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COLLEGE STUDENT ACHIEVEMENT PROJECT

Final Report 2013

Executive Summary

For the

Ontario Ministry of Education

and the

Ontario Ministry of Training, Colleges and Universities

The College Student Achievement Project Team

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Executive Summary

The College Student Achievement Project (CSAP) is a product of the College Mathematics Project (CMP). The goals of the CMP have been expanded to include the analysis of student achievement in first semester college mathematics, English and French courses and student secondary school background in these three subject areas. In addition, where CMP looked only at first semester students, CSAP examines participation and achievement in both first and second semester college courses. This Report, based on the 2011/12 student cohort, aims to inform and engage discussion on student success at college, how student achievement and success can be improved with steps taken by both schools and colleges, and how to make the transition from secondary school to college as seamless as possible.

CSAP includes all 24 colleges (22 English language colleges and 2 French language colleges) and 72 district school boards (60 English language boards and 12 French language boards) in the province. It is funded by the Ministry of Education and the Ministry of Training, Colleges and Universities, and led by a team of researchers based at Seneca College.

The first chapter of this Report introduces the project, its research questions and the criteria under study. It also contains explanations of how CSAP has grouped college programs into Program Clusters and how a common CSAP grading system for college grades was created. Definitions of the various types of first and second semester mathematics and language courses are included.

First semester highlights from Chapter 2, Mathematics, include the following:

- The grade distribution for the 2011 cohort is very similar to that of previous years with 68.5% of students in college level courses achieving good grades (A, B, C, and Pass) and 31.5% at risk grades (D, F, and Withdrawal). The percentage of good grades is up slightly from the 67.6% successful achievement of the previous year.
- Females continue to outperform males and older students, particularly those in the 40 – 49 year old age range, achieve greater success than their younger counterparts, with 81.4% of females in this age group achieving good grades.
- While 68.9% of all students (in both college-level and foundational courses) achieved good grades, only 66.1% of Recent Ontario Graduates (ROGs) a subset of the whole, and 65.4% of Direct Entry (DE) students, a subset of ROGs, did so.
- Students who had taken MCV4U in secondary school achieved the highest success rate, 86.2%, while those with MAP4C as their terminal course achieved the lowest at 60.6%. However, 77.1% of students whose final mark in MAP4C was 80% or higher received good grades in college mathematics.
- MAP4C is the terminal course taken by most students attending college: 9,410 out of the 19,902 students in our sample.
- The achievement of students in the three most common Grade 11 and 12 pathways is as follows:
 - 56.7% for students with MBF3C and MAP4C
 - 71.2% for students with MCF3M and MCT4C
 - 81.9% for students with MCR3U and MDM4U

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- Approximately 3,600 students in this year's cohort took no mathematics after Grade 11, up from just over 3,000 in 2010. The overall success rate for these students is 55.0%, with only 47.2% of those who took MBF3C achieving good grades.
- The number of students transferring from Grade 10 Applied Mathematics to MBF3C continues to grow with 1,952 students taking advantage of this relatively new alternative compared to 1,213 students in 2010.

For the first time, CSAP is reporting student participation and achievement in second semester. Some highlights from Chapter 2 are as follows:

- 92.9% of students who achieve good grades in first semester mathematics courses continue on to second semester while only 60.9% of those who receive at risk grades do so.
- There are seven different types of mathematics courses students might take in Semester Two ranging from a second mathematics course to a first mathematics course to a regular course following a foundational one. In addition, students may be repeating a course.
- Overall, 70.1% of Semester Two students achieved good grades. The achievement levels among program clusters were much more varied than they were in Semester One.

Overall, after four years of study, little improvement has been seen in success rates in college mathematics courses, with approximately one-third of the students in the at risk group and, therefore, in danger of not completing their program. Conclusions and recommendations for future action are presented in Chapter 6.

Data on language achievement is analyzed in Chapter 3 for English and Chapter 4 for French. Students in communications may be taking courses using either an expository or vocational writing approach. Some students at seven English language colleges which both administer post-admission skills assessment tests and provide foundational courses may be placed in either remedial (for first language students) or developmental (for second language students) courses.

Highlights from the first semester data presented in Chapter 3 include the following:

- Overall, 73.3% of students received good grades. Achievement is fairly consistent across program clusters. ROGs performed at slightly below average and DEs were slightly above.
- As with mathematics, females outperformed males and older students were more successful than younger students with 88.4% of females in the 50+ age group achieving good grades.
- 74.4% of students in courses using the expository approach received good grades while 72.3% of those in courses using a vocational approach did so.
- 77.9% of students in developmental courses achieved good grades compared to only 66.1% of those in remedial courses.
- ENG4C is the terminal English course taken by 60.2% of the students in our cohort. 77.8% of students with a credit in ENG4U receive good grades in their college communications course; for Direct Entry students that number increases slightly to 78.1%. In comparison, only 66.2% of

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students with a credit in ENG4C receive good grades in their college English communications course; for Direct Entry students, the number is essentially the same at 66.1%.

