

Secondary Success Indicators

ISSUE 4, June 2016

Post-secondary Pathways 2015-16

The Secondary Success Indicators (SSI) Fact Sheets incorporate secondary success indicator variables from the Toronto District School Board's (TDSB) School Information Systems (SIS). This Fact Sheet focuses on **post-secondary pathways** based on students' applications to post-secondary institutions in Ontario and their years in school (including Year 4 (Grade 12) as well as those who return to continue their secondary school studies, Years 5 to 7).

Current patterns and trends are presented for students who applied to university only; applied to community college only; applied to both university and community college; and those who did not apply according to the following sections: Applications of Year 4 (Grade 12) students; Applications of Year 5 to 7 students; Applications of Year 4 to 7 students by Achievement of Completed Mathematics Marks; and Applications of Year 4 to 7 students by Family Income.

Applications to Ontario Post-secondary Institutions

Students applying to post-secondary institutions in Ontario provide applications through the Ontario Universities' Application Centre (OUAC) and the Ontario College Application Service (OCAS). The 2016 applications were matched with information from the TDSB's School Information Systems for the Year 4 (Grade 12) and Year 5 to 7 students on March 31, 2016.

Applications of Year 4 (Grade 12) Students

For the 2015-16 school year, Year 4 (Grade 12) students made up most (76%) of the Grade 12 student population who were eligible to apply to post-secondary institutions. In 2015-16 there were 17,369 Year 4 (Grade 12) students. Figure 1 shows post-secondary applications for Year 4 students from 2007-08 to 2015-16.

The Trend:

In the 2015-16 school year, 52% of the TDSB's Year 4 (Grade 12) students applied to university only while 31% of Year 4 (Grade 12) students did not apply to post-secondary (see Figure 1). Note that we have found from our cohort studies that many students who did not apply in Year 4 will apply to post-secondary in Years 5-7, or as adult students.

Since 2007-08, the proportion of postsecondary applicants has continued to increase, particularly applications to university only and more recently, community colleges only, as well as applications to both university and college.

Figure 1: Ontario Post-secondary Applications of Year 4 (Grade 12) Students (Spring 2007-08 to 2015-16) 60% 50% Proportion of Students 40% 30% 20% 10% 0% Community Both University University Only Did Not Apply College Only and College **2007-08** 46% 7% 4% 43% 2008-09 47% 8% 4% 42% 2009-10 47% 8% 4% 40% 2010-11 7% 4% 41% 48% 2011-12 50% 6% 40% **2012-13** 50% 10% 6% 35% 2013-14 50% 11% 6% 33% ■ 2014-15 52% 32% 2015-16 52% 11% 31%



Applications of Year 5 to 7 Students

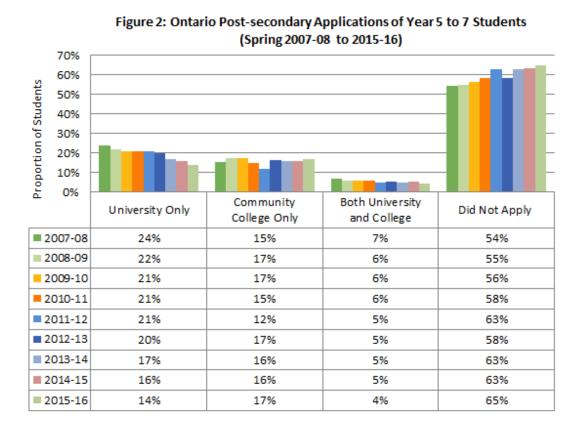
Previous research has shown that about three quarters of students who apply will attend post-secondary institutions. In addition, many who do not attend during their Year 4 application cycle will re-apply to post-secondary the following year (Year 5). Many students who do not go into post-secondary directly from high school will apply as adults, with most submitting their applications up to three years later (i.e., Year 5, 6, and 7).

Year 5 to 7 students made up 24% of the Grade 12 student population who were eligible to apply to post-secondary institutions. These are students who returned to the TDSB after the fourth year for additional years of schooling and who have been grouped into Year 5 to 7 students. In 2015-16 there were 5,636 Year 5 to 7 students. Figure 2 shows post-secondary applications for these students from 2007-08 to 2015-16.

The Trend:

In 2015-16, almost two thirds (65%) of Year 5 to 7 students did not apply to a post-secondary institution while 14% applied to university only; 17% applied to college only; and 4% applied to both university and community college.

Over the eight year period, 2007-08 to 2015-16, there has been a decline in the proportion of Year 5 to 7 students applying to university only (24-14%) and those who applied to both university and college (7-4%), while there have been similar proportions applying to college only (15-17%) (see Figure 2).



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Applications of Year 4 to 7 Students by Gender

Students' gender is derived from the TDSB's SIS. Students in Year 4 to 7 were grouped together and then compared by gender. Figure 3 shows the post-secondary pathways of these students.

The Trend:

Female students are more likely than their male counterparts to apply to post-secondary. For example, in 2015-16, the main difference is seen in students who apply to university only (49% of female students applied to university only compared to 37% of male students) and students who do not apply (33% of female students compared to 45% of male students). Whereas, there are similar proportions among students who apply to community college only (12% female and 13% male) and among students who apply to both university and college (6% of female students and 5% of male students) (see Figure 3).

