

EQAO Fall #DataInAction Symposium

November 21, 2024

On November 21, 2024, EQAO welcomed researchers, data analysts and other school board staff focused on student achievement to its fourth #DataInAction symposium. The event featured research on mathematics [achievement trends](#) and highlighted effective practices used by school boards to support student success in mathematics. Additionally, EQAO presented recent updates to the Grade 9 Individual Student Report (ISR) to assist educators in supporting student achievement.

A Closer Look at Math Priority Schools

EQAO staff shared data on the recent positive trends observed in math priority schools, which are identified by the Ministry of Education based on EQAO mathematics results. As part of the [Math Achievement Action Plan](#), priority schools are provided with targeted resources and funding to improve math achievement.

Dot Score Distribution Analysis

EQAO staff expanded on previous EQAO research by analyzing student achievement using dot scores (measures that indicate where within a level of achievement a student's result falls). Results for Grades 3, 6 and 9 math revealed illuminating patterns. Although priority schools still have a larger proportion of students performing below the provincial standard in mathematics, progress is evident, particularly in Grade 3, where the gap relative to non-priority schools is narrowing.





Students with Special Education Needs and Language Learners¹

EQAO findings highlighted differences between priority and non-priority schools in the proportion of students who have special education needs and the proportion who are language learners in Grades 3, 6 and 9. While math priority schools have higher proportions of students with special education needs across all three grades, these schools have lower proportions of language learners in Grades 3 and 6, but higher proportions in Grade 9. The additional supports provided to priority schools appear to be having a positive impact on student achievement.

Mathematics Achievement Trends Over Time

The symposium also highlighted positive trends in achievement results from priority schools over a three-year period, markedly in Grades 3 and 6. In Grade 3, priority schools in both English- and French-language boards saw increases in the shares of students meeting the provincial standard, with a six-percentage-point increase and a four-percentage-point increase between 2022–2023 and 2023–2024 respectively. These trends highlight progress in priority schools and the ongoing effort to close the achievement gap. Grade 6 results showed continued progress, especially in French-language schools, with a 10-percentage-point increase compared to the two-percentage-point increase in non-priority schools.

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Grade 3 students, in particular, showed strong improvements overall in Knowledge and Understanding and Thinking.”



¹ “Language learners” refers to students enrolled in English or French support programs (e.g., ESL, ALF, PANA).

Progress in Mathematics Skills

This encouraging pattern of progress extends to the mathematics skills outlined in the Ontario mathematics curriculum and assessed by EQAO.

- Knowledge and Understanding, which emphasizes subject-specific content and its meaning.
- Application, which highlights using knowledge to make connections.
- Thinking, which involves critical and creative problem-solving.

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Gains and Gaps in Mathematics Strands

Students in Grade 6 showed gains across the strands (e.g., Algebra, Spatial Sense and Financial Literacy), with priority schools making notable progress in narrowing the achievement gap with non-priority schools. Results for priority schools in the Number strand increased over three years to 58% from 51%, while non-priority schools were stable at 66%.²

However, Grade 9 results indicate that significant disparity remains, particularly in Geometry and Measurement. The difference between priority and non-priority schools is still pronounced, with a gap of 13 percentage points, although some progress has been made.

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58% ↑

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² The results in the strands and skills reports are expressed as average percentage correct, which takes into account the fact that different students are administered systematically different sets of questions due to the adaptive nature of the assessment.

Insights from High-Performing Boards: Strategies Driving Math Achievement

The symposium also highlighted strategies from school boards that have seen consistent improvements in math achievement. EQAO staff conducted interviews with 15 boards, who identified the following factors as contributors to their board's improvement. They shared their practices and local insights with EQAO staff to help others build and sustain momentum in improving student outcomes. The following are key strategies:

Clear Vision and Goals

A focus on collaboration between classroom teachers and administrative staff, where everyone has a shared understanding of goals and the practices that support these goals.

Data-Driven Decision Making

The use of multiple forms of data to set goals, monitor progress and inform decisions.

Alignment of Resources

The strategic alignment of resources to support curriculum fidelity and classroom learning.

Professional Development

Job-embedded and research-based professional learning opportunities, with a focus on building content knowledge and high-impact instructional practices to support classroom learning.

