assistants were hired to conduct an environmental scan of proven programs (Appendix B) at other universities and a comprehensive review of the literature. In addition, a thorough examination of indicators from Memorial’s Centre for Institutional Analysis and Planning
(CIAP) was completed, and extensive consultations were held with key informants across all Memorial’s campuses, as well as the College of the North Atlantic (Appendix C).

The pilot that is being proposed is the result of that process – a plan anchored in knowledge, reflective of existing programs and services at Memorial, and articulated by the collective voice of the university. The pilot reflects the principles of the TLF and the knowledge gained from it, and will position Memorial University to eventually move forward with an informed and tested support plan in future years. In September 2012 students who are “at-risk” will have the opportunity to participate in this full year program, should they elect to do so. They will be supported across their first year experience while a monitoring team prepares to report on their experiences.

Memorial’s Population

Due to its unique position as the only university in Newfoundland and Labrador, Memorial embraces its special obligation to provide access to a quality education for the people of this province. The majority of incoming students each year are from Newfoundland and Labrador (A Comprehensive Framework for Teaching and Learning at Memorial University, 2011, hereafter referenced as MUNb, 2011). Therefore, we must demonstrate and stay true to our commitment to our own young people as they venture forward to become the leaders of tomorrow. Community is central to the province’s culture and this is reflective of Memorial’s culture. We build community within the university, the province, the nation and the world (MUNb, 2011).

To fulfill this commitment to the people of Newfoundland and Labrador, Memorial University recognizes that community means a variety of post-secondary options for the students. We strive to establish an accessible and seamless network of post-secondary institutions where students can realize their individual potentials. In addition to the main St. John’s campus, which is home to 15 660 students (12 744 undergraduates), Memorial also includes the Marine Institute (3272 total; 320 undergraduates, and the Grenfell Campus (1022 undergraduates) (CIAP, 2010). In addition, we view the province’s College of the North Atlantic as a partner institute where students can complete their first year through a Comprehensive Arts and Science Transfer program. The establishment of an effective teaching and learning community must be anchored in this network of options that we offer our students. In turn, students must feel that they have a continuum of options from which to choose, and be supported in whatever option they choose.

Memorial’s First-Year Students

Despite Memorial’s attempts to foster a holistic community that actively seeks to promote academic success and a culture of lifelong learning, students with admission averages below 75% continue to perform academically at levels much lower than students admitted with high school averages of 75% or higher (CIAPa, 2011). Furthermore, the first to second year retention rate for students enrolled in both the Summer Bridging Program and a comparison group composed of students entering
Memorial with an average between 70 and 75% is lower than the rate seen in the overall population of first-year students (CIAPb, 2011).

A close examination of the literature and existing programs provides evidence that current Memorial programs aimed at improving the retention of “at-risk” students are not as effective as intended. CIAP data on the retention/participation and academic performance of students who completed the Summer Bridging Program (SBP) over the scan of its short history to date (2007-2010 data) echo this finding. In three of the four years the program has been running, the first semester average was lower for SBP students at both the St. John’s and Grenfell campuses than it was for a comparison group (those students entering Memorial with an average between 70 and 75% (CIAPb, 2011).

Memorial’s first-year student population is diverse in terms of culture, background, level of academic preparedness and learning styles (MUNb, 2011). The contemporary student is no longer exclusively the traditional learner who enters university immediately after high school. Changing career goals, a fragile economy, evolving credential requirements, increased migration, increasingly effective K-12 special education services, continued personal development and non-mandatory retirement have resulted in the prospective and current student profile expanding to include a wide variety of learners. More and more students are entering Memorial’s programs and courses from different life paths and at points in their lives different from the traditional student, who is fresh out of high school (MUNa, 2011).

Lampard, Dennis & Osterholt, (2011) note that as campuses accept an increasingly diverse set of learners, the issues surrounding underprepared students must be addressed. Growing concern over the retention and success of Memorial’s students helped motivate the development of the TLF and further fuels the development of this pilot.

**Informed by the TLF**

At Memorial, we believe that three components constitute the teaching and learning enterprise and contribute to the attainment of student outcomes at both the institutional and individual student levels:

- student-centred curriculum and teaching practice
- appropriate learning environments (both physical and virtual)
- a supportive institutional culture around learning and teaching (MUNb, 2011)

These components have been considered in the development of our TLF and will serve to guide the implementation of our proposed support plan for incoming students identified as “at-risk” (with an average between 70 and 74.9%). The pilot program will reflect the core values of the TLF: collegiality, inclusiveness, responsiveness, integrity,

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1 The SBP is designed for students with a high school graduating average of 65-70% in courses required for admission to Memorial.
Themes that focused on students with academic challenges that emerged from phase one of the TLF consultations included:

- easing the transition from high school
- ensuring that adequate space was allotted for classes (small class sizes to encourage student and faculty/professor interaction)
- developing a mandatory orientation
- advocating for and promoting a community of supports with a focus on special interest groups, academic advising centres, co-op/career services, creating an early awareness of library supports, tracking initiatives, and building in post-first year supports.

Consultation sessions around the TLF emphasized student support as a component of success. Student services must be integrated, providing students with streamlined accessibility to academic and holistic support. Participants in numerous sessions also noted the need to improve student preparedness. They indicated that many students struggle with the transition from high school to university and the expectations and rigor of the academy.

The essence of Memorial’s teaching and learning community is engagement and support. Engagement happens when students and educators are invested in the learning process and when learning is meaningful, intense, and rewarding. Everyone in a teaching and learning community also requires support. Educators need support and recognition to help them become the best teachers they can be. Students need support to achieve learning outcomes and become well-rounded, holistic individuals who demonstrate the desired attributes of a Memorial graduate. The institution has to provide this support to ensure that meaningful teaching and learning takes place (MUNa, 2011).

Our mission for teaching and learning at Memorial is a holistic process that involves academic and non-academic components to create a well-rounded, engaged, and knowledgeable graduate. The university views academic support services as integral to the teaching and learning enterprise. Numerous services, whose aim is to advocate for student success, are available at Memorial. Many non-academic support services are also available at Memorial; administered through units such as Student Affairs and Services, the student unions, and clubs and societies. TLF Advisory Groups have provided their input with regards to the academic and non-academic supports they would like to see integrated into a first year support plan, with an aim to 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 (MUNb, 2011).

Many first-year university students require skills which are not explicitly taught in high school but which are increasingly recognized as being critical to higher learning. Increasingly, the literature recognizes that first-year university students need to be taught new skills, require new supports, and become engaged in recognizing their own
learning needs. This pilot is focused on teaching these required skills and assisting with the transition from high school environments to our university's campuses.

Summary

Memorial remains committed to the education of this province's people and is proud to boast some of the most accessible programs and services in the country. The TLF articulates the vision for a stronger learning community. Memorial recognizes that there is no single reason why students are academically vulnerable, and that there is no single 'fix' or solution. However, its goal is to create a stronger continuum of services to respond to this continuum of need. This continuum will be reflected in each of our campuses as well as in our partnerships with the College of the North Atlantic so that an accessible and seamless post-secondary experience is available for all our students.

Creating an inclusive teaching and learning community begins by focusing on the more vulnerable learners. The pilot that is presented is the next step in this process that will position Memorial University at the forefront of inclusive learning communities. The pilot is anchored in the TLF, supported by the literature and reflective of proven programs at other universities. More critically, it is the collective voice of the university, a shared recognition of an opportunity to act.
Introduction

While the incoming new student population at Memorial University has increased in diversity over the past ten years, the institution continues to see its largest proportion of first-year students entering directly after completion of high school in the Newfoundland and Labrador school system. Current admission criteria for Memorial includes completion of 10 credits in high school courses in math, English, science, social studies and an elective area, and an overall average of 70% or higher in these prerequisite courses. Each year a small number of students is admitted outside of these criteria, through the special admissions process or by completing the Summer Bridging Program at either the St. John’s or Grenfell campuses.

This document will present data concerning the incoming new student population from Newfoundland and Labrador, with a particular emphasis on those students in the lower range of admission average - identified as the “70-74.9%” group. Numerous sources of information, including data originating from the Banner student system, survey research, and pre-existing reports compiled by the Centre for Institutional Analysis and Planning (CIAP) will contribute to this discussion. The first section provides an overview of the population of new matriculants and their first semester academic performance at Memorial. This is followed by data concerning academic outcomes such as retention and graduation rates. Finally, several areas which impact success in the first year of university are discussed.

Profile of First-Year Students

Eligibility & Participation

Each fall semester, approximately 75% of new students entering Memorial are newly matriculated students from the high school system in the province. The overall population of high school students in Newfoundland and Labrador has declined over the past decade, but the graduation rate of Grade 12 students has remained relatively stable, at approximately 90% (Education Statistics, 2010-11). Not all high school graduates, however, are eligible for post-secondary study. Table 1 illustrates the eligibility and participation rates for high school graduates for the past five years, as tracked by CIAP. While just under half of those graduating from high school meet the entrance requirements for Memorial, approximately two-thirds of these eligible students attend the university that fall semester.
Table 1. Eligibility and participation of high school graduates, 2006-2010

<table>
<thead>
<tr>
<th>Year</th>
<th>June Graduates</th>
<th>Eligible for Memorial</th>
<th>Eligibles Attending Memorial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>2006</td>
<td>5,024</td>
<td>2,288</td>
<td>45.5</td>
</tr>
<tr>
<td>2007</td>
<td>5,278</td>
<td>2,435</td>
<td>46.1</td>
</tr>
<tr>
<td>2008</td>
<td>5,368</td>
<td>2,405</td>
<td>44.8</td>
</tr>
<tr>
<td>2009</td>
<td>4,973</td>
<td>2,322</td>
<td>46.7</td>
</tr>
<tr>
<td>2010</td>
<td>4,916</td>
<td>2,404</td>
<td>48.9</td>
</tr>
</tbody>
</table>

Academic Performance in the First Semester

The groups of new students who attend Memorial each fall are profiled by CIAP in terms of their academic performance. The trends that are seen in terms of admission average distribution, overall admission average, and first semester performance among new matriculants are usually stable from year to year. Select information from the most recent analysis of new matriculant performance (Academic Performance Profile, fall 2010) is highlighted in the tables that follow.

When new matriculants are categorized according to high school/admission average, a fairly normal distribution of grades is apparent. There are typically no significant differences in the proportions of students within each grouped high school average category when the variables of gender, origin (rural/urban) or campus are considered (Table 2).

Table 2. High school admission average of full-time new matriculants by gender, origin and campus, Fall 2010

<table>
<thead>
<tr>
<th>Admission average</th>
<th>Total full-time</th>
<th>Gender</th>
<th>% Female</th>
<th>% Male</th>
<th>% Rural</th>
<th>% Urban</th>
<th>% St. John’s</th>
<th>% Grenfell</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 70</td>
<td>101</td>
<td></td>
<td>6.6</td>
<td>5.3</td>
<td>5.3</td>
<td>6.8</td>
<td>5.8</td>
<td>8.3</td>
</tr>
<tr>
<td>70-74.9</td>
<td>303</td>
<td></td>
<td>18.6</td>
<td>17.7</td>
<td>19.7</td>
<td>18.2</td>
<td>18.5</td>
<td>20.4</td>
</tr>
<tr>
<td>75-79.9</td>
<td>357</td>
<td></td>
<td>21.3</td>
<td>21.3</td>
<td>19.5</td>
<td>23.3</td>
<td>21.6</td>
<td>23.0</td>
</tr>
<tr>
<td>80-84.9</td>
<td>396</td>
<td></td>
<td>24.5</td>
<td>23.0</td>
<td>23.9</td>
<td>22.9</td>
<td>24.0</td>
<td>19.6</td>
</tr>
<tr>
<td>85-89.9</td>
<td>329</td>
<td></td>
<td>19.3</td>
<td>20.5</td>
<td>19.7</td>
<td>19.5</td>
<td>19.9</td>
<td>18.1</td>
</tr>
<tr>
<td>&gt; 90</td>
<td>173</td>
<td></td>
<td>9.3</td>
<td>12.2</td>
<td>12.0</td>
<td>9.2</td>
<td>10.3</td>
<td>10.6</td>
</tr>
<tr>
<td>Total</td>
<td>1,659</td>
<td></td>
<td>991</td>
<td>662</td>
<td>641</td>
<td>968</td>
<td>1344</td>
<td>265</td>
</tr>
</tbody>
</table>

Notes: Admission averages were missing for 3 students; gender was missing for 6 students; origin and campus breakdowns do not include 51 students with a listed campus of Western Regional School of Nursing (WRSN), Centre for Nursing Studies (CNS) or Distance.

For the most part, the “< 70%” group is comprised of students who gained admission to Memorial by completing the Summer Bridging Program; other students in this grouped average category would have been accepted through the special admissions process.

