## Who Doesn't Go To Post-Secondary Education?

## **Final Report of Findings**

for

## **Colleges Ontario**

## **Collaborative Research Project**

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October 20, 2009

Funding for this College Ontario's Collaborative Research Project was provided by Colleges Ontario, Canada Millennium Scholarship Foundation, Higher Education Quality Council of Ontario, and the Ontario Ministry of Training, Colleges and Universities. Data files were obtained from Ontario College Application Service and the Ontario Ministry of Education.

The entire report will be seen: www.collegesontario.org

## **Executive Summary**

#### Introduction

This study<sup>1</sup> was designed to develop a better understanding of the characteristics of the young people who do not pursue post-secondary education (PSE)<sup>2</sup> directly after leaving secondary school, and the factors that shaped their decision making.

Quantitative and qualitative data were used in this study. The quantitative component relied on data files from the Ontario Ministry of Education which included demographic information and marks records for approximately 750,000 secondary school students in each of their school years from 2001-02 to 2006-07. These files included integrated data on applications and registrations in university and college which the Ministry of Education (MOE) had received from the Ontario Universities' Application Centre (OUAC) and the Ontario College Application Service (OCAS), respectively. Data were also received from OCAS which included applications, offers and registrations in Ontario's 24 Colleges of Applied Arts & Technology for 2006-07 (n=138,000).

Three types of analysis were conducted: the first involved a snapshot of all enrolled students in Ontario secondary schools in 2006-07 to gain an insight into academic achievement and PSE interest and opportunity at one point in time. The second involved the trace of students who began Grade 9 in 2001-02 and 2002-03 to their PSE destination in 2005-06 and 2006-07 (n=88,427 (2001-02); n=105,570 (2002-03). The purpose of this analysis was to outline the path of Ontario students throughout secondary school in terms of course selection and achievement, and to describe students' characteristics in terms of their PSE destinations. The third analysis examined applications, offers and registrations with regard to direct-from-secondary-school and out-of-school applicants to Ontario colleges as well as in specific college programs.

<sup>&</sup>lt;sup>1</sup> This study was initiated by Colleges Ontario and partly funded by that organization as well as by the Ontario Ministry of Training, College and Universities, the Canada Millennium Scholarship Foundation and the Higher Education Quality Council of Ontario. Furthermore, the Ministry of Education in collaboration with the Ontario Universities' Application Centre (OUAC) and the Ontario College Application Service (OCAS) provided the integrated data files essential to the study.

<sup>&</sup>lt;sup>2</sup> Within the scope of this study, PSE includes publically funded universities, the Colleges of Applied Arts and Technology and apprenticeship.

The qualitative component consisted of the analysis of interviews with 211 young people who either went directly from secondary school into the workforce (n=111) or enrolled in college from the workforce at least one year after leaving secondary school (n=100). The qualitative component was designed to broaden our understanding of those young people who go directly to the workforce, and to identify the factors that influenced their decision making. The findings from the analyses of both the quantitative and qualitative components were intended to provide objective support for recommendations to improve the transition of young people from secondary school to PSE.

#### Findings

The findings have been divided into three sections: (1) the flow of students from secondary school to PSE; (2) characteristics of those who do not go to PSE; and, (3) decision making related to PSE.

### A. Destination of Students after Four or Five Years in Secondary School

Figure 1 presents a trace of students from their enrollment in secondary school in the Fall of 2003 to their PSE destination four or five years later. At the end of five years of secondary school, sixty percent of students were enrolled in PSE programs (34% in university, 20% in college, and 6% in apprenticeships).

Within one or two years, a substantial number of youth from out of school will enroll in college (over 60% of first-year college enrollees do not come directly from secondary school) or university.

#### Figure 1: Transition of Secondary School Students from Enrollment in Grade 9 in 2003-04 to Their Post-Secondary Destinations<sup>1</sup> in Fall 2008



<sup>1</sup> The university percentages have been adjusted to include students who attended university in other provinces and the United States. Apprenticeship figures were based on 18 and 19 year olds registered in apprenticeship with MTCU. The large majority of those placed in the Workplace category were in the workforce, but the percentages also include those enrolled in private colleges and the military. University and college enrollment data were obtained from OUAC and OCAS, respectively.

