First Year Transitions: An Evaluation of Nipissing University's UNIV1011

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The Higher Education Quality Council of Ontario (HEQCO) issued a Request for Proposals in June 2008 that focused on The Role of Student Services in Support of Access, Retention and Quality. The goal was to provide funding to institutions to allow them to evaluate the effectiveness of existing student services projects or programs designed to enhance student access, retention and academic success, and to identify best practices and innovative techniques that might be useful for other postsecondary institutions. Twenty-eight proposals from Ontario colleges and universities were submitted, and 15 projects were subsequently approved for funding by HEQCO.

 While there was some overlap, the projects were roughly divided into those that focused on the general student population to deal with overall first-year transition challenges; those that focused on improving the engagement, transition and retention of targeted populations of "at-risk" students; and those that focused on courses and programs that were considered to be "at-risk" (e.g. high rates of Failure and Withdrawal) for students enrolled.

This final report is part of the "Student Services" series, and is one of four being released in June 2010. Together, these and the subsequent reports from this series will help better inform student success strategies with evidence-based assessments.

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Introduction

In June 2008, the Higher Education Quality Council of Ontario (HEQCO) released an RFP offering funding for Ontario universities and colleges to evaluate existing programs or services that were intended to promote access, retention and quality to postsecondary students. With the assistance of the Educational Policy Institute, Nipissing University submitted a successful proposal that allowed it to evaluate the course UNIV1011: Student Success: Theory and Practice.

UNIV1011 was first created in 1998 by the dean of the faculty of arts & science in partnership with the student services department at Nipissing, and is designed to help first year students transition to university life by providing supplementary training in a broad array of topics ranging from general study tips to personal career planning. Both the student services department and the faculty of arts & science recognized that some students coming to Nipissing University were not fully prepared for either the academic demands or the life transitions of university, and to address that need they developed the course and introduced it into the regular university curriculum. Students who take UNIV1011 are given credit for the course, but must take it during their first 30 credits at the university (during their first year).

Throughout its 10-year existence, UNIV1011 has been lauded as a beneficial and even necessary program at the institution. Those who are more aware of UNIV1011 consider the course to be a valuable contribution to the student experience at Nipissing. However, others have questioned its academic relevance or see the course as redundant with the skills development workshops offered by other departments at the university.

A variety of sources and methods were employed to evaluate the impact of UNIV1011 and to better understand the perceptions and performance of both UNIV1011 students, and of other students at Nipissing University who have not taken the course. They were as follows:

- A new course survey was created to better understand UNIV1011 students' perceptions of the course and to assess the impact of the course material on their skills.

- For the past three years, the instructors of UNIV1011 have used the Learning and Study Strategies Inventory (LASSI) to assess students' perceptions of their skills both before and after taking UNIV1011. The data for the 2007, 2008 and 2009 entering classes of UNIV1011 were made available for this analysis.

- To measure the academic differences, if any, between UNIV1011 students and non-UNIV1011 students, the Office of the Registrar at Nipissing provided complete anonymized academic records for all undergraduate students between 1998 and 2007. These records allowed for the measurement of academic averages at Nipissing, as well as high school academic averages prior to entering Nipissing and retention rates from Years 1 through 3.

- In January 2009, a survey about UNIV1011 was distributed to a sample of undergraduate classes at Nipissing. The aim of this survey was to measure perceptions and knowledge about UNIV1011 among the general Nipissing population and to assess why some students who might have benefitted from the course during their first year of university decided not to take it.

- To buttress the surveys, LASSI data and administrative files, the research team conducted a series of key informant interviews with academic advisors and staff in the Office of the Registrar, as well as holding focus groups with students who took UNIV1011 and students who did not take UNIV1011.

The data yielded several important findings about UNIV1011:
- Students who take UNIV1011 enjoy the course and feel it is valuable.

- Students who take UNIV1011 believe that it enhances their skills and allows them to be successful at university.

- There is a correlation between successfully completing UNIV1011 and Year 1 to Year 2 retention at the university.

- There appears to be little correlation between UNIV1011 and overall university marks.

- Very few students at the university even know about UNIV1011 and its objectives, and the primary medium of information about the course continues to be the course calendar.

There are some limitations to these data, and they are discussed in greater detail later in the report.

Overall, the assessment of UNIV1011 yielded some interesting conclusions. This report reveals some trends among UNIV1011 students, but to enhance a number of the findings, more research needs to be conducted with a larger sample. The only way to obtain this sample is to add additional complete years of academic records to the study as the course continues to be offered over time.

Nipissing University

First established in 1967 as Nipissing College, Nipissing University received its charter from the Government of Ontario in 1992. With a main campus in North Bay and regional campuses in Bracebridge and Brantford, Nipissing currently enrolls approximately 7,000 Full Time Equivalents (FTE), with close to 4,000 full-time students at the main campus.

Nipissing University could be considered one of the most "residential" universities in Ontario, since over 70 per cent of its students are not from the immediate North Bay area. Nipissing's

largest programs are related to teacher education either directly (Consecutive Education) or indirectly (OTT and Concurrent Education).

The university prides itself on providing a caring learning environment by preparing students "to realize their full intellectual and personal potential," and it "commits itself to increasing accessibility to under-represented groups." As a primarily undergraduate institution, "student success" is paramount.

UNIV1011 has become a key component of the student success strategy developed at Nipissing University over the years, and having a student success course that actually attains these intervention objectives is critical.

UNIV1011: Student Success: Theory and Practice

In 1998, Nipissing University created a course entitled Student Success: Theory and Practice. Introduced under the shortened institutional code UNIV1011, the course was similar to those offered at the time at the University of Guelph and York University in Ontario, as well as at the University of Prince Edward Island and the University of Manitoba. According to documents submitted to Nipissing's senate during the process of the course's introduction, interest in the first year student experience had been generally rising due to a variety of factors, but most importantly by:

> a desire to improve retention and graduation rates, the increase in costs of higher education, heightened competition between institutions for declining numbers of students and for limited financial resources, demographic changes in the population of new students . . . [and] a decline in levels of academic preparation of entering students and high rates of student attrition, especially after the first year.

Thus, the course was developed both because of a desire to support the first year experience and because of evidence from other institutions that such programs are valuable for retention, student satisfaction and student development. While a number of the topics included in UNIV1011 have been covered and continue to be covered by different courses and services at Nipissing, the course was intended to provide an integrated, holistic approach to assist the transition of first year students.

In its current form, UNIV1011 is an optional, three-credit course designed to assist students early in their university careers (during their first 30 university credits) in developing the skills they need to succeed in the university environment. The course is usually team-taught and involves small class sizes. It is offered during both the fall and the winter semesters, and it involves three lecture hours per week.

Approximately 6 per cent of incoming first year students complete the course each year. Students work to develop attitudes, skills and knowledge that will promote success in higher education, and they explore methods for achieving success that are grounded in theory drawn from various disciplines and human development models. Topics covered by the course include learning styles and study skills, research and library skills, critical thinking, communication and

writing skills, time and stress management, health and wellness, career planning, and job search and academic planning.[1]

UNIV1011 has existed for approximately a decade, during which time an extensive amount of data has been collected regarding student participation, experiences and outcomes. The course has been offered at the Nipissing University campus in North Bay, and more recently at Nipissing's Muskoka campus (in Bracebridge) and online. This duration and variation, along with the growing numbers of first year students who have now completed the course, provide a great deal of information from which to begin to assess the impacts of the course on student success.

Retention in Postsecondary Education

Concerns over how and why students do not complete their programs of postsecondary study have been prevalent for some time, and a significant amount of research has been conducted in this area. Past research in Canada and the United States has indicated that approximately 20 to 25 per cent of students leave their program of study in the first year (Parkin & Baldwin, 2009, p. 3). However, these numbers were based on institutional information sources and, as such, cannot be generalized with confidence. They do not, for instance, reliably account for students who either switch institutions or leave for a few years and eventually return to postsecondary education.

Some recent research has provided figures from non-institutional sources that account for inter-institutional transfer. In their study of student transitions in the Atlantic Region, Finnie and Qiu (2008) found average five-year graduation rates in universities to be 52.1 per cent "with respect to the initial program started," and they noted that 18 per cent of university students leave their program of study by the end of its first year (p. 41). It should be pointed out, however, that a majority actually switch to another program right away, while many of the others do return to PSE, though after a longer period of time (Finnie and Qiu, 2008).

Although many students leave their original program of study for another one, and don't necessarily leave PSE entirely, the fact remains that a large number of students do not continue in their programs. This has an enormous impact on both the institutions and the students that they serve.

Modeling Retention

When considering retention or persistence, and the factors associated with each of these, it can be instructive to consider the various components that must come together to provide for a successful university experience. Swail and his colleagues (2008) describe a model, previously developed by Swail that includes three primary types of factors: cognitive, social and

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[1] For course calendar information regarding UNIV1011, see Appendix A. A sample course syllabus is attached as Appendix B. The full content for UNIV1011 is available on the following website: http://www.nipissingu.ca/faculty/univ1011/Index.htm.

institutional. Cognitive factors include abilities developed through previous coursework, as well as academic skills such as time management, study skills and "technological ability" (Swail et al., 2008, p. 17). Social factors include family and culture as well as social and emotional skills. Institutional factors consist primarily of "financial aid," "student services," "recruitment and admissions," "academic services" and "curriculum and instruction" (ibid., p. 18).

Swail and his colleagues (2008) maintain that a balance between these factors is required for student success. This balance can be achieved in a number of ways. Students who are strong in all three areas achieve that balance, while other students who have less strength in some areas require more strength in other areas to create the balance. At the same time, the institution must meet the varied needs of students by providing the right supports for success. For example, if a student has strong social factors and less strong cognitive factors, such as time management skills, they will require more support from the institution in that specific area to be successful.

Within this model, UNIV1011 should be seen as an institutional intervention that can assist students with varied needs, particularly in the realm of developing cognitive skills.

Factors Associated with Non-completion

Several factors have been associated with increased rates of program non-completion. Aboriginal students who attend postsecondary education in Canada are, on average, less likely to complete their studies than non-Aboriginal students. The leaving rate for Aboriginal students is between 33 per cent and 56 per cent, significantly higher than the generally assumed leaving rate of 20 to 25 per cent mentioned above (Parkin & Baldwin, 2009). It should also be noted that this data excludes Aboriginal students living on reserves and thus is still likely to underestimate the actual leaving rate for Aboriginal students.

According to Parkin and Baldwin (2009), some studies suggest that postsecondary persistence rates are positively correlated with parental education, but others find no relationship, except for a positive correlation between parental education and re-enrolment in another program (p. 11). The authors also note that receipt of financial aid can improve persistence, though students with a lot of debt – or for whom financial aid is insufficient to cover costs – have lower rates of persistence than others (ibid.).

Grades are also correlated with persistence in postsecondary education, as students with higher marks in high school or PSE have higher average persistence rates than those whose marks are lower (ibid.). The same is true of engagement at both the secondary and the postsecondary levels (ibid.).

In Finnie and Qiu's (2008) study, most students who left reported that they did so "because they did not like their current program or wanted a change" (p. 42). Finnie and Qiu also found a number of variations in persistence trends based on gender, immigration status and visible minority identification, which made overall patterns difficult to identify.

Parkin and Baldwin (2009) note that there is some evidence to suggest that "students are more likely to stay in school when there is a clear connection in their minds between their studies and their intended career path" (p. 9).

It is clear that some members of some groups, such as Aboriginal students, are more likely to require institutional supports to be successful in postsecondary education. However, while there are discernable patterns in rates of retention due to a variety of factors, it is important to note that whether or not an individual student remains in her or his program depends on a range of interacting factors that are unique to each student. This diversity of factors does not diminish the need for student supports and assistance. As Parkin and Baldwin (2009) note, "Many students would benefit from additional support—both before and after arriving on a post-secondary campus, and both financial and non-financial" (p. 13).

Methodology

This study analyzes five main types of data: Learning and Study Strategies Inventory (LASSI) data, evaluation form data, survey data, administrative data and focus group data. These five types of data, and the methods used to collect and analyze them, are addressed below. The findings are discussed in subsequent sections.

LASSI

The LASSI is a diagnostic measure used to evaluate perceived learning skills, though more often in colleges than in universities. Students who enroll in UNIV1011 are asked to complete the LASSI both before and after they complete the course, and answer 80 assessment questions with responses from one to five. The test assesses responses on 10 different scales: anxiety, attitude, concentration, information processing, motivation, self-testing, selecting main ideas, study aids, time management and test strategies.

We have examined the LASSI data available from all sections of the UNIV1011 course that were completed in 2007, 2008 and 2009. These data were taken from sections that were offered at Nipissing University campuses in North Bay and Muskoka, as well as from online versions of the course.

UNIV1011 Course Evaluation & Student Survey

The university has collected anonymous course evaluation data for all the years in which UNIV1011 has been offered, including the 2008/09 academic year when this study was undertaken. The evaluation forms are organized on a bipolar scale from "Strongly Agree" to "Strongly Disagree," and they include an option for questions that are not applicable. The evaluation form asks questions regarding student perceptions of course content, presentation and instructor quality. (An example of such an evaluation form is included as Appendix D.) The extensive amount of data derived from these course evaluations has been coded, and an analysis has been performed.

In addition, a supplemental course evaluation form was developed for the current academic year (2008/09), for use in this study. It asks students about their original motivation for taking the course and their overall satisfaction with its content and benefits. This data has also been analyzed.

General Student Survey

In late January 2009, a paper survey was distributed to a sample of Nipissing students at the beginning of class, and classes were selected in such a way that the sample would be as broadly representative of the institution's student population as possible. The sample consisted of seven first year classes and six upper year classes. It should be noted that a significant number of upper year students usually enroll in first year classes, but only rarely do first year

students enroll in upper year classes. The selection of classes was based on the following criteria:

a) size of class
b) gathering a cross-section of all classes where students had the option of enrolling in UNIV1011 as part of their program
c) classes in which professors were willing to give the survey facilitators time to administer the survey during their classes

A total of 904 students were officially enrolled in the 13 classes surveyed. Some would have been eliminated, as they were enrolled in "multiple survey classes" and they were instructed to complete the survey only once, while others would have been absent when the survey was administered and others simply chose not to participate.

The goal was to obtain approximately 800 completed surveys, with approximately 50 per cent of the surveys to be completed by students who were in their first year at the time and with the remainder to be completed by an even distribution of students in other years. In total, 554 surveys were completed, of which approximately 277 were completed by first year students.

The survey was designed primarily for students who had not taken UNIV1011. It asked about whether or not students were aware of UNIV1011, the ways in which they had heard about the course, why students had chosen not to take the course, what student perceptions of the course were and whether (at the time of filling out the survey) students would have made different decisions about whether or not to take the course. The survey questions are attached as Appendix C.

Administrative Data

For the last 11 cohorts of first year students, a wide range of anonymized administrative data from the Office of the Registrar at Nipissing University was compiled. The data included the yearly academic average, average entering grade from high school, persistence into each subsequent year of study, as well as entering program, graduating program, gender, age, postal code and financial aid status.

These administrative data were cleaned and analyzed with several purposes in mind. Primarily, we sought to determine whether students who had enrolled in or completed UNIV1011 differed in significant ways from those who had not. The analysis included observations about the variations in academic performance between the two groups and examined their common and different characteristics.

Focus Groups

In March 2009, two focus groups were conducted with first and second year students at Nipissing to learn more about the reasons why students do or do not participate in UNIV1011. Students from the following three groups were contacted and invited to participate in the focus groups:

1. Students who indicated a willingness to participate in a focus group exercise on their in-class surveys (conducted in late January 2009).
2. Students who had taken UNIV1011 within the last three years (the list was generated by the Office of the Registrar).
3. Current students who have not taken UNIV1011 but who are aware of it according to their survey responses.

