



REPORT TO BOARD OF TRUSTEES

October 22, 2013

Jim McKenzie, Associate Director & Treasurer

SUBJECT: EQAO Results - Grade 9 Mathematics Assessments 2012 - 2013

PREPARED BY: Deb Crawford, Superintendent of Education

BACKGROUND:

The Education Quality and Accountability Office (EQAO) recently provided the Board with the results of the Grade 9 Mathematics Assessment, conducted at the end of each semester during the 2012 - 2013 school year.

The EQAO report summarizes achievement results based on four levels:

- Level 4 - exceeding the provincial standard
- Level 3 – meeting the provincial standard
- Level 2 – approaching the provincial standard
- Level 1 – performing significantly below the provincial standard

The St. Clair Catholic District School Board had a total of 589 students who were eligible to participate in the assessment. Of the total number of students, 422 (72%) were enrolled in the academic course, while were 167 (28%) in the applied course.

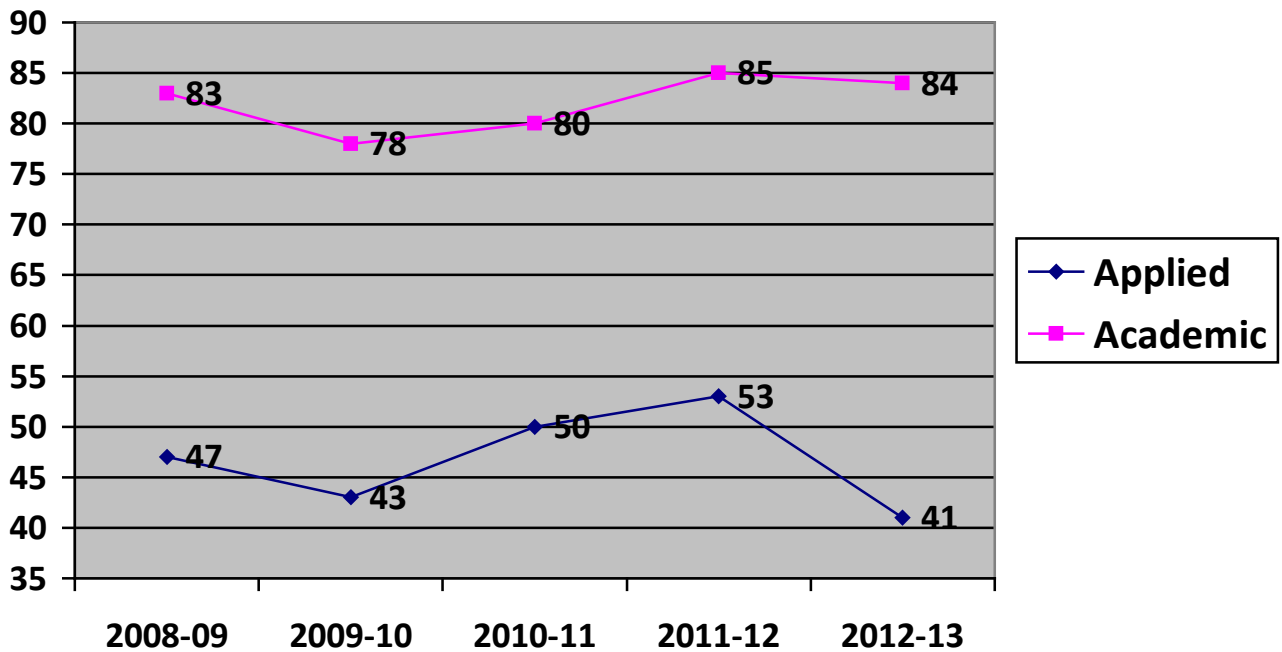
The following table shows the results for Grade 9 students in the 2012 - 2013 school year within the St. Clair Catholic District School Board.

Grade 9 Mathematics	Applied		Academic	
Percentage of students who exceeded, or met the provincial standard (Levels 3, and 4) (70-100%)	Board 41% (- 12)	Province 44% (0)	Board 84% (-1)	Province 84% (0)

Grade 9 Results showing Levels 3 and 4 for the St. Clair Catholic District School Board – Comparing Board Results from 2008 to 2013.

Years	08-09		09-10		10-11		11-12		12-13	
	Applied	Academic	Applied	Academic	Applied	Academic	Applied	Academic	Applied	Academic
St. Clair	47%	83%	43%	78%	50%	80%	53%	85%	41%	84%
Province	38%	77%	40%	82%	42%	83%	44%	84%	44%	84%
Difference	+9	+6	+3	-4	+8	-3	+9	+1	-3	Nil

Grade 9 Results showing Applied and Academic Levels 3 and 4 for the St. Clair Catholic District School Board – Comparing Board Results from 2008-09 to 2012-13.

