



REPORT TO

STUDENT ACHIEVEMENT AND WELL BEING, CATHOLIC EDUCATION AND HUMAN RESOURCES COMMITTEE

EDUCATION QUALITY AND ACCOUNTABILITY OFFICE (EQAO) GRADE 9 ASSESSMENT OF MATHEMATICS RESULTS

*"AN INTELLIGENT HEART ACQUIRES KNOWLEDGE, AND THE EAR OF THE WISE
SEEKS KNOWLEDGE."*
PROVERBS 18-15

Created, Draft

October 9, 2015

First Tabling

November 4, 2015

Review

[Click here to enter a date.](#)

M. Vanayan, Senior Coordinator, Educational Research

N. D'Avella, Superintendent of Learning, Student Achievement and Well Being

INFORMATION REPORT

Vision:

*At Toronto Catholic we transform the world
through witness, faith, innovation and action.*

Mission:

*The Toronto Catholic District School Board is an
inclusive learning community rooted in the love of
Christ. We educate students to grow in grace and
knowledge and to lead lives of faith, hope and
charity*



G. Poole

Associate Director of Academic Affairs

A. Sangiorgio

Associate Director of Planning and
Facilities

Angela Gauthier

Director of Education

A. EXECUTIVE SUMMARY

This report summarizes the results of the Toronto Catholic District School Board (TCDSB) student achievement on the 2014-2015 Grade 9 Assessment of Mathematics. Since not all schools in Ontario participated in the 2015 assessment, provincial-level results were not published by EQAO this year. Results in Grade 9 academic mathematics for the board has remained relatively high and stable for many years. In 2014-2015, 82% of students in the academic program were at or above the provincial standard. Over the past five years, in Grade 9 applied mathematics, the percentage of students at or above the provincial standard has increased from 38% to 44%.

B. PURPOSE

This report presents Provincial and TCDSB results of the Education Quality and Accountability Office (EQAO) Grade 9 Assessment of Mathematics. These results will be publicly released on October 28, 2015. (***Results are confidential until October 28, 2015**)

C. BACKGROUND

1. The Grade 9 Assessment of Mathematics is administered to all Ontario students who are working toward their Grade 9 academic or applied mathematics credit. Students in the first-semester mathematics courses take the test in January; students in the second-semester or full-year mathematics courses take the test in June.
2. The Grade 9 Assessments of Mathematics assesses cumulative knowledge and skills and is based on the Ontario Curriculum. Achievement is reported according to the province's four achievement levels. The provincial standard is Level 3, which corresponds to a 70 to 79 per cent.
3. Since not all schools in Ontario participated in the 2015 assessment, provincial-level results were not published by EQAO this year.

