

Students in Mortlach School School Completion (2016/2017)



Only about three of every four Canadian students graduate from secondary school in the typical timeframe, although many students who drop out of school later pursue adult education programs that lead to a high school diploma.¹ School completion is a significant predictor of a student's long-term health, economic success and general well-being. Therefore, the 'completion rate' is a key marker of the efficiency of the formal K-12 school system. Longitudinal studies that have followed students through to the school-leaving age have identified a number of demographic and school-related factors related to school completion.^{2,3} Literacy skills, engagement, and positive mental health are among the most important protective factors. Data on these factors can be used to gauge a student's chance of completing secondary school. Schools can improve school completion rates by increasing students' literacy skills, monitoring student engagement, building trusting relationships, tackling issues concerning bullying and school safety, and establishing effective family-school partnerships.^{4,5}

Key Findings from the Research

- All children have a certain probability of completing school, which depends on a complex set of factors associated with their family background, academic achievement, engagement, mental health, and the learning climate of their school.
- The *OurSCHOOL* student survey provides reliable measures of these factors, which can be conceived as *assets* that children acquire as they progress through school.
- We can use data on students' assets to identify different types of students based on a profile of their academic grades, engagement, and mental health. Analyses of data from over 500,000 Canadian students identified five types of students with differing profiles of these key assets.
- Measures of students' assets can also be used to estimate the probability that a student will complete secondary school. The formula for predicting the probability takes into account the relative importance of the various predictive factors based on the findings from several longitudinal studies.
- We can consider two types of interventions. The first type entails whole-school initiatives aimed at increasing the academic and social-emotional assets of all students, thereby increasing the likelihood they will graduate. The second type involves identifying students who are most at risk of dropping out, and providing a targeted intervention to help them complete school.
- Schools can make a difference. The Alberta study, *School Completion in Alberta Schools*, provides compelling evidence that schools vary in their school completion rates, even after taking account of students' family backgrounds.

Students from Mortlach School completed the *OurSCHOOL* survey, which included measures of the most important assets related to school completion. This report summarizes the results and discusses how they relate to whole-school and targeted interventions.

1. Pathways to School Completion

For most students, the pathway to school completion begins early: the successful development of literacy skills leads to greater participation in school activities and a strong sense of belonging at school. Students who do not learn to read well during the primary school years tend to fall further and further behind in their academic skills and gradually withdraw from school.⁵ Some students fall off the path to completion later in their school career: they encounter difficulties in making the transition to secondary school or suffer unexpected or traumatic events.⁶

2. Personal Assets Leading to School Completion

Longitudinal studies that have followed children through to their school-leaving age have identified a number of protective factors related to school completion. These can be grouped into seven broad categories:

Demographic: grade, gender, parents' level of education, educational possessions in the home, having an advocate at home or in the community;

Academic: school grades, no grade repetition;

Social engagement: a sense of belonging at school, participation in sports and clubs, the ability to make positive friendships at school;

Institutional engagement: valuing schooling outcomes, school attendance, positive homework behaviours, and positive school behaviours;

Intellectual engagement: interest and motivation, effort, and being appropriately challenged in class;

Positive mental health: positive self-esteem, not experiencing anxiety or depression;

Learning climate of the school: high expectations for success, has an advocate at school.