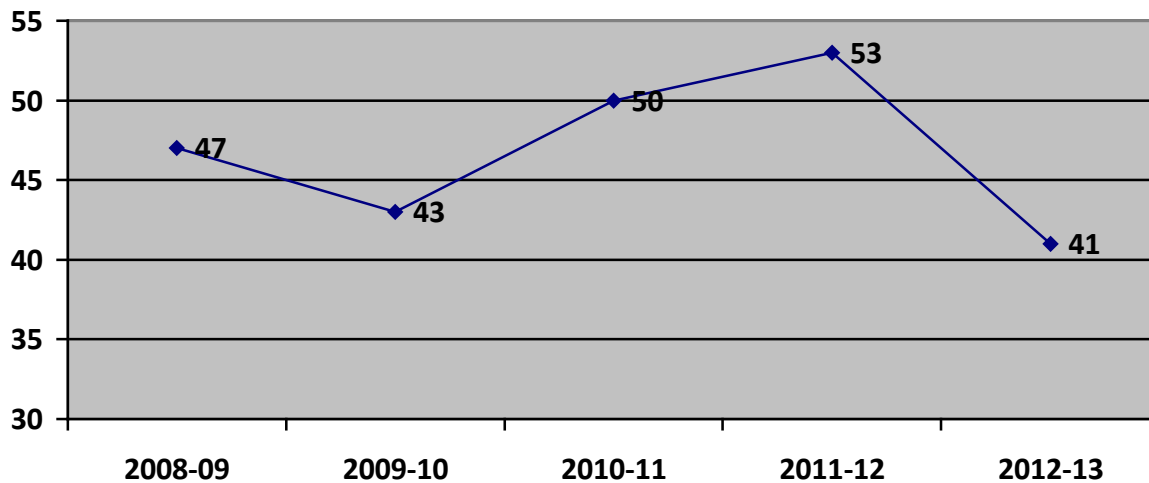


GRADE 9 APPLIED

The following table shows the results over five years compared to the province with the difference noted for Grade 9 applied mathematics.

Years	08-09	09-10	10-11	11-12	12-13
St. Clair Catholic	47%	43%	50%	53%	41%
Province	38%	40%	42%	44%	44%
Difference	+9	+3	+8	+9	-3

Grade 9 Applied Assessment Over Time 2008-09 to 2012-13



Highlights of the Applied Results:

- The results for St. Clair Catholic District School Board students studying applied mathematics indicate a decrease of 12% from the previous administration of the assessment, for those achieving at or above the provincial standard (Levels 3 and 4). This drop is concerning as it is not consistent with the gains made over the past 5 years.
- It should be noted that 86% of students studying applied mathematics are achieving at Levels 2, 3 and 4 (60% or higher) however, we are concerned about the increase in students achieving at Level 2 (44%).
- 35% of Grade 9 students in applied mathematics achieved Level 3 on the assessment, which is in line with the Province; however this represents an 11% drop in Level 3 for our students.
- 100% of students in Grade 9 applied mathematics participated in this assessment vs. 96% for the Province.
- 48% of students in Grade 9 applied mathematics have special education needs vs. 36% for the Province.
- Girls represent 43% of the students in applied mathematics with 40% of the girls achieving at Level 3. No girls achieved Level 4. Boys represent 57% of the population with 31% achieving Level 3 and 12% achieving Level 4.
- 80% of the students in Grade 9 applied mathematics reported that they try to do their best in math class. 34% of this group strongly dislikes mathematics, with 28% seeing themselves as not good at math, and 28% report that they will not need math for future job prospects.
- 26% of students in all Grade 9 courses report that they really like mathematics and 35% say that they are good at math. 47% of the students in Grade 9 applied math courses stated that they would like to do better in mathematics, with 39% believing that mathematics will be important for future job prospects.

**REPORT:
EQAO Results - Grade 9 Mathematics Assessments 2012 - 2013**

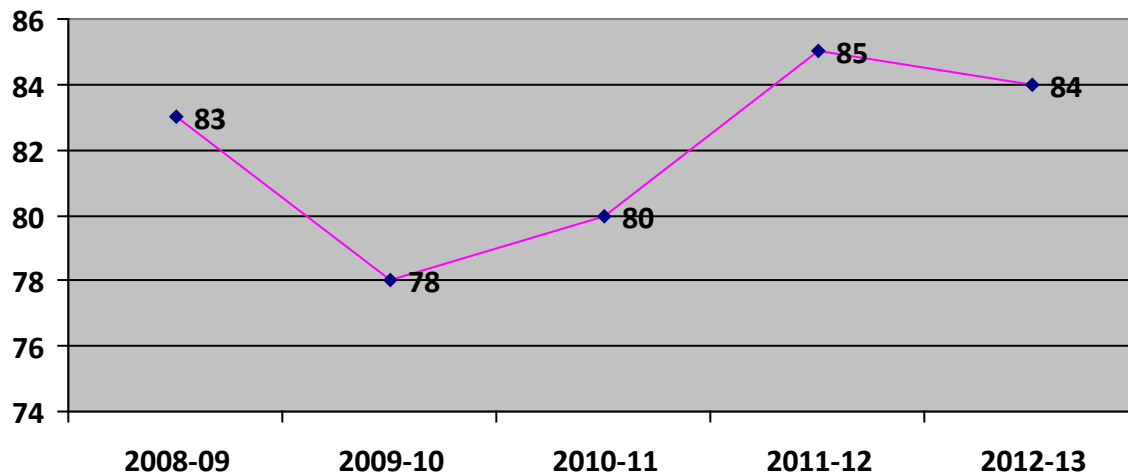
- 56% of students in Grade 9 applied math read a book/article/printed text 0 -2 times per month. 74% of the students use the Internet daily and 61% play video games between 1 – 7 times per week.
- 56% of students in Grade 9 applied math work between 0 -2 times per month, 24% work between 1-3 times per week, and 11% of the students work every day.