The college and university enrollment numbers do not correspond exactly with other findings in the report because, when the Ministry of Education's OUAC and OCAS files were integrated to be used in the basic analysis, not all PSE enrollees were identified. In addition, Figure 1 represents the transition of students in 2008 rather than 2007, and incorporates an increase in the secondary school graduation rate and PSE enrollments. A small percentage of students remained in secondary school for a sixth year.

#### B. Who Does Not Go to PSE?

#### 1. Type of Ontario Secondary School Diploma (OSSD)

- There was great variability in the proportions of students who go directly to PSE from secondary school depending on their secondary school program (Figure 2).
  - Eighty-four percent of those who completed an OSSD with University Preparation courses (46% of the 2002-03 base Grade 9 population) enrolled in a
    PSE program. Most of the others did so in the following year.

- Less than one-half of the students with College-Preparation OSSDs (26% of the 2002-03 base Grade 9 population) went directly to college.
- Three percent of the 2002-03 base Grade 9 population completed a Workplace-Preparation OSSD.
- Apprenticeship registrants came from the College- and Workplace-Preparation OSSD groups.
- One-quarter of the 2002-03 base Grade 9 enrollment did not complete an OSSD in four or five years of secondary school. About one-quarter of this group were relatively close to completing an OSSD, but the remainder were well short of credits necessary for graduation.

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



Note: Workplace includes apprenticeship, private career colleges, military. Source: MOE/OCAS/OUAC data file, 2006-07.

#### 2. Secondary School Course Type

 OSSD completion and subsequent PSE enrollment are far more likely for those who took Academic English or Mathematics in Grade 9, and far less likely for those who took Applied or Locally Developed English or Mathematics in Grade 9 (Figure 3).

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



Source: MOE data file, 2006-07.

#### 3. The Role of Academic Achievement in OSSD Completion and PSE Destination

The number of courses failed in Grades 9 and 10 was directly related to OSSD completion within five years (Figure 4). For example, one failed course in Grade 9 reduced the graduation rate by over 20 percent.





Source: MOE data file.

- Grade 9 marks were a strong predictor of OSSD completion. Students with marks between 50% and 59% were less than half as likely to graduate as those with marks over 75%.
- The majority of the university-registrant group had average secondary school marks much higher than those of the other two groups (Figure 5).



Source: MOE/OCAS/OUAC data file.

- Students who registered in an apprenticeship had a similar marks distribution to that of college registrants, except that the apprentices were more likely to have had marks below 60 percent (14.8% compared to 11.6%) and to have taken Workplace-Preparation courses.
- The lower the average secondary school marks the less likely that students enrolled in PSE.
- The average secondary school marks distributions of those who applied but did not register in college and those who registered in a college program directly from secondary school were very similar.
- The average secondary school marks distributions of direct and non-direct registrants in college programs were very similar, suggesting that other factors play a role for those who choose not to go directly to college after secondary school.

#### 4. Gender

• More females than males registered in university directly from secondary school (Figure 6).

#### Figure 6: Secondary School to Post-Secondary Education Destination Directly from Secondary School, by Gender (%; 2006-07)



Source: MOE/OCAS/OUAC data file.

- Similar proportions of males and females registered in college directly from secondary school.
- Three times as many males as females took up an apprenticeship directly from secondary school.
- More males than females did not complete an OSSD within five years.
- Females were more likely than males to have taken Academic courses in Grades 9 and 10, and University-Preparation courses in Grades 11 and 12.
- Female secondary school graduates were less likely than male graduates to have taken a Grade 12 Mathematics course (63% to 74%).
- Females obtained higher average marks on all secondary school English, Mathematics and Science courses, except Grade 9 Locally Developed Mathematics.

#### 5. ESL Courses

• ESL students were less likely than non-ESL students to complete an OSSD (62.6% compared to 75.7%) and to enroll in university and college (Figure 7).



Source: MOE/OCAS/OUAC data file.

#### 6. PSE Destination by Language Spoken at Home

- Students from some language groups were more likely to attend university and others college, although the combined PSE enrollments were similar for many of the language groups – 40 to 50 percent.
- In general, students whose main language spoken in the home was other than French or English were less likely to enroll in PSE, but there was great variability across language groups. For example, students whose main language spoken in the home originated in China, Korea, Russia, and South Asia were most likely to complete an OSSD and go on to PSE. Students who had Spanish and Portuguese mainly spoken in their homes were least likely to do so.