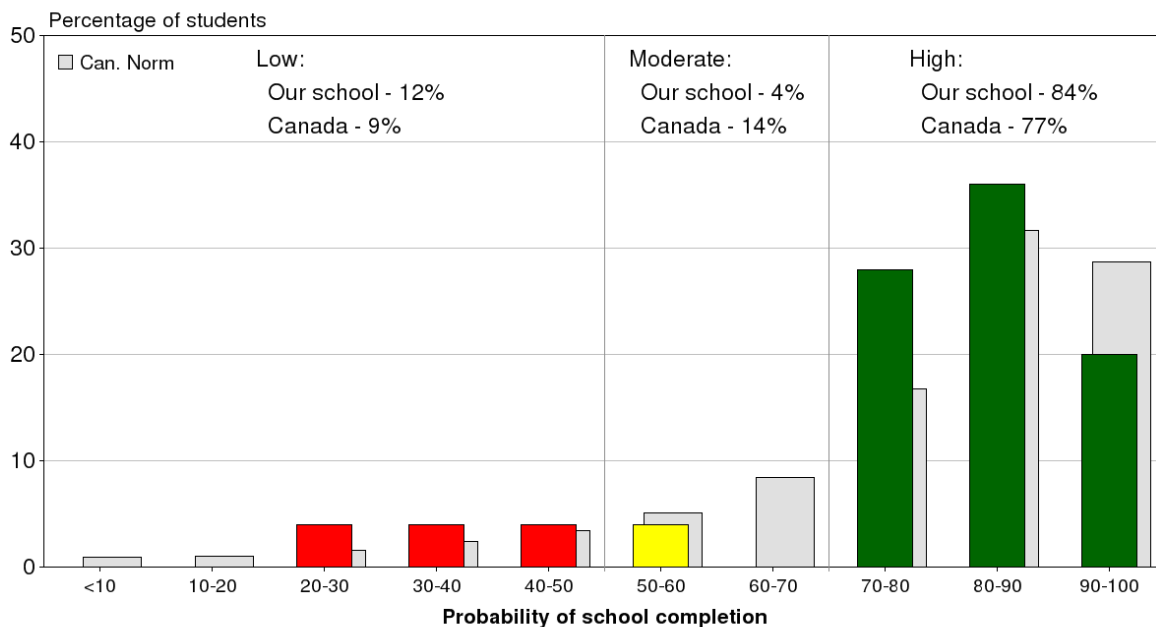
3. Probability of School Completion

OurSCHOOL includes measures of each of these protective factors, which are considered personal assets that increase a student's likelihood of completing school. Some assets are more important than others, based on the results of a number of longitudinal studies. The assets can be weighted accordingly to estimate each child's probability of school completion. The distribution of the probabilities for Mortlach School is shown in Figure 1.

At Mortlach School, 84% of the students have a probability of school completion that is greater than 70%. A further 4% have a moderate chance of completion, with a probability of school completion between 50 and 70%. About 12% of the students have a probability of school completion that is less than 50%.

The average probability of school completion at Mortlach School is 77%, while the Canadian average is 78%.

Figure 1. Percentage of students with varying probabilities of school completion at Mortlach School



4. Five Types of Students

A statistical technique called cluster analysis was used to identify types of students that have similar profiles in terms of their assets for school completion. Canadian students that participated in *OurSCHOOL* in 2012-13 fell into five groups:

Engaged. These students have high grades, high scores on all three types of engagement, and positive mental health. Their average probability of school completion is 93%.

Disconnected. These students also have high grades and comply with the formal rules of schooling. However, they have very low scores on social engagement and many have low self-esteem accompanied with high levels of anxiety and depression. Their average probability of school completion is 82%.

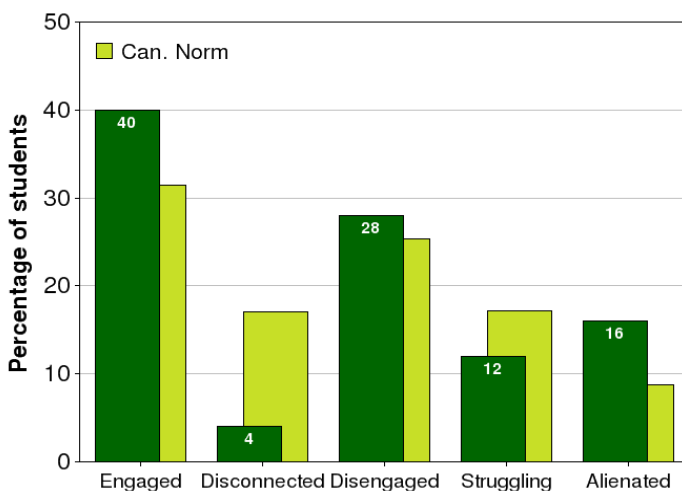
Disengaged. Although these students have reasonably good grades, they have low scores on all three types of engagement. Their average probability of school completion is 79%.

Struggling. These students have very low grades, but they strive to comply with the formal rules of schooling and have a positive self-esteem and positive mental health. Their average probability of school completion is 61%.

Alienated. As with struggling students, this group has very low grades and low levels of engagement. They tend to have poor attendance, poor homework behaviours and do not value schooling. They have very low levels of self-esteem and poor mental health. Their average probability of school completion is 45%.

The percentages of students in each group for the Canadian population and for Mortlach School are shown in Figure 2.

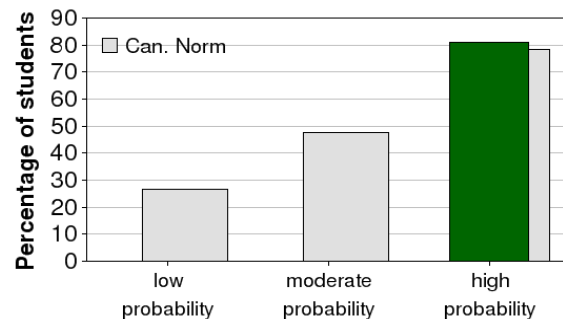
Figure 2. Percentage of students in each of the five types at Mortlach School



5. Building Assets with School-Wide Reforms

These findings can help school staff consider how much emphasis to place on *school-wide* reforms that improve the chances of completion for all students versus *targeted* interventions for high-risk youth.⁷ A common characteristic of all students that are at risk of dropping out is that they have low levels of social engagement. *OurSCHOOL* includes three indicators of social engagement. The results for sense of belonging at Mortlach School are shown in Figure 3, broken down by the probability of school completion.