GRADE 9 ACADEMIC

The following table shows the results over five years compared to the province with the difference noted for Grade 9 academic mathematics.

Years	08-09	09-10	10-11	11-12	12-13
St. Clair Catholic	83%	78%	80%	85%	84%
Province	77%	82%	83%	84%	84%
Difference	+6	-4	-3	+1	nil

Grade 9 Academic Assessment Over Time 2008-09 to 2012-13



Highlights of the Academic Results:

- The results for St. Clair Catholic District School Board students studying academic mathematics has remained consistent with Provincial results at 84% from the previous administration of the assessment, for those achieving at or above the provincial standard (Levels 3 and 4). Over the course of the last five years there has been steady improvement in these results.

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- 95% of the students studying at the academic level are achieving at levels 2, 3 and 4 (60% or higher). 15% of academic course students achieved at Level 2.
- 99% of students in Grade 9 academic mathematics participated in this assessment, which is consistent with the Province.
- 8% of students in Grade 9 academic mathematics have special education needs.
- Girls represent 55% of the students studying academic math, with 81% achieving at Levels 3 and 4. A small gender gap of 7% exists with 88% of boys achieving at Levels 3 and 4, and double the percentage of boys achieving at Level 4.
- The number of students achieving at Level 3 has increased by 4% over the last 5 years.
- The number of students achieving at Level 2 has declined by 3% over the last 5 years. This steady improvement means that more students are achieving at the Provincial standard.

Preliminary Conclusions:

- Ministry Math GAINS support has resulted in significant improvement in the achievement results of both the applied and academic level mathematics over the last 10 years. These gains have begun to stabilize as students and teachers integrate deep math thinking into the classroom curriculum.
- The use of TIPS4RM resources for the applied math courses has yielded less dramatic improvements over the last couple of years. There is a need for new resources that are used consistently across the system.
- System and school-based numeracy support teachers have provided additional support for teachers through modeling, coaching, co-planning, and co-teaching.
- The achievement gap between applied and academic courses remains a concern. A continued focus upon instructional strategies that assist students in applied courses must be implemented in all classes.
- The gender gap continues to be a concern, as it demonstrates a need to address the instructional preferences of girls in applied and academic classes. Lack of female achievement at Level 4 may limit future participation in careers requiring mathematic skills and proficiencies for some female students.

NEXT STEPS:

- Curriculum Services and Learning Services teams are engaged in discussion and interpretation of the data, focusing on EQAO and other data to identify patterns and areas requiring focused support. Individual school results have been examined, identifying the specific strategies that were successful and implementing new strategies where concerns were identified.
- Principals will engage the teachers in discussions about the data at the school level, in order to incorporate numeracy strategies in their school-wide improvement plans.
- The Board and School improvement plans have an increased focus on developing a deeper understanding of mathematics.
- Student Success Numeracy Support Teachers will work with teachers to build capacity and share best practice within the context of the individual classroom.

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- Cross-panel math teachers and Curriculum Department personnel are meeting to examine data, evaluate new resources and suggest best practice strategies for the system.
- The Student Success Grade 7-8 Numeracy Support teacher is working to build system capacity and align curriculum between elementary and secondary math teachers in conjunction with the secondary Numeracy Support Teachers and the District Literacy and Numeracy Teachers. Board-wide EQAO data from Grades 3, 6 and 9 will be evaluated over time to identify patterns and areas of strength and concern.
- The Catholic Curriculum Department is investigating the possibility of offering the OECTA Additional Qualifications Course in Mathematics at SCCDSB.
- Students will be encouraged to utilize the online Homework Help math tutoring program.
- The secondary schools will continue to offer after-school math tutoring sessions for students experiencing difficulty in math.
- Increased efforts will be made to inform parents about the additional math supports that are available to students.

RECOMMENDATION:

That the St. Clair Catholic District School Board receive the report: *EQAO Results - Grade 9 Mathematics Assessments 2012 – 2013*, for information.