The students were contacted by telephone and invited to participate in one of the focus groups using the Recruitment Pre-Screener (which is shown in Appendix E).

One of the groups consisted of students who had completed the course, and the other consisted of students who either chose not to take the course or who enrolled initially but did not complete it. Table 1 describes the sample for each focus group:

Table 1: Focus Group Demographic Information

Group	Number	M:F
Completed UNIV1011	10	3:7
Did not complete UNIV1011	10	4:6

Analysis of the survey results allowed us to better refine our focus group questions, and the groups allowed us to build on and explore insight gained from the survey. The focus group discussion guide is included in Appendix E.

A less formal meeting was conducted with three academic advisors at Nipissing for the purpose of determining their perceptions of the needs of first year students and their perceptions of UNIV1011. This meeting also allowed us to inquire about the role of the academic advisor in the promotion of the course. Furthermore, we conducted a key informant interview with three staff members from the Office of the Registrar to determine their perceptions of UNIV1011 and their level of involvement with the course.

Limitations of the Data

Each of the four data sets used to evaluate UNIV1011 provides at least some valuable insights into UNIV0111. However, there are some limitations to the data which must be discussed. It is important to note that the limitations of the data do not nullify the results. The data used is still a reflection of relevant opinions and performance.

LASSI

The primary limitation of the LASSI data is its sample size. The LASSI survey was first implemented in 2007, and it continues to be used in UNIV1011. Students are not required to complete the LASSI survey, however, and in the winter 2009 session of UNIV1011, only 13 students completed it.

UNIV1011 Course Evaluation & Student Survey

The UNIV1011 survey that supplemented the regular course evaluation provided good information but was limited by the sample size. In all, 43 students in UNIV1011 filled out the survey during the 2008/09 academic year. Since the sample size was so small, it was difficult to extrapolate findings from the 2008/09 UNIV1011 students to all UNIV1011 students (1998-2007). In this regard, the survey should be taken only as a reflection of the opinions of the students who took UNIV1011 in 2009.

General Student Survey

As mentioned under the "Methodology" section (above), in late January 2009 a paper survey was distributed to a sample of Nipissing students at the beginning of class, and classes were selected in such a way that the sample would be as broadly representative of the institution's student population as possible.

The survey attempted to understand the level of familiarity with UNIV1011 within the general student population at Nipissing, and it was designed in such a way that only students who had heard of UNIV1011 were asked to answer questions about the course. Unfortunately, only a very small portion of the survey sample had heard about the course, and although this was an interesting finding in itself, it further restricted the sample size for the series of questions in the survey that related to perceptions about the actual course.

Administrative Data

The limitations in the administrative data were the sample sizes and the restricted number of cohorts that were actually available for analysis. The last year of good administrative data

related to the entering cohort of 2004 (students who entered Nipissing University in the fall of 2004 and potentially graduated in the spring of 2008, assuming that each student in this cohort needed only three or four years to complete their degree).

Much of the analysis of the administrative data focused on the retention of students from Year 1 to Year 2 (Y1-Y2) and Year 2 to Year 3 (Y2-Y3). The 2006 and 2007 administrative data, and to an extent the 2005 data, were limited in that students who entered Nipissing in those cohorts had yet to progress to Year 3.

Linking the Administrative Records to Other Data Sources

In order to successfully link the data sets, a common identifier had to be found for each record in both sets. For instance, if two data sets each included the same unique student number, or a combination of identifiers that could establish a unique identity for each record, then the data could easily be merged and analyzed. However, with the data available for this project only the administrative data set included a unique identifier. In all of the other data sets (surveys and focus groups) the individual records were anonymous. Therefore, linking data for the purposes of analysis was impossible.

General Student Survey

In late January 2009, an in-class survey was distributed to students in a series of undergraduate courses at Nipissing University to assess their knowledge about and attitudes toward UNIV1011. The target demographic of the survey was any student who had not enrolled in UNIV1011. The survey was distributed at the beginning of various classes, and students were asked to complete the survey only once. It was distributed to approximately 800 students (approximately half first year and half upper year) and remained in the field for a total of 10 days. The total number of final respondents was 554, of which 50 per cent identified themselves as first year students.

More first year students were targeted for the UNIV1011 survey because the course is designed for first year students. Furthermore, questions about attitudes and perceptions would be fresher in their minds than in the minds of students who had been at Nipissing for two or more years. The final survey respondents reflected the targeted sample.

Profile of Respondents

Almost half the survey respondents were at Nipissing to receive a bachelor's degree, though the survey did not distinguish students' majors. In the response set the more common faculties, such as science and arts, were combined. In hindsight, it would have been helpful to include the bachelor of science as a separate option.

Approximately one-fifth of the sample was in the concurrent education program, and just over 10 per cent were enrolled in the BSc Nursing stream. Of the individuals surveyed, 17 per cent were taking a bachelor's of business administration (BBA) and only 1 per cent were enrolled in physical education.

It should be noted that because of "elective limitations," concurrent education and business students are less likely to be able to fit UNIV1011 into their program, and nursing students have virtually "no elective room" in their program.

Table 2 displays the responses to the demographic questions on the survey.

Table 2: Responses to Survey Demographic Questions

Question	Response	Frequency
What year of your program of study are you in?	First year	50%
	Second year	19%
	Third year	16%
	Fourth year	13%
	Other	2%
What is your program of study?	BA	46%
	BA/OTT/Concurrent Ed	23%
	BSc Nursing	13%
	Phys Ed	1%
	BBA	17%
Are you?	Male	31%
	Female	68%
	Other	1%
What was your final high school GPA?	50% to 59%	0%
	60% to 69%	9%
	70% to 79%	42%
	80% to 89%	41%
	90% and above	8%
What is your current GPA?	50% to 59%	4%
	60% to 69%	32%
	70% to 79%	47%
	80% to 89%	16%
	90% and above	1%

Familiarity with UNIV1011

At first glance, the survey results tell us a lot about students' perceptions and attitudes toward UNIV1011. Approximately half of the survey respondents who did not take the UNIV1011 course were also not familiar with, or had not heard of, the course. This automatically eliminated 249 responses from the next series of questions regarding perceptions and attitudes about the course.

Of the students who identified themselves as first year, third year and fourth year, approximately 9 per cent in each year were either fairly familiar or very familiar with the course. Of students who identified themselves as second year, 13 per cent were familiar to very familiar with UNIV1011. For the most part, the breakdown by year does not yield any valuable insights into familiarity with UNIV1011. The data indicate that there are small differences between the identified year of study and knowledge of the course, but the differences are quite small (Table 3).

Table 3: Familiarity with UNIV1011 by Year of Study

	How familiar are you with the course entitled UNIV 1011, Student Success: Theory and Practice?					
	Not familiar/I have not heard of UNIV 1011	Fairly unfamiliar	Neutral	Fairly familiar	Very familiar	Count
First year	55%	19%	17%	6%	3%	244
Second year	42%	19%	23%	10%	3%	96
Third year	54%	24%	13%	6%	3%	78
Fourth year	40%	32%	19%	7%	1%	68
Other	55%	27%	9%	9%	0%	11
Total	50%	22%	18%	7%	3%	497

Due to rounding, percentages may not add up to 100 in each case.

If we examine the data according to final high school GPA, none of the students who reported having a high school GPA over 90 per cent were "very familiar" with the course, and only a small percentage were "fairly familiar" with it. This would suggest that higher-achieving students are not seeking out information on skills development or that they disregard any information they do receive. Students who were fairly familiar or very familiar with UNIV1011 tended to have averages between 70 per cent and 89 per cent. Approximately 15 per cent of the students who were fairly familiar with the course had averages of 60 to 69 per cent. Table 4 shows familiarity with UNIV1011 according to reported high school GPA.

Table 4: Familiarity with UNIV1011 by Reported High School Grade

		What was your final high school GPA?				
		50%-59%	60%-69%	70%-79%	80%-89%	90% and above
How familiar are you with the course entitled UNIV1011?	Not familiar/I have not heard of UNIV 1011	0%	11%	44%	38%	7%
	Fairly unfamiliar	1%	8%	34%	45%	12%
	Neutral	0%	8%	42%	38%	12%
	Fairly familiar	0%	14%	39%	44%	3%
	Very familiar	0%	0%	29%	71%	0%

Source of Information About UNIV1011

Of the remaining 245 respondents who were less familiar with the course, the majority had heard about the course from the course calendar/university website or from students/friends/family. Only 13 per cent of respondents to this question heard about UNIV1011 from an academic/faculty advisor. This was particularly interesting, since in the initial discussions with the course supervisors, it was stated that all the academic/faculty advisors were supposed to discuss UNIV1011 with students.

About half the survey respondents who answered the question "When did you first learn about UNIV 1011?" indicated that they found out about the course during or after their first year of study. Conversely, 37 per cent of respondents knew about the UNIV1011 course prior to selecting their first year courses at Nipissing, and 11 per cent found out about the course after choosing their courses (Table 5).

Table 5: Responses to the Questions about Sources and Timing of Information

Question	Response	Frequency
How did you first hear about UNIV 1011? (Check all that apply)	Course calendar/University website	38%
	Academic/Faculty advisor	13%
	Students/Friends/Family	33%
	Student services	9%
	Other	7%
When did you first learn about UNIV 1011?	Before I applied to Nipissing	12%
	After I applied to Nipissing and before I had to choose my first year courses	25%
	Before I started attending Nipissing and after I had to choose my first year courses	11%
	During my first year of university	35%
	After my first year of university	16%

Due to rounding, percentages may not add up to 100 in each case.

Perceived Value of UNIV1011

The survey also asked a series of questions about the hypothetical utility of UNIV 1011. The prompt to the series of questions was "Based on your knowledge of UNIV 1011, please rate your agreement or disagreement with the following statements," and the questions explored respondents' perceptions of UNIV1011's ability to assist them with various skills. The spread of answers received was fairly consistent. Approximately 12 per cent stated that they disagreed with the statements; approximately 30 per cent said that they neither agreed nor disagreed; approximately 30 per cent stated that they agreed; and roughly 28 per cent said they did not

know. Figure 1 displays the "agree" response frequencies to the series of questions that begin with "UNIV1011 could have helped me to . . . ."

Figure 1: Agreement with UNIV1011's Hypothetical Utility
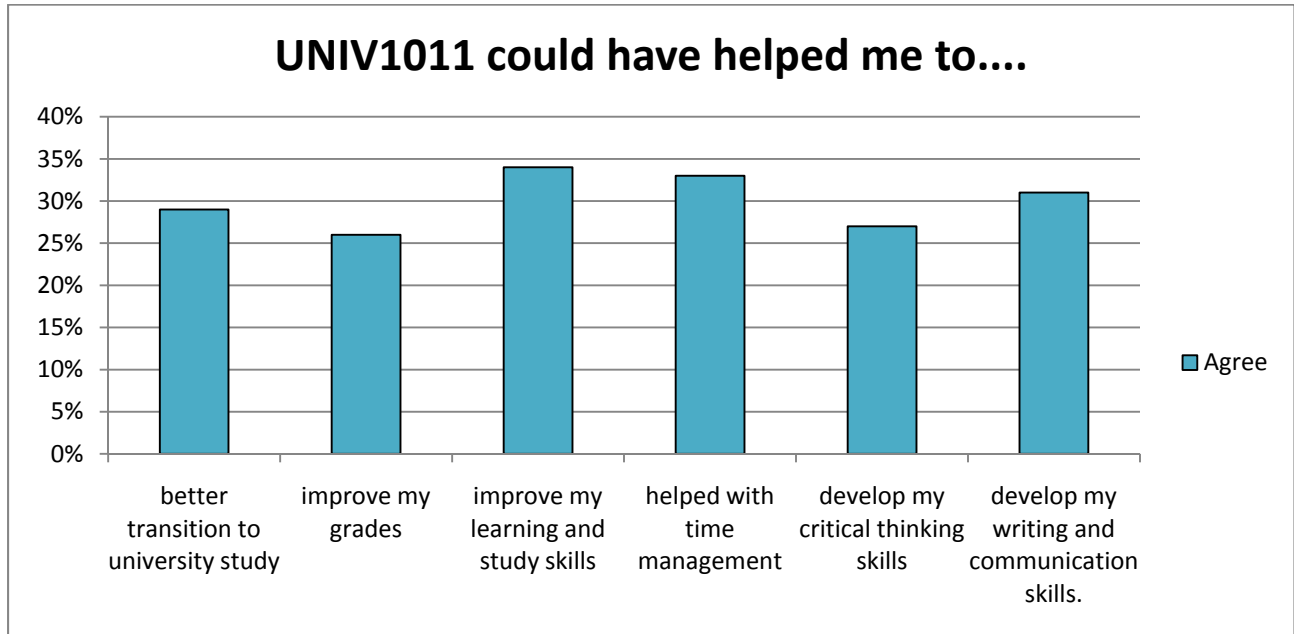
Finally, the question "Why did you choose not to take UNIV1011?" was asked. Only 19 per cent of respondents stated that the course would not have been useful to them. Only 3 per cent of students stated that they had heard bad things about the course from other students, and 13 per cent stated that they had found other ways to develop their skills. The two most common answers to this question were "The course didn't fit into my class schedule" (38 per cent) and "Other/I don't know" (26 per cent). (See Table 6.)

Table 6: Student Reasons for Not Taking UNIV1011

Why did you choose not to take UNIV1011? (Choose the most accurate response.)	
I didn't think that the course would be useful to me.	19%
The course didn't fit into my class schedule.	38%
I found other ways to develop my skills.	13%
I heard bad things about the course from students who had taken it.	3%
Other/I don't know.	26%

Due to rounding, percentages may not add up to 100 in each case.

Key Findings from the General Student Survey

From the student survey, we learned a few key insights into UNIV1011:
1. Very few students knew about UNIV1011.
2. Of the students who were familiar with the course, only 37 per cent knew about it before they had to select their first year courses.
3. The majority of students had heard about the course through the course calendar or students, faculty or friends.
4. About 40 per cent of survey respondents said they did not take the course because it did not fit into their course schedule.

Getting the right information to the right people at the right time is a very difficult but important part of service delivery. In this case, making sure that students who most need academic support know about the course before they enroll is paramount to successful uptake and perception about the course. Since UNIV1011 cannot be taken after first year, the target population for information is the incoming cohort of students, whether they are direct entry, transfer or mature students.

UNIV1011 Student Survey

A questionnaire was completed by 43 students who had almost completed UNIV1011: Student Success: Theory and Practice during the 2008/09 academic year. Appendix D shows the content of the questionnaire.

It should be noted that respondents to this questionnaire were not randomly selected, and that the sample size of 43 is quite small for analytical purposes. For these reasons, what follows should be considered to be representative only of students who completed the questionnaire and should not be generalized to past populations of students enrolled in UNIV1011. Figure 2 displays the demographics of the UNIV1011 student survey responses.