- When comparing the two most popular secondary school pathways followed by students, of those with credits in the Grades 9 and 10 Applied English courses and the Grades 11 and 12 College-destination English courses, 63.0% received good grades in Semester One English courses, while 78.7% of those with credits in Grades 9 and 10 Academic English courses and Grades 11 and 12 University-destination English courses did. However, 79.4% of students with over 80% in ENG4C achieved good grades.
- Of those students who are unable to pass the Ontario Secondary School Literacy Test and take one of the two Literacy (OLC) courses in its place, regardless of which OLC course, Grade 11 or 12, and which Grade 12 English course, College or University-destination, is taken only between 55.6% and 58.3% receive good grades in college English courses.

In second semester, there are nine different types of courses student may be taking ranging from a second English course to a first English course to a regular course following a remedial one or a remedial course following a developmental one. Students may also be repeating a course.

Highlights from the second semester data include the following:

- 92.3% of students who achieve good grades in Semester One English courses continue on to the winter semester.
- Of students taking a vocational writing courses in Semester Two following an expository writing course in Semester One, 85.3% of females and 78.2% of males achieve good grades.
- Of students who are moving from developmental to remedial courses, only 52.0% of females and 31.3% of males achieve good grades.
- Of the students repeating courses, only females repeating a regular courses and males and females repeating a developmental course achieve success rates over 50%.
- The grade range in Semester Two is more skewed than that in Semester One with 72.8% of males and 81.5% of females receiving either an A, B, or C.
- Both the ROG group and the DE group achieved a lower success rate than all students, females again outperformed males, and the 50+ age group achieved the highest success rate.

Overall, almost 75% of students pass their first semester English course, and 92.3% of those students continue on to the winter semester. However, when these results are broken down, we see that students who have taken the college-destination courses in secondary school are less successful than those who followed the university-destination route. Also, students who begin in remedial or developmental courses at college are particularly at risk. In addition, we see that achievement improves with age in both the chart that compares age groups and in the one that compares Recent Ontario Graduates (ROGs) and Direct Entry (DE) students to non-ROGS, those over the age of 23, with or without an OSSD.

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The data from Ontario's two French colleges is analyzed in Chapter 4. Care must be taken when drawing conclusions from this data as it represents only two colleges. In addition, the student numbers in some program clusters and sub-clusters are quite small.

Highlights from the Semester One analysis include the following:

- Similar to results for English-speaking students, 72.6% of students in all programs achieved good grades in their first semester French course. Results across program clusters are fairly consistent with those in the Foundations cluster performing slightly below average and those in the Business cluster slightly above.
- The grade distribution pattern differs somewhat from that of students in English courses in that the majority of students in French courses (72.9%) achieved an A, B, or C grade with only 10.8% receiving an F.
- The performance of DE students is comparable to that of all students with 71.5% achieving good grades.
- Students at French-language colleges taking an English course performed very well with 92.1% achieving good grades while DEs performed at the high success rate of 94.2%.
- As with mathematics and English, female students outperformed male students in French communications courses.
- Again similar to achievement in English, of those students with FRE4C as their terminal secondary school French course, 67.4% achieved good grades while of those with a terminal credit in FRE4U, 79.2% achieved good grades.
- Comparing students from the two most common secondary school pathways, of those students with credits in Grades 9 and 10 Applied French and Grades 11 and 12 College French, 64.6% achieved good grades in their French communications course while of those who followed the Grade 9 and 10 Academic French and Grade 11 and 12 University French pathway, 80.3% received good grades.
- 91.4% of students who receive good grades in Semester One continue on to Semester Two.

Some programs offer their first French communications courses in second semester. Of students taking this course:

- 82.2% achieved good grades;
- 33.5% received an A; and
- DE students achieved a slightly lower success rate than the average at 80.6%.

CSAP's research is based on the deliberative inquiry method which integrates research with deliberation to ensure that it is relevant to current issues and that deliberations are grounded in evidence. Integral to this research methodology is bringing people together to discuss findings. In the fall of 2013, a Provincial Forum was held which brought together more than 120 representatives from schools, colleges, universities, government and agencies to discuss the Interim Report on which this Final Report is based. A summary of the discussion and highlights of presentations given at the Forum can be found in Chapter Five.

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Chapter Six, Themes and Recommendations, summarizes what was learned from the data, from other studies of these same issues, and from Forum feedback. A summary of the Mathematics recommendations can be found on page 86 this report. A summary of the Language recommendations is on page 92. It is the hope of the CSAP Research Team that both sectors, schools and colleges, will begin discussion, separately and together, as the next steps in the ongoing process of ensuring that students have the necessary knowledge, skills and qualities for success at college and beyond.