The distribution of grades within the “<70%” and “70-74.9%” groups are fairly evenly distributed, as shown in Figure 1 for the fall 2010 cohort. There are no “clusters” of
students within these average groups which would indicate that large proportions of students are close to the adjacent average grouping.

Analysis of first semester academic performance over the years has demonstrated a strong association between high school admission average and first semester average (Table 3). As noted in the Academic Performance Profile (2010): “There is a dramatic difference in the proportion of students who do not achieve a passing average in their first semester when grouped high school average is considered. For students with admission averages less than 70% and between 70 and 74.9%, 30.7% and 29.4% of these students do not pass their first semester, respectively. For students in the next grouped average category, those with an entrance average between 75 and 79.9%, the proportion of students who do not pass first semester drops significantly to 13.7%. Collectively, 29.7% of students with admission averages less than 75% do not achieve a passing average in first semester, compared to 6.4% of students with admission averages of 75% or higher.”

Table 3. Fall 2010 academic performance by high school admission average for new matriculants

<table>
<thead>
<tr>
<th>Admission average</th>
<th>&lt; 45</th>
<th>45-49.9</th>
<th>50-59.9</th>
<th>60-69.9</th>
<th>70-79.9</th>
<th>&gt; 80</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 70</td>
<td>20</td>
<td>11</td>
<td>42</td>
<td>26</td>
<td>2</td>
<td>0</td>
<td>101</td>
</tr>
<tr>
<td>70-74.9</td>
<td>44</td>
<td>45</td>
<td>135</td>
<td>65</td>
<td>13</td>
<td>1</td>
<td>303</td>
</tr>
<tr>
<td>75-79.9</td>
<td>27</td>
<td>22</td>
<td>104</td>
<td>133</td>
<td>63</td>
<td>8</td>
<td>357</td>
</tr>
<tr>
<td>80-84.9</td>
<td>11</td>
<td>14</td>
<td>56</td>
<td>172</td>
<td>130</td>
<td>13</td>
<td>396</td>
</tr>
<tr>
<td>85-89.9</td>
<td>2</td>
<td>3</td>
<td>19</td>
<td>81</td>
<td>162</td>
<td>62</td>
<td>329</td>
</tr>
<tr>
<td>&gt; 90</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>22</td>
<td>64</td>
<td>86</td>
<td>173</td>
</tr>
<tr>
<td>Total</td>
<td>104</td>
<td>96</td>
<td>356</td>
<td>499</td>
<td>434</td>
<td>170</td>
<td>1,659</td>
</tr>
</tbody>
</table>
The relationship between high school average and first semester average, in particular the divide that is seen below and above the 75% point, is observed with each cohort of new matriculants.

In the first semester, course load attempted by full-time new matriculants also varies by grouped high school average. Generally speaking, higher pass rates are associated with higher course loads; however, it is important to note that students entering the university with averages less than 75% are more likely to opt to take a reduced course load of 3 or 4 courses in the first place, therefore the lower academic performance levels demonstrated by these students in their first semester may be influenced more by their incoming average than by the effect that course load may have on performance. In other words, regardless of course load, the proportion of students who successfully pass all courses they attempt increases with each category grouping of high school average.

<table>
<thead>
<tr>
<th>Admission average</th>
<th>Course Load (number of courses attempted)</th>
<th>All courses pass rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>#</td>
</tr>
<tr>
<td>&lt;70</td>
<td>14</td>
<td>28.6</td>
</tr>
<tr>
<td>70-74.9</td>
<td>24</td>
<td>41.7</td>
</tr>
<tr>
<td>75-79.9</td>
<td>16</td>
<td>50.0</td>
</tr>
<tr>
<td>80-84.9</td>
<td>12</td>
<td>75.0</td>
</tr>
<tr>
<td>85-89.9</td>
<td>4</td>
<td>50.0</td>
</tr>
<tr>
<td>&gt;90</td>
<td>0</td>
<td>--</td>
</tr>
</tbody>
</table>

The Academic Performance Profile has also provided longitudinal data on performance trends based on gender and rural/urban origin. Although there are variations by year, the general pattern observed is that rural males as a group are more likely to not achieve a passing average in their first semester of study at Memorial, while urban females consistently have the highest pass rate among the groups (Figure 2).
What is interesting, however, is that when the variables of gender and origin are considered in relation to high school average groupings, there is no significant difference between males and females, or between rural and urban, within each of these grouping (as seen in previous Table 2). Put another way, origin and gender are associated with semester average, but do not differentiate high school performance.

Campus attended is also associated with academic performance in the first semester but is not related to high school average. Admission averages are generally not significantly different between the St. John’s and Grenfell campuses, but differences tend to emerge in first semester average by campus. In fall 2010, the overall first semester average at Grenfell was slightly higher than at St. John’s. It is important to note also that urban students earned a higher term average than rural students regardless of campus attended.

**Academic Outcomes Beyond First Year**

Academic success indicators most commonly involve retention and time to graduation measures, but can also include cumulative average, course credits completed, and semester pass rate. Analysis of these indicators has been carried out for several different years of new matriculants. The academic outcomes data for the 2003 cohort of new matriculants is summarized in Table 5, as this group allows for a sufficient number of years to be analyzed in a longitudinal manner, but the trends for each cohort year are strikingly similar. There is a consistent pattern in retention and graduation rates on the basis of high school admission average: with each increment in grouped high school average, both retention rates and graduation rates increase. The largest jump is seen when moving between the less than 75% groups and the 75% or higher groups. These patterns are observed for both the St.
John’s and Grenfell campuses when considered separately (in terms of campus attended in the first year), however first-to-second year retention as well as graduation rate after seven years are both slightly lower for students who attended Grenfell Campus in their first year.

The relationship between entrance average, university academic performance and declared program major is interrelated and multidirectional (acceptance into a program usually depends on academic performance). Regardless, students who do not or are unable to declare a program of study after their first year of university often show lower levels of academic achievement, which may in turn translate into longer times to graduation.

If success is defined as eventual completion of a program at Memorial, there are several factors that emerge as having a strong association with graduation. Considering again the 2003 cohort of new matriculants, where there are a sufficient number of subsequent years to look at this measure, gender has been found to be related to success, as the proportion of females who graduate is significantly higher than males (66.7% females graduated by 2010, compared to 57.0% of males). Likewise, a higher proportion of urban students (66.0%) compared to rural students (58.4%) had graduated by 2010. Attempting a course load of 5 courses in first semester was also associated with eventual success, but again this may be confounded with academic performance.
Table 5. Academic outcomes for Provincial new matriculants, 2003

| Admission Average | # full-time students | pass rate | term average | term credit hrs | courses attempted | courses passed | % graduated | % returned | cumulative average | cumulative credits |
|-------------------|----------------------|-----------|--------------|----------------|------------------|---------------|-------------|------------|-------------------|-------------------|-----------------|
| <70               | 76                   | 55.3      | 51.2         | 8.1            | 4.4              | 2.7           | 0           | 0          | 60.5              | 42.1              | 32.9            |
|                   |                      |           |              |                |                  |               | 3.9         | 0          | 14.5              | 18.4              | 13.2            |
|                   |                      |           |              |                |                  |               | 18.4        | 0          | 6.6               | 6.6               |                |
| 70-74.9           | 437                  | 77.6      | 55.6         | 10.2           | 4.6              | 3.5           | 0           | 0.2        | 73.5              | 60.2              | 54.3            |
|                   |                      |           |              |                |                  |               | 73.3        | 0.9        | 15.1              | 14.4              | 11.3            |
|                   |                      |           |              |                |                  |               | 23.8        | 22.1       | 106.3             | 103.9             | 78.3            |
| 75-79.9           | 515                  | 91.7      | 62.7         | 12.5           | 4.8              | 4.3           | 0           | 0.4        | 85.6              | 75.0              | 68.5            |
|                   |                      |           |              |                |                  |               | 52.2        | 8.3        | 28.3              | 25.9              | 16.9            |
|                   |                      |           |              |                |                  |               | 12.6        | 5.4        | 65.0              | 58.4              | 26.8            |
| 80-84.9           | 443                  | 98.2      | 68.7         | 13.8           | 4.9              | 4.7           | 0           | 0.9        | 94.4              | 87.1              | 79.2            |
|                   |                      |           |              |                |                  |               | 24.6        | 8.8        | 54.0              | 50.3              | 5.6             |
|                   |                      |           |              |                |                  |               | 30.9        | 3.4        | 69.2              | 67.7              | 58.2            |
| 85-89.9           | 270                  | 98.1      | 72.2         | 14.1           | 5.0              | 4.8           | 0           | 1.1        | 69.8              | 71.0              | 72.1            |
|                   |                      |           |              |                |                  |               | 11.1        | 5.4        | 72.5              | 71.5              | 69.6            |
|                   |                      |           |              |                |                  |               | 71.5        | 5.4        | 69.9              | 68.4              | 58.6            |
| >90               | 143                  | 100.0     | 80.3         | 14.8           | 5.1              | 5.1           | 0           | 0.7        | 93.7              | 88.5              | 85.2            |
|                   |                      |           |              |                |                  |               | 53.3        | 4.6        | 24.8              | 12.2              | 8.8             |
|                   |                      |           |              |                |                  |               | 12.2        | 7.4        | 69.0              | 66.7              |                |
|                   |                      |           |              |                |                  |               | 119.3       | 7.4        | 126.9             | 113.5             |                |

Notes: (1) 33 students are not included in analysis due to missing high school average; (2) the <70 group includes 66 students from the 2003 Bridging Program; (3) term averages of zero are included if the student had a positive course load; (4) the 4 students graduating by the 3rd Fall received diplomas/certificates; (5) the % graduated is cumulative; once counted as graduated the student is removed from other counts.
Factors Influencing the First Year Experience for the Population Between 70-74.9%

High school admission average is clearly predictive of performance in the first year, and the students entering with an admission average between 70-74.9% are, as a group, proportionately more likely to face academic challenges in their first year. It is useful to consider factors that are also known to impact the experience of first-year students.

Academic Preparedness

High School Academic Coursework

One point that is useful to consider in tandem with high school average is the type of coursework that contributes to a student’s admission average. It may be argued that high school courses which require public examinations reflect a higher level of academic challenge in the high school program, and completion of more courses of this type could help further differentiate students within the 70 to 74.9% average group as to their success in first year university. Analysis of the number of publicly examined courses completed in high school, using the fall 2010 cohort of new matriculants, suggests that within the 70 to 74.9% group there is very little difference in overall first semester academic performance based on the number of public examination courses completed. In other words, regardless of the type of coursework attempted, these students are performing at lower academic levels overall. For students with admission averages greater than 75%, the earned fall 2010 semester average increases with more completed public exams.

High School Math and English

High school grades in the subject areas of math and English are strongly associated with overall admission average, and there are significant differences in high school performance in these areas for students with averages below 75% compared to students with admission averages of 75% or higher. Recent analysis of the 2010 new matriculant cohort has shown that the overall average grade for the required English and math courses is below 70% for the group of students with an entrance average between 70 and 74.9%. Students with an admission average above 75% show considerably higher course grades in these required English and math courses (Table 6).

<table>
<thead>
<tr>
<th>Admission average</th>
<th>English 3201</th>
<th>Math 3204 (academic)</th>
<th>Math 3205 (advanced)</th>
</tr>
</thead>
<tbody>
<tr>
<td>70-74.9</td>
<td>67.2</td>
<td>67.7</td>
<td>62.8</td>
</tr>
<tr>
<td>75-79.9</td>
<td>71.6</td>
<td>75.1</td>
<td>70.4</td>
</tr>
<tr>
<td>80-84.9</td>
<td>76.2</td>
<td>82.1</td>
<td>78.0</td>
</tr>
<tr>
<td>85-89.9</td>
<td>80.4</td>
<td>88.8</td>
<td>85.2</td>
</tr>
<tr>
<td>&gt;90</td>
<td>86.6</td>
<td>94.3</td>
<td>92.6</td>
</tr>
<tr>
<td>Total</td>
<td>75.6</td>
<td>80.6</td>
<td>80.8</td>
</tr>
</tbody>
</table>
Interestingly, within the 70-74.9% group the distributions of high school math and English grades show no clear relationship to academic performance in the first semester; that is to say, further subdivision of the 70-74.9% group in terms of who will show higher levels of academic success in first semester cannot be achieved based on high school marks in English and math.

Since performance in both math and English are highly correlated with overall high school performance, analysis of these grades for the fall 2010 cohort suggests that there are very few cases where students show strong academic performance outside of a low grade in math or English; therefore, removing a rogue score in either math or English would not impact overall average.