#### 7. 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<sup>3</sup> students to complete an OSSD, to enroll in university, and to enroll in college (Figure 8).

<sup>&</sup>lt;sup>3</sup> 'Other' students refers to all secondary school students who were not receiving funding from INAC, including off-reserve First Nation, Métis, and Inuit students.

Figure 8: First Nation & Other Students Who Registered in Ontario Colleges & Universities Directly from Secondary School (% Eligible Students;<sup>a</sup> 2005-06)



<sup>a</sup> Eligible students include those in their fourth and fifth years of secondary school. Source: MOE/OCAS/OUAC data file.

#### 8. French-Language 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 Directly from Secondary School, by Students from French- & English-Language District School Boards (%; 2006-07)



Source: MOE/OCAS/OUAC 2006-07 and OCAS 2006 data files.

#### 9. Region and Type of School Board

 In general, students from Catholic District School Boards were more likely than students from Public District School Boards to attend university and college directly from secondary school (Figure 10).



Source: MOE/OCAS/OUAC 2006-07 and OCAS 2006 data files.

 Pronounced school board differences from one region to another were evident in the proportions of Grade 12 and Year 5 students who applied to and registered in college and university; these differences ranged from 6.4% to 24.5% for college and 6.9% to 38.4% for university.  Generally, rural and northern Ontario students were less likely to apply to and register in PSE.

#### 10. Interest in Local PSE Institution

- Pronounced regional differences were evident in the proportion of applicants who registered in their local university ranging from 8.4 percent to 85.4%.
- College offer rates (i.e., offer rates to all programs in a college) ranged from 47.2% in one college to 85.5% in another excluding offers to programs not applied to.
- College program offer rates were notably lower in the Toronto and Ottawa-Carleton regions.
- Generally, college applicants preferred to remain in their home community to attend college, but there were exceptions. Figure 11 shows an example of the application pattern for two school boards (combined) in the southwestern region of the province in relation to their local college.

#### Figure 11: Applicants to Their Local & Other Colleges from a Catholic District & Public District School Boards in Southwestern Ontario (%; Fall 2006)



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

• The combination of "interest" in remaining at home to attend college and relatively low offer rates to applications from some colleges raises the issue of accessibility to college for prospective college enrollees.

 Students applying to college directly from secondary school were more likely to apply only to their local college than were students applying to university to their closest university (Figure 12). This pattern was even more pronounced for the over 60 percent of college applicants who did not apply directly from secondary school (Figure 13).



Figure 12: Number of Ontario Colleges or Universities Applied to by Students Directly from Secondary School (%; Fall 2006)

Source: OCAS data file (2006); university data adapted from King & Warren (2006).



#### Figure 13: Number of Ontario Colleges Applied to by Out-of-School (Non-Direct) Applicants (%; Fall 2006)



Source: OCAS, 2006

• The college system only registers about 60 percent of applicants, even though over 80 percent of the applicants typically receive offers, regardless of how many colleges and programs to which they applied.

#### C. Decision Making of Young People Who Do Not Go to PSE

- Eligible students who did <u>not</u> enroll in college directly from secondary school cited the following factors that influenced their decision:
  - o uncertainty about career direction;
  - o concern about financing a college education; and,
  - dissatisfaction with their secondary school experience (e.g., because of lack of academic success, having moderate to low marks, lack of support from teachers and guidance counsellors, and lack of involvement in school life).
- Workplace interviewees, with and without PSE plans, cited the following factors that influenced their decision:
  - cost-benefit concerns about the advantages of a college education (i.e., the time taken away from making money while having to go into debt to finance it);
  - o the need to continue holding a job to support themselves; and,
  - lack of success in secondary school.
- Delayed College Enrollees cited as incentives to return to formal education the following:
  - o realization of few opportunities for advancement in jobs that they held;
  - o lack of career opportunities without PSE;
  - o clarification of career focus as a result of workplace experience;
  - o less concern about financial issues; and,
  - witnessing of peers' academic success in a college program, and consequent interesting, financially rewarding career.