



## **Executive Summary: Who Doesn't Go to PSE?**

The primary goal of the "Who doesn't go to post-secondary education?" research project was to gain insight on the characteristics of young people who do not pursue PSE immediately after high school. The project was commissioned by Colleges Ontario, and conducted by Drs. Alan King and Wendy Warren of Queen's University. Funding was provided by Colleges Ontario, the Ontario Ministry of Training, Colleges and Universities, the Higher Education Quality Council of Ontario and the Canada Millennium Scholarship Foundation.

### **Methodology**

For the quantitative part of the project, the Ministry of Education, with assistance from the college (OCAS) and university (OUAC) application centres, provided provincial secondary school data files from 2001-02 through to 2006-07. These files included graduation status and post-secondary destinations, enabling the researchers to track Ontario students from Grade 9 through Grade 12 (or Year 5), and on to PSE destinations. These records were analyzed to determine the factors (e.g. gender, grades, course types, school board type, region) associated with those students who went on to PSE (college, university, or apprenticeship) and those who did not.

Additional data files from OCAS provided information on the characteristics of those individuals who applied to college, but did not receive offers.

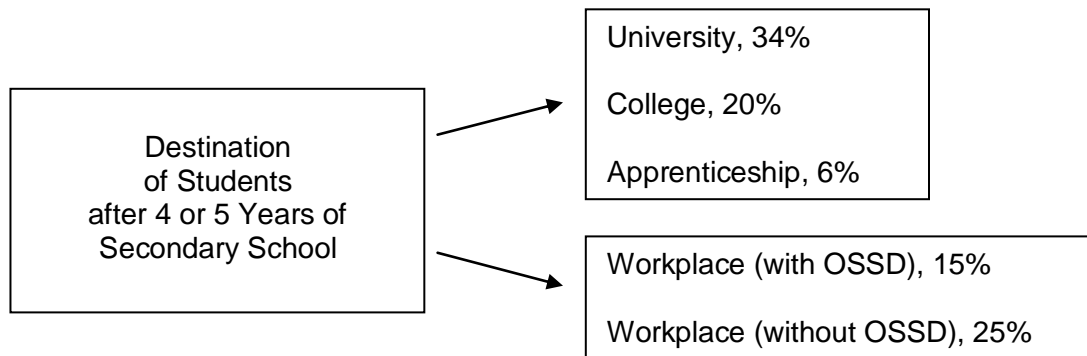
For the qualitative part of the project, interviews and focus groups were conducted with young people who did not pursue PSE immediately after high school including: (1) first-year students who registered in college at least one year after leaving secondary school (i.e. delayed entrants); (2) young people who went directly to the workforce after secondary school; (3) young people without PSE who were in employment services programs. These discussions were focused on factors that had influenced their decisions regarding PSE including: incentives, barriers and disincentives; perceptions of PSE; knowledge of PSE programs and entry requirements; and financial information.

### **Research Findings**

#### **School to PSE Transition**

- At the end of five years of secondary school, 60% of students enrol directly in PSE programs (34% in university, 20% in college, and 6% in apprenticeships). Figure 1 shows the estimated percentages of students leaving for PSE or the workforce by Grade 12 and Year 5.

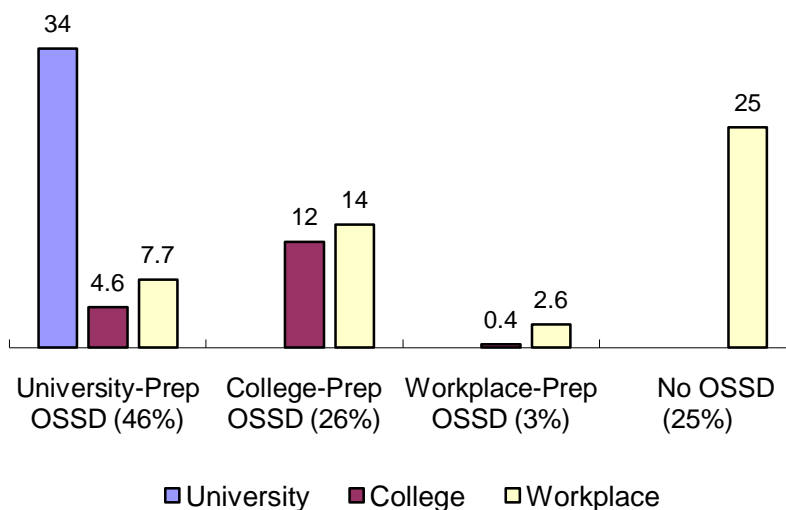
Figure 1. Secondary School to Post-Secondary or Workforce Destinations



