

# School performance in reading, writing and mathematics

School performance in reading, writing and mathematics is another determinant of school perseverance. The Youth in Transition Survey<sup>1</sup> reveals that dropouts get lower scores than high school graduates, especially in their ability to understand, use, and analyze written texts. Given that reading and writing are essential for learning all subjects, including mathematics, difficulty in reading and writing is not without consequence on young people's performance in all subjects and on the continuation of their studies. In fact, passing language arts and mathematics is a condition of the Quebec high school curriculum for obtaining a diploma.

## What the research says

Numerous studies on the dropout issue show close ties between poor grades and the likelihood of dropping out. The authors of a recent report based on the Quebec Longitudinal Study of Child Development maintain that having reading problems at age 7 is a reliable predictor of dropping out.<sup>2</sup> Difficulties in French (reading and writing) appear to be as important a risk factor as socioeconomic status. However, paradoxically, logical and mathematical skills measured at age 4 are a good predictor of mastery of reading and mathematics in grade 4.


Janosz<sup>3</sup> developed a classification for dropouts that group them into four types: maladjusted, quiet, disengaged, and low-achievers. According to Janosz, maladjusted dropouts represent 40 percent of all dropouts. Their academic and psychosocial profiles are very negative, both in terms of grades and behavioural problems. They also get less family support. Behaviours of maladjusted dropouts are characterized by indifference, negativity, absenteeism, and drug and alcohol consumption.

Quiet dropouts also represent 40 percent of all dropouts. They like school, feel engaged and have no behavioural problems. However, they get low grades and often have had learning problems since elementary school.

Disengaged dropouts represent 10 percent of dropouts. They get average grades and have no behavioural problems, but they say they are disengaged with their education and do not like school.

Finally, low-achievers are very similar to quiet dropouts and represent 10 percent of dropouts. They have no behavioural problems but struggle with learning disabilities and say they are very disengaged with school. They are simply waiting for school to be over.

In short, dropouts differ from each other in whether they have behavioural problems in addition to their academic problems. In fact, 90 percent of dropouts get poor grades, and for about half of them, their academic difficulties could be one of the factors that trigger the dropout process.



To foster school perseverance and prevent dropout, one must concentrate on reading, writing and mathematics, while focusing on student engagement at school. This is true from kindergarten through high school, with even greater intensity during transition years, in particular during the switch from elementary to high school.

## For more information

Recension des écrits scientifiques sur la littératie familiale et communautaire

[http://www.crie.ca/recherches/Documents/Beauregard\\_Carignan\\_MELS\\_litteratie\\_familiale.pdf](http://www.crie.ca/recherches/Documents/Beauregard_Carignan_MELS_litteratie_familiale.pdf)

[1] Description of the Youth in Transition Survey: <http://www.pisa.gc.ca/eng/yits.shtml>

[2] M. Janosz, S. Pascal, L. Belleau, I. Archambault, S. Parent, and L. Pagani (2013), Les élèves du primaire à risque de décrocher au secondaire : caractéristiques à 12 ans et prédicteurs à 7 ans, Institut de la statistique du Québec.

Downloaded at: <http://www.stat.gouv.qc.ca/statistiques/education/frequentation-scolaire/dcrochage.pdf>

[3] M. Janosz (2000), L'abandon scolaire chez les adolescents : perspective nord-américaine, *VEI Enjeux*, 122, Sept 2000. Downloaded at: <http://www2.cndp.fr/revueVEI/122/10512711.pdf>

## Taking effective action

Given the foregoing, it is vital to intervene before youth encounter these difficulties, especially difficulties in reading and mathematics. Quick action must be taken to reduce the gap between good and poor readers because this gap tends to get wider over time and affect all school subjects. From an academic standpoint, effective, evidence-based programs can significantly reduce the number of at-risk students in terms of reading proficiency from kindergarten through high school.

More broadly, implementing family literacy programs in the community can also develop and promote reading proficiency among children. Such programs improve and enhance family literacy practices and parent-child interactions related to written language.

### Avenues for effective action related to performance in reading, writing and mathematics

#### Establish emergent literacy programs in day- and child-care centres.

#### Mobilize families and the community to put in place literacy, numeracy, and academic support activities:

- to guide parents in helping their children with school work (offering courses to develop parenting skills, offering occasional workshops, providing reading material, giving advice on how to encourage children or on how to support them without doing things for them, etc.);
- to organize literacy and numeracy activities in the community (parent-child reading circles, reading activities with the elderly, etc.);
- to organize events that promote books, writing, and mathematics (book festival, story hour, science fair, poetry contest or slam, etc.);
- to organize reading activities at vaccination clinics, public celebrations, or any other event involving young children;
- to ensure continuity between school and family in order to encourage learning;
- to quickly identify children at risk for low reading proficiency and act immediately by offering supplementary activities, in partnership with the family (preschool screening and stimulation camp, remediation, peer-based support groups, specialized intervention, etc.);
- to quickly identify school engagement and motivation problems and provide support;
- to carry out literacy and numeracy promotion campaigns, in collaboration with parents and community partners;
- to implement homework help and tutoring services;
- to build ties between families and schools by paying special attention to families from underprivileged areas, immigrant families, or at-risk youth (sponsorship, pairing, etc.);
- to continuously monitor students' grades and data on attendance, punctuality, and discipline;
- to organize events that celebrate effort and achievements;
- to encourage parental engagement in academic achievement by involving them in various transitions (kindergarten-elementary, elementary-high school, etc.).