**University Coursework**

The grades of select first year courses completed by fall 2010 new matriculants are shown in Table 7. When course grades in first year are considered, it is no surprise that overall course average improves with each increment in grouped high school average; this trend is seen in previous years as well. Some subject areas, however, show a larger range in grades then others. For students with high school averages below 75% in fall 2010, the overall averages achieved by these students in the select first semester courses are all below 60%. Math and the sciences in particular show low levels of overall academic achievement for students with incoming averages less than 75%.

<table>
<thead>
<tr>
<th>Admission average</th>
<th>ENGL</th>
<th>MATH</th>
<th>MATH</th>
<th>MATH</th>
<th>ECON</th>
<th>SOCI</th>
<th>FREN</th>
<th>PSYC</th>
<th>BIOL</th>
<th>CHEM</th>
<th>CHEM</th>
<th>PHYS</th>
<th>PHYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 70</td>
<td>54.7</td>
<td>45.8</td>
<td>43.3</td>
<td>n/a</td>
<td>42.0</td>
<td>49.7</td>
<td>55.7</td>
<td>50.4</td>
<td>37.9</td>
<td>44.4</td>
<td>n/a</td>
<td>38.6</td>
<td>n/a</td>
</tr>
<tr>
<td>N</td>
<td>76</td>
<td>16</td>
<td>32</td>
<td>6</td>
<td>21</td>
<td>18</td>
<td>78</td>
<td>13</td>
<td>5</td>
<td>2</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70-74.9</td>
<td>58.0</td>
<td>48.5</td>
<td>44.5</td>
<td>44.1</td>
<td>47.2</td>
<td>58.3</td>
<td>59.4</td>
<td>54.0</td>
<td>47.0</td>
<td>47.8</td>
<td>52.0</td>
<td>52.7</td>
<td>48.6</td>
</tr>
<tr>
<td>N</td>
<td>244</td>
<td>27</td>
<td>135</td>
<td>11</td>
<td>35</td>
<td>82</td>
<td>30</td>
<td>204</td>
<td>49</td>
<td>57</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-79.9</td>
<td>62.0</td>
<td>54.2</td>
<td>54.7</td>
<td>49.7</td>
<td>53.9</td>
<td>62.3</td>
<td>64.0</td>
<td>59.1</td>
<td>53.5</td>
<td>60.5</td>
<td>47.2</td>
<td>61.1</td>
<td>50.6</td>
</tr>
<tr>
<td>N</td>
<td>282</td>
<td>17</td>
<td>184</td>
<td>49</td>
<td>41</td>
<td>47</td>
<td>26</td>
<td>202</td>
<td>97</td>
<td>84</td>
<td>10</td>
<td>53</td>
<td>21</td>
</tr>
<tr>
<td>80-84.9</td>
<td>66.7</td>
<td>63.9</td>
<td>64.0</td>
<td>57.6</td>
<td>63.1</td>
<td>68.2</td>
<td>70.0</td>
<td>66.9</td>
<td>62.4</td>
<td>64.8</td>
<td>59.6</td>
<td>63.6</td>
<td>63.2</td>
</tr>
<tr>
<td>N</td>
<td>310</td>
<td>13</td>
<td>151</td>
<td>134</td>
<td>45</td>
<td>37</td>
<td>18</td>
<td>186</td>
<td>117</td>
<td>98</td>
<td>53</td>
<td>72</td>
<td>54</td>
</tr>
<tr>
<td>85-89.9</td>
<td>72.4</td>
<td>75.0</td>
<td>73.1</td>
<td>68.9</td>
<td>68.3</td>
<td>84.9</td>
<td>79.7</td>
<td>76.5</td>
<td>70.7</td>
<td>73.8</td>
<td>69.7</td>
<td>73.3</td>
<td>70.6</td>
</tr>
<tr>
<td>N</td>
<td>242</td>
<td>7</td>
<td>91</td>
<td>158</td>
<td>28</td>
<td>20</td>
<td>14</td>
<td>118</td>
<td>112</td>
<td>63</td>
<td>94</td>
<td>61</td>
<td>89</td>
</tr>
<tr>
<td>&gt; 90</td>
<td>74.1</td>
<td>92.0</td>
<td>88.4</td>
<td>79.7</td>
<td>80.0</td>
<td>82.0</td>
<td>90.0</td>
<td>81.9</td>
<td>79.3</td>
<td>84.1</td>
<td>77.3</td>
<td>83.8</td>
<td>78.2</td>
</tr>
<tr>
<td>N</td>
<td>109</td>
<td>1</td>
<td>14</td>
<td>117</td>
<td>12</td>
<td>3</td>
<td>1</td>
<td>55</td>
<td>56</td>
<td>9</td>
<td>89</td>
<td>32</td>
<td>76</td>
</tr>
<tr>
<td>Total</td>
<td>65.0</td>
<td>54.4</td>
<td>57.7</td>
<td>65.8</td>
<td>58.8</td>
<td>63.0</td>
<td>64.6</td>
<td>62.7</td>
<td>62.6</td>
<td>69.2</td>
<td>66.2</td>
<td>68.8</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>1263</td>
<td>81</td>
<td>607</td>
<td>469</td>
<td>167</td>
<td>210</td>
<td>107</td>
<td>843</td>
<td>444</td>
<td>316</td>
<td>248</td>
<td>252</td>
<td>249</td>
</tr>
</tbody>
</table>

Academic performance in university English and math courses has a direct linear relationship to high school admission average group. As a group, students entering Memorial with a high school average between 70 and 74.9% did not perform well in either Math 1090 or 1000 in fall 2010. For the first year English course 1080, overall course grade improved steadily with each increase in grouped high school average.
Academic performance in first year English and math also differs according to campus attended (Table 8). Although there are no significant differences in high school average for students who attend Grenfell Campus compared to those who attend the St. John’s campus in their first year, academic performance in the first semester does vary by campus for common courses. For Math 1090, the pass rate was much higher at Grenfell Campus than at the St. John's campus in both fall 2009 and 2010. Grenfell Campus does not offer a foundation math course like those offered through the Math Learning Centre at the St. John’s campus.

Table 8. Grades in first year English and Math courses by campus, Fall 2009 and 2010 new matriculants

<table>
<thead>
<tr>
<th>Campus</th>
<th>Course</th>
<th>Fall 2009</th>
<th>Fall 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ENGL 1000/80</td>
<td>MATH 1090</td>
<td>MATH 1000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td></td>
<td>N</td>
</tr>
<tr>
<td>St. John’s</td>
<td>F (&lt;50)</td>
<td>115</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td>D (50-54)</td>
<td>78</td>
<td>5.9</td>
</tr>
<tr>
<td></td>
<td>C (55-64)</td>
<td>299</td>
<td>22.8</td>
</tr>
<tr>
<td></td>
<td>B (65-79)</td>
<td>696</td>
<td>53.0</td>
</tr>
<tr>
<td></td>
<td>A (80-100)</td>
<td>124</td>
<td>9.5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1312</td>
<td>100.0</td>
</tr>
<tr>
<td>Grenfell</td>
<td>F (&lt;50)</td>
<td>29</td>
<td>12.7</td>
</tr>
<tr>
<td></td>
<td>D (50-54)</td>
<td>16</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td>C (55-64)</td>
<td>54</td>
<td>23.6</td>
</tr>
<tr>
<td></td>
<td>B (65-79)</td>
<td>105</td>
<td>45.9</td>
</tr>
<tr>
<td></td>
<td>A (80-100)</td>
<td>25</td>
<td>10.9</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>229</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Not all first-year students choose to take a math course in their first year. The first semester math outcomes for new matriculants are shown in Table 9. In fall 2010, 73.7% of new matriculants completed some type of math course in their first semester; 3.2% of these students registered for a foundation math course (102/3/4F), 6.6% attempted Math 1050, 49.1% attempted Math 1090, and 38.3% attempted Math 1000. While approximately one-quarter of new matriculants in the past two years have not attempted a math course in
their first semester, this proportion is higher for students with admission averages less than 75% than it is for students entering the university with averages above 75%.
Table 9. First Semester Math Outcomes for New Matriculants, 2009 and 2010

<table>
<thead>
<tr>
<th>Admit average</th>
<th>Fall 2009</th>
<th>Fall 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>No Math</td>
</tr>
<tr>
<td>&lt;70</td>
<td>112</td>
<td>58</td>
</tr>
<tr>
<td>70-74.9</td>
<td>369</td>
<td>118</td>
</tr>
<tr>
<td>75-79.9</td>
<td>407</td>
<td>101</td>
</tr>
<tr>
<td>80-84.9</td>
<td>372</td>
<td>85</td>
</tr>
<tr>
<td>85-89.9</td>
<td>315</td>
<td>56</td>
</tr>
<tr>
<td>&gt;90</td>
<td>150</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>1725</td>
<td>437</td>
</tr>
</tbody>
</table>

High school averages for 3 Fall 2010 and 6 Fall 2009 new matriculants were not available.

A small number of students may have attempted a math course other than those listed above, therefore the sums may not equal the total N in each row.

No Math means none of 1090, 1000, 1001, 1050, 1051, 2000, 2050, 2051, 2090, 102F, 102N, 103F, 104F
Transition Factors

Campus Transition

Transition occurs between high school and university, but may also occur when transitioning from one campus to another. In particular, students who begin their university studies at Grenfell Campus and then move to the St. John's campus for the second year may also experience a transitional effect ("transitional bump") moving from a smaller to larger campus.

Figure 3. Fall semester average by campus attended in the first three years, 2006-2008 new matriculants
An analysis of new matriculant cohorts over several years, tracking the first three years at university, suggests that there is a slight drop in overall fall semester average when students move from Grenfell to St. John’s and a recovery from this drop by year three; however the decrease is not always significant. This trend is illustrated in Figure 3 for the 2006, 2007 and 2008 cohorts. The ‘Grenfell’ and ‘St. John’s’ lines represent students who remained at that same campus for the first three years of university study, while the ‘Grenfell-St. John’s’ line represents students who attended Grenfell Campus in their first fall semester, but then attended the St. John’s campus for their second and third fall semester.

**Common Arts and Science (CAS) Transfer and Transition Program**

The Common Arts and Science (CAS) Transfer Program offered by the College of the North Atlantic (CNA) enables students to complete first year course work at one of several CNA campuses and receive university credit for these courses; it is intended for students who plan to transfer to Memorial after completing first year courses at CNA. Students may be accepted into the CAS Transfer Program with an average of 60% in courses required for admission to Memorial.

In 2000 and 2006, CIAP collaborated with the College of the North Atlantic (CNA) to produce reports that summarized the academic performance of students from the Common Arts and Science (CAS) Transfer Program (the 1998 and 2004 groups). Based on the 1998 and 2004 CAS groups, it was noted that there had been an improvement in academic performance of the CAS students over those two periods, both in terms of the courses completed at the College and their subsequent first semester at Memorial. For the 2004 CAS students, this was particularly evident for high school graduates initially ineligible for Memorial, which may suggest that participation in the CAS program has a positive impact on the academic achievement of lower-performing students, and which is a point that requires further study with more recent data.

Work on a third report of the CAS Transfer Program is currently underway, but preliminary data has been provided by CNA on recent student participation and performance in the program. In the 2009-10 year there were 266 students in the CAS Transfer Program, and in 2010-11 there were 303 students (CNA, Office of the President, 2011). Table 10 shows the participation and pass rates for the university-equivalent English and math courses in the CAS Transfer Program.
<table>
<thead>
<tr>
<th>Subject</th>
<th>Course</th>
<th>Memorial Equivalent Course</th>
<th>2009-10</th>
<th>2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Average Grade</td>
<td>Students</td>
</tr>
<tr>
<td>Math</td>
<td>MA1104</td>
<td>MATH 1090</td>
<td>60.6%</td>
<td>107</td>
</tr>
<tr>
<td>Math</td>
<td>MA1120</td>
<td>MATH 1050</td>
<td>53.5%</td>
<td>57</td>
</tr>
<tr>
<td>Math</td>
<td>MA1121</td>
<td>MATH 1051</td>
<td>59.2%</td>
<td>46</td>
</tr>
<tr>
<td>Math</td>
<td>MA1130</td>
<td>MATH 1000</td>
<td>68.7%</td>
<td>106</td>
</tr>
<tr>
<td>English</td>
<td>CM1120</td>
<td>ENGL 1080/ENGL 1000</td>
<td>62.3%</td>
<td>276</td>
</tr>
</tbody>
</table>

When considered in comparison to the grade data and pass rates for the Memorial equivalent courses, it appears that average grades and pass rates for the CAS Transfer students in the select math and English courses are similar to those for new matriculants at Memorial, but there is variation in subjects and between years. It is not clear at this point how students in the lower entrance average grouping compare to those in higher entrance average groupings. A more detailed analysis of how the CAS Transfer students perform when they come to Memorial should help shed light on these data.
Chapter Three: Environmental Scan

Introduction

An environmental scan was conducted to determine how other universities are addressing the needs of academically vulnerable first-year students. Over 60 post-secondary institutions were reviewed to identify emergent trends in university- and college-based support programs of institutions outside of Newfoundland. The intention was to identify proven programs and common approaches that could help inform intervention at Memorial University, especially in the development of a pilot for 2012. From a review of program offerings across Canada, and in some cases the United States, several themes quickly emerged. These themes will be presented here while a full listing of the programs reviewed is contained at the end of this report (See appendix B). Individual programs will not always be referenced, focusing rather on overarching approaches and services. It should be noted that a separate committee is currently conducting a review of the programs and services being offered at Memorial and its campuses, for submission in January 2012. That data will further inform this pilot.