Note: These percentages are the authors' estimates of the transition of students in 2008. The university percentage was adjusted to include students who attended university outside of Ontario. Apprenticeship was based on 18 and 19 year olds registered in apprenticeship with MTCU. The large majority of those placed in the Workplace categories were in the workforce, but the percentages also include those enrolled in private colleges and the military.

- Of those students who graduated with an OSSD after four or five years of secondary school, 26% had taken college-preparation courses while 46% had taken university-preparation courses.
- As shown in Figure 2, course type predicted PSE destination for university (i.e. the majority of university-prep students went to university), but not for college (i.e. almost equal proportions of college-prep students went to college or entered the workforce).

Figure 2. Destination by OSSD Type After Four or Five Years of Secondary School  
(% Students; 2002-03 Base Grade 9 Cohort)

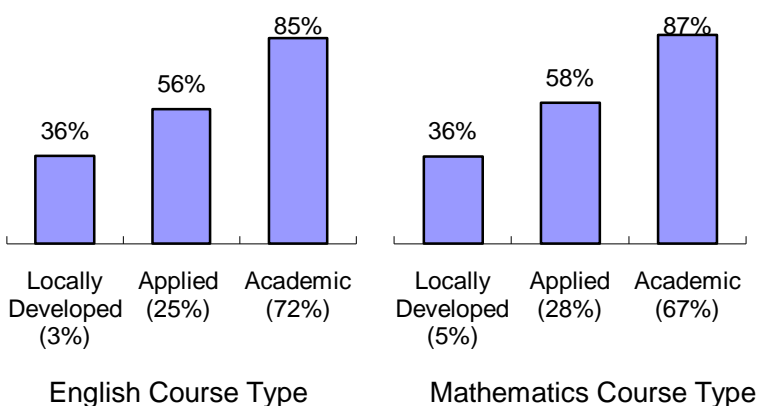


Note: In this figure, 'Workplace' includes apprenticeship, private career colleges, military.

## Performance in Secondary School

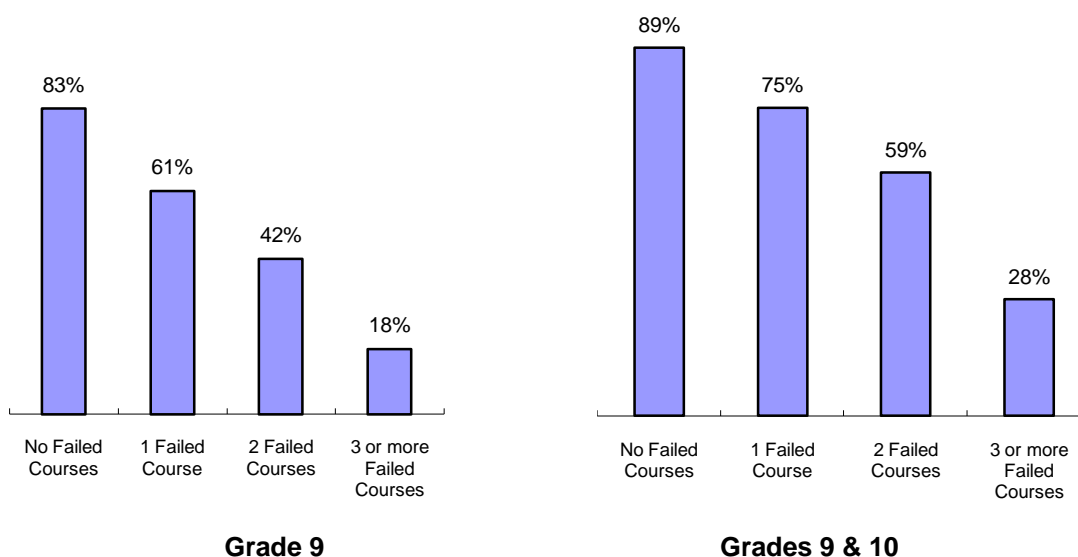
- OSSD completion and subsequent PSE enrollment were far more likely for those who took Academic English or Mathematics courses in Grade 9, as compared to those who took Applied or Locally-Developed English or Mathematics courses (Figure 3). For example, 85% of students who took Academic English in Grade 9 went on to complete an OSSD vs. 56% of those who took Applied English in Grade 9.

