

Countability Quandary:

Investigating the Higher Achievement of French-Language Schools on EQAO Math Assessments

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About EQAO

- The Education Quality and Accountability Office (EQAO) is Ontario's official standardized testing agency, responsible for administering tests and reporting on province-wide student outcomes.
- Every year, EQAO administers four major standardized tests to schools across Ontario's English and French language systems.
- Historically, differences in curriculum have been the primary obstacle to comparing English–French EQAO achievement, but the standardization of Ontario math curricula in 2020 (Grades 1–8) and 2021 (Grade 9) between language systems finally changes this.

Research Objectives

1

To determine whether there was a significant English–French achievement gap on EQAO math assessments for the 2022–23 assessment period.

2

To identify potential predictors of student achievement, assessing their individual and combined effects.

Methods

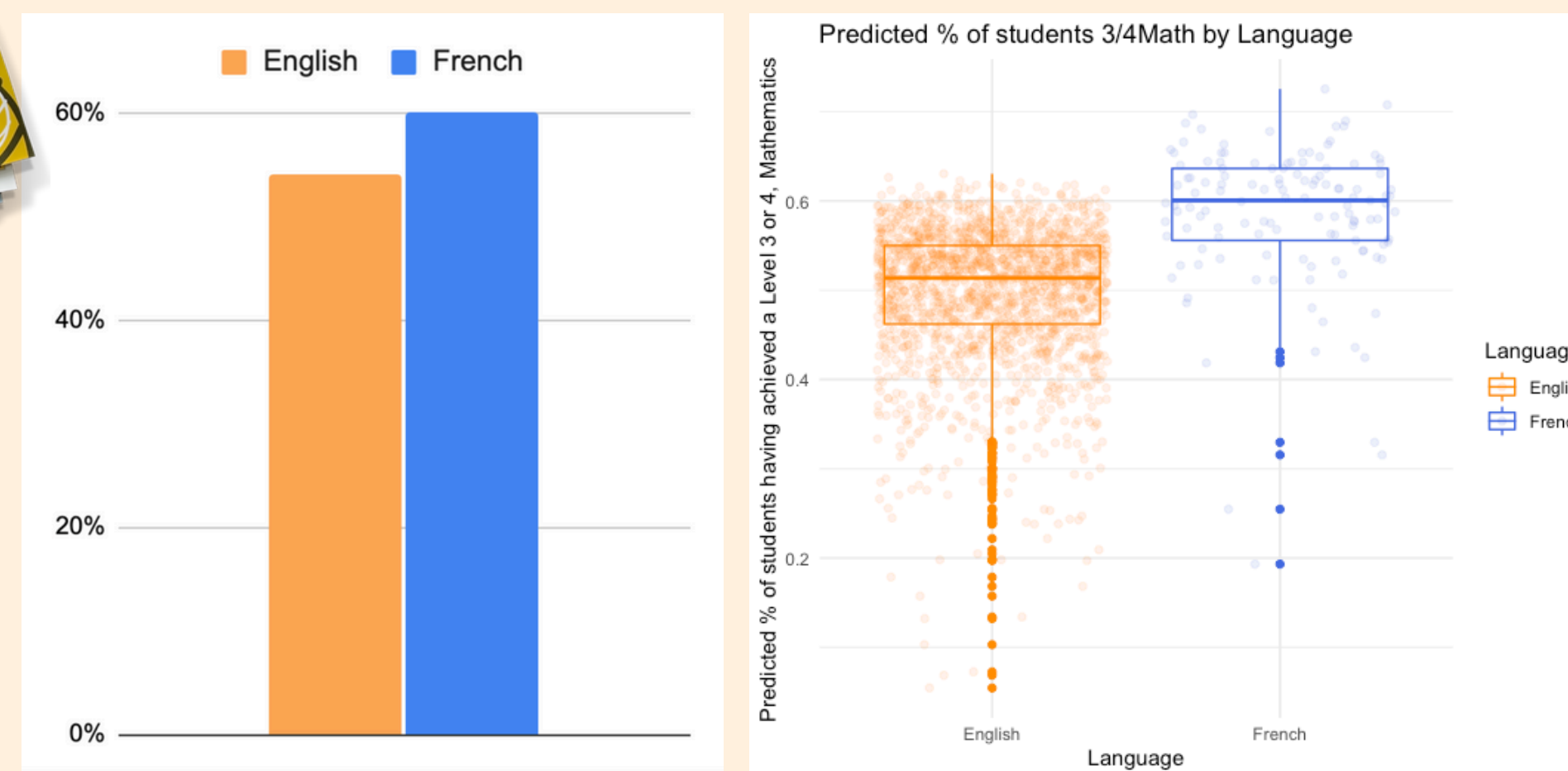
- **Variables:** (1) enrolment, (2) per-student funding, (3) remoteness, (4) dispersion, (5) urban factor, (6) the percentage of participating students who were female, (7) who were eligible to receive either ELL or ALF supports, (8) who were identified as having special education needs, and (9) who were born outside Canada.
- **Sample:** The data used in this study encompass 72 public district school boards, 7858 schools, and a total of 436,145 EQAO-registered students.
- **Defining achievement:** To operationalize achievement, we use the combined percentage of students having achieved a Level 3 or 4 as the dependent variable.
- **Linear mixed modelling:** We used a linear mixed-effects model for data analysis, which included fixed effects for interactions between language of instruction and significant covariates, with random intercepts for grade, school name, and board name.



