Is Student Achievement on Standardized EQAO Testing Reflected in Their Annual Academic Performance? A Longitudinal Study

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Purpose

The purpose of this longitudinal study was to compare classroom achievement to provincial testing results in literacy for children, grades 1 through 6, enrolled in a French language school board in Northern Ontario, Canada.

Context

In Ontario, the Education Quality and Accountability Office (EQAO) is responsible for testing student literacy and numeracy skills across the province. Since its inception, this standardized testing has generated much controversy. The scientific community criticizes various aspects of the process. This study addressed one of these concerns, particularly the link between students' academic performance in 1st to 6th grade as compared to their achievement on EQAO testing in grades 3 and 6 in literacy. The sample of **2052 students** enrolled in **French language schools across Northern Ontario** in 2004 or later wrote the EQAO test in French, which was not necessarily their first or dominant language. For the purposes of this study, the sample was divided into **2 groups**: students without an Individualized Education Plan (IEP) and students with an IEP. In addition to establishing **Gamma correlations**, this study analyzed specific factors' influence such as sex, grade level and language dominance in Junior Kindergarden on these literacy measures. It was hypothesized that classroom tests and large-scale assessments should be highly correlated. However, exact agreement was unlikely because the assessment tools differed in important ways.

Table 1: What is being compared?

EQAO provincial testing levels of achievement	Classroom grading
Level 1 Well below provincial standard	D- = 1- = 50-52 D = 1 = 53-56 D+ = 1+ = 57-59
Level 2 Below provincial standard	C- = 2- = 60-62 C = 2 = 63-66 C+ = 2+ = 67-69
Level 3 Reaches provincial standard	B- = 3- = 70-72 B = 3 = 73-76 B+ = 3+ = 77-79
Level 4 Exceeds provincial standard	A- = 4- = 80-86 A = 4 = 87-94 A+ = 4+ = 95-100

Measures of both classroom achievement and EQAO testing are obtained by following the provincial curriculum guidelines, which establish grade level expectations to be met by the end of each school year. Classroom grades are obtained over the course of the school year and assess all three areas: Reading, Writing and Oral Communication. They are more specific and provide a continuous yet more subjective measure of a given child's level of achievement. Given the objective nature of EQAO's assessment process, the provincial testing does not measure Oral Communication, which represents one third of the French curriculum.

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Results

Table 2: Results of correlations in a nutshell

Classroom academic performance			EQAO testing			
Group	Domain	Level Primary = Grades 1, 2, 3 Junior = Grades 4, 5	Grade 3		Grade 6	
			Reading	Writing	Reading	Writing
1 No IEP	Reading	Primary	0.41*** – 0.63***	0.41*** – 0.66***	0.44*** – 0.7***	0.59*** - 0.72***
		Junior	0.62*** - 0.77***	0.51*** – 0.74***	0.59*** – 0.75***	0.69*** – 0.78***
	Writing	Primary	0.32*** - 0.65***	0.38*** – 0.66***	0.44*** - 0.68***	0.4*** – 0.78***
		Junior	0.55***– 0.68***	0.59*** – 0.64***	0.6*** – 0.75***	0.73*** – 0.77***
2 IEP	Reading	Primary	0.32 *** – 0.59***	0.05 – 0.36***	0.37 – 0.58**	0.32 – 0.52*
		Junior	0.54** - 0.73***	0.36 – 0.72***	0.42 – 0.73***	0.23 – 0.55*
	Writing	Primary	0.19* - 0.42***	0.05 – 0.32***	0.34 – 0.79***	0.4 – 0.51*
		Junior	0.36* - 0.63***	013 – 0.65***	0.36 – 0.78***	0.33 – 0.58*

***p<0.001 **p<0.01 *p<0.05

Discussion and conclusion

Very weak to very strong correlations were observed in this study. Results confirmed that overall, classroom achievement was significantly correlated to provincial testing results in literacy for children, grades 1 through 6, without an IEP enrolled in a French language school board in Northern Ontario. However, correlations varied from very weak to strong for the second group of students, those with an IEP. Links between sex and language dominance in a limited number of students (734) were also measured and revealed the following: overall, girls achieved better grades than boys and French dominant children, better grades than English dominant children within this school board. However, regarding language dominance, the observed gap decreased over time.

What's next?

The consideration of certain contributing factors such as anxiety or socioeconomical status for example would greatly enrich and inform such a study. Also, in Grade 10, Ontario high school students write a high stakes provincial test in literacy. The inclusion of this data could help verify the trends that were observed in this study. Furthermore, a neighbouring province, Alberta, has revised its provincial testing policies. Focus has shifted from a program based on reputation and system functioning to one geared to helping individual students improve. The pilot program begins in the Fall of 2014 and its progress should be considered. Its eventual success could warrant such a change in Ontario.

Final thoughts

In a contemporary society focused on inclusion and individualized teaching to ensure success for all students, a provincial standard is obtained in Ontario by excluding children with certain disabilities and fitting the rest of the students into a strict mould. A normal distribution is carefully calculated in order to establish a *provincial standard*. This curve excludes children who cannot succeed despite their IEP. Such a costly program that is supposed to provide statistically sound data is flawed. Do its benefits outweigh its drawbacks or is it time for reform?

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