Figure 3. OSSD Completion in Five Years or Less, by Type of Grade 9 English & Mathematics (% Students; 2002-03 Base Grade 9 Cohort)



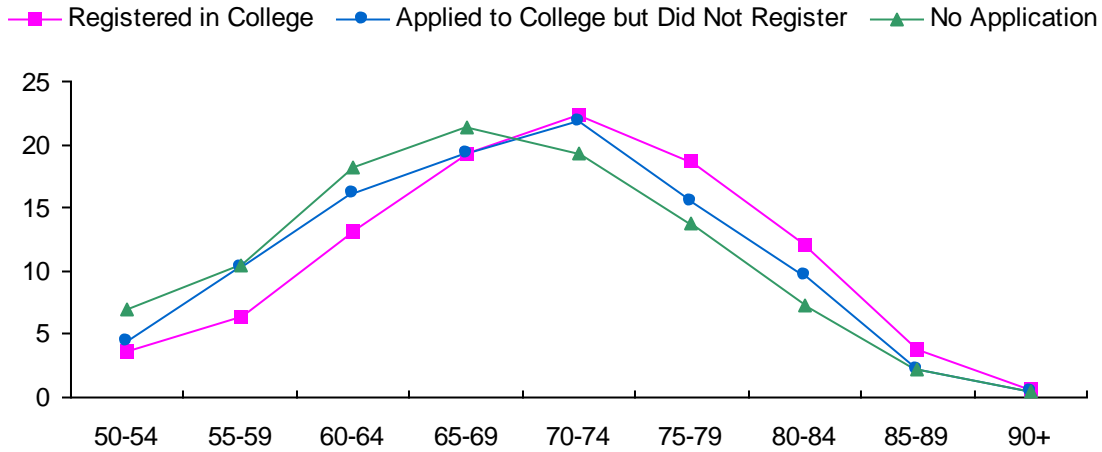
- Students who failed courses early in secondary school were much less likely to complete an OSSD. For example, 83% of students with no failed Grade 9 courses graduated with an OSSD within five years compared to only 61% with a single failed Grade 9 course. (Figure 4).

Figure 4. OSSD Completion in 5 Years or Less, by Number of Courses Failed in Grades 9 & 10 (% Students; 2002-03 Base Grade 9 Cohort)



- Marks did not differentiate students who applied to college and registered, from those who applied but did not register, as the average secondary school marks distributions of both groups were very similar (Figure 5).

Figure 5. College-Preparation OSSD Students: Grade 12 Average Marks by College Application Status



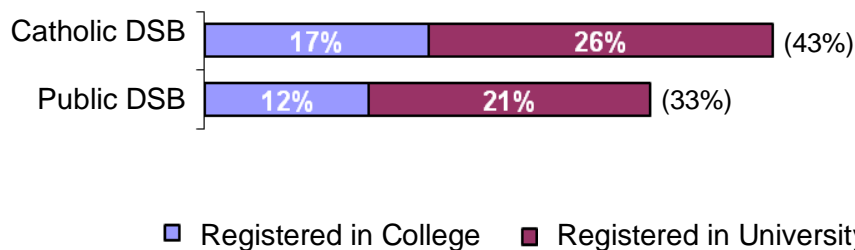
- Students who enrolled in apprenticeships had a similar marks distribution to that of college registrants, except that the apprentices were more likely to have had average marks below 60 percent (15% compared to 12%) and to have taken Workplace-Preparation courses.