Figure 2: Demographics of UNIV1011 Student Survey Responses
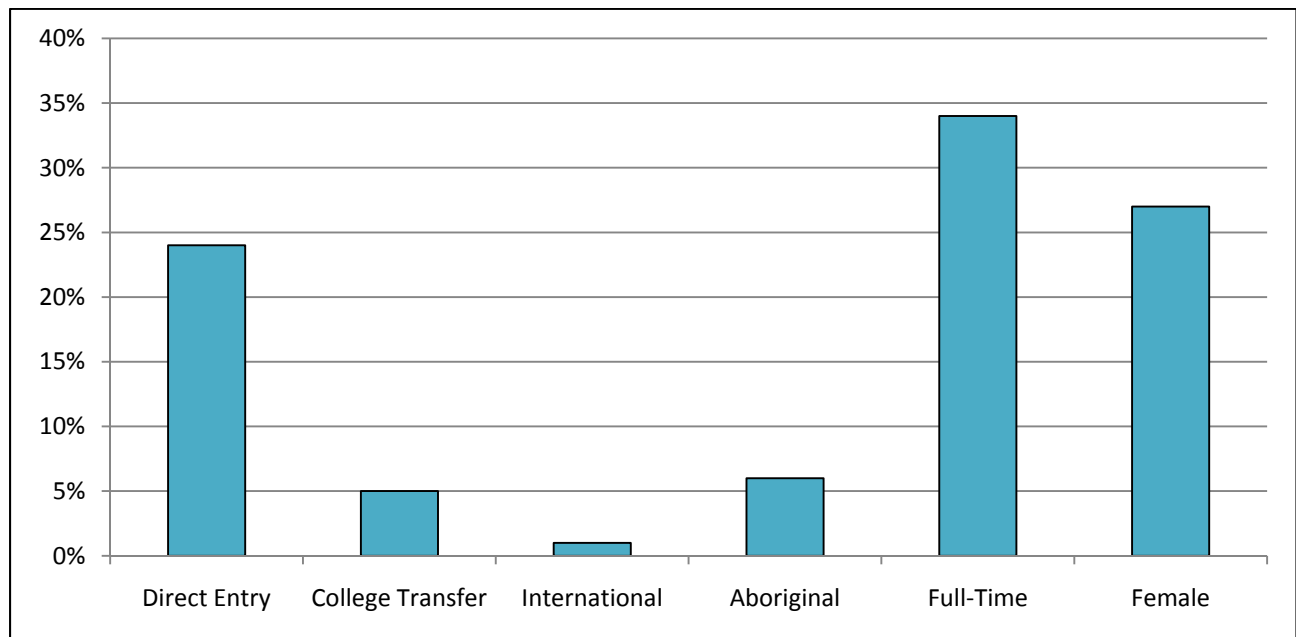
Expected UNIV1011 Grades

Respondents were asked about the final grade that they expected to receive in the course. The mean of the responses was 76.4 per cent, and responses ranged from 60 per cent to 90 per cent, which indicates that no respondents believed they were likely to fail the course. Male respondents had a noticeably lower mean expected grade (72.1 per cent) than female respondents (78.9 per cent). The highest expected grade reported by a male student was 80-84 per cent, while the highest expected grade reported by a female student was 90 per cent.

Surprisingly, while none of the male respondents expected grades over 85 per cent, a full 31 per cent (8) of the female students expected grades over 85 per cent. Similarly, while none of the female respondents expected grades of less than 65 per cent, 20 per cent (3) of the male respondents expected grades of less than 65 per cent. Figure 3 displays the distribution of grade responses by gender.

Figure 3: Expected Grade by Gender
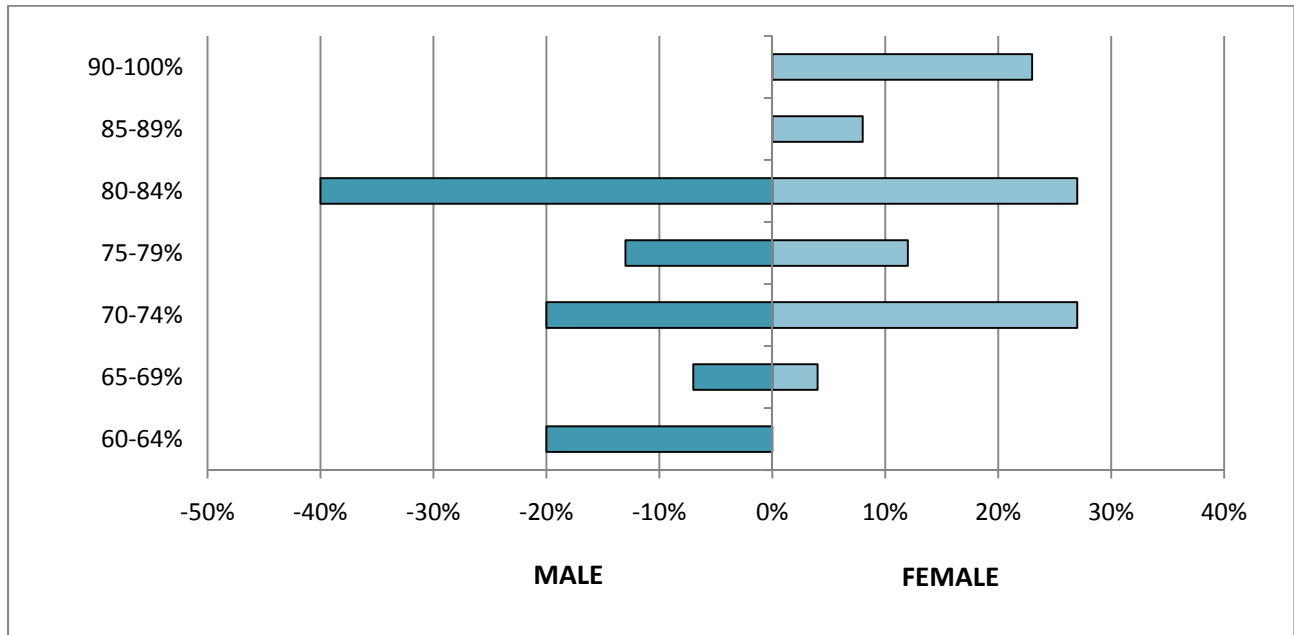
Information and Motivation

Respondents were given a number of options to describe how they had heard about UNIV1011, and all participants provided at least one response. Of the options provided, the university course calendar was the most common source of information, with 67 per cent of respondents selecting it. Next most common was the university website, at 35 per cent. Academic or faculty advisors were tied with students or friends, at 26 per cent, while comparatively few students reported that they had heard about UNIV1011 through course instructors or professors or through student services. These numbers are perhaps not surprising, as UNIV1011 is targeted toward first year students, and students entering their first year and selecting their courses are unlikely to have had much contact with either instructors or student services personnel.

Respondents were also asked about their motivation for enrolling in the course. Once again, respondents were told that they could select multiple options, and all respondents chose at least one answer. The most common reason cited for enrolment was to "help transition to university study," with 79 per cent of respondents selecting this option. The need to improve specific skills was also cited by a majority of respondents, at 53 per cent, while increasing one's grades and

compatibility with one's timetable were close behind, at 42 per cent and 40 per cent respectively. Ease of the course and encouragement from others were also cited by substantial numbers of respondents (see Table 7).

Table 7: Responses to Questions about UNIV1011

Question	Response	Frequency
How did you hear about UNIV1011? (Check all that apply)	Course calendar	67%
	Academic/Faculty advisor	26%
	University website	35%
	Course instructor/Professor	5%
	Students/Friends	26%
	Student services	7%
	Other	7%
Why did you enrol in the course? (Check all that apply)	Increase my grades	42%
	Needed to improve specific skills	53%
	Help transition to university study	79%
	Easy credit	30%
	Fit my timetable	40%
	Was told to by someone	21%
	Other	7%

Expectations and Satisfaction

Respondents were asked four questions related to the extent to which the course met their expectations, their level of satisfaction with the course instruction, their level of satisfaction with the overall course experience and their satisfaction with the course content. Responses were entered on a five-point Likert scale, with higher numbers indicating greater levels of satisfaction (with 5 representing "Very Satisfied" and 1 representing "Dissatisfied").

The mean responses of those who provided an answer were all above 4, with the mean for satisfaction with the course instruction being slightly higher than the others at approximately 4.43. All were quite high, however, suggesting that respondents were generally quite satisfied in relation to these four queries.

Of particular interest is the fact that no respondents indicated that they were either "Dissatisfied" or "Somewhat Dissatisfied" with the extent to which the course met their expectations. Only 5 per cent indicated that they were "Neither Satisfied Nor Dissatisfied," while a remarkable 95 per cent were either "Somewhat Satisfied" or "Very Satisfied."

Improvement of Specific Skills

Respondents were asked about the extent to which UNIV1011 helped them to improve particular skills (listed in the second section of Table 8, below). Respondents were provided with a 5-point scale on which 5 represented "Significantly Improved," 4 represented "Improved," 3 represented "Somewhat Improved" and 2 indicated "Did Not Improve." The number 1 was reserved for "Not Sure."

For this scale to function as a Likert scale, responses of 1 were removed from the analysis. Of those UNIV1011 students that answered between 2 and 5, the mean responses were all between 3.4 and 4.0. This places the average response overall between "Somewhat Improved" and "Improved." All four skills – self-awareness, overall study skills, healthy lifestyles and stress management, and time management – had similar scores of 3.9. Problem solving had the lowest mean, at 3.5 (see Table 8).

Perceived Impact of UNIV 1011 on Academic Performance

Respondents were asked about the impact of UNIV1011 on their academic performance. On a four-point scale of "Significantly Improved (5)," "Improved (4)," "Somewhat Improved (3)" and "Did Not Improve (2)," respondents rated the extent to which they believed the course had and would improve their academic performance. The mean response about the extent to which the course had improved respondents' academic performances was 3.8, which falls between "Improved" and "Somewhat Improved." Only one participant said that their academic performance "Did Not Improve," and the most common response was "Improved" – chosen by 61 per cent of those who selected a number from 2 to 5.

Respondents' estimation of the degree to which the course would improve their future academic performance was somewhat higher (at 4.4 between "Improved" and "Significantly Improved"). No one indicated "Did Not Improve" with relation to their future academic performance, and 86 per cent selected "Improved" or "Significantly Improved" (see Table 8).

Respondents were also asked about whether the course had prevented adverse academic outcomes or had increased their confidence, and registered their responses on a five-point Likert scale from "Strongly Agree" (5) to "Strongly Disagree" (1). When asked about whether the course had prevented them from dropping out of Nipissing, the mean response was 2.69, which falls between "Somewhat Disagree" and "Neither Agree Nor Disagree." While there was not a general sense among most respondents that the course kept them from dropping out, four respondents indicated that they "Strongly Agreed," while a further three indicated that they "Somewhat Agreed." This suggests that the course prevented attrition for at least a small number of respondents.

The mean response for the question "Completing UNIV1011 prevented me from performing poorly/dropping a course" was slightly higher, at 3.1, which is very close to "Neither Agree Nor Disagree." In contrast, when asked about whether the course had increased their confidence in their academic abilities, the mean response was 3.9, which is close to "Somewhat Agree," and

75 per cent of respondents indicated that they either "Strongly Agreed" or "Somewhat Agreed" with the statement (Figure 4).

Figure 4: Mean Responses to Question about Improved Skills
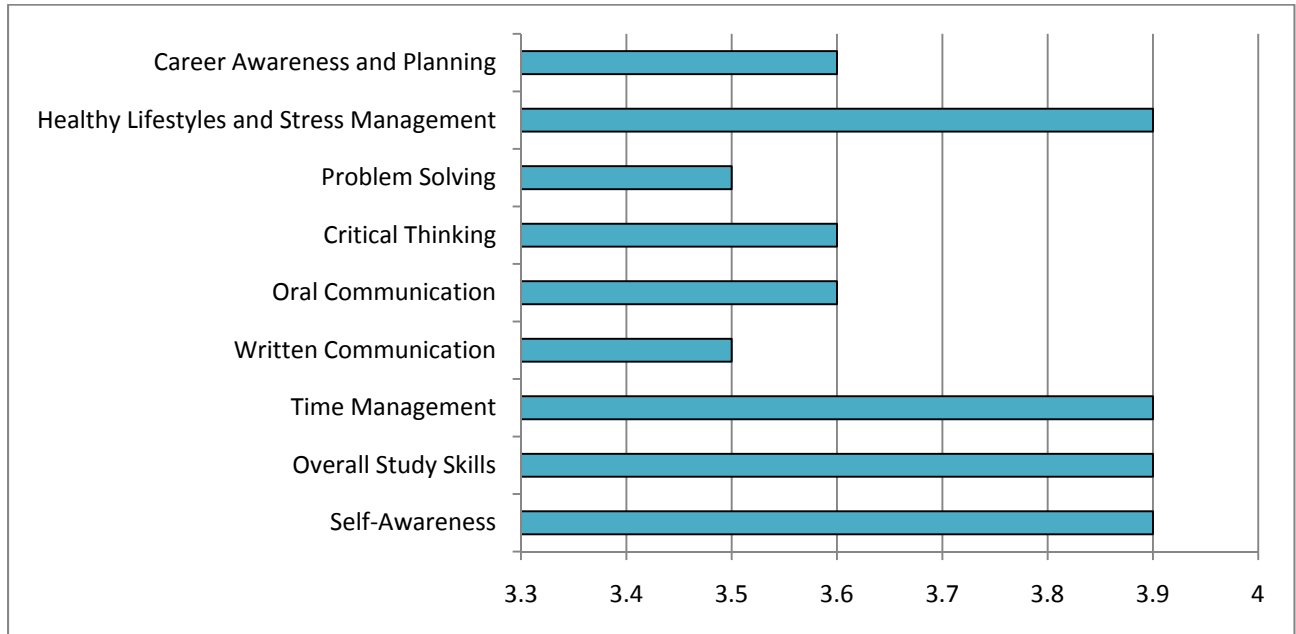
Recommending UNIV1011 to Other Students

Respondents were asked whether they 1) would recommend or 2) have recommended UNIV1011 to other students. Responses for "Would you recommend UNIV 1011 to other students?" were collected on a five-point Likert scale, from "Strongly Agree" (5) to "Strongly Disagree" (1). Sixty-five percent of those who responded strongly agreed that they would recommend UNIV1011, and 23% somewhat agreed. Only 2% strongly or somewhat disagreed (Table 28). Seventy-seven per cent indicated that they actually had recommended the course already; the mean response was 4.49, between "Somewhat Agree" and "Strongly Agree.

Differences in Likert Scales by Gender

There were interesting differences in mean Likert responses between male and female respondents. In almost all questions involving a Likert scale, male respondents' mean answer was lower than female respondents' mean answer. The only exception to this trend was the mean response to the question "Completing UNIV1011 prevented me from dropping out of Nipissing," and in this case, the mean responses were similar. While the reasons for this distinction are beyond the scope of this report, it is possible that the small sample size means that the males who completed the questionnaire coincidentally had a less positive experience as a group to taking UNIV1011 than did female respondents as a group. Alternately, it is possible

that these numbers are in some way reflective of a real difference in experience, on average, between male and female students as groups. This distinction might be worthy of further study.

Table 8: Likert Scale Means by Gender

Topic	Question	Male	Female	Total
Expectations and Satisfaction (Scale of 1 to 5)	To what extent did the course meet your expectations?	4.1	4.5	4.3
	How satisfied are you with your overall course experience?	3.9	4.5	4.3
	How satisfied were you with the course content?	4.2	4.4	4.3
	How satisfied were you with the course instruction?	4.4	4.5	4.4
To what extent did this course help to improve the following skills for you? (Scale of 2 to 5)	Self-awareness	3.7	4.0	3.9
	Overall study skills	3.7	4.0	3.9
	Time management	3.5	4.1	3.9
	Written communication	3.3	3.6	3.5
	Oral communication	3.4	3.7	3.6
	Critical thinking	3.3	3.9	3.6
	Problem solving	3.2	3.7	3.5
	Healthy lifestyles and stress management	3.3	4.3	3.9
	Career awareness and planning	3.4	3.7	3.6
Academic performance (Scale of 2 to 5)	To what extent did this course improve your overall academic performance?	3.6	3.9	3.8
	To what extent do you think this course will improve your future academic performance?	4.2	4.4	4.4
Interventions (Scale of 1 to 5)	Completing UNIV1011 prevented me from dropping out of Nipissing.	2.7	2.7	2.7
	Completing UNIV1011 prevented me from performing poorly/dropping a course.	3.0	3.1	3.1
	Completing UNIV1011 increased my confidence in my academic abilities.	3.8	4.0	3.9
Recommendations (Scale of 1 to 5)	Would you recommend UNIV1011 to other students?	4.4	4.5	4.5

Preferences

Respondents were asked about a few personal preferences with regard to UNIV1011. An overwhelming majority of respondents (93 per cent) indicated that they would not have preferred to take the course for free without getting course credit. Only 3 of the 42 respondents who answered the question said that they would have preferred that arrangement.

