



# Highlights of the Provincial Results

## Grade 9 Assessment of Mathematics

The Education Quality and Accountability Office (EQAO) is an agency of the Government of Ontario that contributes to the quality and accountability of Ontario's publicly funded education system. EQAO develops and administers large-scale assessments that produce objective and reliable information to support student success. EQAO data act as a snapshot that shows whether students are meeting curriculum expectations in reading, writing and mathematics at key stages of their education.



### Context

The 2021–2022 school year marked a return to EQAO's provincial assessment administrations, which had been paused for the prior two years. For the first time, EQAO is reporting on the student achievement results of its new digitalized and modernized assessments. As per Ministry direction, students learning in person (and students learning remotely who wrote in person) participated in the assessments in the 2021–2022 school year. This was also the first school year that the government's new de-streamed, universal mathematics curriculum was implemented in classrooms.

As part of the digitalization and modernization of EQAO assessments, the agency introduced for the Grade 9 Assessment of Mathematics a new mode of delivery (online) and a new assessment model (multi-stage computer adaptive), which differ from the prior paper-based assessments.

### Considerations

The Grade 9 Assessment of Mathematics is a multi-stage, computer adaptive assessment that measures the mathematics skills students are expected to have learned by the end of the Grade 9 mathematics course as per *The Ontario Curriculum*.

In 2021–2022, the administration of the Grade 9 mathematics assessment took place from October 2021 through June 2022, with students writing the assessment at the completion of their math course. With the implementation of a new de-streamed, universal mathematics curriculum for the 2021–2022 school year, all Grade 9 students now write the same EQAO assessment.<sup>1</sup>

<sup>1</sup> A different EQAO assessment model necessitates that new baselines be established for EQAO assessment results, meaning that new trendlines were set in 2021–2022. Additionally, in keeping with large-scale assessment best practices, standard setting in mathematics was conducted to define levels of achievement.

## Assessment Results<sup>2</sup>

The number of students in the 2021–2022 Grade 9 cohort participating in the Grade 9 assessment is lower than in previous years due to unforeseen circumstances related to the COVID-19 pandemic, which prevented some students from participating.

### ALL PARTICIPATING STUDENTS

In 2021–2022, of the



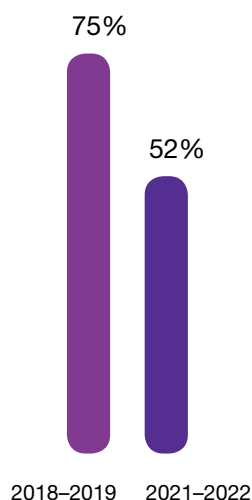
**66 805**

students who fully participated in the **Grade 9 Assessment of Mathematics**,

**52%**

met the provincial standard (Levels 3 and 4).

This is a **decrease** from the 2018–2019 results.



Additionally, **17%** of students overall were close to meeting the provincial standard.

**Note:** In 2018–2019, Grade 9 students were accessing the streamed (i.e., applied or academic) program they were enrolled in. In the past, EQAO did not report combined academic and applied achievement results but rather reported results separately by course type, given the streamed programming and the separate curriculum.

This year's cohort of Grade 9 students were in Grade 6 in 2018–2019. As Grade 6 students, 50% of the cohort who participated in the Assessment of Reading, Writing and Mathematics, Junior Division, had met the provincial standard in mathematics.

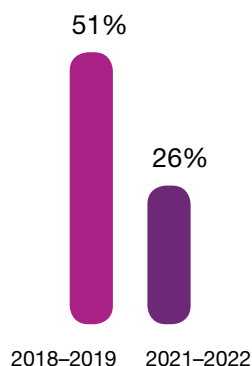
### STUDENTS WITH SPECIAL EDUCATION NEEDS

Of the

**11 348**

students who wrote the Grade 9 assessment and were identified as having **special education needs** (excluding gifted),

**26%** met the provincial standard.



This is a **decrease** from the 2018–2019 results.

<sup>2</sup> Given the substantial changes to the EQAO assessments (e.g., delivery, model, new de-streamed curriculum), 2018–2019 results are provided only as reference points, where applicable, to shine a light on how students are doing after a two-year pandemic.

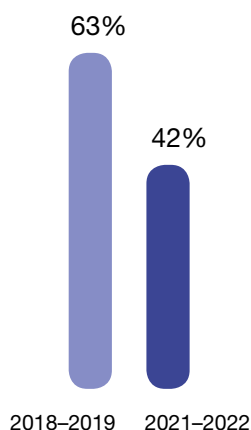
## STUDENTS WHO ARE ENGLISH-LANGUAGE LEARNERS

Of the

**4292**

students who wrote the Grade 9 assessment and were identified as **English-language learners**,

**42%** met the provincial standard.



This is a **decrease** from the 2018-2019 results.

## Learners' Context

EQAO's student and educator questionnaires are completed voluntarily during the assessment administration and offer valuable attitudinal and contextual information about students' experiences and perceptions with respect to numeracy. This type of information is important and should be considered alongside assessment results and data from other sources to build a full understanding of student learning in Ontario.

Overall, 85% of fully participating students completed the Student Questionnaire, 83% of teachers completed the Teacher Questionnaire, and 80% of principals completed the Principal Questionnaire.



## INTEREST AND CONFIDENCE IN MATH



Overall,

**53%** of students indicated that they like mathematics, and

**39%** say that mathematics is one of their favourite subjects.

**55%** of students think they are good at mathematics, and

**68%** think they understand most of the mathematics they are taught.

## GROWTH MINDSET



Overall,

**18%** of students think that being good at math requires natural intelligence in math that you are born with.

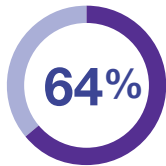
**77%** of students think that nearly everyone is capable of understanding math if they work at it.

## TEACHING TRANSFERABLE SKILLS

Overall,



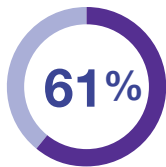
of teachers indicated that they incorporate student development of transferable skills such as critical thinking and problem solving (e.g., addressing complex issues, making informed decisions, analyzing information) into their general practices.



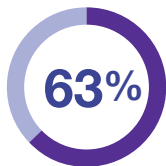
of teachers indicated that they incorporate student development of transferable skills such as self-directed learning (e.g., perseverance, growth mindset, goal-setting) into their general practices.

## USE OF EQAO DATA

Overall,



of principals indicated that they plan to use this year's EQAO data to identify how well students are meeting curriculum expectations.



of principals indicated that they plan to use this year's EQAO data to inform program planning, resource allocation or teaching practices.

EQAO's data are an important indicator of student learning that add to the available knowledge about how Ontario students are doing. These data also help Ontario's education sector with improving student achievement and well-being at the individual, school, school board and provincial levels. EQAO data alongside information from other sources can strengthen conversations about student learning across the province.