### School Board Characteristics

#### **Catholic and Public District School Boards**

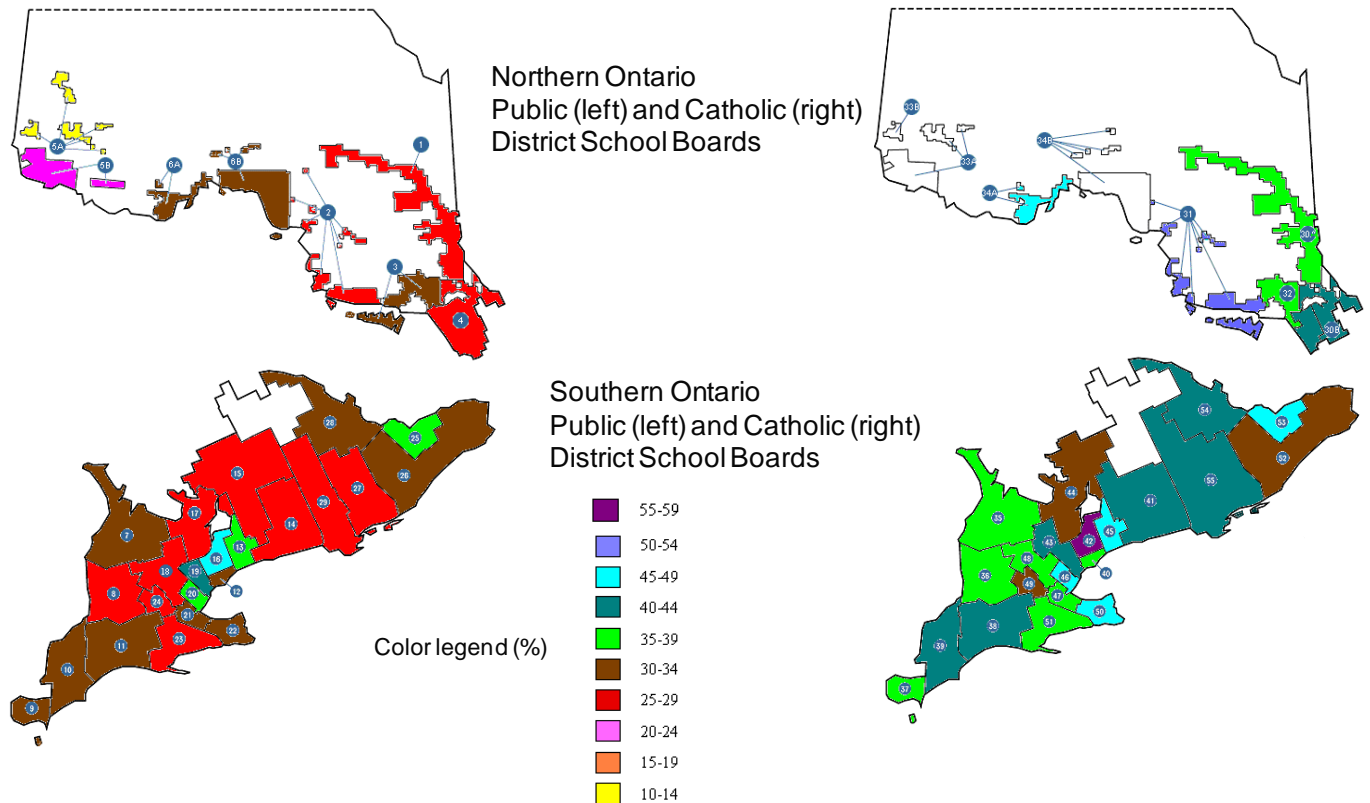
- Students from Catholic District School Boards were more likely to enrol in PSE directly from secondary school as compared to students from Public District School Boards (Figure 6).

Figure 6. Students Who Registered in College & University by Type of School Board  
(%; Fall 2006)