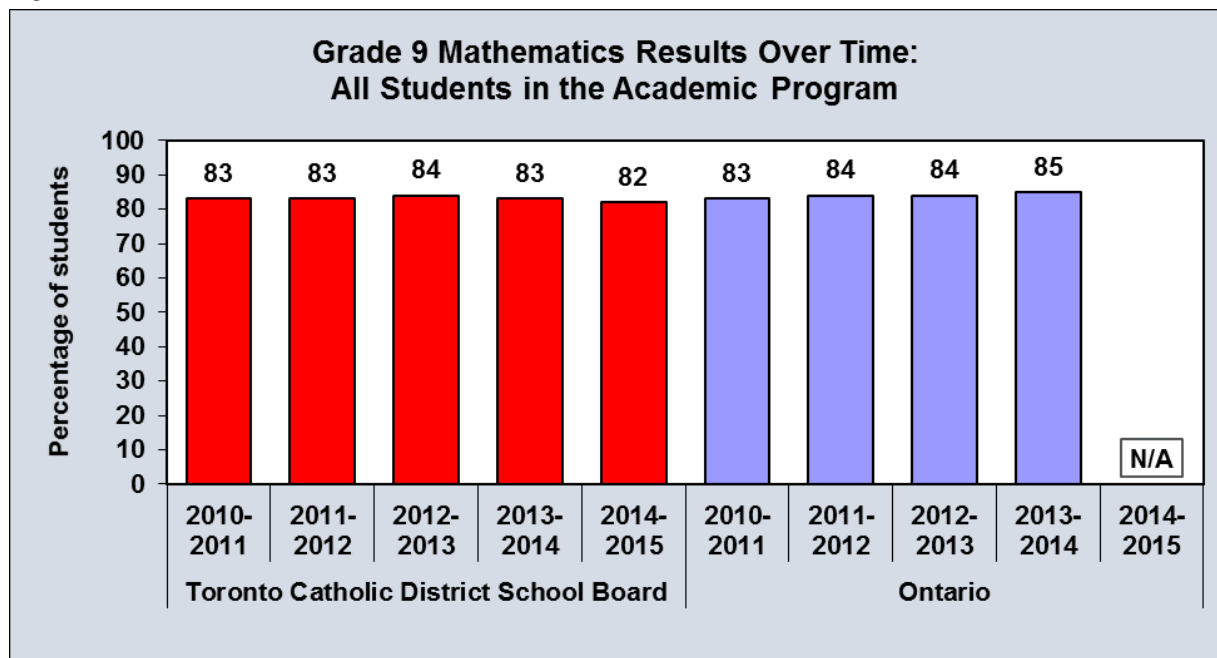
D. EVIDENCE/RESEARCH/ANALYSIS

1. GRADE 9 MATHEMATICS RESULTS OVER TIME FOR TCDSB AND ONTARIO

The following graphs display the percentage of students in the academic and applied programs at Levels 3 or 4, over the past 5 years for both the TCDSB and Ontario. The Provincial standard is Level 3.

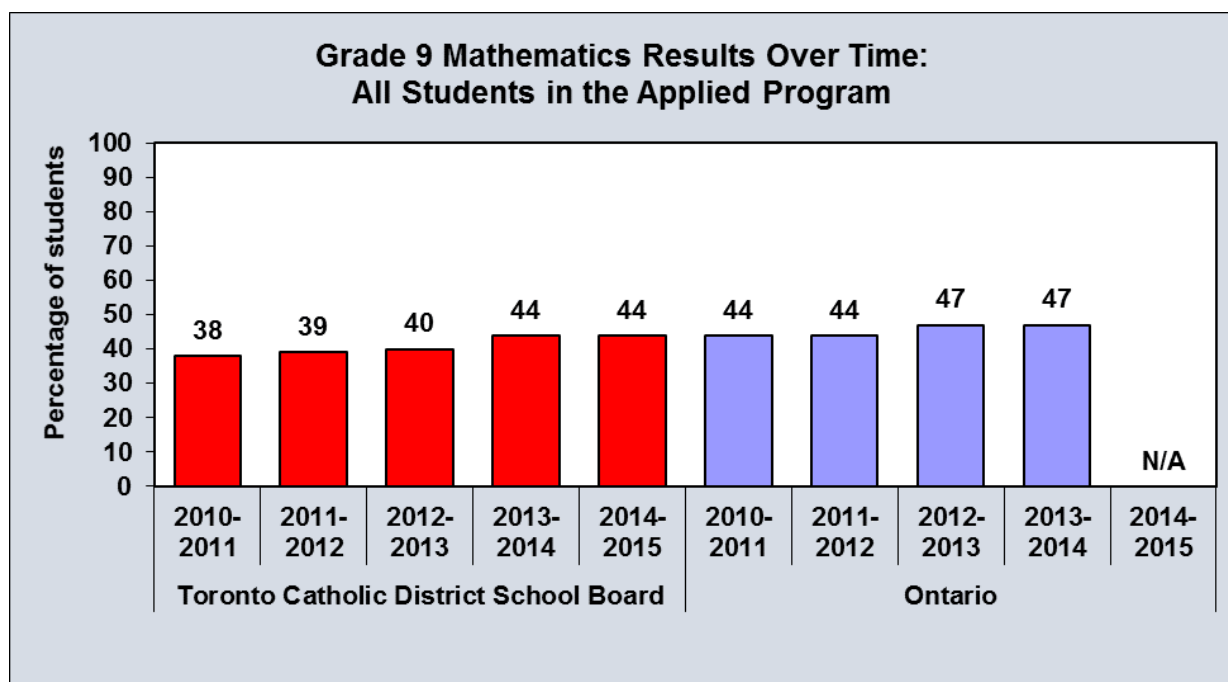
ACADEMIC PROGRAM

Total number of TCDSB Grade 9 Academic Program students in 2014-2015 = 4611



APPLIED PROGRAM

Total number of TCDSB Grade 9 Applied Program students in 2014-2015 = 1979



In Grade 9 academic mathematics, 82% of students are at or above the provincial standard; in Grade 9 applied mathematics, 44% of students achieved the provincial standard or above. Results in Grade 9 academic mathematics for the board have remained relatively high and stable for many years. In applied mathematics, there has been a 6% gain for the board over the past five years.