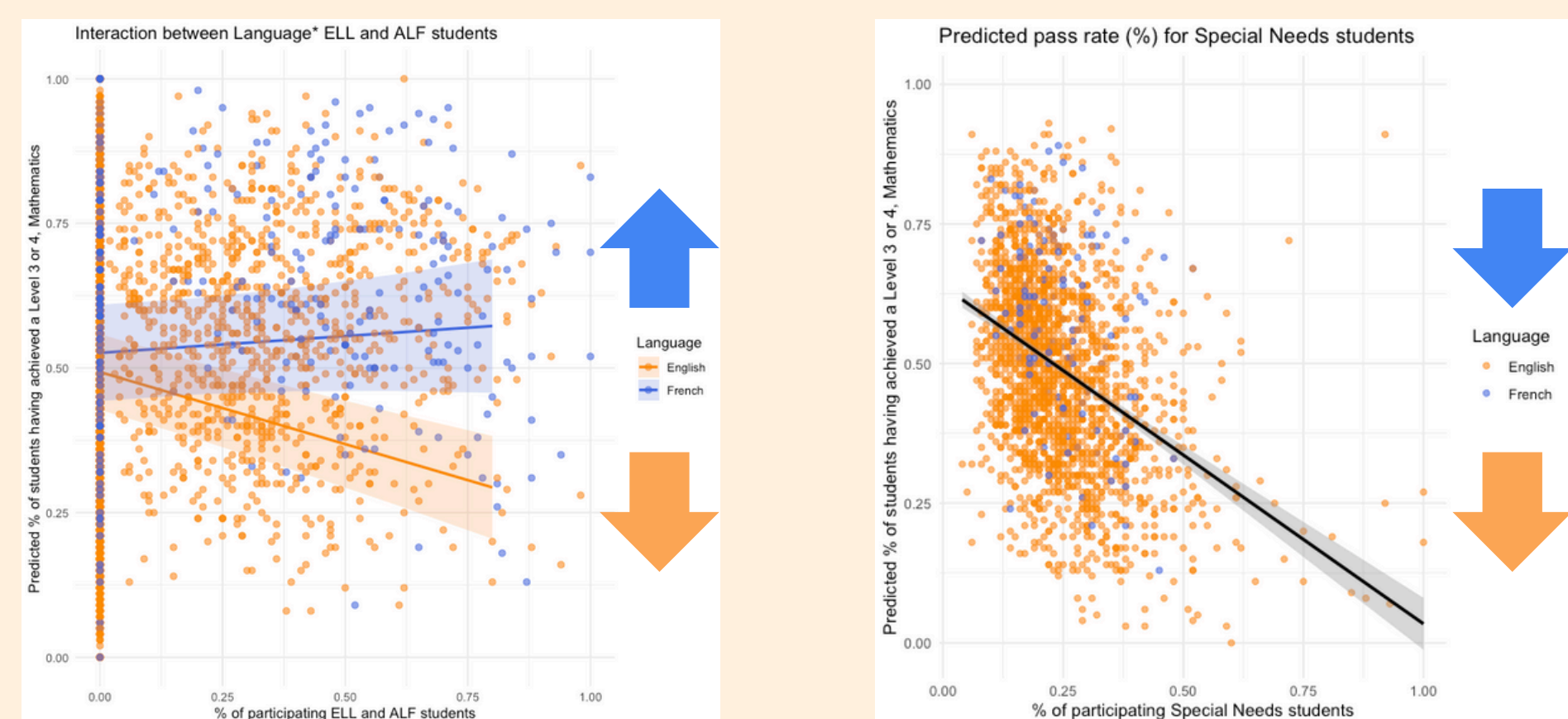
Results

- **English-French achievement gap:** French-language schools had a higher percentage of students having achieved Levels 3 (meeting expectations) or 4 (*exceeding* expectations) on math assessments compared to English-language schools, with the difference being statistically significant.
- **Variable interactions:** In modelling variable interactions, we identified three significant predictors of achievement—the percentages of (1) ELL- or ALF-eligible students, (2) students with special education needs, and (3) students born abroad—with varying effects on the English–French achievement gap.

Level 3/4 Achievement by Language System



Interactions: ELL/ALF & Special Needs



Discussion

- **Trends over time:** Earlier studies noted challenges in French-language schools, including poor resources and lower performance (Gilbert et al., 2004; Dénoimé, 2006). Our study, however, shows that French-language schools significantly outperformed English-language schools in EQAO math assessments in 2022–23, possibly due to increased investment.
- **Bridging the ELL literature gap:** The interaction between language of instruction and ELL/ALF eligibility shows that demographic factors can moderate the perceived advantages of French-language schools and impact math achievement disparities.

Conclusion

- This research bridges a literature gap by comparing EQAO achievement across language systems and aligns with EQAO's goals of understanding achievement predictors.
- By contextualizing EQAO data, the study aids educational administrators in addressing diverse student needs and supports existing research while suggesting areas for future study.
- Further investigation into Ontario's French-language ALF program and consideration of modern testing and funding developments are essential for addressing the English–French achievement gap.

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