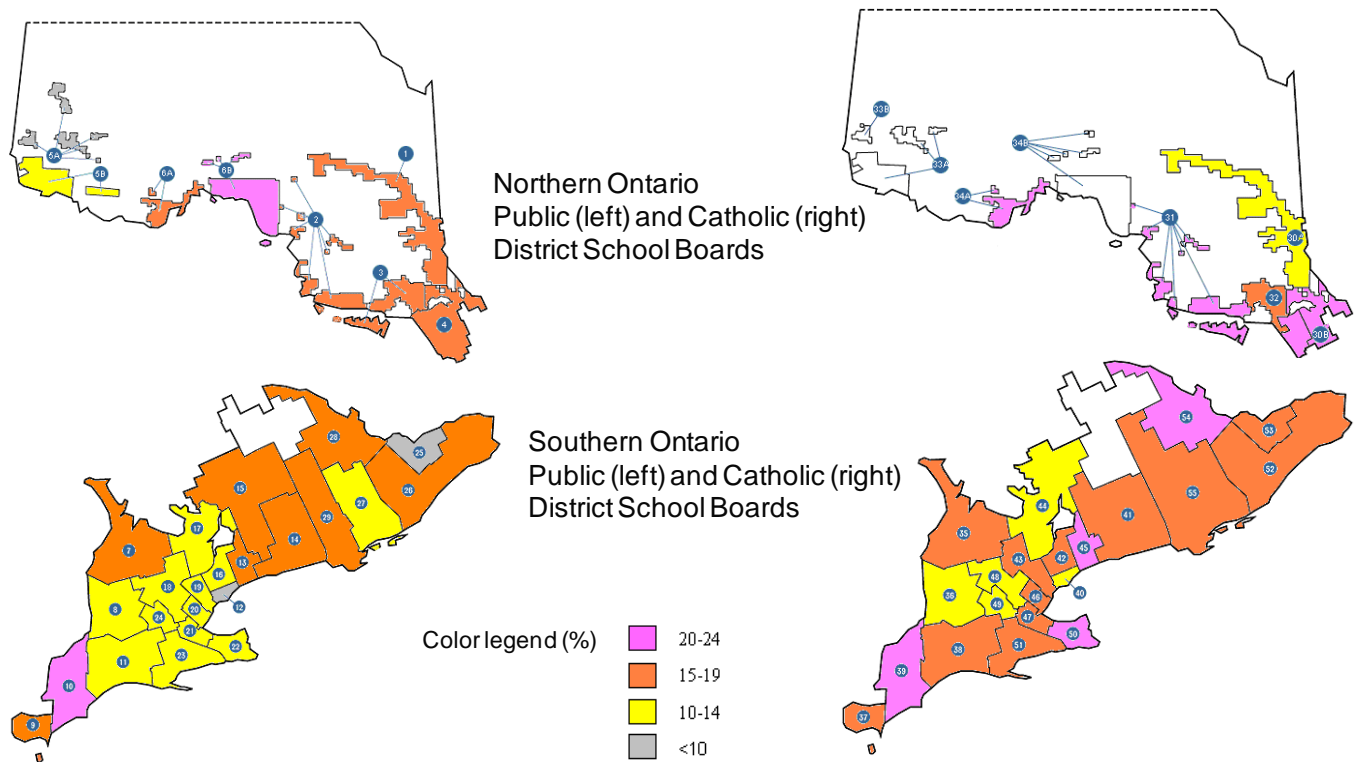
- Both Catholic and Public District School boards across Ontario showed large differences in the percentages of their secondary school students who applied to and registered in PSE programs (Figure 7).

Figure 7. PSE Registrants Direct from Secondary School: Percent of Grade 12/Year 5 Students Who Registered in College or University by School Board



- Generally, rural and northern Ontario secondary school students were less likely to apply to and register in PSE.
- Students from the Toronto, Ottawa-Carleton and York Region District School Boards were much more likely to register in university than college.
- Across school boards, registration rates ranged from 6% - 25% for college (Figure 8) and from 7% - 38% for university.

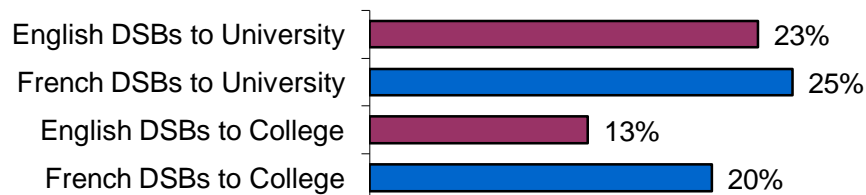
Figure 8. College Registrants Direct from Secondary School: Percent of Grade 12/Year 5 Students Who Registered in College by School Board



### English and French District School Boards

- Students from French-language District School Boards were more likely to attend college and slightly more likely to attend university than students from English-language school boards (Figure 9).