Respondents were also asked whether they would have preferred to have taken the online version of the course (if they took the in-person version) or the in-person version (if they took the online version). However, respondents were not initially asked to indicate whether they had taken the online or the in-person version of the course, and this makes it difficult to draw useful conclusions from the responses. As it turned out, only 10 per cent of those who responded to the question indicated that they would have preferred the other delivery method. At present, approximately 80 per cent take the in-class rather than the online version.

Finally, respondents were asked whether they considered other skills development methods at Nipissing to be more effective than UNIV1011. Approximately one-quarter of those who responded to the question believed that there were other, more effective methods, while the vast majority (76 per cent) did not.

Key Findings from the UNIV1011 Course Survey

The course survey provided some insight into students' perceptions about UNIV1011. Key findings from that data include the following:
1. Respondents most often learned about UNIV1011 through the course calendar.
2. They most often reported that they chose to take UNIV1011 to assist their transition into university study, though a large number also reported that they wanted to improve particular skills.
3. Respondents reported high levels of satisfaction with UNIV1011.
4. A large percentage reported that they "strongly agreed" or "somewhat agreed" that they would recommend the course to other students, while only 2 per cent disagreed.
5. Females, on average, reported higher expected grades in the course than males. Females also responded to Likert scale questions with higher scores.
6. Respondents were generally not interested in taking the course for free and without credit, and nearly all were satisfied with the version of the course (in-person/online) that they were already in the process of completing.

Students who participate in the course enjoy the experience. Moreover, in the eyes of the students themselves, the course has improved their academic performance at Nipissing. Some respondents somewhat or strongly agreed that the course was a factor in retaining them as an undergraduate student at Nipissing, suggesting that UNIV1011 is a significant intervention for at least some students. The vast majority of respondents indicated that they expected UNIV1011 would improve their future academic performance.

Learning and Study Strategies Inventory (LASSI)

In 2007, the instructors of UNIV1011 implemented a new method of skills evaluation for participants of the course. The Learning and Study Strategies Inventory (LASSI) is a pre- and post-course evaluation instrument more commonly used in colleges that measures a student's perceived level of competence in a number of different areas. The students are asked to assign a numerical value ranging from 1 to 5 to a series of statements. The categories covered in the LASSI survey at Nipissing are listed in Table 9.

Table 9: LASSI Scale Categories

Category	Code
Anxiety scale	ANX
Attitude scale	ATT
Concentration scale	CON
Information processing scale	INP
Motivation scale	MOT
Self-testing scale	SFT
Selecting main ideas scale	SMI
Study aids scale	STA
Time management scale	TMT
Test strategies scale	TST

In each category, an equal number of questions is asked; in the case of the 2007, 2008 and 2009 Nipissing LASSI surveys, eight (8) questions were asked in each of the categories.

To generate a LASSI score for an individual, the results of the pre-course survey and the results of the post-course survey are calculated as a sum for each section. These sums are compared to a chart indicating the national percentile scores in each category. For example, if a student scored 34 on the anxiety scale, they would be in the 86th percentile. The differences between the percentile scores for the pre-course test and the post-course test are compared with each other to generate a net comparative score for the student. For the purposes of this analysis, the scores listed are the changes in net category percentile scores. For example, if a student finished in the 50th percentile on the first test and the 75th percentile on the second test, that student would have a score of 50 ((75 – 50)/50). A positive number means that the student perceived an increase in her or his skills from the start of the course; a negative number means that the student perceived a decrease in his or her skills from the start of the course.

LASSI Samples and Scores

A total of eight (8) UNIV1011 courses have employed the LASSI survey, and a total of 106 students have completed both the pre- and post-survey instruments. The scores for the 2007 and 2008 classes of UNIV1011 were fairly consistent with each other, but the LASSI data for 2009 differed significantly from the other two cohorts. The overwhelming majority of the category scores in all three years in which the test was administered were positive, and category scores were fairly consistently high among all the UNIV1011 courses, thus indicating that students perceived their skills to have improved as a result of the UNIV1011 courses in most skill categories. For instance, in 2007 and 2008 the anxiety scale for each course was above 19, and the time management scale in all but one course was above 10. Conversely, somewhat lower scores were also common within certain categories. The attitude scale scores were all within a range of -1 to 9, and the motivation scale scores were within a range of -2 to 19.

The sample size in 2009 was quite small, with a total of only 13 students completing the test. Within that small data set, there were 4 students who identified significant changes in their LASSI scores resulting in higher overall means for the cohort as a whole, while the other 9 scores followed a similar pattern to that of the averages in 2007 and 2008. Table 10 displays the LASSI category scores for each UNIV1011 course for which data are available.

Table 10: LASSI Category Scores for Each UNIV1011 Course

	ANX	ATT	CON	INP	MOT	SFT	SMI	STA	TMT	TST	Ave. Total
Fall Nipissing 2007	23	2	23	14	10	29	26	26	39	20	21
Fall Online 2007	25	(-1)	12	2	4	19	24	6	11	12	11
Winter Nipissing 2007	19	2	4	7	4	12	9	9	13	8	9
Fall Nipissing 2008	32	5	17	9	11	16	21	18	20	14	16
Fall Muskoka 2008	32	2	14	6	(-2)	0	6	25	13	13	11
Winter Muskoka 2008	33	0	8	11	4	12	9	8	2	8	9
Winter Muskoka 2009	45	9	29	39	19	47	35	31	38	26	32
Winter Nipissing 2009	20	6	27	24	19	46	24	35	34	18	25

The LASSI scores for the eight UNIV1011 classes revealed two important patterns. First, the net changes were variable but almost always positive, with the exception of the 2007 fall online attitude scale and the 2008 fall Muskoka motivation scale. Second, all the scales fluctuated from class to class, with the exception of the anxiety scale and the attitude scale (with the omission of the 2009 data discussed above).

It would appear that completing UNIV1011 consistently improves the net anxiety score for students and does not change the net attitude score. If the LASSI scales are an accurate measure of a perceived change, then students who take UNIV1011 consistently are less anxious about university life upon completion of the course.

The attitude scale assesses students' interest in, and attitude toward, university success. Essentially, this scale measures whether students believe that university and academics are important and relevant to future goals. The low score in the net attitude scale indicates that in each of the UNIV1011 classes, students never wavered in their own understanding of the importance of academics in contributing to success. This can be important, because according to the literature, "Students are more likely to stay in school when there is a clear connection in their minds between their studies and their intended career path" (Parkin & Baldwin, 2009).

When we compare the average LASSI scores for 2007, 2008 and 2009, the category scale scores differ significantly for 2009 but not for 2007 and 2008. Again, a few individuals in a small 2009 sample are driving the higher means in that year. Between 2007 and 2008, there is a variance of up to 33 points in the scores, and the smallest variance is 7. The sample count for 2007 was 43, the sample count for 2008 was 48 and the sample count for 2009 was 13. Figure 5 displays the LASSI category score increases for 2007, 2008 and 2009.

Figure 5: LASSI Category Scores (Increases) for 2007, 2008 and 2009
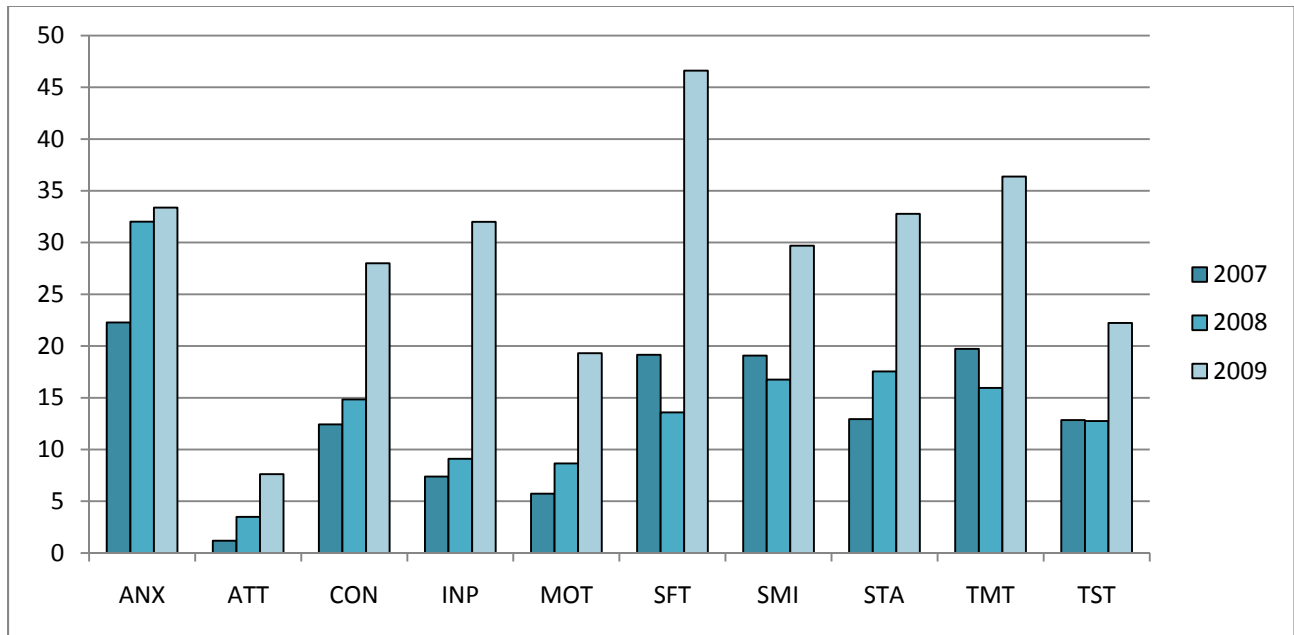
The LASSI data provide a good measure of students' perception of their skills. As displayed in the data, students who took UNIV1011 perceived that they possessed increased skills upon completion of the course. This then leads to the following question: Did this perceived increase

in skills translate into better academic performance? The analysis of the administrative data that follows in the next section should help answer this question.

Key Findings from the LASSI Data

The LASSI data offer a few key findings:
1. Every UNIV1011 class reported higher LASSI scores after students had completed UNIV1011.
2. Within the 2007, 2008 and 2009 cohorts that completed LASSI, the scores for the anxiety scale and time management scale showed the largest improvement.
3. The anxiety scale and attitude scale remained fairly constant for each of the UNIV1011 classes.

The LASSI scores support the data derived from the course survey: students who take the course perceive a benefit in that their skills improve. Students who participated in the LASSI test reported better scores after having taken UNIV1011. Although this is not a hard measure of student performance either in UNIV1011 or in their university courses in general, it proves that in specific skill sets, students believe that they have improved as a result of taking UNIV1011.

Finally, the overall attitudes of students who took UNIV1011 did not significantly change from year to year, and they did not change from the beginning of the course to the end of the course. This could be related to students' overall academic objectives and motivations prior to taking the course.

Key Informant Interviews

Academic Advisors

Role

Academic advisors perform many functions at the university, but their most important responsibility is assisting students with course selection. They conduct half-hour appointments with students as requested to help them understand their degree requirements and the information in the course calendar, to help them plan out their degree, and to ensure that the courses students choose help them achieve their academic goals.

The content of the discussions with students depends on the time of year. Closer to course registration and graduation, academic advisors assist in course selection rather than helping with big-picture planning.

Relationship to UNIV1011

The overall interaction between academic advisors and UNIV1011 is limited. For the most part, academic advisors recommend UNIV1011 to students who express concern about academic performance. Furthermore, they often recommend the course to students in the second semester of first year. If a student is struggling academically in the first semester of first year, an academic advisor might recommend the winter session of UNIV1011. Academic advisors also meet with all transfer students to help them with credit transfers and course selection. Depending on the individual, an academic advisor might recommend UNIV1011 to a transfer student to assist in the transition to university life.

Perceptions about UNIV1011

According to the academic advisors who were interviewed, UNIV1011 gives students study skills and information about university life and transitions. The course also helps students learn about specific campus resources and gives them a better understanding of the university's expectations of them.

Course Improvements

Nipissing's academic advisors had only one recommendation for changes to the course. According to them, more people take the course in the fall than the winter. Therefore, more emphasis should be placed on the course and the course benefits as early as possible during first year, and even right after they enroll in university and before they begin their first semester of study. This would give struggling students an opportunity to take the course during their first year.

Registrar's Staff

Role

The staff at the Office of the Registrar tended to take a more "holistic" approach to university transitions as opposed to focusing on UNIV1011. To them, transitions were not just about academic skills, but about myriad other skills that students need to successfully transition to university. The registrar's staff seemed to be more connected to overall university life and the bigger picture on campus than was the case with the academic advisors, who seemed much more concerned about helping students with their more immediate academic needs.

Relationship to UNIV1011

The staff at the Office of the Registrar have an arm's-length relationship with UNIV1011 and indicated that they mention the course while recruiting only if students raise concerns about university transitions. In that same vein, during the New Student Orientation (NSO) the registrar's staff will suggest UNIV1011 to students or parents expressing concern about the transition to university. In addition, the registrar's staff is responsible for scheduling the course, coordinating the registration and assisting students who want to get into the course if it is full.

Perceptions about UNIV1011

According to the registrar's staff, many students at Nipissing want to take the course but can't because it is full or does not fit into their first year schedule. One staff member said that the students who need the course the most can't take it because it is full at the very end of the registration period, and this is precisely the time when students with lower entering grades are admitted to the university. Finally, the staff thought that UNIV1011 should not be a for-credit course. Instead, they felt that the course should follow the same structure as non-credit academic workshops.

Course Improvements

According to the registrar's staff, UNIV1011 could be an important selling point for liaison officers as they are recruiting students, but since there is limited space, it is not a good "sell" to prospective students. They believed that if the course was offered and available to all students, it might be a better recruitment tool. As noted earlier, the registrar's staff thought that UNIV1011 should not be a for-credit course. In addition, they felt that if the course became more comprehensive and was linked to specific academic skills, such as literacy and numeracy, there might be a higher uptake.

Furthermore, some thought that the course should be condensed and made mandatory for all first year students. One person noted that the January offering is too late because students need to learn university skills in the fall term in order to have a successful first year. Finally, the staff thought that information about the course should be better communicated to staff and

faculty at Nipissing. Many people do not know what the course is about or why it should be a for-credit offering.

Focus Groups

UNIV1011 Students

Demographics

In the UNIV1011 focus group, there were a total of 10 participants – 3 students in first year, 4 students in second year and 3 students in third year. Most of the participants identified themselves as direct entry students; 2 other students identified themselves as college transfer students and 1 identified as a mature student. Most of the participants in the focus group were attracted to Nipissing because of the concurrent education program, and most were from North Bay or small towns around the area.