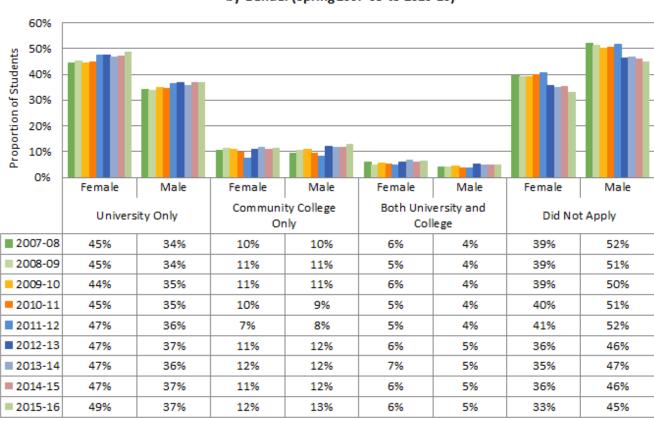


Figure 3: Ontario Post-secondary Applications of Year 4 to 7 Students by Gender (Spring 2007-08 to 2015-16)

Applications of Year 4 to 7 Students by Average Mathematics Achievement

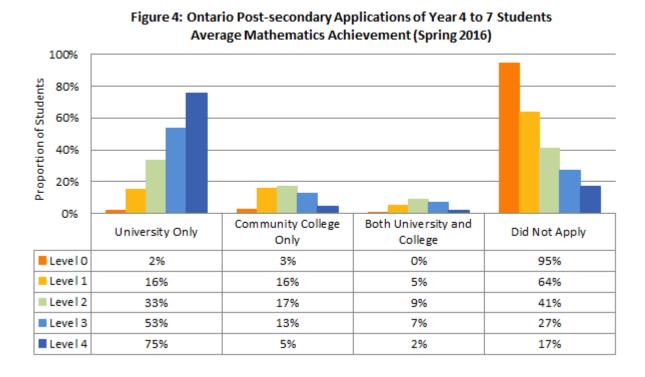
Previous research suggests Mathematics achievement is a strong predictor of student achievement success. Figure 4 shows students' post-secondary pathways compared to their overall Mathematics achievement marks from Grades 9 to 12. Mathematics achievement levels for students in Years 4 to 7 are defined as follows:

- Level 1 and Below an average mark of 59% or less in completed Grades 9-12 Mathematics courses;
- Level 2 an average mark of 60-69% in completed Grades 9-12 Mathematics courses;
- Level 3 and 4 an average mark of 70% or higher in completed Grades 9-12 Mathematics courses.

The Trend:

Over 70% of students with an average mark of 70% or higher (Levels 3 and 4) in Mathematics (Grades 9-12) applied to post-secondary institutions, with the majority applying to Ontario universities. Well over half (64%) of students with an average mark of 59% or less (Level 1 and Below) did not apply to post-secondary (see Figure 4).

Similar patterns are seen when looking at the Grades 9-12 summary information for English and Science achievement.

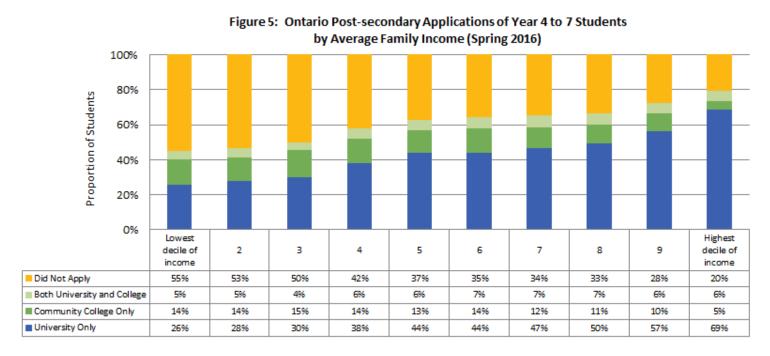


Applications of Year 4 to 7 Students by Family Income

Student income was approximated by using the average family income of the neighbourhood of student residence according to the 2016 Average Household Income*. All students in the TDSB are divided into 10 income groupings (deciles), from lowest to highest income (1 being lowest and 10 being highest).

The Trend:

There is a clear relationship between neighbourhood income and applying to post-secondary institutions (university or college): while 69% of Year 4 to 7 students from the highest-income neighbourhoods applied to university only, 55% of students from the lowest-income neighbourhoods did not apply at all. However, closer examination shows that the key difference is among students applying to university only, with the exception of the highest income group. Overall, there is only a slight difference between neighbourhood income when students apply to community colleges (see Figure 5).



^{*} Student postal codes were matched to the 2011 Dissemination Area (DA) boundaries, then matched to the 2016 Average Household Income for the DA, as provided by Environics Analytics Canada.

Why is this information important?

The more recent history of the TDSB has found a gradual but important increase in most secondary school achievement. A higher proportion of secondary school students now attend post-secondary than ever before, but there are often noticeable differences between groups. This analysis also provides evidence to evaluate the effectiveness of different types of educational programs and interventions within the TDSB.

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