While the review was extensive, it became evident early on that saturation had been reached. Approaches and services are remarkably common and widespread, with nearly every institution having some articulation of similar programs. More interestingly, nearly every service or program identified in the scan currently exists or did exist in some version or format here at Memorial University; therefore we could actually look within our own services to develop the pilot. The issue is that these services are often in silos. The challenge of developing a pilot program has become a process of drawing together and strengthening existing approaches so as to create a more effective first year experience for Memorial’s students.

Diversity in Language and Programs

While conducting the environmental scan, it became evident that there is significant variety in the terminology used to describe these services. Terms such as “bridging”, “access”, “transition”, “preparatory”, “enriched support”, “student success”, etc. are often used interchangeably, though often speak to specific sub-sets of students. For example, “access programs” and/or “transition programs” are often broader terms referring to those programs designed for first-year students who may not have otherwise had the opportunity to enroll in university. “Preparatory programs” usually references services with an academic focus to help students meet entrance requirements. “Bridging programs” frequently refer to the same type of programs, but often include services that are designed for students whose first language is not English. “Enriched support” is frequently used to describe broader and separate services offered under student support programs. Likewise, there is equal diversity in the myriad of special courses, approaches to supporting regular courses, and services that characterize these programs, which in itself becomes a dominate theme. There is no singular approach to supporting vulnerability.
A Continuum of Services for a Continuum of Needs

All universities studied have developed some type of programs targeting specific groups of students such as academically vulnerable, non-traditional students, students who are older than average, students with individual learning needs, aboriginal students, international students and those from under-represented populations. Most programs include a cascade of academic and non-academic support services, regardless of the specific group of students it targets. While there is often a more intense focus on first-year students, these supports are available throughout a student’s entire university career.

Year-long, Two Semester Programs

Most support models have been developed for first-year students, ranging in length from a few days or weeks to intense programs that are semester-long or year-long. There is a trend away from the shorter programs toward a more intensive first year structure, where students are supported in both their first and second term of study. Students are taught specific skills in separate support courses and are connected with existing supports at universities as they move through their first two semesters. Programs focus on helping students acquire skills and awareness of the programs that will remain available to them.

Partnering with Community Colleges

Interestingly, university-based programs designed to raise a student’s academic average to meet minimal entrance requirements are limited. More often than not they are deferred to the community college level where students benefit from smaller campuses and class sizes that are closer to their existing support networks. Dawson College in Quebec, for example, offers two bridging programs: Explorations Science, designed for students who did not take advanced science courses in high school, and Developmental Science, a bridging program for students whose grades in advanced mathematics, chemistry and physics do not meet entrance requirements for the Science Program. Trent University and Fleming College jointly offer a General Arts and Science University Transfer Program for those without the necessary academic credentials or those wanting to take the initiative to be successful in university. Successful completion of these programs may lead to admission to pre-university science or medical/engineering technology programs.

Nonetheless, there are some university-based programs that are geared towards students who have an academic average slightly lower than that required for university admission, who are missing required courses, or who feel they may need additional support at university. Examples include the Transition Program at the University of Prince Edward Island, the Gateway Program at Lakehead University, and the Enriched Support Program at Carleton University.
Specific Groups of Vulnerability

While there are many groups of students who can be deemed to be “at-risk”, three groups stand out: aboriginal students, international students and students with exceptionalities. For these specific sub-groups, nearly all universities have services that are intense but separate, though they parallel the structure of broader supports for vulnerable students. A specific centre or department typically organizes services for these three groups. Such services focus on specific issues such as second-language learning, cultural transitions, academic standing, assistive technology, academic accommodations, mobility/access, counselling, etc. Nonetheless, many of the services and programs that are established to support students with low academic average will also benefit these specific groups.

Full-time Students in a Community of Learning

Learning communities typically consist of planned groups of first-year students who interact as a cohort group, helping to connect students with their peers. There is a clear mandate to engage students and blatant efforts to create social connections and ensure that students develop a sense of belonging. Campus pride and university identity is high profile on all campuses studied. Orientation is seldom a first week phenomenon. Students often enroll in a cluster of 3 common classes and may participate in small-group sessions that provide them with the opportunity to meet classmates, form study groups, and develop academic and personal skills. Some programs provide students with the opportunity to take classes with the rest of the university, while others operate according to a cohort model with students taking foundation courses specifically designed for the program and housed separate from other students. LEAP at St. Mary’s University, First Year Learning Communities at the University of Regina, and Freshman Learning Communities at the University of South Carolina, Beaufort Campus, are all examples of the cohort model.

Balancing Cohorts, Support Courses and Stand-alone Courses

While many programs offer specific support courses and regular courses through either a cohort model or a stand-alone model, there is care and caution against stigmatizing or isolating participating students. Most programs encourage participating students to select electives as stand-alone courses that expose them to the broader university experience as they begin their individual degree plan. Programs clearly balance course loads so as to address individual needs in separate learning environments with exposure to the realities of university life. The support courses tend to focus on two specific areas: orientation/metacognition and university writing. They are almost always for credit and are offered in the first year. Examples are endless and include the Cornell Writing Program, Wilfred Laurier’s Academic Writing, University of Western Ontario’s Learning to Write program, and the University of South Carolina’s Learning Strategies course. Many universities are also developing online versions of these support services.
Concern for Math

Math readiness appears to be a common area of need and struggle for many vulnerable students at the post-secondary level in general. Largely recognized as a secondary school curriculum issue, many students need support in their first year math courses and all universities have some type of service. In fact, it is the most common subject-specific area of support. The diversity of approaches is significant. The supports tend to focus on explicit support for existing courses, versus re-teaching high school math curriculum. Again, for students who do not meet entrance requirements, separate transition services are increasingly offered at community colleges. Nonetheless, math help centres and/or separate intensive programs are realities at all universities studied. Examples include the University of Toronto’s PUMP (Preparation for University Math Program) and the University of Saskatchewan's Math Readiness Course.

Academic Tracking and Early Warning

Academic tracking (early warning) systems are emerging to follow and intervene early so as to support students. It is imperative that students themselves know how they are performing, identify areas where intervention is required and know where energies must be placed early in each semester. Likewise, it is equally important that support programs and services have information and share it so as to mobilize services. These systems are computerized using various software systems. Examples include: Glendale Community College and Portland Community College. At the University of North Carolina, Greensboro Campus, the academic progress of undergraduate students is closely monitored; those who fall on academic probation after their first semester must take SAS 100: Strategies for Academic Success, an eight-week, non-credit course that focuses on the needs and concerns of students entering their second semester.

“Mandatory” Participation

Surprisingly, the term “mandatory” appears frequently in the description of these services. Increasingly, the trend is toward special admission based on participation in a first year program that focuses on students whose academic average at admission is slightly lower or borderline. In these programs, participation in support courses is often described as being a mandatory component. However, participation in these courses is optional for other students who feel they may benefit from the course content. Some universities have made orientation and metacognitive learning skills a mandatory course for all first-year students. One example is Cornell University, which offers First Year Writing Seminars, mandatory writing courses required for each first-year student no matter what his or her subject of study. No universities outlined what the consequence of poor attendance or engagement would be.
Supporting Faculty

While programs to support vulnerable students are evident across universities, there is significant evidence that universities are strengthening their support for the instructors of these students. The environmental scan which informed the development of the Teaching and Learning Framework detected growing recognition of the critical role of teaching in accommodating diverse learners. Many support centres offer seminars, supports and services to faculty of first-year students. For example, faculty members at the University of Texas at El Paso use a variety of active and collaborative learning approaches.

Post-first Year Planning

While the first year is widely seen as a critical point of support and intervention, universities recognize that many students, for many reasons, will require supports across their entire degree program. Some programs have specific mechanisms to follow students who receive initial intervention and, as stated earlier, every university has help centres and services. Intensive first year experiences are seen as the beginning of a process and not a “one off” experience. In fact, it is apparent that an explicit objective of many first year programs is to introduce students to, and create a relationship with, services and supports that are already available to any student.

Examples are plentiful, and some extend far beyond the support courses and writing/math help centres listed above. Many offer structured tutoring programs such as the Peer Assisted Study Sessions (PASS) at Carleton University. Other universities specifically target students who have been placed on academic probation, such as the Fresh Start Program at the University of Alberta and the BOOST program at Brock University.

It has become clear from this exploration that a continuum of services and programs has been established to respond to a continuum of need. Connecting students with services early in their university experience and engaging them in a learning community, especially those who need it most, is widely recognized as a critical responsibility of universities. “Support”, “engagement”, “inclusive”, and “community” have all become shared philosophies within the academy.
Chapter Four: Literature Review

Introduction

A literature review was conducted to explore the existing knowledge, theoretical constructs, and best practices with regards to student success and retention so as to inform the development of a program at Memorial targeted towards students identified as academically “at-risk”. An extensive search has revealed voluminous and diverse literature on the subject. A number of social, academic and institutional factors were identified as having an influence on student success and retention. Multiple responses have also been suggested, developed, and implemented to address the needs of those students identified, based on various criteria, as being academically “at-risk.” In this section, we highlight key findings that have emerged from research in the area, as well as practice-informed recommendations for consideration in the implementation of future programs.

The Importance of Student Success and Retention

Attrition is a concern for educational institutions as it has a number of negative consequences: it represents a loss of human potential for students leaving their studies (Koutsoubakis, 1999; see also Tinto, 1993; Pascarella & Terenzini, 1991) and is experienced as a failure by the university staff, instructors, and faculty members who serve these students (Wilder, 1992). Since retention is often considered “a significant indicator of institutional quality and impact” (Schnell & Doetkott, 2003; see also Pascarella, 1986) and a measure of an institution’s commitment to its students (Schnell & Doetkott 2003; see also Astin, Green, & Korn 1987), attrition also threatens post-secondary institutions’ financial well-being because it not only represents a direct loss of revenue (Schnell & Doetkott 2003) and unrealized alumni contributions, but can also blemish their institutional image. Sanders and Burton (1996) note that post-secondary educational institutions have been increasingly held accountable for student success.

Defining the “At-Risk” Student

King (2004) defines "at-risk" students as being a diverse collection of sub-groups of students who may be classified as such based on a number of criteria such as:

- academically underprepared as a result of prior educational experiences (e.g., academic failure, poor preparation, low expectations)
- individual risk factors (neurological, cognitive, health, or psychological) that can contribute to academic failure
- familial risk factors including disturbed family functioning, dependent care issues, familial values concerning education, and lack of financial resources
- social risk factors (e.g., conflicting ethnic or cultural values or stressful peer and social interactions).
“At-risk” students may struggle to find a balance between their institutional and external commitments, and overcome barriers that may inhibit or prevent them from sustaining a sufficient level of engagement conducive to their retention and success (Gilardi & Guglielmetti, 2011). Students’ individual circumstances must be considered in the development of programs that seek to mediate the challenges they may face as part of the first year experience.

Multiple Reasons for Vulnerability

Academic underpreparedness is just one factor among many that may contribute to poor undergraduate performance and attrition. A review of the literature provides evidence to suggest that a great number of social, academic and institutional factors may influence student performance and persistence. Each of these is discussed here under the following headings: pre-entry characteristics; social factors; academic factors and institutional factors. It is important to note, however, that these categories and factors often overlap and intersect, making the task of identifying the exact reasons for attrition and poor performance difficult. Andrade (2008-09), in summarizing Tinto’s theory of student departure, states that “students’ pre-entry characteristics (family background, individual characteristics, and educational background) as well as their initial commitments to the institution and to degree completion, influence their level of academic and social integration. Successful integration affects subsequent levels of commitment and increases the likelihood of persistence” (p.484).

Pre-entry Characteristics

Students enter undergraduate programs with pre-existing attributes and experiences that ultimately shape their entrance and passage through the post-secondary education system. These factors are an important consideration when examining possible influences in student persistence through the first year.