Preparedness before First Year

The focus group was asked, "How prepared were you for university?" Most of the students stated that they were not fully prepared. One stated that she was especially prepared for "life responsibilities" such as laundry and money. Another student commented that he did not realize the life balance necessary to succeed at university. Most agreed that coming to university was a very big life adjustment. Time management was identified as the most difficult skill to master in the first year. In high school and college, everything had been regimented and there was little flexibility or responsibility.

To help make the transition, students said that New Student Orientation (NSO) "was very helpful." Students appreciated having the abundance of information about student life prior to first year. One student noted that living in residence helped ease the transition to university. To this person, living with others who were facing the same challenges and experiences made it easier to cope with the change.

Course Decision Making

Regarding the topic of course selection, the focus group was asked, "How did you decide what courses to take in first year?" Most students stated that the course calendar was the primary resource they used to decide what courses to take. Some students were able to sit down with an advisor at NSO; others stated that they had asked friends and family already at Nipissing. Some looked online to see what courses were being offered. All of the participants said that they chose courses based on what subjects they liked or what was required for their degree.

When asked how they select courses now (after first year), the group noted that they make their course selections based on recommendations from friends, roommates and others who already know either the course or the professor. To them, word of mouth is more important than the course descriptions in the calendar. Some noted that they have less flexibility in their class

schedules as they progress in their degree, as they needed to take more mandatory courses in order to graduate.

Personal Skills Assessment

Regarding personal skills assessment, participants were asked what skills were necessary to succeed in university. This is the list the group generated: coping with stress; organization; time management; money management; housekeeping skills; motivation; social skills such as communicating with and/or confronting professors or peers; networking; learning how to make decisions and dealing with the consequences; and having a positive attitude. It is interesting to note that the skills listed were not academic skills.

UNIV1011

Students in the focus group found out about UNIV1011 in a variety of ways. Some students heard about it from an academic advisor, others received the summer mailing, some saw it in the academic calendar, and one individual's mother pointed out the course.

The majority of the students in the focus group took the course in the fall semester. Participants noted that they wanted to take the course because they were concerned about their transition to university. One student said that he did not perform well in high school and wanted to do well in university.

Prior to the first UNIV1011 class, students expected that they would be learning study tactics, improving their writing ability, learning about campus resources and generally gaining more confidence. All of the participants said that these expectations of the course were met.

The group was also asked what they liked and disliked about UNIV1011. The listed likes about the course were as follows: the learning assessment exercise; the time management exercise; the course's emphasis on self-awareness regarding strengths and weaknesses; and the older student panel. The dislikes about the course included the following: "the pointless 80 minute video"; the overload of facts; the two-professor format; and the final project.

It is particularly important to note that more time was spent discussing the positives than the negatives. Participants were generally hard pressed to come up with dislikes about the course.

Changes to UNIV1011

The participants were asked what they would change about the course. Most noted that the team teaching was particularly difficult. With team teaching, there was no consistency in the teaching style, and they believed that having only one professor would have enhanced the delivery of the content. Some students said that they would want to increase the motivation and energy in the class by bringing in more motivational speakers. One student suggested that the upper year student panel be brought in at the beginning of the course (Each year, a panel of upper year students comes back to UNIV1011 to discuss their success in university and to

suggest ways to apply the course skills to university success.) Having this at the beginning of the course would help students see the end goal. Another student suggested that all UNIV1011 students be paired with an upper year mentor. This would help them with the university transition outside the classroom.

Recommending the Course

All participants stated that they would recommend the course to incoming students, and about half of them said that they had already recommended it to an incoming student.

Non-UNIV1011 Students

Demographics

The non-UNIV1011 focus group, like the UNIV1011 focus group, had a total of 10 participants: 5 students in first year; 2 students in second year; 2 students in third year; and 1 student in fourth year. Most of the participants identified themselves as direct entry students. Students in this group were attracted to Nipissing because of the small class sizes, the guaranteed residence, scholarship offers and a good concurrent education program.

Preparedness before First Year

The focus group was asked, "How prepared were you for university?" Most of the students stated that they were not at all prepared. One student stated that they were not prepared for the amount of note taking that would be required. Another student stated that they were not ready to write at a university level. Most of the comments about preparedness were academic in nature, not social.

It is interesting that the non-UNIV1011 group commented more on the academic aspects of university, rather than social adjustment concerns.

Personal Skills Assessment

In relation to personal skill assessment, participants were asked what skills were necessary to succeed in university. This is the list the group generated: writing; note taking; grammar; time management; coping with stress; study skills; preparation for class; knowing how to do labs and how they relate to the coursework; knowing your individual work or study style; self-motivation; attending and participating in class; listening skills; and ability to focus. All the skills listed by this group were academic in nature.

Most of the participants in this group noted that they eventually learned to cope with the academic rigors of university life, and figured out how to acquire university skills on their own. The general attitude of this group was centered more on self-help and personal development than was the attitude of the UNIV1011 group.

UNIV1011

Most of the participants in the focus group had heard about UNIV1011 largely through friends in first year residence, from academic advisors or from the summer mailing or the course calendar. One student commented, "I was told the course is an excellent average booster."

When this group was asked, "What do you know about UNIV1011?" one student said that the course did not count toward anything, meaning it was not for credit (although that is not true). Another commented that as part of the course, students were required to volunteer somewhere (also not true). One individual noted that in the course, students become more aware about their personal learning style. On the whole, students knew very little about the course.

When asked when these students learned about UNIV1011, about half of them said they had learned about it after their first year of study. One student wanted to take the course during the winter (second) semester of their first year on the advice of one of the academic advisors, but when they went to enroll, the course was full.

For the most part, this group was not too interested in the course, as evidenced by their answers to the question "Having learned more about the details of UNIV1011, would you enroll in the class?" Most of them said that they would not enroll, and a few said that it would be a "waste of time and credit."

Finally, the group was asked how they generally obtain their information on campus. Posters, e-mail and websites were the most common responses. Some stated that they would like to see more class presentations about important initiatives such as UNIV1011.

Key Findings from the Focus Groups

There were a few differences between the UNIV1011 focus group and the non-UNIV1011 focus group:
1. UNIV1011 students identified social skills as the skills most necessary for university.
2. The non-UNIV1011 students identified academic skills as the skills most necessary for university.
3. The tone of the UNIV1011 discussions dealt more with social transitions to university than academic transitions, while the non-Univ1011 discussions focused on the academic rigor of university life.

Administrative Data

The data to this point have painted an interesting picture. The LASSI data indicate that students who complete UNIV1011 are generally more comfortable dealing with anxiety about some aspects of university life, even though there was little net change as a result of taking the course in the overall "high anxiety" of UNIV1011 students.

Students who took UNIV1011 never wavered in their understanding of the importance of academics in contributing to success. According to the literature, "students are more likely to stay in school when there is a clear connection in their minds between their studies and their intended career path" (Parkin & Baldwin, 2009). If UNIV1011 students' attitudes already included placing high importance on academics as contributors to success, they may have already made the connection between academics and life goals prior to even enrolling in UNIV1011. Therefore, there could be a significant commitment on their part to remain in school and obtain a degree.

Finally, according to the UNIV1011 student survey, students who had taken the course in the fall of 2008 noted that it had helped them improve some aspects of their academic life, such as study skills and time management. More importantly, students agreed that the skills learned in UNIV1011 would likely help them achieve greater academic success in the future.

The LASSI, survey and focus group data indicate that students perceive UNIV1011 to be a benefit in improving their university skills. In this section about administrative data, we will examine whether this perception about enhanced skills is a reality.

It is important to note that the administrative data provide a historical perspective on the academic performance of Nipissing students. However, since the survey, LASSI and focus group data begin in 2007 and the complete administrative data end in 2005, correlations between the two data sets are speculative. In order to draw more concrete parallels between the different pools of data, the LASSI and survey data would have to have started in 2000.

Enrolment

The average size of the first year cohort at Nipissing University steadily increased from 1998 to 2007, with a large enrolment spike in 2003 (the "double cohort" year). In 1999, the Ontario government eliminated Grade 13 from the high school curriculum, so in 2003, the last graduating Grade 13 cohort and the first graduating Grade 12 cohort applied to college and university in the same year. To handle the influx of students, universities in Ontario were asked to expand their annual enrolment, and Nipissing's 2003 enrolment grew by approximately 85 per cent. After the year of the "double cohort," enrolment at the university returned to below 1,000 students and continued to grow modestly. In 2007, enrolment at Nipissing was approximately 1,000 students.

Enrolment in UNIV1011 has been fairly reflective of enrolment trends in the university as a whole. When the course was first introduced, approximately 35 students were enrolled. The course continued to grow modestly, with 62 students enrolled in 2002, one year before the "double cohort." In 2003, however, enrolment in the course increased by approximately 70 per cent, and in the following year, enrolment fell to 1998 levels, with only 37 students taking the course. From 2005 to 2007, enrolment in the course was 74, 56 and 83, respectively.

The online version of UNIV1011 was first introduced in 2004, when only one student took the course online. Enrolment in the online version of the class grew steadily, however, and during the first year in which the online UNIV1011 class was fully utilized (2007), 44 students were enrolled.

Each year the dean's office sets the capacity limits for each course offered at Nipissing, and in some cases, it determines whether a specific course will even be offered. Enrolment trends in UNIV1011 are not driven completely by student demand. Although popularity plays a part in setting limits on the number of students enrolled, overhead and resources often dictate changes in enrolment. Moreover, UNIV1011 is offered to students in different locations and by different means. As noted in previous sections, UNIV1011 is offered online and at the Muskoka campus in Bracebridge. Both offerings were first made available during the 2004/05 academic year. Figure 6 shows overall first year enrolment trends for both Nipissing University and UNIV1011 from 1998 to 2007.

Figure 6: First Year Enrolment at Nipissing from 1998 to 2007 and Percentage of First Year Students Who Took UNIV10111
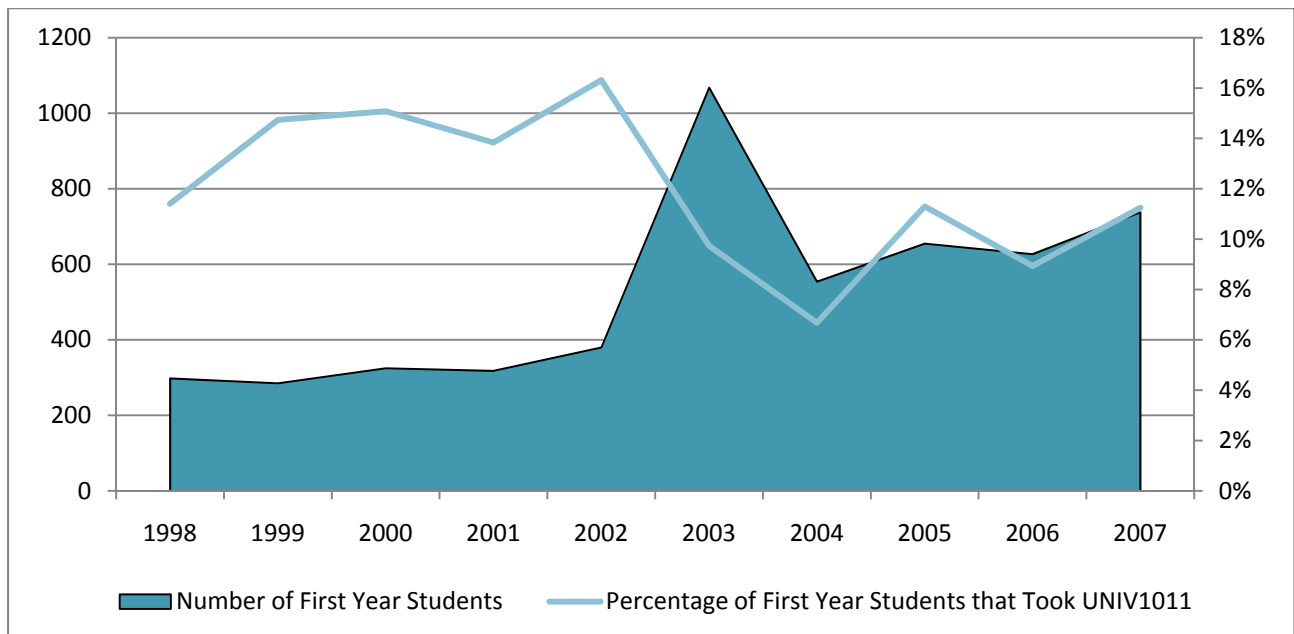
Gender Ratio

From 1998 to 2007, the gender demographics of the student population did not change significantly, with the female-to-male ratio for the first year cohort at Nipissing University remaining at approximately 7:3. In 1998, 33 per cent of the population was male, the highest male proportion for an incoming cohort. Conversely, in 2001 males comprised only 27 per cent of the student population. Throughout Canada, the university enrolment ratio of females to males is approximately 60:40, so Nipissing University clearly has a higher female-to-male ratio than the national average. It should be noted that Nipissing University has a large nursing and concurrent education program, and across Canada, significantly higher numbers of women traditionally enroll in those programs than do men (see Figure 7).

Unlike the overall population of Nipissing University, the gender ratio of students who enrolled in UNIV1011 does not follow a clear pattern. In 2000, only three males took UNIV1011, accounting for only 6 per cent of the course population, while in 2004 41 per cent of the students taking the course were male. Although there is no clear pattern in terms of the gender ratio, it is interesting to note that for the most part, the majority of students in UNIV1011 classes are female. This female dominance in the course cannot simply be attributed to the dominance of the nursing or concurrent education programs at Nipissing University either, since nursing and education students have a fixed first and second year schedule with no room for electives. Figure 7 displays the percentage of females in UNIV1011 and in the non-UNIV1011 student population in Nipissing University from 1998 to 2007.

Figure 7: Percentage of Females in UNIV1011 and in the Non-UNIV1011 Student Population from 1998 to 2007
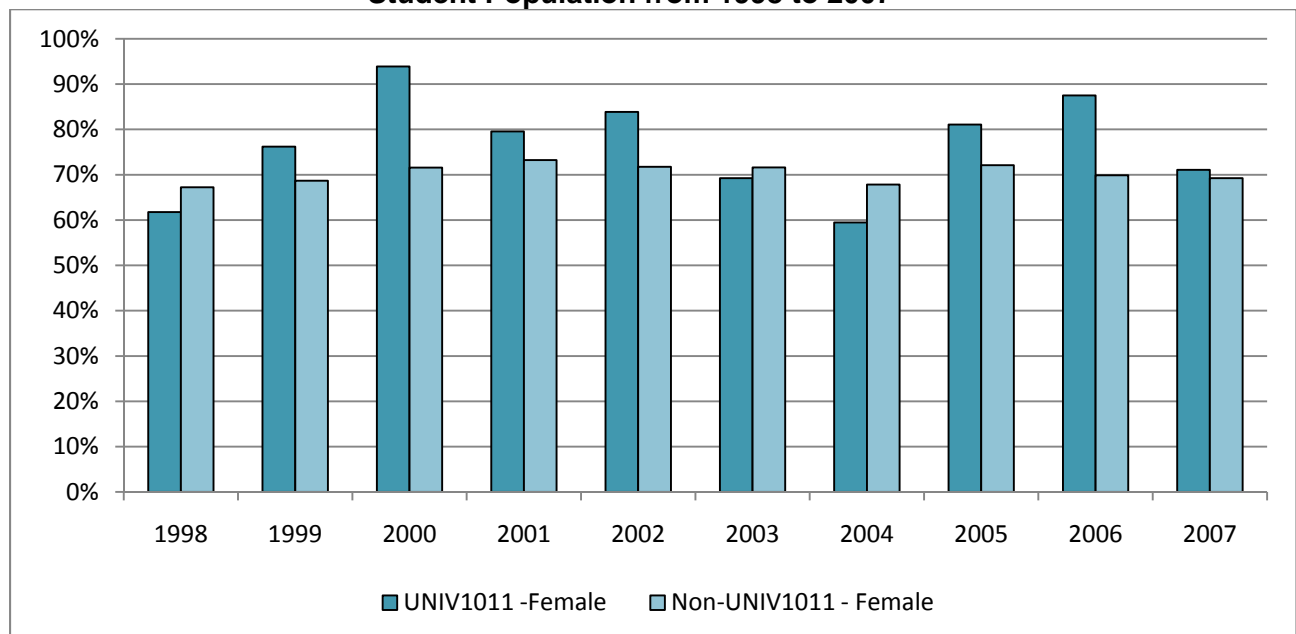
Enrolment Status

Three types of students enroll at Nipissing University: direct entry students, college and university transfer students and mature students. Direct entry students (who enroll directly from high school) account for the majority of first year cohorts. Included in the direct entry group are students from Quebec (CEGEP graduates) and international students. College and university transfer students are individuals who were enrolled in another college or university prior to their first year at Nipissing. These students could have been at a university or community college in Canada, the United States or Europe. It is also important to note that Nipissing University shares part of its campus with Canadore College, so a number of students might also be transfers from that PSE institution. Mature students are defined as individuals who are not transferring to Nipissing University directly from high school or CEGEP or from another college or university.