Figure 9. Registrations in College & University, by Students from French- & English-Language District School Boards (%) 2006-07

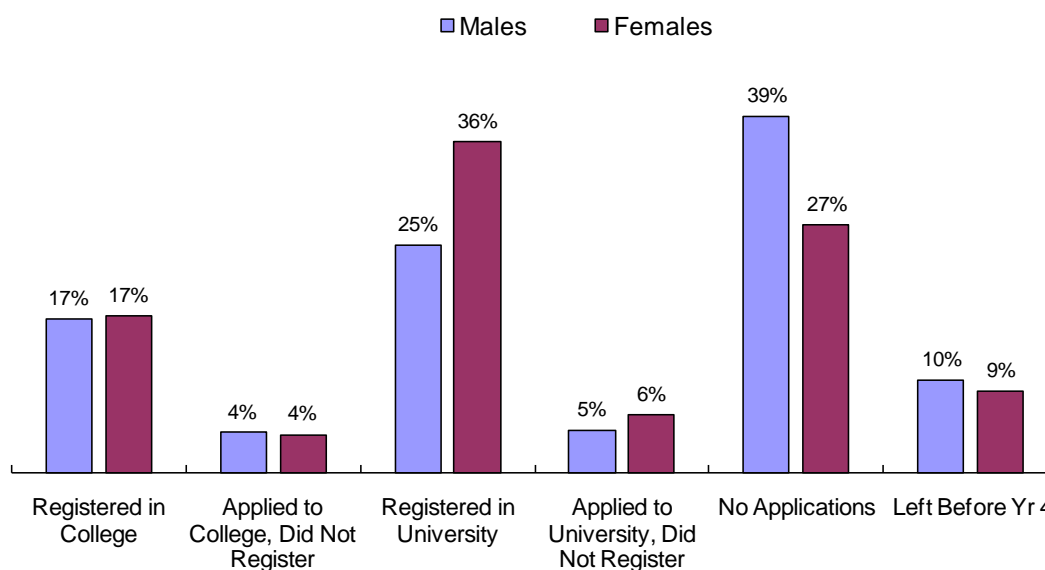


## Student Characteristics

### Gender

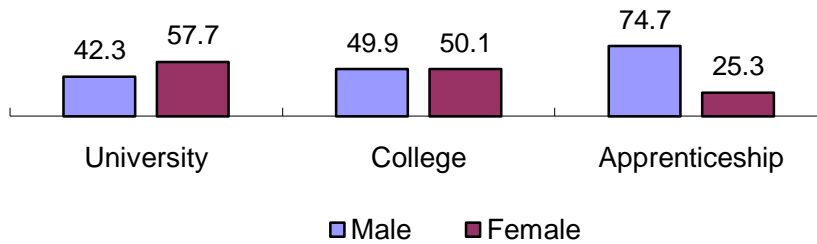
- Large gender differences were found in secondary school course selection and grade performance for males and females. For example, females were more likely than males to have taken Academic courses in Grades 9 and 10, and university-prep courses in Grades 11 and 12. Females also obtained higher average marks than males in almost all secondary school English, Mathematics and Science courses.
- More males than females did not complete an OSSD within five years.
- Males and females were equally likely to register in college directly from secondary school, while females were more likely than males to register in university. Males were much more likely not to apply to PSE at all, and slightly more likely to have left secondary school before their fourth year (Figure 10).

Figure 10. Secondary School to PSE (College or University) by Gender



- From the PSE perspective, gender differences in registration rates were also evident; similar proportions of females and males enrolled in college directly from secondary school, higher proportions of females enrolled in university (58% compared to 42%), and approximately three times as many males as females entered an apprenticeship (Figure 11).

Figure 11. PSE Registrations by Gender (%; 2006)



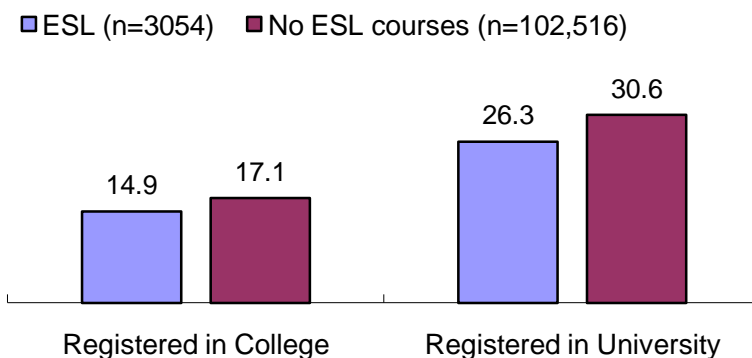
### Language

- Language spoken at home is a possible proxy for cultural identity included in secondary school records. In general, students whose main language spoken in the home was other than French or English were less likely to enrol in PSE. Significant variability was observed across language groups however; for example, students for whom Chinese, Korean, South-Asian languages were the main languages spoken in the home were most likely to enrol in PSE, while students with Spanish and Portuguese languages were least likely to do so.