Parental support has been shown to be positively related to adjustment to post-secondary studies (Cutrona et al., 1994; Napoli & Wortman, 1998; Martin, Swartz-Kulstad, & Madison 1999; Yazedjian et al., 2007). Students whose parents did not attend university (referred to as “first-generation students”) tend to arrive less prepared than their peers, since their parents may not be familiar enough with the expectations to adequately prepare their children for post-secondary studies (Perna & Titus, 2005). Many of the factors commonly linked to attrition are associated with students’ social class and socio-economic backgrounds. First-generation students are at a higher risk of attrition than students whose parents attended university (Young 2002; Nandeshwar, Menzies & Nelson 2011).

Bean and Metzner (1985) discuss educational goals as a background variable in their model of non-traditional student attrition. They note that at the time of enrolment these goals may include the highest level of education sought, the amount of importance ascribed to obtaining university education, and the likelihood of completing an educational goal at the current institution. Numerous studies have demonstrated a connection between pre-enrolment educational goals and persistence. Tinto (1975) includes a discussion of
educational expectations in a factor he termed an individual’s educational ‘goal commitment’ in his model of university dropout, and notes that the extent to which one is committed to an educational goal is directly related to persistence.

**Social Factors**

According to Astin (1996), attrition is least likely to occur when students enjoy good levels of involvement with faculty and student groups. Likewise, Tinto (1987) describes the attrition as being the result of students’ failure to integrate into their institutions’ academic and social systems (see Willcoxson, Cotter & Joy 2011, 331). A number of studies have shown that academic and social integration have positive effects on student success and persistence (Pascarella, Smart & Ethington, 1986; Cabrera, Nora & Castañeda, 1993; Braxton, Hirschy, & McClendon, 2004) and thus are especially significant in the first year (Pascarella & Terenzini, 1983; Hoffman et al., 2002; Nicpon et al. 2006; Rayle et al., 2006). Emotional and social integration have been shown to be as important as academic adjustment in the first year experience (Myers & Birk, 2002); such integration is thought to contribute to students’ success and persistence (Tinto 1986; 1993; Braxton, Sullivan, & Johnson, 1997). Astin (1984) notes that increased rates of undergraduate program completion may be attributed to increased levels of student involvement. They claim that students’ active participation in the academic and social life of the post-secondary institution leads not only to learning and development, but also to academic success and retention. Also important is what Keup and Barefoot (2005) term engagement. The first six-week period at university is identified as being particularly critical in establishing this engagement and ensuring that students feel that they belong, that they are connected.

**Academic Factors**

The academic factors that are identified in the literature as affecting student success and retention include: student academic readiness and preparedness; the connection between student expectations and what they experience and learn; their understanding of their institutions’ and professors’ expectations; their past (e.g., high school) and present (e.g., university) academic successes and failures; the level of academic integration they enjoy; the number and impact of the validating experiences they have; their study skills, resourcefulness, sense of self-efficacy, self-confidence, and ability to self-regulate; the motivations they have and the effort they put in; and the difficulty and number of courses in which they enroll. The literature is clear and consistent in stating that full course loads promote academic success and retention. Students must see themselves as being fully engaged in their studies.

High levels of past academic performance increase retention (Rudra, 2000). For first-year students, research indicates attrition is particularly related to academic integration (Cox et al., 2005; Hoffman et al., 2002; Lohfink & Paulsen, 2005; Pascarella & Terenzini, 1983).
Institutional Factors

Institutional factors affecting student success and retention include: access to information and advice; connectivity to campus services; the availability of courses; the selection of courses offered; the quality of these offerings; the quality of programs; and the quality of instruction and guidance offered. Negative factors include: large class sizes (Rudra, 2000); cumbersome and stressful “red tape” and administrative errors (Mohr, Eiche, and Sedlacek, 1998; Willcoxson, Cotter & Joy 2011); dissatisfaction with policies and facilities; and negative campus climate, including the threat of dangerous, unsafe, or unpleasant environments. While it is important to establish a focused and effective learning environment, it is equally important to develop an effective and focused teaching experience. Both need to be prioritized, planned and monitored.

Multiple Responses to Vulnerability

The value of student success, bridging and retention programs lies in their ability to attend to the factors identified as being influential and increase students’ ability to succeed socially and academically. No program effectively addresses all (or even most) of the factors identified in the literature. The elements involved in these programs can range from a few minutes in length to the entirety of a degree and beyond, and include initiatives offered prior to enrolment to years following the successful completion of a degree. All of these initiatives can be targeted to specific populations (e.g., students who are academically “at-risk” at admission). Multiple responses and interventions are required for multiple needs and issues.

The literature shows that effective student success programs are typically tailored to the institution and aligned with its mission. Such programs must represent and incorporate the views of the entire institution and remain inclusive and responsive to the needs of the entire student body. Supports must involve the entire university community. Interventions are holistic, comprehensive, intrusive, and learner-focused. Effective support programs also address socio-psychological factors such as peer effects and stigmatization, and are fueled by the need to understand student motivations as a primary objective in avoiding a lengthening time to graduation. Effective student success programs are focused on the promotion of social and institutional ties, as well as involvement. Most programs are not optional and require mandatory participation. Many offer incentives or extrinsic rewards for those who participate. Subsequently, it is particularly important that support courses receive credit so as to be seen as legitimate and rigorous.

Student success programs are usually front-loaded, meaning that they are heavily focused on the first year experience, devoting a significant amount of resources to servicing those students in the early stages of their university career. Millem & Berger (1997) found that students who do not become engaged with the institution within the first weeks tend to remain uninvolved. In recognition of this, the early identification of students “at-risk” followed by a prompt implementation of intervention services for those students is a key strategy of many institutions (Summers, 2003). The first year should be structured for
students and with the help of students to explicitly draw from, and introduce them to, the appropriate courses and existing supports.

**Characteristics of Effective Supports**

Increasingly, academic institutions are implementing various success and retention initiatives to support student transitions into university and throughout the first year experience. Pre-orientation programs exist at institutions such as Longwood University and the University of North Carolina, Chapel Hill. Some also offer parent orientations. Orientation weeks, workshops, and conferences are geared at organizing social activities to welcome incoming students. Participation in such programs has been found to be critical to students’ success and to their sense of connection with the institution (Pérez, 1998). The literature also reveals that there are programs developed for specific groups, such as students with disabilities, as well as services targeted towards academic deficiencies, such as writing and math. While supports are available for students, supports are also available for those who teach first-year students. Faculty development programs work to promote effective teaching strategies that enhance learning. Quality teaching and effective instruction is a priority for the promotion and tenure process. One example of this is the University of Michigan where a set of named professorships, the Thernau Professors, has been established to recognize faculty members with extraordinary achievements in undergraduate education (Kinzie, 2005).

**Supports for Academically “At-Risk” Students**

Academically “at-risk” students also require a number of academic and social supports, which commonly take such forms as: learning communities; peer mentoring and peer partnership programs; counselling and advising; first-year student success seminars; remedial courses; and summer bridging programs. Again, the literature challenges the notion that lighter course loads are conducive to success. Students, including those considered “at-risk”, who are registered for full course loads tend to earn higher GPAs and have been consistently shown to demonstrate greater rates of retention (Szafran, 2001).

**Learning Communities**

Learning communities are clusters of 15-30 students who share two or more courses in common. While small clusters of students may share both small and large classes together, two- or three-course clusters appear to be most effective in promoting success and retention. One of the purposes of first-year student learning communities (FLCs) is the formation of a “peer cohort” that provides a sense of community for students (Jaffe et al., 2008). It has been noted that residential living-learning communities are among the most consistently effective methods. In fact, it has been noted that first-year students living on campus experience higher levels of peer support, perform better academically, and are more likely to persist in college than those living off campus (Gardner, 1991; Pascarella & Terenzini, 1991). While such cohorts are effective, there is caution against creating stigma.
A careful blending of inclusion into support services and engagement in the broader university experience is required.

**Peer Mentoring and Peer Partnership Programs**

Peer partnership and peer mentorship programs are also identified as effective ways to address some of the many challenges of the first year. They are seen as being cost-effective and beneficial to all participants (i.e. both the mentee and the mentor). These programs can have a variety of foci (e.g., programs specifically tailored for minorities, second language and transition issues for international students). Mentoring first-year students has emerged as a key activity in first year experience programs to support student success. In particular faculty and peer mentoring programs are often used in conjunction with a first year seminar to: facilitate students’ transition from secondary school to college; provide role modeling; support personal development; and help students succeed academically (Bierema & Merriam 2002; Harmon, 2006; Keup & Barefoot, 2005; Logan, Salisbury-Glennon, & Spence, 2000; Terrion & Leonard, 2007). Having a faculty mentor can lead to higher GPAs and lower dropout rates for mentored first-year students than non-mentored first-year students (Campbell & Campbell, 1997). Similarly, having a peer mentor can lead to a better adjustment to college, finding more solutions for problems, and higher retention rates for mentored first-year students than for those not mentored (Schwitzer & Thomas, 1998).

**Counselling and Advising**

Counselling and advising programs are effective ways of ensuring that “at-risk” students are making the right decisions and are supported through the transition process. Mandatory pre-entry advising and counselling are useful strategies, as is out-of-class contact with faculty members. Many institutions have successfully used specialized advising programs as part of their freshman year programming (Brown 1995; Crowl 1993; Weaver 1993; White 1993). Career advising is also seen as being a critical area of support for “at-risk” first-year students (Bigger, 2005), particularly those who are often undeclared and unsure of their academic or career plans (Keeling, 2003).

First-year student success seminars (FYSSS) are courses offered to first-year students that serve to ease the transition process into university. They are referenced by various terms, such as freshman courses; first year seminars; extended orientation courses; survey courses; and first year experiences (Schnell & Doetkott, 2003). These programs seek to help students find a sense of community, encourage their involvement and engagement in the institution, and assist in academic and social integration. Other goals of these courses include encouraging personal development and creating a common first year experience. While there are many types of FYSSS, four themes have been identified as being geared towards “at-risk” students.

The first type of course is transition-themed seminars, also known as orientation courses. They tend to focus on skills and information such as the use of key student services and knowledge of the academic community. These are the most popular type of FYSSS (e.g.,
Grenfell’s UNIV 1010) and strive to ensure student engagement, understand the expectations of university versus high school learning and introduce them to services and supports that are available to them.

The second type is study skills seminars, which are more intensive metacognitive learning strategies. Their content can be either focused or broad, and often encompasses a number of the following themes and topics: reading and writing skills; study skills and techniques; emotional and social skills; stress management; and time management. An example of this type of course is UNIV 0001: Student Success Course at Mount Saint Vincent University. The literature adds that such skills must be explicitly taught and that students also need instruction in applying them to real learning experiences. If such skills are taught in isolation they tend to stay in isolation.

The third type of course is discipline-based first year seminars, which are hybrids of transition-theme and/or study skills courses. They are offered by a department as an introduction to a specific academic major (Swing, 2002). They often support students in applying study skills to the content of a specific course, and as such are considered to be an efficient administrative structure. An added feature is that they establish relationships between professors and their future students (Cavote & Kopera-Frye, 2004).

Finally, academic preparatory courses, such as academic writing, research, basic English or pre-calculus (also referred to as “refresher courses”) exist, though they are less common at universities. Such courses are usually restricted to first terms and designed to ready students to move into the first year core academic courses.

The effectiveness of FYSSS is based on a number of factors, including that they be offered in small classes, composed of between 15-20 students (Barefoot, 1993; Benjamin et al., 2007), and that they be mandatory for “at-risk” students (Weissman, Bulakowski, & Jumisko 1997; Koutsoubakis 1999; Logan, Salisbury-Glennon & Spence 2000; Thayer 2000; Zimmerman 2000; Oudenhoven 2002). As noted earlier, it is also critical that they receive academic credit so as to be seen as having academic rigor (Barefoot, 1993; Gilbert et al., 1997). When such courses are only required for “at-risk” students, special attention must be paid to the makeup of the resulting classes and the peer effects which result from this grouping of lower-ability students. Caution is again given against producing negative peer effects and diminishing opportunities for students to interact with peers who are higher achievers and strong role models (Betts & Morell 1999; Bettinger and Long 2008; Hoxby 2000; Kim 2009; Sacerdote 2001; Zimmerman 2003).

The positive influence of FYSSS on retention and graduation rates has been well documented (Pascarella & Terenzini, 1991; Schnell & Doetknott, 2003). While FYSSS are widely used across North American universities, they are varied in form and content (Upcraft, Gardner, & Associates, 1989). Not all types or offerings are effective and some may actually have a negative impact on students’ progress and success (Cavote & Kopaera-Frye 2004; Chapman & Reed 1987; Davis 1992; Hendel 2006-7; Muraskin & Wilner 2004; Robinson 1989). Again, the diversity of factors that place an individual student “at-risk” should stipulate the nature and intensity of intervention.
**Remedial Courses**

Remedial courses are those designed to address academic deficiencies and prepare students for subsequent college success. Often designed for those students who have not met entrance standings, these programs attempt to teach students the material they have not yet mastered. They help underprepared students gain skills necessary to excel in college. By grouping students with similar needs, remediation is similar to tracking in primary and secondary schools, and can enable instructors to better tailor their teaching to the needs of students and provide other kinds of support, such as tutoring (Bettinger & Long 2008). Increasingly, universities are partnering with community colleges, where smaller campuses and class sizes, often in their home communities, deliver remedial services. Such campuses are seen as being more effective in responding individually to students’ needs.