Traditionally, direct entry students have made up the majority of the first year cohort; from 1998 to 2002, they accounted for approximately 54 to 60 per cent of each cohort. During that same period of time, transfer students made up from 27 to 32 per cent of the cohort. In 2003, as noted previously, Ontario experienced the sudden expansion in enrolment of the double cohort, and in that year the demographics of the first year class changed significantly. Direct entry students accounted for 82 per cent of the incoming cohort, while transfer and mature students comprised 14 per cent and 5 per cent of the population, respectively. After the "double cohort," the average proportion of direct entry students was about 65 per cent, the average proportion of transfer students was about 25 per cent and the average proportion of mature students was about 10 per cent.

Enrolment trends seen at Nipissing University as a whole do not mimic enrolment trends in UNIV1011. In any given year, the entry status of students in UNIV1011 fluctuates. From 1998 to 2007, for example, the majority of students in UNIV1011 were direct entry, and mature and college transfer students made up between 4 and 34 per cent of the course. Figure 8 displays the percentage of UNIV1011 students and the percentage on non-UNIV1011 students who were direct entry students for the 1998 to 2007 cohorts.

Figure 8: Percentage of Direct Entry Students in UNIV1011 and in the Non-UNIV1011 Student Population from 1998 to 2007
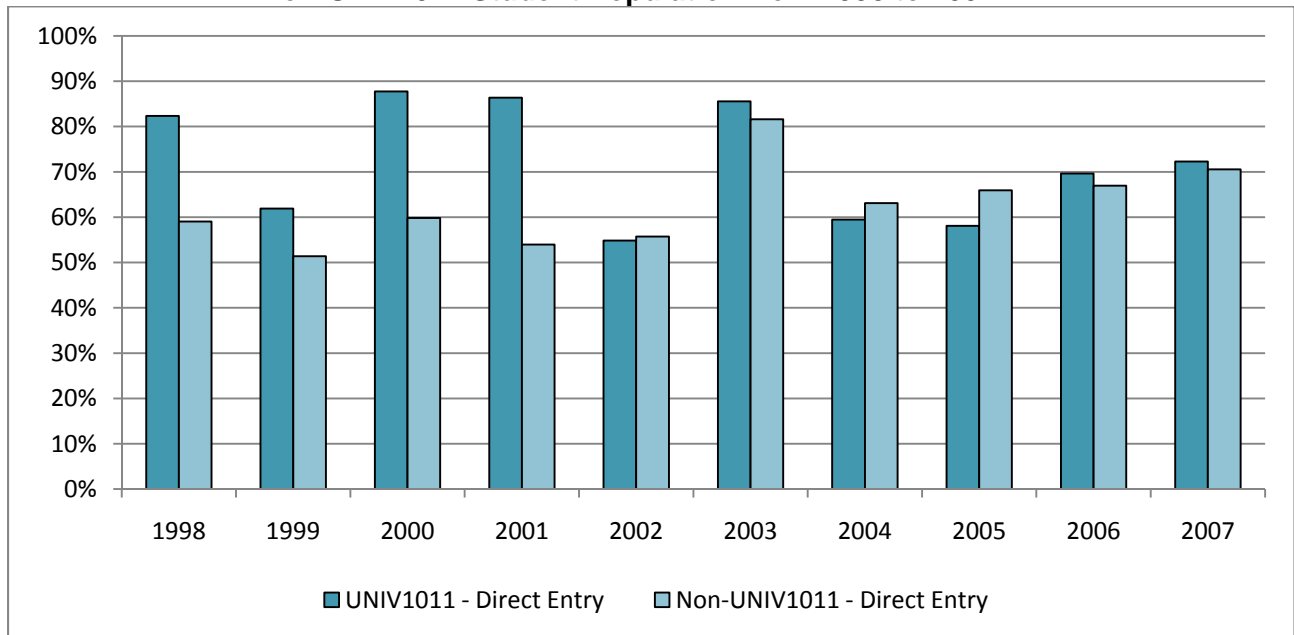
Student Records

In order to determine whether there were significant differences between students who took UNIV1011 and those who did not, we needed to examine the academic performance of the individuals. Eleven years of academic records were made available by Nipissing University for this research. Since the raw records were supplied, a few manipulations of the data were required before any analysis could begin. Until 2003, a course failure is displayed in the data as an "F." However, since it is impossible to run a mean with a non-numeric value in the data set, the letter grade "F" was replaced with the numeric value 40. Records after 2003 are not coded with an "F," and it must be noted that the actual failed mark is considered in the student record from that year on.

Second, it was important to identify which students had completed their studies at Nipissing and which students had left. Any student who received a degree was deemed to have completed their studies. However, students who had enrolled in 2005 would not be considered to have received a degree (even if they were planning to complete their studies) since they would not normally be graduating from Nipissing until 2009 or 2010. In addition, any student who had a missing academic record for one or more years and who had not received a degree was identified in the data set as an Incomplete.

There are two significant subsets within this group. Any student who received an annual academic average below 60 per cent and did not continue at Nipissing the next year was identified as an "academic dropout." At Nipissing, any student who fails to achieve an academic

average greater than 60 per cent in a given year is asked to leave. Depending on the circumstances, some students are put on probation or given a second chance. Students who left the university but had an academic average higher than 60 per cent were identified as a "dropout – reason unknown." These students could have transferred to another institution or decided that university was not the right fit for them. Since it is impossible to determine the cause of the dropout, the "reason unknown" must be applied.

Third, for the purposes of the administrative data analysis, the final observed year was determined to be 2005. Students who enrolled in 2005 would graduate in 2008 or 2009, depending on their degree, and any analysis of retention and academic success in this case would have been difficult because the students in the sample had not yet completed their degrees. No fourth year analysis of the 2005 class was conducted either.

High School Academic Averages

All direct entry students must submit a high school academic average with their application. As noted earlier, UNIV1011 is meant to support students who are making their transition to university. Therefore, it is important to examine the high school academic averages of the students who decide to enroll in UNIV1011, as well as the averages of those who did not. In the examination, we will try to answer the question "Are there differences in the students who enrolled in UNIV1011 and those who did not?"

According to Parkin and Baldwin (2009), grades are correlated with persistence in postsecondary education, as students with higher marks in high school or postsecondary education have higher average persistence rates than those whose marks are lower. This suggests that if the UNIV1011 students have lower entering and first year grades than the non-UNIV1011 students, they are less likely to remain at the institution barring some intervention such as the course. As it turns out, however, there appears to be very little difference in the average high school or first year marks for students who took UNIV1011 and those who did not. From 1998 to 2005, the largest difference in the high school entering averages between the two groups was 3.4 per cent, and the smallest difference was 0.3 per cent. The data, therefore, seems to indicate that there is no correlation between enrolment in UNIV1011 and high school academic performance (see Figure 9).

Figure 9: High School Academic Averages for UNIV1011 and Non-UNIV1011 Students from 1998 to 2005
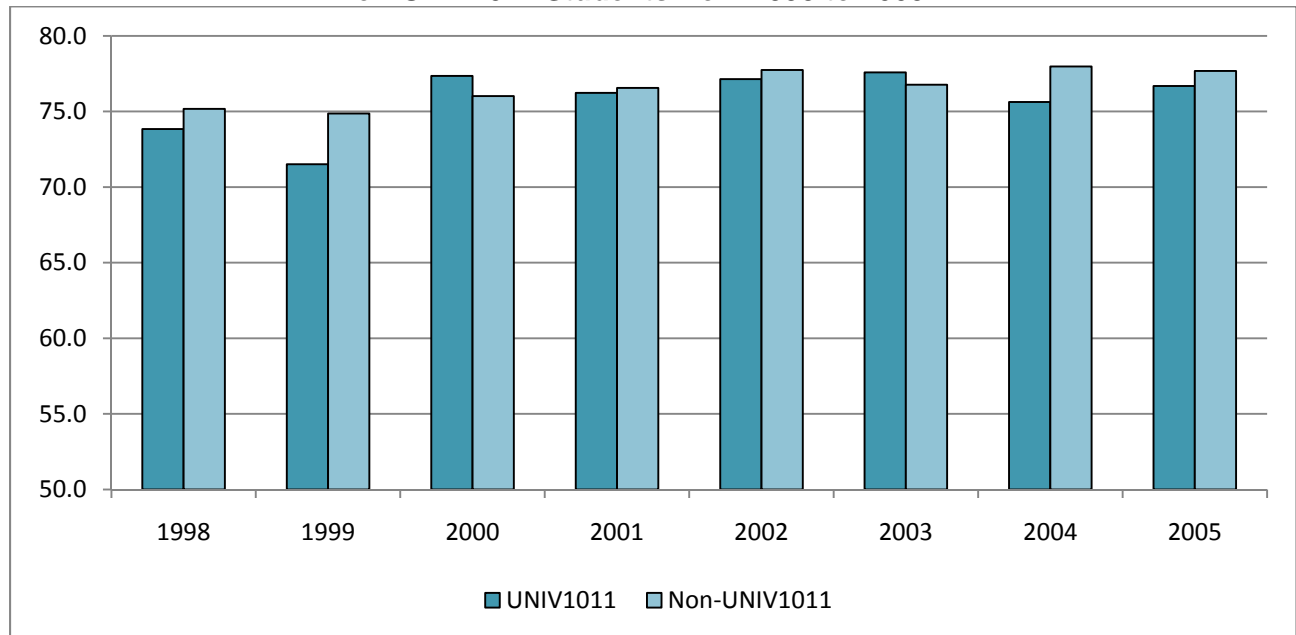
If the high school averages are fairly comparable, the next logical examination should be of academic performance in university. The UNIV1011 course is set up to assist with the transition to university, as well as to provide a firm foundation of basic university skills such as critical thinking, writing, reading, research and study habits. By comparing the academic performance of students who took UNIV1011 with that of students who did not take UNIV1011, we can explore any academic variations that the intervention through UNIV1011 might have had.

University Academic Averages

From 1998 to 2005, the academic performance of students who took UNIV1011 was comparable to the academic performance of those who did not. In some years, the students who took UNIV1011 actually had averages slightly below the students who did not take UNIV1011.

In the "double cohort" year (2003), the students who took UNIV1011 had marginally higher high school averages than students who did not take the course; the UNIV1011 average high school mark was 78 per cent, and the non-UNIV1011 students' average high school mark was 77 per cent. However, after first year, students who took the course had an average mark of 64 per cent in their university courses, whereas the average of students who did not take the course was 68 per cent. For the next three years, UNIV1011 students had lower marks, on average, than students who did not take the course, though the differences were only about 3 per cent.

Part of this phenomenon may relate to the change in the academic progression rule imposed at Nipissing University after 2003. From that year onward, students who entered as mature or college transfer students, and who might not have had high school grades that were as strong, were "guided" to UNIV1011. On the other hand, during the 2000/01 academic year, students who took UNIV1011 had a higher annual grade point average each year while at Nipissing than the students who did not take UNIV1011, though the differences between the two groups in this year were very small.

On the whole, the academic averages of the students who took UNIV1011 do not yield any valuable insights. It appears that the academic profile of the two groups of students is fairly static and relatively indistinct from year to year. While there are differences between cohorts of students, within each annual data set there are no significant differences (Table 11).

Table 11: High School and University Academic Averages for UNIV1011 and Non-UNIV1011 Students from 1998 to 2005

Year	Took Univ1011	High School Average	Year 1 Average	Year 2 Average	Year 3 Average	Year 4 Average
1998	Yes	73.8	70.0	70.4	72.9	72.0
	No	75.2	70.8	71.4	73.5	73.8
1999	Yes	71.5	67.6	71.2	73.3	68.3
	No	74.9	70.3	72.3	73.6	75.1
2000	Yes	77.4	71.7	72.0	74.3	74.5
	No	76.0	70.5	72.0	74.0	74.8
2001	Yes	76.2	72.5	71.8	73.7	76.2
	No	76.6	69.7	71.7	73.8	76.3
2002	Yes	77.1	67.3	69.9	73.8	74.6
	No	77.7	70.0	72.7	75.1	75.8
2003	Yes	77.6	64.2	69.2	71.8	70.4
	No	76.8	67.5	71.1	73.4	74.9
2004	Yes	75.6	66.2	67.2	70.3	70.4
	No	78.0	68.4	71.5	73.2	75.1
2005	Yes	76.7	66.7	69.5	71.2	75.1
	No	77.7	68.3	70.7	72.7	75.4

It is interesting to observe the differences in the high school admittance average and the first year Nipissing average shown in Table 11 (and Figure 10). From 2002 to 2005, the high school entrance averages for the UNIV1011 and non-UNIV1011 groups are fairly constant. However, during that same period of time the Year 1 average for both groups dropped. In 2002, the Year 1 average for UNIV1011 students was 67.3 per cent; one year later, the average of UNIV1011 students had dropped to 64.2 per cent. In the two subsequent years, the Year 1 average was approximately 66 per cent. The non-UNIV1011 students experienced a similar trend; from 2002 to 2005, the Year 1 average dropped and then evened out.

