



The University of Toronto-Toronto District School Board (U of T-TDSB) Cohort Study: An Introduction

The Context: Thirty years ago, the majority of students who graduated from high school went directly into the workplace. Today, most students go directly to university or college, while others will pursue further studies after a few years in the workplace. *College readiness* – the degree to which public school prepares students for success in post-secondary – has become a necessary measure (perhaps the most important measure) of educational effectiveness. However, so far there has been limited research on college readiness in Ontario.

The Study: The U of T-TDSB cohort study is one of the first to try to match secondary with post-secondary achievement. To do this, we took five successive TDSB Grade 9 cohorts: students who started Grade 9 in Fall 2003, Fall 2004, Fall 2005, Fall 2006, and Fall 2007. These students entered U of T starting in Fall 2007, and were followed as they progressed through U of T up to Spring 2018. Of all the TDSB Grade 9 students, 17% entered University of Toronto; of those who entered U of T, slightly less than three quarters (72%) graduated from U of T¹. This is something of an underestimate of students' full graduation outcomes, since many students left U of T and entered other post-secondary institutions.

Results: The same general patterns seen with previous TDSB studies on high school graduation and post-secondary access (e.g., Brown, 2010; Brown and Tam, 2016) are also evident in this study. For example, female students are more likely to get into U of T than male students; and once in U of T, they are also more likely to graduate from university. The importance of achievement in Grade 9 (the first year of secondary school) is especially related to post-secondary completion: achievement in any of the four mandatory Grade 9 subjects (English, Mathematics, Science, and Geography), credit accumulation, absenteeism, program of study, and special education needs status in secondary.

¹ Of students in these cohorts, most (60%) directly transitioned to post-secondary in Ontario: 46% confirmed an offer from an Ontario university while 14% confirmed an offer from an Ontario college. In this study, we are looking only at the 17% of students who went to the University of Toronto.

Very High Achievement in Grade 9

Given the strength of the four compulsory Grade 9 achievement variables and credit accumulation, we created a composite variable based on all five Grade 9 achievement variables. Students were organized into four categories of achievement:

- A) Very high achievement: Level 4 (A) in all four mandatory Grade 9 credits
- B) High achievement: A grade of Level 4 (A) in 1-3 of the four mandatory Grade 9 credits
- C) Medium achievement: A mark of below 80% in all four subjects, but with a credit accumulation of eight or more Grade 9 credits
- D) Low achievement: Completed fewer than eight Grade 9 credits

The relationship of this composite variable to U of T entrance is extremely high; higher than any other single variable: 40% of very high achievers entered U of T, compared to 3% of low achievers. (Consequently, these very high achievers comprised 11% of the TDSB cohort population but 27% of the population of TDSB students in U of T). Of those who entered U of T, 84% of very high achievers graduated compared to 31% of low achievers. In other words, this composite of Grade 9 achievement explained much of the students' final post-secondary outcomes at U of T.

Figure 1: Grade 9 Achievement and U of T Outcomes

Secondary School Achievement		Enter U of T		Graduate U of T	
		Did not Enter	Entrant	Non-grad	Graduate
Grade 9 Composite Achievement	Very high: Level 4 in all four Grade 9 subjects	59.8%	40.2%	16.2%	83.8%
	High: Level 4 in 1-3 Grade 9 subjects	77.0%	23.0%	27.5%	72.5%
	Medium: Below Level 4 but 8 plus credits in Grade 9	89.4%	10.6%	42.3%	57.7%
	Low: Fewer than 8 credits	97.1%	2.9%	69.3%	30.7%

Implications: There is a strong relationship between Grade 9 achievement patterns and access to university and post-secondary graduation. But we also know that there is a strong relationship between Grade 9 achievement and elementary school characteristics such as student suspensions, placement in special education classes, and absenteeism. In other words, achievement patterns are a continuum from elementary through post-secondary.

Next Steps: The first U of T-TDSB report of initial results will be released soon. The U of T-TDSB Research Team will release additional reports, as further analysis is done. (The Principal Investigators are Scott Davies and Neil Chakraborty from U of T, and Robert S. Brown from the TDSB). This is the first of what are anticipated to be a series of studies linking elementary and secondary with post-secondary achievement; a York University-TDSB analysis is also in progress.