**Summer Bridging Programs**

Summer bridging programs have been seen as an effective means of giving “at-risk” students a head start. These programs were designed to remediate academic skill deficiencies, provide information regarding college campus life, orient students to the institution’s culture, and develop student self-esteem and sense of efficacy (Ackermann 1991; Buck 1985; Evans 1999; Fitts 1989; Garcia 1991; Pascarella & Terenzini, 1991). Summer bridging programs continue to be used by both colleges and universities to attract students and assist them with transition, so as to retain underprepared students. Such programs typically provide academic preparation and transitional support during the summer prior to a student’s first year (Buck 1985; Fitts 1989; Logan, Salisbury-Glennon, & Spence 2000; Perna 2003; Perna & Swail 2001; Swail & Perna 2002; Valeri-Gold, Deming, & Stone 1992). Bridging programs often target admitted students who may be academically underprepared, or students who are admitted conditionally. Because underrepresented students may lack the scholastic skills necessary to successfully complete post-secondary level work (Gandara 2002; Hagedorn & Fogel 2002; Perna, 2003), summer bridging programs focus on preparing students to meet the rigorous academic demands. However, given their short duration, they are not seen as ensuring long-term success. The literature is clear in stating that a full first year experience with a variety of interventions is the most effective way of ensuring retention for academically vulnerable students.
Chapter 5: A Program for Pilot (2012)

Introduction

The recognition of the need to respond to students who are considered “at-risk” is acknowledged across the programs, academic disciplines and campuses of Memorial University. This need was highlighted in the reports of both the academic and non-academic support advisory groups to the Teaching and Learning Framework and reiterated in the feedback from the advisory group to this current process and in the individual consultations that have helped guide and inform this initiative. Subsequently, this proposal, which is designed for pilot in September 2012, stands at the intersection of the findings of the environmental scan, the analysis of our in-house data from CIAP and the Registrar’s Office on student performance, the literature review, the consultations and the feedback received from the advisory group. It does not propose a totally new initiative but rather a co-ordination and strengthening of existing services and programs; a weaving of supports to engage first-year students in a sense of community. Guided by the core values of the Teaching and Learning Framework at Memorial - collegiality, inclusiveness, responsiveness, integrity, respect and accountability, the proposed pilot program affords Memorial University a starting point from which to build a first year experience that will earn a reputation of excellence.

As a pilot program, it will build on existing knowledge and proven programs and create additional knowledge to inform and guide us in supporting our students. Participation will be voluntary and advised, as part of Memorial’s recruitment and advising program, and will target students whose academic average at admission is between 70-74.9%. CIAP notes that each year approximately 300 students fall into this range. Likewise, CIAP adds that without support 25% of these students will fail the first term and 75% will not have completed a degree in seven years.

The Goal

The goal of this initiative is to develop a pilot program that will build on existing knowledge, proven programs, and existing supports in order to respond to the specific needs of a targeted group of students. The explicit plan was to create a starting point for supporting our students and in doing so, help to create additional knowledge. Long-term intervention must address our specific needs in ways that have been shown to be effective on our campuses. It is envisioned that the program may eventually become:

- mandatory for some
- strongly advised for others
- optional for those who think (or discover) they will benefit from it, or parts of it

Subsequently, it is proposed that a full pilot will begin in September 2012 and run for two years, with a report to Senate following the first academic year (May 2013) and a recommendation to Senate midway through its second year (December 2013) that will inform a more permanent model. The Marine Institute will continue to participate in
evaluating and monitoring the pilot so as to identify how best to avail of services for its unique program delivery model. Likewise, Grenfell may also participate in a portion of the pilot. We recognize that each of our campuses has unique strengths and needs and requires individual planning processes. We recognize as well, that all stakeholders at Memorial University, regardless of campus or discipline, are committed to supporting this initiative. Everyone will benefit from successful intervention with this group of students.

What follows is a description of this pilot program with a rationale for each step in its structure and the supports that will be created to strengthen it. We conclude with discussion of the processes that will be required to further develop the program and prepare it for implementation in the fall of 2012.

**The Pilot: Structure**

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The program will be a full, first year experience, supporting students across both semesters. The literature identifies that the first six weeks present a critical opportunity for engagement and that both semesters are critical opportunities for skill acquisition. A pilot will engage students with a community, as full-time students receiving academic credit for their courses. These courses will be a blend of existing support courses, cohort courses and elective courses completed without specific supports. Caution must be taken against creating a stigma or establishing an artificial first year experience that will not be sustained in second year. Likewise, caution is also taken against elongating degree programs and having students incur additional expense. The Registrar’s Office assures that, excepting the direct entry degree students, students participating in this program will not be delayed in their studies. It should be noted that this target group of students cannot currently compete for admission to such direct entry programs. CIAP indicators on graduation rates inform us that for students in this target group, participation in the program will actually improve their chances of finishing degrees on time.

The vast majority of these students are undeclared and many eventually end up in an Arts program. The support courses and some electives will be Arts courses. It will be recommended that the pilot program be housed within the Faculty of Arts so as to help streamline the delivery of supports. Students participating in the pilot will be encouraged to declare as Arts students so as to have a home at Memorial University.

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Each semester will offer a support course that explicitly teaches the skills required to be a university student. University 1010 is an existing credit course in Arts at Grenfell, which orients the student to university life. It has a solid reputation and has been offered for a number of years. That course will be offered as part of this pilot on the St. John’s campus. This course facilitates immediate engagement with students. It facilitates a transition from being a high school student to being a university student. It introduces the opportunities the university offers and the supports available to students. It establishes a path for becoming an engaged and committed student. University 1010 will continue at Grenfell for students outside of this program who wish to take it. Offerings on the St. John’s campus will be reserved for students who are involved in the pilot.

University 2020 is a more advanced credit course currently called University Counselling Centre 2020 and offered only at the St. John’s campus. It is also a proven course with a solid reputation and is in high demand, with 2-3 sections being offered each fall and winter semester. This pilot will include this course, cross-listing it with Arts as “University 2020”. The intention is to have it seen as the advanced continuation of University 1010. The course teaches metacognitive learning skills and the content will not change. The existing UCC 2020 will continue for students outside of this program who wish to avail of it.

Each course currently includes a module on Information Literacy, offered by the University Library. The content of these modules will be curriculum mapped so as to ensure a continuum of skill development.

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<td><strong>Semester One</strong></td>
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<td>1. University 1010</td>
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<td>2. Introduction to University Writing</td>
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The second course in first semester will focus on writing. A new Arts course has been developed, tentatively entitled “An Introduction to University Writing” for the pilot. The objective is to teach students the language and writing skills that will be required across academic disciplines. It focuses specifically on teaching transferable skills and has been developed by the English department and approved by the Faculty of Arts.

In the second semester students will enroll as a cohort in English 1080, using the F-slot (a scheduling code used by the Registrar’s Office to allow for a fourth hour of instruction) for supplemental instruction. This course is currently completed by nearly all first-year students and has a relatively high pass rate. Using a cohort supplemental model allows the pilot the opportunity to link the skills taught in University 1010 and University 2020 with the requirements of English 1080. It will also allow the pilot to reinforce the writing skills and strategies taught in the new writing course that was delivered in first semester. It is a
careful sequencing of strategies and skills that strive to improve the existing success rate. This sequencing and linkage will help ensure that the content taught in the three support courses is reinforced and transferred by the students to their other courses. Both the writing and the English course will also ensure that students receive early and continuous evaluative feedback so as to gauge their own progress.

Next to English, psychology is the most popular course currently completed by first-year students. Offered under the Faculty of Science, it helps students fulfill degree requirements under that category. Like English, it already has a relatively high success rate. Again, supports will improve that.

Students in the pilot will register in regular sections of Psychology 1000/1001 but an additional class (utilizing the F-slot) will be scheduled as supplemental instruction and support. Psychology has significant technology, online texts and exams that can be used in the fourth class to augment lectures. They have also explored the use of “lecture capture”. The online tests can be used as part of the course evaluation scheme to guide and reinforce student learning and give early and frequent feedback on progress. It affords the pilot the opportunity to reinforce and transfer the strategies taught in University 1010 and 2020. The Psychology department has agreed to participate in the pilot.

At present, incoming students are advised of several entry options to university math, should they choose it as a part of their degree program. Depending on the campus at which they begin their program of studies, as well as their academic standing in high school math, students could have diverse math experiences in their first year.

CIAP findings indicate that Math 1000 is seldom an option for our target group. Existing Math 1050/1051 and Math 1090 are offered at Grenfell, by distance delivery (DELTS), and
at the St. John's campus. Equivalent courses are also offered by the College of the North Atlantic in their College Transfer program. CIAP findings also show relatively high pass rates at Grenfell and in the College program, where smaller class size and more intensive supports are available. At Grenfell, first-year students can enroll in Math 1090 without completing a Math Placement Test (MPT) and, with a weekly lab as supplemental instruction, 88% pass the course on their first attempt. The St. John's campus requires a minimum pass of 50% on the MPT to enroll in Math 1050/1051 and 55% to enroll in Math 1090. Those students who score less than these cut-off grades are deferred to the existing Foundation Math program.

CIAP informs us that in fall 2010, of the 303 first-year students with the admission average of 70-74.9%, 16 (5%) enrolled in Foundation Math and 171 (56.4%) enrolled in Math 1050/51, Math 1090 or Math 1000. For this cohort, these courses prove to be very challenging. Supports are available for all courses. However, the level of support varies significantly. Foundation Math has eight full time staff. The Math Help Centre has one full time staff member and extremely limited space. Enhanced support for the for-credit first year math courses must be a priority for this pilot.

The pilot will continue the tradition of advising students of their entry-level math course option, should they wish to pursue a degree that requires math. The pilot will closely track each student’s performance in math and advise them, during the course, of supports and options available to them. To that end, we will be making three recommendations: that the Math Help Centre be better resourced to support first-year students; that (for students in the pilot) a cohort be offered for Math 1090; that the same arrangement will be offered for Math 1050/1051 and Math 1000 (depending on enrollment); and that a committee be established to examine the diversity of existing delivery models for first year math courses with a focus on how to better support students.

Students who choose not to pursue a first year math course will be advised to select an elective from the general category.

<table>
<thead>
<tr>
<th>A Full First Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester One</strong></td>
</tr>
<tr>
<td>1. University 1010</td>
</tr>
<tr>
<td>2. Introduction to University Writing</td>
</tr>
<tr>
<td>3. Psychology 1000 (F-Slot)</td>
</tr>
<tr>
<td>4. “Advised” Math - or Elective</td>
</tr>
<tr>
<td>5. Elective</td>
</tr>
</tbody>
</table>

Finally, the fifth course taken by students each semester will be a general elective. This will allow students the option to explore individual career plans, interact within the broader
university community and transfer skills taught and reinforced in the support and cohort courses. It helps ensure against stigma or creating an artificial experience that will not be sustained in future years. While we know which courses have higher success rates, the advising program will encourage students to pursue their individual interests.

**The Pilot: Supports**

The structure of the pilot is strategically planned to ensure a realistic and successful first year course plan. Students will obtain credit for 8 - 10 courses (24-30 credit hours), depending on whether they elect to take Foundation Math, and will be positioned to start their second year with higher skills, confidence and sense of community. However, this structure requires a network of supports. While the data that emerges from the pilot itself will eventually inform the exact nature of required supports, it is evident at this point that the following systems of support will be needed:

1. **Year long mandatory academic advising, with scheduled points of contact, mandated career advising and predetermined goals**

The evidence is clear in stating that vulnerable students need to be engaged and followed on an individual level. Designated staff from Academic Advising will develop a timeline and agenda for individual sessions with each student, spread across their first year. They will outline the goals to be met, issues to be explored and effective avenues of communication. It is envisioned that Academic Advising will meet with the students a minimum of five times during their first year. Students will also be referred for career advising so as to help explore and establish realistic career plans as they move through the pilot year and pursue interests and acquire realizations. It is envisioned that Career Advising will meet with the students a minimum of three times during their first year.

2. **“Tracked” attendance and performance**

The development and use of “early warning” and “tracking” systems is a clear theme in the environmental scan and the literature. There have been efforts at Memorial to develop a similar model for use on our campuses. It is imperative that the student, the instructor and the institution monitor progress and performance so as to direct energies and supports, while respecting access to information issues. University 1010 and 2020 will focus on helping students recognize the importance of attending class, helping them to establish communication with instructors and encouraging them to participate effectively in class. Likewise, instructors will be supported in exploring ways to encourage student attendance and participation. A committee will be created to build on initiatives at Memorial to establish an online tracking system for student progress.