Figure 10: High School and First Year University Academic Averages for UNIV1011 and Non-UNIV1011 Students from 2002 to 2005
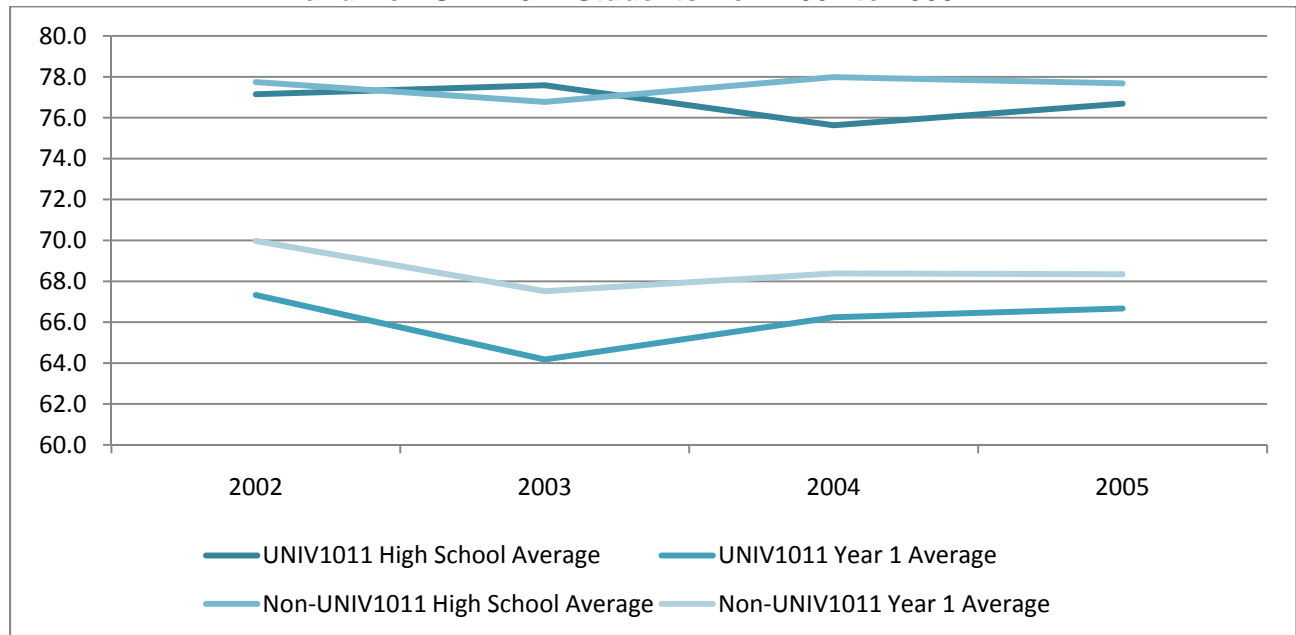
Since both groups share a very similar high school academic profile and university academic profile, it can be concluded that both groups should share similar progression trends in university as well. If the literature is correct, there should not be significant differences in the retention or degree-completion rates for the UNIV1011 students and the rest of the student population at Nipissing University.

Statistical Significance with Retention Analysis

To analyze retention from first into second year, we pooled the data for the 5,885 students covered from 1998 to 2005 for which retention data were available. The outcome variable – student retention from first year to second year – was coded as a dummy variable. Retained students are those who were enrolled in both first year and second year (coded as 1); attrited students are those who were enrolled in first year but not second year (coded as 0). Students who were enrolled in second year but not first year were excluded from the analysis. Similarly, the explanatory variable, whether a student had participated in UNIV1011, was also coded as dummy variable. The coding was 1 for any student who had taken UNIV1011 and 0 for any student who had not. A logistic binary choice model was estimated to predict the effect of having taken UNIV1011 on student retention from first to second year. As few other student characteristics that might be relevant to the retention decision were available at an individual level, the only explanatory variables used in this initial analysis were UNIV1011 status and a constant. A similar analysis was then carried out to study retention into third year for the 4,963 students who had averages listed for both first and second year.

It was found that UNIV1011 enrolment status was a significant predictor of retention into second year (at a 95 per cent confidence level (p = 0.031) and a significant predictor of retention into third year (at a 99 per cent confidence level (p = 0.09). The likelihood of a first year student who had taken UNIV1011 remaining in school is 1.3 times higher than that of a first year student who had not taken UNIV1011, while the possibility of a second year student who had taken UNIV1011 being retained into third year is 1.6 times higher than that of a second year non-UNIV1011 student.

In order to control for other factors that might influence a student's retention decision, the analysis was repeated with additional explanatory variables. First, high school admission average was added as an explanatory variable, and then gender and OSAP status were added in successive steps. With the high school admission average added, our first-to-second-year retention sample was reduced to the 3,883 students for whom admission averages and retention data were available, while the second-to-third-year retention sample was reduced to 2,750 students. It was found that the successive addition of gender as well as OSAP status to a model including high school admission average and UNIV1011 status did not significantly improve the fit, so gender and OSAP status were dropped from this model in the final analysis.

A set of regression models were conducted using the smaller sample for which high school admission average was available. Once High school Admission Average was added as an explanatory variable in the original model, UNIV1011 became an insignificant explanatory variable (pvalue=1.152) for year 1 to year 2 retention status. However, UNIV1011 remained as a significant variable for year 2 to year 3 retention status (pvalue=0.072). That is, when a student's academic background is controlled, whether a student has taken UNIV1011 is not a predictor of year 1 to year 2 retention status, but it is a predictor of year 2 to year 3 retention status.

Since the loss of significance level appears to have been due to the size or composition of the subsample of students for whom high school admittance averages were available, the analysis was repeated, omitting the high school average upon admission to university, and including only potential determinants of retention that were available for all students in the sample. The new regressors added were an indicator of gender (the variable male, coded 1 for males, and 0 for females) and OSAP status (coded 1 for recipients and 0 for non-recipients), as well as a full set of yearly indicator variables to control for other sources of annual variations in retention. For retention from Year 1 to Year 2, the gender and OSAP variables were highly significant predictors of retention (at a 99 per cent confidence level), as was the combined block of annual dummy variables (the inclusion of which led to an improvement in fit that was significant at a 99 per cent confidence level). For retention from Year 2 to Year 3, gender and OSAP status were not significant predictors of retention, but the year dummies were.

With the inclusion of these additional regressors, the significance of UNIV1011 completion for students remained similar to its value in the original, simplified model. For first-to-second-year retention, UNIV1011 status remained significant at 95 per cent (p = 0.29), while the predicted odds ratio remained at 1.3. For second-to-third year retention, UNIV1011 status remained significant at 99 per cent (p = 0.01), while the odds ratio was unchanged at 1.6.

The results are summarized in Table 12 below. Additional details may be found in Appendix F.

Table 12: Logistic Model Results

Dependent variable	UNIV1011	HS avg	Gender	OSAP	Year	N	Sig.	Odds ratio	Std. error on odds
	Model							**UNIV1011**	
Y1-Y2 retention	✓					5,885	0.031	1.3	0.18
Y1-Y2 retention	✓	✓				3,883	0.152	1.3	0.23
Y1-Y2 retention	✓		✓	✓	✓	5,885	0.029	1.3	0.18
Y1-Y2 retention	✓	✓	✓	✓	✓				
Y2-Y3 retention	✓					4,963	0.009	1.6	0.29
Y2-Y3 retention	✓	✓				2,750	0.072	1.6	0.42
Y2-Y3 retention	✓		✓	✓	✓	4,963	0.010	1.6	0.29
Y2-Y3 retention	✓	✓	✓	✓	✓				

In short, basic statistical analysis using a logistic regression suggests that UNIV1011 has improved retention rates at a 95 per cent confidence level.

When attempting to control for high school admission average, however, the use of the smaller sample size for which these averages are available immediately erodes the significance of the result. Including high school admission average improves the significance moderately, but still not above the 90 per cent confidence level. Omitting high school admission average and instead using additional regressors to control for gender, OSAP status and annual variations preserves the result in the original, larger sample. A cursory analysis therefore suggests that UNIV1011 may play an important role in contributing to retention; however, the lack of high school admission average data for a number of students in the sample, as well as other information relevant to a student's retention decision, makes it difficult to control for other possible causes of academic withdrawal.

First year retention on a year-by-year basis was examined more carefully through the application of our basic model, with UNIV1011 and a constant as explanatory variables. However, only two instances provided evidence of the course influencing retention at an acceptable confidence level. A similar analysis for second year retention also produced two

years where a significant effect was found, though in one of those years (2004), UNIV1011 was actually associated with lower retention. The results are summarized in Table 13, below.

In addition, we applied an ANOVA analysis to the annual retention data to determine the years in which the retention percentages differed significantly between the students who had taken UNIV1011 and the students who hadn`t. These results are also summarized in Table 13 below.

Table 13: Logistic Model Estimates and ANOVA Results

Logistic Model Estimates							ANOVA		
Dependent variable	Year	UNIV1011 estimate	Std. error	Odds ratio	Sig.	N	UNIV1011 rate	Others rate	Significance of difference
Second year retention	1998	0.876	.543	2.403	0.107	479	88%	76%	.097
	2000	1.446	.606	4.25	0.017	519	94%	78%	.010
Third year retention	2000	2.410	1.019	11.136	.018	414	98%	80%	.003
	2001	N/A*	N/A*	N/A*	N/A*	457	100%	84%	.009
	2004	-.780	.397	.458	.049	701	68%	82%	.045

* The logistic model did not find UNIV1011 to be significant in 2001, so the results are not reported in this table.

The ANOVA analysis indicates that second year retention for UNIV1011 students was significantly higher than that for other students in 1998 and 2000, with confidence levels of 90 per cent and 99 per cent, respectively. Third year retention was higher in 2000 and 2001, at a 99 per cent confidence level. In 2004, retention was lower among UNIV1011 students, at a 95 per cent level of confidence.

The overall results of the analysis performed above are suggestive of UNIV1011 having some impact upon retention at Nipissing. However, they should be interpreted with extreme caution due to limitations of the available data. Much of the information that is likely relevant to the decision to continue or withdraw from school, including detailed data on students' personal and financial situations, is not available in the current data set; even the academic information that is available, such as high school admissions averages, is available only for a subset of the entire data set.

Retention Rates

Retention in this initial analysis will be defined as the progression from year to year for all students in the given cohort, regardless of progression within a particular program or degree (i.e., whether or not the student continues to be a Nipissing student). It is also worth noting that the university currently has overall difficulty with retention from Year 2 to Year 3.

From 1998 to 2005, all students who took UNIV1011 had a Y1-Y2 retention rate of 85 per cent and a Y2-Y3 retention rate of 87 per cent. Conversely, all students from 1998 to 2005 who did not take UNIV1011 had a Y1-Y2 retention rate of 80 per cent and a Y2-Y3 retention rate of 85

per cent. Over this period of time, students who took UNIV1011 were more likely than the general Nipissing population to continue from Year 1 to Year 2.

In 1998, 88 per cent of the students who took UNIV1011 remained at the institution for a second year. In contrast, only 76 per cent of the general population returned to Nipissing in Year 2. In the year 2000, the Y1-Y2 retention rates for both the UNIV1011 students and the general Nipissing population was higher. All but 6 per cent of the students who took UNIV1011 in this cohort returned to the university for a second year. Conversely, 22 per cent of the general Nipissing population did not return for a second year.

Although the rest of the yearly data are not statistically significant, it is important to examine the general trends occurring at the university. From 1998 to 2002, students who took UNIV1011 were more likely to stay at Nipissing than students who did not take the course. After 2003, however, there was a stark difference between the UNIV1011 group and the non-UNIV1011 group. The UNIV1011 group in the 2004 and 2005 cohorts has about the same retention rate as the non-UNIV1011 group for Y1-Y2, but the Y2-Y3 retention rate for UNIV1011 students was noticeably lower than the rate for the rest of the student population. In 2004, for instance, the Y2-Y3 retention rate for the UNIV1011 group was 13 points lower than the rate for the rest of the student body. In 2005, the difference between the two groups was 14 points.

A careful examination of the UNIV1011 course curriculum and structure revealed no noticeable changes in the content or manner in which the course was taught. Therefore, the discrepancy between the 1998-2002 Y2-Y3 retention rate and the 2004-2005 Y2-Y3 retention rate is difficult to explain. However, the discrepancy may have been partly a result of the significant academic changes that occurred in 2003 (as outlined under "University Academic Averages," above).

The data indicate that between the years 1998 and 2002, students who took UNIV1011 were more likely to remain at Nipissing University. After 2003, however, students who did not take UNIV1011 were more likely to remain at the institution. In all, it is difficult to draw any hard conclusions from the yearly administrative data because of the significance levels. Table 14 displays the retention rates of students at Nipissing University from 1998 to 2006.

Table 14: Retention Rates for UNIV1011 and Non-UNIV1011 Students from 1998 to 2006

Year	Took Univ1011	Y1-Y2	Y2-Y3
1998	Yes	88%	90%
	No	76%	83%
1999	Yes	83%	89%
	No	75%	81%
2000	Yes	94%	98%
	No	78%	81%
2001	Yes	86%	100%
	No	78%	86%
2002	Yes	79%	84%
	No	80%	82%
2003	Yes	84%	92%
	No	83%	88%
2004	Yes	84%	71%
	No	83%	84%
2005	Yes	82%	72%
	No	82%	86%
2006	Yes	88%	■
	No	81%	■
Total	Yes	85%	87%
	No	80%	85%

As noted earlier, there was a significant shift in the retention rates of UNIV1011 students after 2003. Neither the curriculum nor the instruction of the course changed, and this makes it difficult to explain the 2004 and 2005 Y2-Y3 retention reversal. One possible explanation of the discrepancy between the two retention rates lies in the possible changes to student profiles in UNIV1011 and the general population, as well as the change in the academic progression rule, which had a significant impact on mature students and college transfers.

In 2004, there were more mature and transfer students enrolled in UNIV1011 than in most other years. However, from 1998 to 2002, the student make-up of the course was not constant, yet the retention rates were constant. In 2002, for example, the make-up of the course was very similar to the make-up in 2004; yet the Y2-Y3 retention rate in 2002 was 84 per cent and the Y2-Y3 retention rate in 2004 was 71 per cent. It is doubtful that this aspect of the student profile is driving the shift in retention trends.

Gender does not appear to explain the differences in retention rates either. From 2004 to 2005, the gender ratio of UNIV1011 shifted from 40:60 male:female to 20:80. However, in this time period there was only a negligible change in the retention rate of students who took UNIV1011 relative to that of the overall population. In 2005 UNIV1011 students did 1% better than the

overall population in Y1-Y2 retention (84% vs. 83%), while in 2004 both groups recorded the same retention rates (82%). As for Y2-Y3 rates, UNIV1011 students lagged behind the general population by 13% in 2004 (71% vs. 84%), and this gap widened slightly to 14% in 2005 (72% vs. 86%). The significant change in gender make-up of the UNIV1011 class from 2004 to 2005 resulted in only minor changes in relative retention. If gender is a significant predictor of retention, we would have expected a significant difference between 2004 and 2005 relative to retention rates, but no such difference exists in the data.

Additionally, the gender ratio of UNIV1011 students in 2004 was similar to that of UNIV1011 students in 1998. However relative retention rates were very different for these two cohorts. In 1998, UNIV1011 students experienced Y1-Y2 retention rates 12% higher than the general population (88% vs. 76%), and Y2-Y3 rates that were 7% higher (90% vs. 83%). As stated above, in 2004 the UNIV1011 and non-UNIV1011 students performed similarly in Y1-Y2 retention, and UNIV1011 students performed 13% worse in Y2-Y3 retention. It therefore seems that gender is not the main factor driving the differences in retention rates for UNIV1011 students throughout the years.

The changes in the Y2-Y3 retention rate will continue to be explored. A larger sample will hopefully make the Y2-Y3 retention rates statistically significant and move the Y1-Y2 rates from 90 to 95 per cent. Moving forward, Nipissing will circulate this document to stakeholders in the university and try to account for the data shift. Unfortunately, the data do not currently capture whether students left for other institutions or whether they left higher education permanently. It should be noted, however, that from 1998 to 2006, the Y1-Y2 retention rate of UNIV1011 students was in line with or greater than the rate for the rest of the student population.

Type of Withdrawal

For the purposes of this analysis, we placed students into three categories: academic dropout, complete and transfer. An "academic dropout" is classified as any student with an academic average of less than 60 per cent who ceased to continue at Nipissing. A "complete" is classified as any student who eventually received a degree from this institution. A "transfer" is classified as any student who did not remain in their original program of study at Nipissing, but did continue their postsecondary studies at another institution. Within the "academic dropout" category, a "dropout – reason unknown" is any student with an academic average greater than 60 per cent who ceased to continue at Nipissing. The "dropout – reason unknown" students could have left the institution for any number of reasons or they may simply have transferred to another postsecondary institution. Unfortunately, the student records do not capture whether a student transferred to another institution.