Focus on Student Achievement

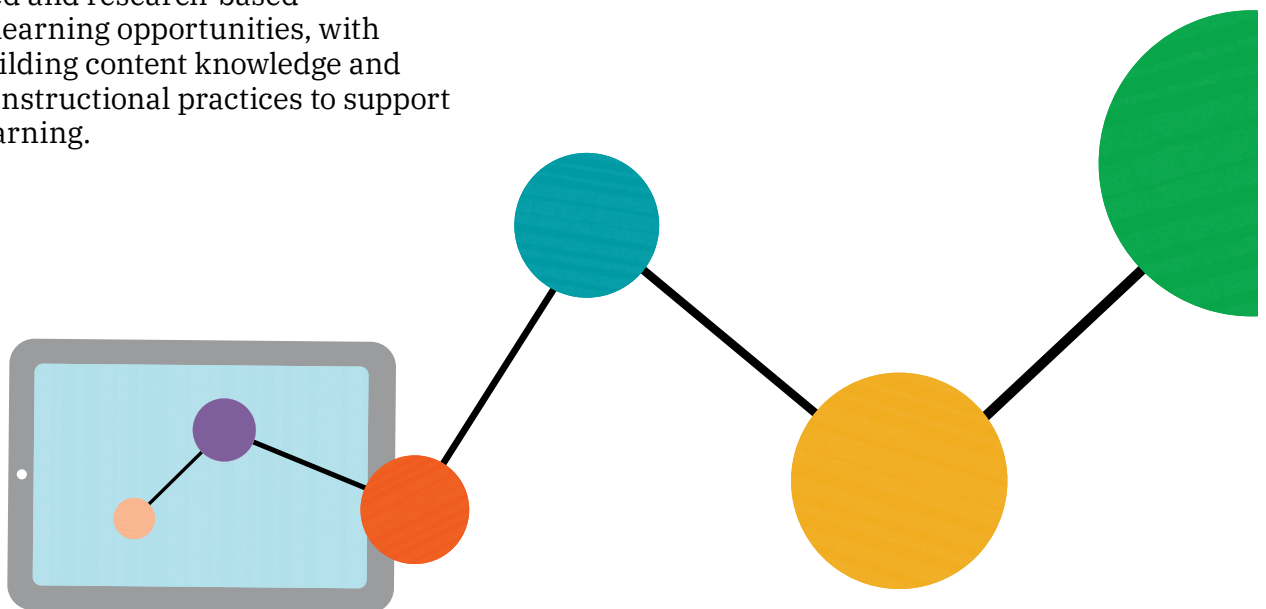
Priority on actions that impact student achievement directly rather than a focus on operational details.

Supportive Leadership

Leadership focused on collaboration and on building shared knowledge through professional learning communities: for instance, leaders engaged with the assessment and learning cycle.

Collaborative Relationships

A focus on sharing ideas, resources and strong partnerships that support students.



Updated Grade 9 ISR and Additional Resources

EQAO staff presented recent enhancements to the ISR students receive after their completion of the Grade 9 Assessment of Mathematics. Following the announcement that, as of September 2024, the Ministry of Education has standardized the practice of using Grade 9 Assessment of Mathematics results as 10 to 30 percent of each student’s final course mark, EQAO updated its ISR to help teachers determine the exact placement of the student’s result within achievement levels. These updates add dot scores as well as clear definitions of each level of achievement to the ISRs, in alignment with the practice of the Ministry of Education. EQAO staff also shared a reference document and a FAQ guide to support the implementation of this policy.

Additionally, EQAO introduced the [2024 Grade 9 Released Questions resource](#) and the accompanying data. The data shows the percentage of students who selected each answer choice by level.

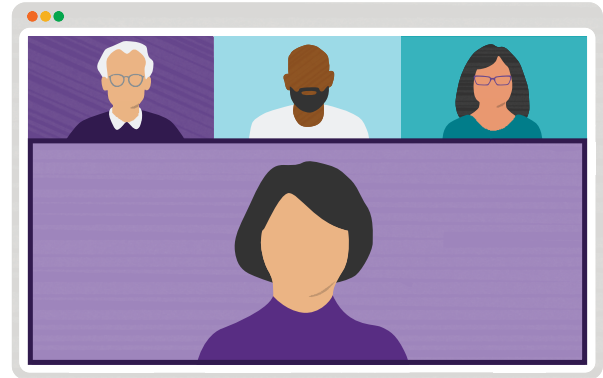


Discussion and Networking

During the symposium, networking was facilitated in breakout rooms. Topics discussed among participants included

Assessment Administration

- using assessments to identify student disproportionalities early (e.g., screeners for Grades 3, 6 and 9)
- leveraging pre- and post-assessment results to measure growth and identify instructional needs
- mid-semester assessments and data dashboards to track progress and inform teaching



Instructional Practices

- high-impact instructional practices such as co-teaching, small-group instruction and targeted interventions
- removing response options from EQAO sample test questions to focus on conceptual understanding

Collaborative Resources and Professional Development

- creating shared lesson plans, assessment tools and digital templates for consistency across grades
- offering job-embedded professional development, after-school options and one-on-one coaching to address gaps
- developing a culture of collaboration among teachers and administrators, and of working together on goals

Conclusion

EQAO's fall 2024 symposium highlighted new data on mathematics achievement and showcased updates to tools designed to support teachers' classroom practices. The session also sparked discussions about best practices for using EQAO data to drive mathematics achievement, providing an opportunity for educators and data analysts from across Ontario to collaborate and share valuable insights.