3. **Support of instructors by an experimental teaching unit led by IDO**

Instructors will be invited to participate in teaching courses in this pilot program. Where necessary, sessional instructors will be hired, and informed that the course is part of a pilot program. All instructors will then be invited to participate in an experimental teaching unit
operated by the Instructional Development Office (IDO). This will support instructors in identifying and implementing strategies to engage diverse learners, connect with vulnerable students, and use technology to individualize teaching. It will help them explore ways to encourage and monitor class attendance and encourage participation. It will strengthen teaching and student engagement, which will strengthen the university as a whole. The Instructional Development Office has agreed to participate in this pilot.

4. Early and frequent evaluation feedback from instructors

The success of early warning and monitoring initiatives will require that students receive early and more frequent feedback on their academic standing. The experimental teaching unit will work with participating instructors to explore ways to restructure evaluation schemes so as to give students graded assignments earlier.

5. Engagement in a structured learning community

Student Housing will take the lead in initiating structured learning communities for first-year students, both on and off campus. This is especially critical for students who are living away from their families for the first time. While structured learning communities will be easier to co-ordinate for students living on campus, a specific focus will be placed on engaging those living in housing arrangements off campus as well. The first six weeks of the first semester will be of critical importance and strategies will be taken to co-ordinate with orientation programs. However, strategies and plans will continue throughout the full year to ensure that both a sense of community and engagement in that community flourish.

The pilot looks to our students’ unions to help strengthen these communities. MUNSU (Memorial University of Newfoundland Students’ Union), GSU (Graduate Students’ Union) and GCSU (Grenfell Campus Students’ Union) have agreed to participate in the pilot and accept its unique and powerful role in responding to the needs of our more vulnerable students. Initiatives such as using mentorship programs, establishing a bank of peer tutors, linking with student leadership programs, and becoming innovative on developing student engagement activities are among the ideas discussed. Our student unions recognize their role in complementing this pilot and are mobilizing to respond.

6. Housed in Faculty of Arts

Most students in this target group are undeclared and are not within any academic department’s structure or network. Connecting them to a discipline group will facilitate their engagement. The mandated advising and career counselling components will help them decide which program to eventually pursue. It is imperative that the pilot program not only has academic rigor but also is perceived as having academic rigor and that participating students feel they belong on campus. The Faculty of Arts has agreed to house the pilot. A coordinator will be charged with the mandate of supporting and managing the pilot.
A Pilot Program to Support First-Year Students with Academic Challenges

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Semester Two</th>
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<tbody>
<tr>
<td>1. University 1010</td>
<td>1. University 2020</td>
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<td>2. Introduction to University Writing</td>
<td>2. English 1080 (F-Slot)</td>
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<td>3. Psychology 1000 (F-Slot)</td>
<td>3. Psychology 1001 (F-Slot)</td>
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<tr>
<td>4. “Advised” Math - or Elective</td>
<td>4. “Advised” Math - or Elective</td>
</tr>
<tr>
<td>5. Elective</td>
<td>5. Elective</td>
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</table>

Target Population
- All full-time first-year students whose admission average falls between 70 and 74.9%
- First-year students who successfully complete the Summer Bridging Program
- Full pilot to be delivered on the St. John’s campus; portions of the pilot may be delivered on the Grenfell and Marine campuses but a final decision for 2012-13 has not yet been made.

Core Program Components: St. John’s Campus
- Housed in the Faculty of Arts
- Two year pilot
- Full time pilot coordinator hired or seconded to the Faculty of Arts
- Academic Advising consisting of 5 points of contact with students in the pilot program during their first year
- Career Advising consisting of 3 points of contact with students in the pilot program during their first year
- Learning Communities for students in the pilot program organized by Student Housing
- Cohort courses capped at 30
- Attendance in cohort courses closely monitored
- Math 1090 offered as a cohort course
- Depending on enrollment of our target population, Math 1050, 1051, and 1000 also use cohorts
- Psychology 1000, 1001 and English 1080 offer a F timeslot to students in the pilot program, using the additional class as supplemental instruction
- Teaching support:
  - Full time faculty, supported by an experimental teaching enhancement program offered by the IDO
  - Teaching Assistants hired to assist with the supplemental instruction assigned to courses in the pilot using the F timeslot (Psychology 1000, 1001; English 1080)
  - Space and staffing enhancements to the Math Help Centre
  - Staffing enhancements to the Writing Centre
Planning and Monitoring Supports
- CIAP to support program monitoring and evaluation
- Tracking systems so that Academic Advisors can monitor student progress and facilitate early intervention
- Explore the range of options required to support first year math courses

Other Related Issues
- Develop a common recruitment message for all of Memorial’s campuses
- Grenfell and Marine Institute campuses to decide re delivery of components of the pilot
- Explore implementing aspects of the pilot in the College of the North Atlantic (CNA) CAS Transfer Program
- Continue discussions with CNA regarding bridging programs
- MUNSU, GCSU, MISU (Marine Institute Students’ Union) and GSU have agreed to create and maintain a tutor database and develop innovative ways to engage this targeted group of students.
References

Note: only references cited in this report are included here. The review of the literature involved a much more extensive bibliography that has not been included.

References


Keup, J.R. & Barefoot, B.O. (2005). Learning how to be a successful student: 
Exploring the impact of first-year seminars on student outcomes." *Journal of 
The First-Year Experience, 17*(1), 11-47.

adaptation experience of minority immigrant students. *Journal of The First-
Year Experience & Students in Transition, 21*(2), 9-34.

Institute on Advising.

(Occasional Paper No. 6)*. Bloomington, Indiana: Indiana University Center 
for Postsecondary Research. Retrieved from 
http://nsse.iub.edu/institute/documents/briefs/DEEP%20Practice%20Brief 
%206%20What%20Faculty%20Members%20Can%20Do.pdf

orientation program at the foreign campus of an accredited private American 

Retrieved September 12, 2011 from: 
http://www.nebhe.org/thejournal/holistic-support-that-promotes-student-
learning/


### Appendix A

#### Advisory Group Members

<table>
<thead>
<tr>
<th>Name of Group Member</th>
<th>Academic and Administrative Departments</th>
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<tbody>
<tr>
<td>Adcock, Lorna</td>
<td>QEII Library</td>
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<tr>
<td>Ambrozcic, Alex</td>
<td>Academic Advising Centre</td>
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<td>Ayres, Peter</td>
<td>Faculty of Arts</td>
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<td>Benger, Janet</td>
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<td>Carter, Angela</td>
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<td>Clarke, Angie</td>
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<tr>
<td>Colbert, Carolyn</td>
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<td>Comeau, Mark</td>
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<td>Pippy, Sharon</td>
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<td>Cleyle, Su (Co-Chair)</td>
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<td>Philpott, David (Co-Chair)</td>
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<tr>
<td>Crocker, Elaine</td>
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<td>Dunne, Maureen</td>
<td>Facilitator</td>
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<tr>
<td>Johnson, Albert</td>
<td>Distance Education, Learning and Teaching Support</td>
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<tr>
<td>Neville, Doreen</td>
<td>Associate Vice-President Academic</td>
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</tbody>
</table>
Appendix B

Environmental Scan - Institutions

Note: All links were confirmed accurate at time of publication.

Acadia University
Axcess Acadia
http://www.studentservices.ednet.ns.ca/sites/default/files/IPSE_FinalPDF.pdf

Algoma University
Summer Transition Program
http://www.algomau.ca/future-students/student-services/summer-transition-program

Brandon University
Disability Services
http://www2.brandonu.ca/studentsvc/disability_services/student.asp
Arts One Program
http://www.brandonu.ca/arts-one/
Academic Skills Centre
http://www.brandonu.ca/student-services/academic-skills/
Disability Services
http://www.brandonu.ca/student-services/disability-services/
Academic Advising
http://www.brandonu.ca/student-services/academic-advising/
Office of International Activities
http://www.brandonu.ca/student-services/international/

Brock University
First Generation Program
http://edit.brocku.ca/learning-skills/first-generation-program
Summer Transitions Programs
http://www.brocku.ca/services-students-disabilities/future-students/summer-transition-programs)
Summer Orientation Program – Smart Start
http://www.brocku.ca/registrar/smart-start
STRATEGIES weekend conference for students with ADHD
http://www.brocku.ca/services-students-disabilities/future-students/summer-transition-programs/transitions-conference
Transition Program for Students with a Mental Health Disability
http://www.brocku.ca/services-students-disabilities/future-students/summer-transition-programs/transitions-mental-health
BOOST program designed for students to take instead of suspension
http://edit.brocku.ca/learning-skills/boost-program
Services for Students with Disabilities
http://www.brocku.ca/services-students-disabilities
Aboriginal Student Services
http://www.brocku.ca/aboriginal-student-services/our-services
Mature students program
Cambrian College
Glenn Crombie Centre for Student Support
http://www.cambriancollege.ca/Departments/DisabilityServices/Pages/DisabilityPrograms.aspx
Building Bridges
http://www.cambriancollege.ca/Programs/Pages/programDetails.aspx?code=BBPG
Transition to College Program
http://www.cambriancollege.ca/Programs/Programs/201109TCPG.HTM
College Vocational
http://www.cambriancollege.ca/Programs/Programs/201109VOPG.HTM

Camosun College
Engineering Bridge Programs
http://engbridge.camosun.bc.ca/

Canadore College
Summer Transition and Orientation Program
http://canadorec.on.ca/DepartmentsandServices/accessAbilityServices.cfm
AccessAbility
http://canadorec.on.ca/DepartmentsandServices/accessAbilityEnhancedServices.cfm

Carleton University
Bridging Program
http://www1.carleton.ca/cie/bridging-program/
Enriched Support Program
http://www1.carleton.ca/esp/esp-overview/
Aboriginal Enriched Support Program
http://www1.carleton.ca/aesp/
PAS (Peer Assisted Study Sessions)
http://www1.carleton.ca/sasc/peer-assisted-study-sessions
Paul Menton Centre for students with disabilities
http://www1.carleton.ca/pmc/
Make the CUT (College University Transition)
http://www1.carleton.ca/pmc/transition-to-carleton/make-the-cut/
Get the FACTS Asperger’s Orientation
http://www1.carleton.ca/pmc/transition-to-carleton/get-the-facts/

Centennial College
Foundations Certificates
http://www.centennialcollege.ca/prerequisite
Alternate Admissions Offers
http://www.centennialcollege.ca/admissions/alternateoffers
RPN Bridging to University Nursing
http://www.centennialcollege.ca/bridgingtouniversitynursing

Columbia College
University Preparatory Program
Concordia University
Student Transition Centre
http://stc.concordia.ca/index.php

Conestoga College
Diploma-to-degree Bridging Program
http://www.conestogac.on.ca/degrees/diplomatodegreelist.jsp

Cornell University
First Year Writing Seminars
http://www.arts.cornell.edu/knight_institute/fws/

Dalhousie University
University Preparatory Courses
Transition Year Program
http://collegeofcontinuinged.dal.ca/Transition%20Year%20Program
http://www.dal.ca/admissions/undergraduate/transition_year_programstudents.html

Dawson College
Explorations/Developmental Science Programs

First Nations University of Canada
Health Programs only

Grant McEwan University
Services to Students with Disabilities
ESL
Preparation for University and College
ESL Bridging Program
http://www.macewan.ca/wcm/ProspectiveStudents/InternationalStudents/UniversityStudiesInternational/index.htm

iTTi University
University Pathway Program
http://www.ittti.ca/courses/universitypathway.html
Kwantlen Polytechnic University
Access Programs for People with Disabilities
http://www.kwantlen.bc.ca/aca/appd.html

Lakehead University
The Gateway Program
http://sage.lakeheadu.ca/gateway/
Native Access Program
http://aboriginalinitiatives.lakeheadu.ca/?display=page&pageid=49
Humanities 101
http://humanities101.lakeheadu.ca/
Native Nurses Entry Program
http://admissions.lakeheadu.ca/admission-application-information-for-native-nurses-entry-program/
NAGE: Nanabijou Aboriginal Graduate Enhancement Program
http://aboriginalinitiatives.lakeheadu.ca/?display=page&pageid=130