E. METRICS AND ACCOUNTABILITY

1. The EQAO assessments help to identify trends in student learning at the school, board and provincial levels, inform improvement planning, and strengthen accountability. Deeper analysis of the results at both the system and school levels are underway and will be used in conjunction with other school-based information to direct individual School Learning Plans and the Board Learning Improvement Plan.
2. Our 2015-2016 plan for addressing the numeracy needs of students will include the following:
 - Initial meeting with Mathematics Department Heads and Numeracy Leads of all secondary schools:
 - Mathematics Department Heads and Numeracy Leads meet with Numeracy Resource team (resource teachers and coach) to analyse data, identify student learning needs and develop plans to address these needs.
 - Four full-day learning sessions with Grade 9 mathematics teachers (two days in Semester 1 and two days in Semester 2 are offered to teachers of students in Grade 9 mathematics applied or academic courses):

- Full day in-depth analysis of EQAO school results takes place (e.g. EQAO Grade 9 Applied and Academic math results, Open Response and Multiple Choice questions, Item Information Reports, Tracking a Cohort's Achievement, etc.) focussing on organization, planning, teaching and assessment strategies in preparation for grade 9 EQAO Assessment of Mathematics.
- Teachers examine how the results inform their instructional strategies and how they link with their School Improvement Learning Plan (SLIP) (Goal setting) and share their learning with peers.
- Math Department Head Learning Sessions:
 - Three math department head learning sessions are scheduled during the year focussed on developing math content and pedagogical knowledge within the context of the school and regional leadership.
- Ongoing School Numeracy Leads Meetings:
 - The numeracy resource team meets with numeracy leads upon request to learn how to analyse EQAO data, use the data analysis to set goals and identify instructional strategies to improve student achievement, and plan next steps on implementing the strategies.
 - Sessions focus on addressing the needs of students in academic programs and applied programs (e.g., co-teaching, planning Grade 9 and 10 lessons with and without the use of technology, in-depth analysis of student achievement data).
- Mathematics Professional Learning Sessions:
 - *Collaborative Teacher Inquiry*: Secondary school teachers are invited to participate in collaborative inquiry (CODE days are used). In 2014-2015, 28 secondary schools participated. A community of teachers within schools and across schools (professional learning teams) engage in a collaborative inquiry, share similar goals and/or professional learning interests and help one another improve student learning.
 - *Local or group Mathematics Professional Learning Sessions*: Schools are invited to participate in group learning sessions linked with TCDSB mathematics department goals and are offered differentiated support to address student learning needs. These sessions are facilitated by the numeracy resource team and include: studying the urgent critical needs; planning a lesson; identifying evidence-based instructional strategies; creating common assessment; moderated marking; co-teaching; teaching and learning through problem solving;

learning skills in mathematics; embedding technology in a math classroom; implementing learning goal, success criteria, and descriptive feedback in a math lesson; enrichment in mathematics at all levels and grades.

- Other strategies to support Grade 9 applied mathematics:
 - Together with classroom teachers, the numeracy resource team studies the trajectory of applied math concepts (from Grade 7 to Grades 9 and 10) and identifies strategies to support student learning.
 - Teachers make use of resources to create the pre- and post – assessment [e.g., resources from Ontario Numeracy Assessment Package (ONAP 9), Gap Closing, Math Gains].
 - The use of iPads to support math learning and engage students continues in all our secondary schools. The focus is on investigating, studying math content, implementing related instructional strategies, analysing and monitoring the impact on student learning and achievement.

F. CONCLUDING STATEMENT

This report is for the consideration of the Board.