### English as a Second Language

- Students who took at least one ESL course in secondary school were less likely than other students to complete an OSSD (63% compared to 76%)
- ESL students were also less likely to enrol in either college or university (Figure 12).

Figure 12. Post-Secondary Education Destination of ESL & Non-ESL Students  
(%; 2002-03 Grade 9 Cohort)

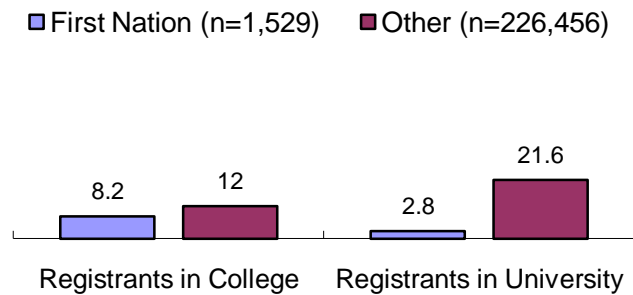




## First Nation Students

- First Nation students enrolled in Ontario public, Catholic and private secondary schools and funded by Indian and Northern Affairs, Canada (INAC) were far less likely than other students enrolled in secondary schools to complete an OSSD, to enrol in university, and to enrol in college (Figure 13).

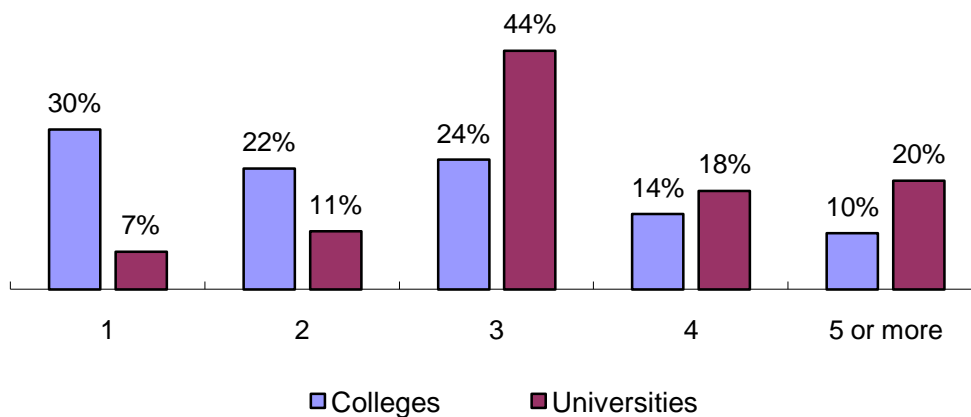
Figure 13. First Nation & Other Students: Registrants in Ontario Colleges & Universities  
(% of Eligible Students)



## Region

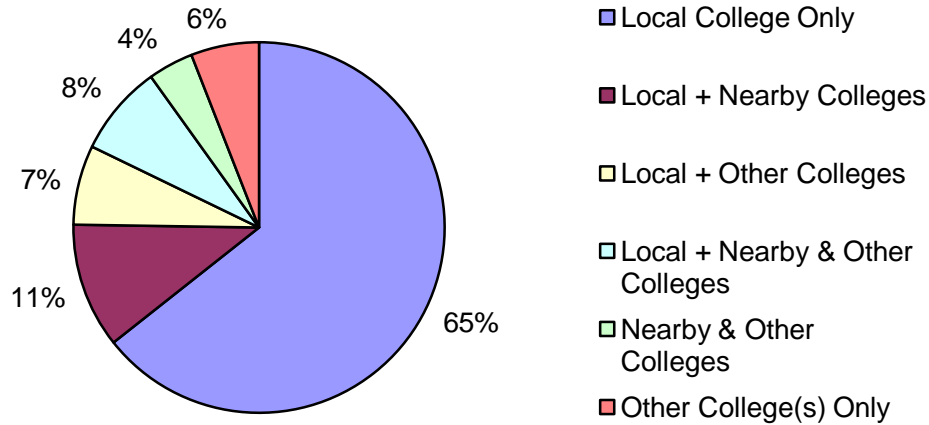
- Of the secondary school students applying to college, 30% applied to only one college. In contrast, university applicants were much more likely to apply to multiple universities (Figure 14).