Longwood University
Student Success Office
http://www.longwood.edu/newstudent/
First Year Experience Programs
http://www.longwood.edu/newstudent/31761.htm
Transfer and Commuter Students
http://www.longwood.edu/newstudent/31789.htm
Outstanding First Year Student Advocates
http://www.longwood.edu/newstudent/31778.htm
First Year Reading Experience
http://www.longwood.edu/newstudent/firstyearreading.htm
Orientation
http://www.longwood.edu/newstudent/orientation.htm
Lancer Days
http://www.longwood.edu/newstudent/newlancerdays.htm
Seminar
http://www.longwood.edu/seminar/
Parents and Family Programs
http://www.longwood.edu/newstudent/31794.htm
Compass Community
http://www.longwood.edu/newstudent/compasscommunity.htm
Disability Services
http://www.longwood.edu/disability/
The Learning Centre
http://www.longwood.edu/learning/index.html

McGill University
Office of Students with Disabilities
http://www.mcgill.ca/osd/
Academic Resources
http://www.mcgill.ca/students/academicresources/
School of Continuing Studies Language Programs
Mount Allison University  
Meighen Centre  
http://www.mta.ca/Research/meighen/

Mount Royal University  
Accessibility Services  
http://www.mtroyal.ca/AcademicSupport/ResourcesServices/StudentLearningServices/AccessibilityServices/index.htm  
Jump Start Program  

Mount Saint Vincent University  
Bridging Program  
UNIV 0001: Student Success Course  

Nova Scotia Agricultural College  
University Access Program and Study Skills Course (mature students)  
http://nsac.ca/mature/uap.asp  
University Access Program and Study Skills Courses (Aboriginal)  
http://nsac.ca/aboriginal/uap.asp

Okanagan College  
Bridging Program in the Bachelor of Business Administration  
http://webapps-1.okanagan.bc.ca/ok/calendar/calendar.aspx?page=BridgingProgramintotheBBAAssociateofArtsBridge

Sheridan College  
Bachelor of Applied Information Sciences Bridging Program  
http://www.sheridancollege.ca/programs%20and%20courses/full-time%20programs/programs%20a-z%20index/bachelor%20of%20applied%20information%20sciences%20bridging%20program%20-direct%20entry%20into%20year%203.aspx

Simon Fraser University  
Centre for Students with Disabilities  
http://students.sfu.ca/disabilityaccess.html  
Diverse Qualifications  
http://students.sfu.ca/admission/requirements/diverse-qualifications.html  
Aboriginal Undergraduate Admissions  
http://students.sfu.ca/admission/requirements/aboriginal-admission-policy.html  
Aboriginal University Prep Program  
http://www.sfu.ca/ctudies/community/aboriginal.htm
Preparation in Academic Skills Program
http://www.sfu.ca/pas.html
Fraser International College English Language Program
Fraser International College University Transfer Program
http://www.fraseric.ca/

St. Mary's University
The Atlantic Centre
http://www.smu.ca/administration/atlcentre/welcome.html
F.Y.I. Boot Camp (for all students)
http://www.smu.ca/orientation/fyi.html
LEAP (Learning, Engagement, Achievement, Peer Mentors)
http://www.smu.ca/leap/welcome.html
Continuing Education (Mature students)
http://www.smu.ca/conted/uprep.html
http://www.smu.ca/conted/credit.html

Trent University
Trent University/Fleming College General Arts and Science University Transfer
http://www.flemingc.on.ca/index.cfm/go/programs/sub/display/code/GSU.cfm
Disability Services
http://www.trentu.ca/disabilityservices/theoffice.php

University of Alberta
Aboriginal students: Transition Year Program
http://www.uofaweb.ualberta.ca/aboriginalservices/typ.cfm
Fresh Start Program
http://www.uofaweb.ualberta.ca/freshstart/

University of British Columbia (Okanagan)
Aboriginal Access Studies
http://www.ubc.ca/okanagan/students/aboriginal/accessprogram.html
Access and Diversity
http://www.students.ubc.ca/access/drc.cfm/

University of Calgary
Aboriginal Student Access Program
http://www.ucalgary.ca/nativecr/asap

University of the Fraser Valley
Aboriginal students
http://www.ufv.ca/arc/Transition_Year/UCAP.htm

University of Lethbridge
First Nations Transition Program
https://discoverulethbridge.ca/fnmi/ftp.ezc?pageID=1560
University of Manitoba
University of Manitoba Access Program
http://www.umanitoba.ca/extended/access/info/umap.shtml
Health Careers Only
http://www.umanitoba.ca/coned/access/info/hcap.shtml
Education Access Program
http://www.umanitoba.ca/extended/access/info/eap.shtml

University of New Brunswick
Mi'kmaq-Maliseet Institute Bridging Year
http://www.unb.ca/fredericton/education/mmi/programs/bridgingyear.html

University of North Carolina (Chapel Hill)
Pre-Orientation
http://nscpp.unc.edu/first-year-students/pre-orientation.html

University of Northern British Columbia
http://www.unbc.ca/disabilities/index.html

University of Ontario Institute of Technology
Bridging Programs
Commerce Bridging Program

University of Ottawa
Student Academic Success Services
http://www.sass.uottawa.ca/our-services.php
Access Service
http://www.sass.uottawa.ca/access/
Aboriginal Resource Centre
http://www.sass.uottawa.ca/aboriginal/
First Generation Students
http://www.sass.uottawa.ca/about/1generation.php
Bridging Level
English Intensive Program

University of Prince Edward Island
Transition Program
http://webstercentre.upei.ca/transition/welcome

University of Regina
Centre for Student Accessibility
http://www.uregina.ca/studserv/disability/index.shtml
Aboriginal Student Centre
http://www.uregina.ca/asc/
First Year Learning Communities
http://www.uregina.ca/gencal/ugcal/lutherCollege/ugcal_395.shtml

University of Saskatchewan
Aboriginal First Year Experience Program
http://explore.usask.ca/programs/ar/afyep
Summer University Transition Program for Aboriginal Students
http://explore.usask.ca/programs/ar/sut
Mathematics and Science Enrichment Program
http://explore.usask.ca/programs/ar/msep
Arts and Science Transition Program
http://artsandscience.usask.ca/students/transition/overview.php
U-Start Program
http://students.usask.ca/new/transition/ustart.php
Math Readiness Program
http://math.usask.ca/mrc-info/Math_Readiness.html

University of South Carolina
Freshman Learning Communities
http://www.uscb.edu/admissions/accepted/learning-communities.php
University 101
http://www.sc.edu/univ101/aboutus/goals.html
Supplemental Instruction
http://sc.edu/fye/resources/fyr/pdf/SouthCarolina_SI.pdf

University of Texas (El Paso)
http://www.collegeportraits.org/TX/UTEP/learning_outcomes

University of Toronto
Transitional Year Program
http://www.utoronto.ca/typ/about.html
Academic Bridging Program (Woodsworth College)
http://www.wdw.utoronto.ca/index.php/programs/academic_bridging/overview/
Academic Bridging Connections
http://www.wdw.utoronto.ca/dean/index.php/programs/academic_bridging_connections
PUMP (Preparation for University Math Program)
http://www.math.toronto.edu/cms/pump

University of Victoria
STEPS Forward
http://www.steps-forward.org/

University of Western Ontario
Student Development Centre - Students with Disabilities
http://www.sdc.uwo.ca/ssd/
International Bridging Program (Kings University College)
http://www.kings.uwo.ca/admissions/international/international-bridging-program/

University of Windsor
The BUILD Program - Bridge to University for Individuals with Learning Disabilities
http://www.uwindsor.ca/disability/build
S.T.E.P.S. (Skills to Enhance Personal Success)
http://www.uwindsor.ca/lifeline/steps-skills-to-enhance-personal-success
http://www.uwindsor.ca/lifeline/session-descriptions
CUSP (College and University Success Preparation)
http://www.uwindsor.ca/disability/welcome-to-cusp
P.L.U.S. (Prepare, Learn, Understand, Succeed)
http://www.uwindsor.ca/disability/welcome-to-plus

Vancouver Island University
Career and Academic Preparation Programs/Access Programs
http://www.viu.ca/calendar/CareerAcademicPrep/access.asp
Adult Basic Education
http://www.viu.ca/calendar/CareerAcademicPrep/abe.asp
Literacy
http://www.viu.ca/cap/aboutcap.asp

Wilfrid Laurier University
Accessible Learning
http://waterloo.mylaurier.ca/accessible/info/home.htm
Head Start Transition Program
http://www.wlu.ca/headstart
University 102: Pre-University Research and Writing Skills Instruction
Writing Support Centre
http://www.sdc.uwo.ca/writing/

York University
Access Programs
http://futurestudents.yorku.ca/access_bridging
Transition-Year Program
http://futurestudents.yorku.ca/transitionyear/
Bridging Program for Women
http://www.yorku.ca/laps/wmst/bridging_program.html
Pre-University Courses
http://dce.yorku.ca/Category.aspx?Cgyid=1
Appendix C

Individual Consultations

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<th>Name of Participant</th>
<th>Academic and Administrative Departments</th>
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<tr>
<td>Adcock, Lorna</td>
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<td>Grenfell Campus</td>
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Appendix D

Summary Report
Practical Vision and Meeting the Challenges Workshops
Support for Students with Academic Challenges Advisory Group
Chaired by Susan Cleyle and David Philpott
September 29, 2011 and October 19, 2011

Facilitated and reported by Maureen Dunne and Elaine Crocker

Mandate: Support for Students with Academic Challenges Advisory Group
The mandate of the advisory group is to propose and support the implementation of a focused and effective support plan in fall 2012 for first-year students whose entering averages are between 70-74.9%.

Four half-day workshops were integrated into the planning process during fall semester, 2011. The workshops were held on the morning of September 29 and the morning and afternoon of October 19th. Because of a university storm closure, the last session in the series on November 24 had to be postponed until January, 2012. The topics of the four sessions were intended to bring the group through the creation of a practical vision of a pilot program, the identification of challenges that might impede its achievement, a consideration of strategies to meet those challenges, and finally, the development of a list of actionable items for the implementation of a pilot for the target group of students in fall 2012.

Invitations to participate were offered to approximately 60 faculty, staff and students from 40 units on three campuses: St. John’s, Marine Institute, Grenfell. There were approximately 45 participants in each session.

Practical Vision Workshop (September 29, 2011)
The focus question for the work of the session was: As a resourceful community working together, what actions can Memorial take to optimally engage our target group of students and support their academic success in the first year of studies?

Doreen Neville welcomed the advisory group to the workshop, contextualized their mandate and reminded them of the foundational values of the initiative. Susan Cleyle and David Philpott, co-chairs of the initiative, reviewed new information and research to be considered by the advisory group in their discussions.

The group participated in a process of developing a chart of identified programs and services to be proposed for a pilot program for the target group of students during the 2012-13 academic year. By the end of the session, they had identified the following necessary actions:

- To implement a mandatory program to foster student success
- To establish academic support that is proactive, mandatory, personalized, and continuing
- To create an engagement unit to better facilitate early outreach to students
- To recruit, train and recognize engaging teachers
- To build collaborative peer support into the first-year experience
- To create a curriculum that integrates and engages its class members into a blended, productive, learning community
Meeting the Challenges Workshop (October 19, 2011)

Following an introduction by Doreen, Susan and David outlined a draft skeletal framework and supports for the first-year pilot program as it emerged from an additional round of consultations and the work of the previous workshop. The group was led through a facilitated process in which they considered some of the challenges that might impede the implementation of the desired pilot program and they identified strategies to deal with the challenges. The strategies that emerged were:

- Developing a comprehensive and enticing communications plan for wide distribution
- Advising high school students of timely indicators of academic need
- Creating faculty incentives to encourage participation in meeting program objectives
- Diversifying program delivery
- Rewarding faculty participation/involvement/buy-in/contribution in the success of the program
- Researching and assessing the program and its participants
- Increasing the emphasis on teaching quality in consideration for professional advancement by providing appropriate mandatory training for all faculty
- Identifying a champion for the program who will synergize current expertise as well as advocate for future supports
- Incorporating proven practice in malleable and responsive curriculum

These strategies were aligned into an integrated plan built upon:

1) Marketing student success through a comprehensive and exciting internal and external communications plan. An important segment of this plan will be active collaboration with secondary school constituents: students, teachers, guidance counselors, and parents.
2) Engaging enthusiastic and committed faculty participation as key to the success of a new program for first-year students with academic challenges. Planning the provision of pedagogical training, career incentives and ongoing support for faculty will be essential components of the project.
3) Incorporating proven pedagogical practice in a well-researched, malleable and responsive curriculum that meets the needs of diverse learners. Continuously assessing, analyzing and reporting outcomes to the university community, both individual student achievement as well as overall program success, will be evidence of institutional commitment to scholarship and accountability.
4) Identifying a champion for the program who will synergize current expertise as well as advocate for future supports for the program.

In early January, 2012, the Advisory Group will build upon these strategies to create a list of actionable items for the winter semester.

More detailed information on the content and results of the advisory group work in these workshops can be found at:

http://www.delts.mun.ca/faculty/teachinglearning/consultationreports.php