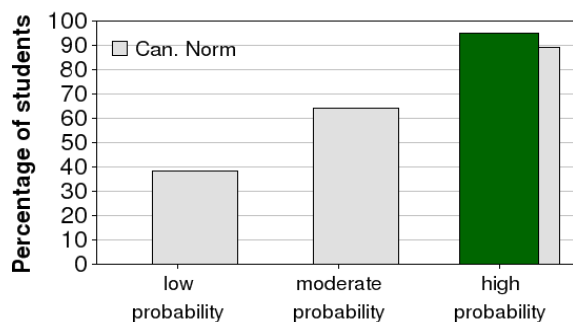
Figure 3: Percentage of students with a positive sense of belonging by probability of school completion at Mortlach School



Students are more likely to stay in school if they are able to make positive friendships. Schools can take an active role in fostering these skills, which can also reduce the prevalence of anxiety and depression. Similarly, increasing students' participation in sports and clubs improves their connectedness with school.

School-wide interventions can also focus on the key elements of a positive school climate. Maintaining high expectations for success is strongly related to school completion. The results for Mortlach School are shown in Figure 4.

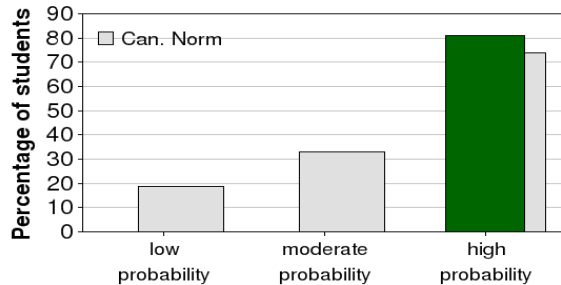
Figure 4: Percentage of students with a high expectation of success by probability of school completion at Mortlach School



6. Targeted Interventions for High-risk Youth

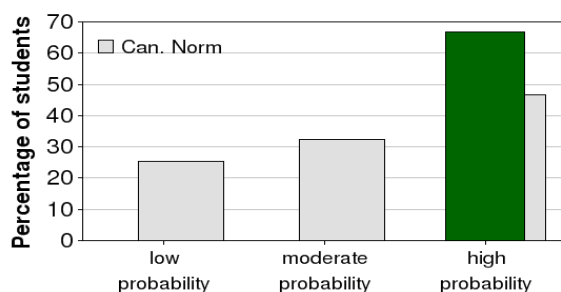
Poor literacy skills, low academic grades, and grade repetition are among the most important risk factors for dropping out. Thus, any intervention aimed at improving school completion rates needs to have a strong program for improving students' literacy skills. Figure 5 shows the percentage of students with grades of B or higher at Mortlach School.

Figure 5: Percentage of students with grades of B or higher by probability of school completion at Mortlach School



Check and Connect, a targeted program for high-risk youth, has four components: a mentor working with students and families; regular monitoring of students' academic progress and engagement; efforts to connect students with school; and strong family-school partnerships.⁴ Mentorship is especially important, as many youth do not feel they have someone at school they can turn to for help. Figure 6 shows the results for Mortlach School.

Figure 6: Percentage of students that have an advocate at school by probability of school completion at Mortlach School



The first step a school staff can take to improve school completion rates is to take stock of its strategies for increasing the literacy skills of low-performing students. Are their literacy skills accurately monitored and are the instructional strategies measurably effective? Next, schools can establish a plan for increasing student engagement. Third, teachers can collectively identify their high-risk youth and ensure that each one has a mentor who will commit to supporting the student through to graduation.

About OurSCHOOL

OurSCHOOL is an evaluation system that includes a dynamic web-based student survey, and optional teacher and parent surveys. The system provides leading indicators of student engagement and wellness, and the aspects of classroom and school learning climate that research has shown affect student engagement and learning outcomes. Please see www.thelearningbar.com for further information.

About this School Report

This report was prepared by Dr. J. Douglas Willms, Director of the Canadian Research Institute for Social Policy at the University of New Brunswick. It was based on data from 24 students at Mortlach School that completed the *OurSCHOOL* student survey in 2016. Schools can print this report free of charge for use in staff meetings and professional development activities. It can also be reproduced for distribution to parents.

References:

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