Figure 14. Number of Colleges or Universities Applied to by Students Directly from Secondary School (%; Fall 2006)



- In general, college applicants preferred to remain in their home communities to attend college, although there were exceptions in some areas of the province. Figure 15 shows an example of the application pattern for school boards in the southwestern region of Ontario; 65% of students in this area applied only to their local college.

Figure 15. Applications to college from two school boards in Southwestern Ontario (%; 2006-07)

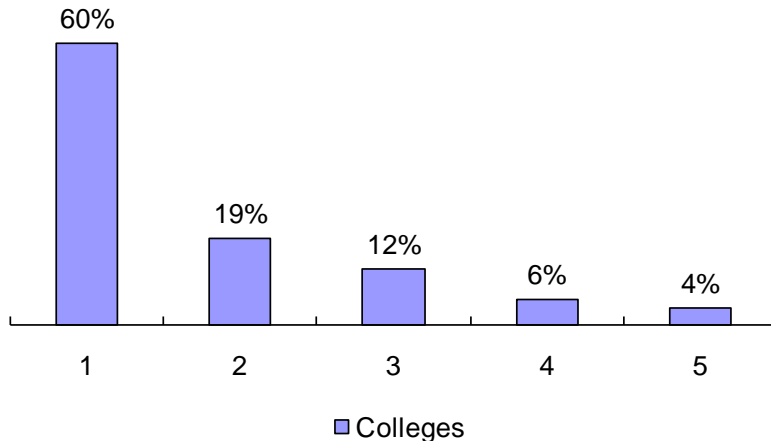


Southwestern DSB, CDSB

Note: Local = within School Board area; Nearby = generally within commuting distance; Other = typically means a student would have to live away from home.

- Non-direct applicants to college were even more likely to apply to only one college (Figure 16).

Figure 16. Number of Colleges Applied to by Out-of-School (i.e. Non-Direct) Applicants (%; Fall 2006)



- Over 80 percent of college applicants typically receive an offer (from at least one college/program), and the college system registers about 60 percent of applicants. However, offer rates range widely across colleges (i.e. from a low of 47% to a high of 86% of programs applied to) and colleges differ significantly in the extent to which they make alternate offers.

## **Focus Groups and Interviews**

Common reasons for not pursuing PSE directly after secondary school included:

- uncertainty about career direction; fear of making a career choice they will later regret
- financial concerns (e.g. uncertainty as to how to finance college; the need to earn money currently; debt aversion)
- dissatisfaction with their secondary school experiences (academic and/or social)

Incentives to return to formal education included:

- realization of a lack of career opportunities without PSE
- clarification of career focus as a result of their workplace experiences
- less concern about financial issues
- positive influence of peers who had found success following completion of a program

## **Primary Recommendations of the Researchers**

The authors make numerous recommendations, largely focused on improving the secondary school experience, increasing the availability of PSE information provided to potential college students, and using the results of the present study as a basis for further work. Of the recommendations, those directed towards school-to-college transition, apprenticeship and college access are particularly prominent. Those research findings and resulting recommendations include the following:

School to College Transition: College-preparation courses are often not available to students in many schools, poor performance very early in secondary school predicts non-completion of an OSSD, and there appears to be a general lack of understanding of PSE options and entry requirements, as well as how to finance PSE.

- Recommendation: Assess the viability of secondary school college-preparation courses, increase secondary school student exposure to current initiatives (e.g. Cooperative Education; Dual Credit; Specialist High Skills Majors) and improve communication with secondary school students regarding career options and finances.

Apprenticeship: Transition rates from secondary school to apprenticeship are low, women are significantly under-represented in most trades, data on apprentices are not well-tracked and young people report difficulties understanding the apprenticeship process.

- Recommendation: MTCU should undertake a comprehensive study on apprenticeship training in Ontario, with an emphasis on: (1) the roles and responsibilities of colleges, employers, the ministry, and trade unions; (2) the application and work placement processes; (3) communication of apprenticeship opportunities and requirements.

College Access: College applicants prefer to remain in their home communities but offer rates vary widely across colleges and thus, college opportunities differ substantially across provincial regions.

- Recommendation: MTCU should ensure that all colleges have the capacity to provide equitable opportunities for access.

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