Although the calculation of student retention does not count the academic dropout or dropout – reason unknown as separate values, it is important to examine whether the students who discontinued their studies left because of academic qualifications or for unknown reasons. There is no consistent pattern between the UNIV1011 and non-UNIV1011 students with respect to academic dropouts or dropouts – reason unknown. In any given cohort, UNVI1011 does not necessarily produce a smaller percentage of academic dropouts. For instance, in 1999, 26 per cent of the students who took UNIV1011 dropped out with an academic average lower than 60

per cent. In that same year, only 17 per cent of the non-UNIV1011 students dropped out with an academic average less than 60 per cent. Conversely, in 2001 no UNIV1011 students dropped out for academic reasons, whereas 14 per cent of the general student population left with averages less than 60 per cent. Table 15 displays the percentage of dropouts from 1998 to 2005 for UNIV1011 students and non-UNIV1011 students.

Table 15: Percentage of Dropouts for UNIV1011
**and Non-UNIV1011 Students from 1998 to 2005**

Year	Took UNIV1011	Academic Dropout
1998	Yes	9%
	No	13%
1999	Yes	26%
	No	17%
2000	Yes	2%
	No	15%
2001	Yes	0%
	No	14%
2002	Yes	19%
	No	13%
2003	Yes	21%
	No	16%
2004	Yes	11%
	No	16%
2005	Yes	22%
	No	20%

Degrees Conferred

If we examine the degrees conferred for both the UNIV1011 students and the rest of the student population, we see a trend similar to the retention rates: from 1998 to 2002, a higher percentage of UNIV1011 students received a degree than the rest of the population, but in 2003, a higher proportion of Nipissing University students from the general population received a degree.

The 2004 cohort was omitted from the data because students from this cohort could still be enrolled at Nipissing. It is not uncommon for students to take a few more electives, switch programs, take a minor or continue part-time for personal reasons that would potentially cause them to stay for an additional year or more. Figure 11 shows the percentages of UNIV1011 and non-UNIV1011 students who received a degree from 1998 to 2003.

**Figure 11: Percentage of UNIV1011 and Non-UNIV1011 Students
Who Received a Degree from 1998 to 2003**
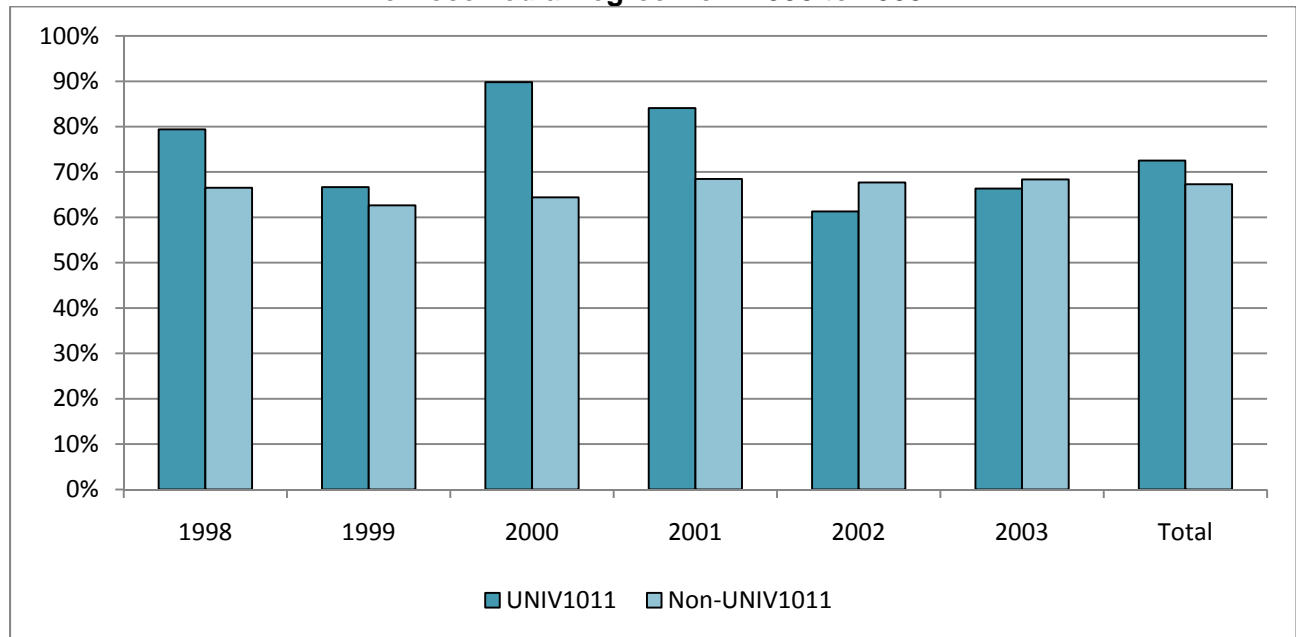
Key Findings from the Administrative Data

There are relatively few key findings in the administrative data, but they are as follows:

1. Whether a student had taken UNIV1011 is a significant predictor of retention status in some the regression models
2. Students who participated in UNIV1011 did not consistently perform better academically than the rest of the Nipissing population.
3. All students who took UNIV1011 were more likely to remain at Nipissing for a second year than the general population.
4. From 1998 to 2002, UNIV1011 students were more likely to receive a degree than the rest of the population; after 2001 the degree rate was similar to the rate for the rest of the population.

Although both the student survey and the LASSI data indicate that students perceived an improvement in their confidence and skills, the administrative data did not support the reported improvements. It is important to note that the cohort years of LASSI data and survey data do not match the administrative data. The two cannot be linked until the 2007 cohort has graduated from Nipissing in 2011.

Conclusions

By employing these various data sets, we can draw a few conclusions about UNIV1011.

There is a self-selection bias with the data, and those who took UNIV1011 have a predisposition and motivation to complete university.

There is an overarching issue that needs to be addressed about UNIV1011. The data indicate that UNIV1011 students had a higher retention rate than students who did not take UNIV1011. The obvious question to ask is this: "Was the course the major factor in the student retention?" The data that is available for analysis can yield some insights and correlations, but no truly conclusive statements about retention can be drawn from the data because of a self-selection bias inherent in the UNIV1011 course.

Every student who enrolled in UNIV1011 chose to take the course for a specific reason, and a self-selection bias appears to be implicit in their choice. Both the focus groups and UNIV1011 student surveys revealed that students who took UNIV1011 did so because they wanted to increase their grades, needed to improve specific skills or identified for themselves that they needed help transitioning to university. Inherent in each of those reasons is a motivation to succeed.

Students who took UNIV1011 for an easy credit or good grade would also have been concerned about academic performance. These students would have wanted to remain at university and would be looking for ways to ensure that they fulfilled the academic requirements. Taking an easy credit would simply be an acknowledgement that they perceived the benefit of a higher education in achieving a goal. The overall outcome for this type of UNIV1011 student may not have been enhanced academic skills, but rather a credential received upon completion of a degree (and taking UNIV1011 would be perceived as a relatively easy means to that end). Therefore, a student could have had an initial motivational or attitudinal bias prior to taking UNIV1011; skills learned in the course might not have been the primary factor of retention in those cases.

Students who needed to improve academic skills or needed help transitioning to university would also have had a self-selection bias before enrolling in UNIV1011. These students would have identified that they did not have the requisite skills to succeed in university, but they would also have had the motivation and desire to complete a university education. Students within this segment of the UNIV1011 population may have had low self-esteem, but they would also have possessed a desire to persevere and succeed at university. This is evident in the anxiety and attitude net scores from the LASSI data. UNIV1011 can assist in alleviating anxiety, build good academic habits and transition to university, but it is unclear whether students' acquisition of these skills is the reason for high retention or whether the retention is a result of their initial desire to persevere. The important questions to ask are "Would these students have sought out

academic skills support if UNIV1011 had not existed?" and "Would their attitude toward success have driven them to complete without UNIV1011?"

The self-selection bias does not entirely negate any conclusions or results observed. Rather, the bias needs to be carefully considered when attempts are made to draw conclusions from the data. These conclusions are based on various data sources and are tempered by sensitivity to the limitations and potential bias of the data.

Students who take UNIV1011 perceived an enhancement in university skills. However, an enhancement of skills does not necessarily translate into better academic performance.

In the LASSI data, UNIV1011 student survey data and focus groups data, students noted that UNIV1011 helped them enhance certain skill sets. However, these skill sets are not explicitly tied to academic performance; rather, they represent a broad array of skills that students might need in order to be successful in all aspects of university life.

Students in both the UNIV1011 focus group and the non-UNIV1011 focus group were asked to identify skills that were necessary to succeed in university. The non-UNIV1011 students identified more academic skills (such as writing, time management, class preparation, listening and ability to focus). In contrast, the UNIV1011 students identified a broader set of skills which were not confined to academics. Some of the answers included coping with stress, organization, time management, money management, housekeeping skills and social skills. Furthermore, when asked about their first year transitions, the non-UNIV1011 students identified difficulty with the academic transition, whereas the UNIV1011 students identified difficulty with the overall university transition (academics, social life, money management, etc.).

Neither the LASSI nor the UNIV1011 student survey gave respondents the opportunity to identify the skills they learned or how they improved. Rather, the surveys asked students to rank their improvement on a set of skills that were closely aligned with the content of UNIV1011. The data from both sources indicated that students who took UNIV1011 perceived an improvement in the listed skills.

The student survey results indicated that students agreed that UNIV1011 helped them with their self-awareness, overall study skills, time management, written communication, oral communication, critical thinking, problem solving, stress management and career awareness. The mean for each skill was between 3.2 and 3.7 on a four-point Likert scale (a scale of 2 to 5). Furthermore, when asked whether UNIV1011 would improve future academic performance, the sample significantly agreed, with a mean response of 4.2 (on a four-point Likert scale, starting at 2). Finally, when asked whether UNIV1011 increased their confidence in their academic abilities, the mean response was 3.8 on a five-point Likert scale. Clearly, the students surveyed perceived that their skills had improved and that by taking UNIV1011, their future academic performance would be enhanced.

The LASSI data displayed a similar result. Overall, the changes in the net category LASSI scores for each UNIV1011 class were positive. In particular, the anxiety, time management, concentration and self-testing scores showed the largest net changes.

According to the data, UNIV1011 students perceived that their skills improved, but the perception of skills improvement did not necessarily translate into better academic performance. The administrative data indicate that, historically, UNIV1011 students performed as well academically as non-UNIV1011 students. In fact, university grades for UNIV1011 students were approximately 1 to 3 per cent below the marks of non-UNIV1011 students. Furthermore, the high school entrance averages for both groups from 1998 to 2005 were very similar; neither group was at an academic advantage or disadvantage prior to their first year of enrolment.
It is important to note that the administrative data cannot be linked to any of the LASSI data, student survey data or focus group data. The respondents in the surveys and focus groups who identified an increase in university skills could potentially do better in school than non-UNIV1011 students. However, this could be proven concretely only with more administrative data and with the capacity to link the records.

The skills taught in UNIV1011 are meant to serve students holistically throughout their academic careers. Perhaps the perceptions of enhanced skills provided students with an added level of confidence and sense of belonging to the university. In essence, teaching students how to be complete university students brought them into the university community. As we know from the literature, students who feel a part of a community are more likely to remain at the institution.

The UNIV1011 retention rate was higher than the non-UNIV1011 retention rate.

According to Parkin and Baldwin (2009), students with higher marks in high school or postsecondary education have higher average persistence rates than those whose marks are lower. The data indicated that both the UNVI1011 students and the non-UNIV1011 students had very similar high school entrance averages and university grades. Since both groups had similar academic profiles, they would both have been susceptible to the same retention factors at Nipissing and should therefore have had the same retention rates. However, the data indicated that UNIV1011 students had a higher Year 1 to Year 2 retention rate and Year 2 to Year 3 retention rate than the students who did not enroll in the course.

Since enrolment in UNIV1011 is small, it is difficult to obtain a sufficient sample to observe results that are statistically significant on a year-by-year basis. However, if all the data is aggregated, the overall retention rates of UNIV1011 students and non-UNIV1011 students become statistically significant. The aggregate data indicated that the Year 1 to Year 2 retention rate for UNIV1011 students was higher than the retention rate for students who did not take the course. The UNIV1011 retention rate was 85 per cent, and the non-UNIV1011 retention rate was 80 per cent. However, the Year 2 to Year 3 persistence rates for UNIV1011 and non-UNIV1011 students were very similar, with rates of 87 per cent and 85 per cent, respectively.

The academic differences between UNIV1011 students and the rest of the population were not large, but for some reason, the differences in retention rates were. According to the UNIV1011 student survey, students' mean response to the statement "Completing UNIV1011 prevented

me from dropping out of Nipissing" was only 2.7 on a five-point Likert scale. This means that the average reply was in the "somewhat disagree" category. To put these responses in context, however, it is important to note that students who completed this survey did so at the end of the first semester in 2008. Perhaps it was too early for them to tell whether they were going to drop out of school.

A few factors may contribute to the UNIV1011 retention rate being higher than the rate for the rest of the student population. As noted in the previous section of this conclusion, the academic success of UNIV1011 students is similar to that of students who did not take the course; UNIV1011 does not improve the academic skills of students, and this is therefore an unlikely factor in the higher retention rate. Consequently, three possible explanations emerge as the driver of the UNIV1011 retention rate: UNIV1011 students are motivated to succeed before they take the course, UNIV1011 increases students' self-esteem and connection to the university community or retention is driven by a combination of motivation and increased self-esteem and motivation.

Very few students at Nipissing know about UNIV1011

Two big challenges for UNIV1011 are perceptions about the course within the student body and communication about the course to students. It is believed that both of these challenges contribute to the very low demand for UNIV1011.

First, it is important to understand how students choose courses. The focus groups were asked "How did you decide what courses to take in first year?" and "How do you select courses now?" Not surprisingly, there was a difference between the methods of course selection in first year and the methods of course selection in subsequent years. Students entering their first year typically relied on institutional sources such as the course calendar, online materials and student advisors. This data is confirmed in the UNIV1011 student survey, where, according to respondents, the majority heard about the course through the course calendar or university website.

As students progressed academically, they preferred to rely on non-institutional sources to choose their courses. Students relied more on friends, roommates and classmates for course selection because they had firsthand knowledge about professors and courses. To upper year students, word-of-mouth recommendations were more important than descriptions in a course calendar.

If students are actively talking about courses with other students, the next question is this: How well known is UNIV1011? The survey distributed to all Nipissing students revealed poor knowledge of UNIV1011 within the student body. Half the students surveyed had not heard about UNIV1011, and only 10 per cent were either "fairly familiar" or "very familiar" with the course. This is not surprising given the course's relatively low profile, and the fact that it is not compulsory.

Students are permitted to take UNIV1011 only within the first 30 credits of their degree. Since most students take 30 credits during their first year of study, the course is limited to first year

students only. This means that the course is not actively discussed within the student body because institutional resources are the primary source that first year students use for course selection. This is disappointing, since the UNIV1011 student survey respondents indicated that they would gladly recommend the course to other students.

To Close

UNIV1011 has had a positive impact on students who have taken the course. While the data might not suggest that the course enhances academic skills, there seems to be a correlation between UNIV1011 and student retention. Whether or not UNIV1011 is the primary driver for student persistence, the presence of the course at Nipissing University seems to be beneficial, as it is welcomed and enjoyed by students seeking help with skills or transitions to university. Further data collection, both quantitative and qualitative, needs to be conducted in order fill in the gaps of this evaluation.

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