



School Board Report



Grade 9 Assessment of Mathematics, 2014–2015

Board: Lambton Kent District School Board (66036)

On behalf of EQAO, I am pleased to provide you with the results of the 2014–2015 Grade 9 Assessment of Mathematics.

This report includes the 2015 results, as well as results for previous years, so you can track progress over time. You'll also find demographic and attitudinal information, which provides context for interpreting the achievement results. This school year was unique in that not all students participated in the provincial assessments because of labour action in the English-language public school system. As a result, there is no provincial-level information in this report.

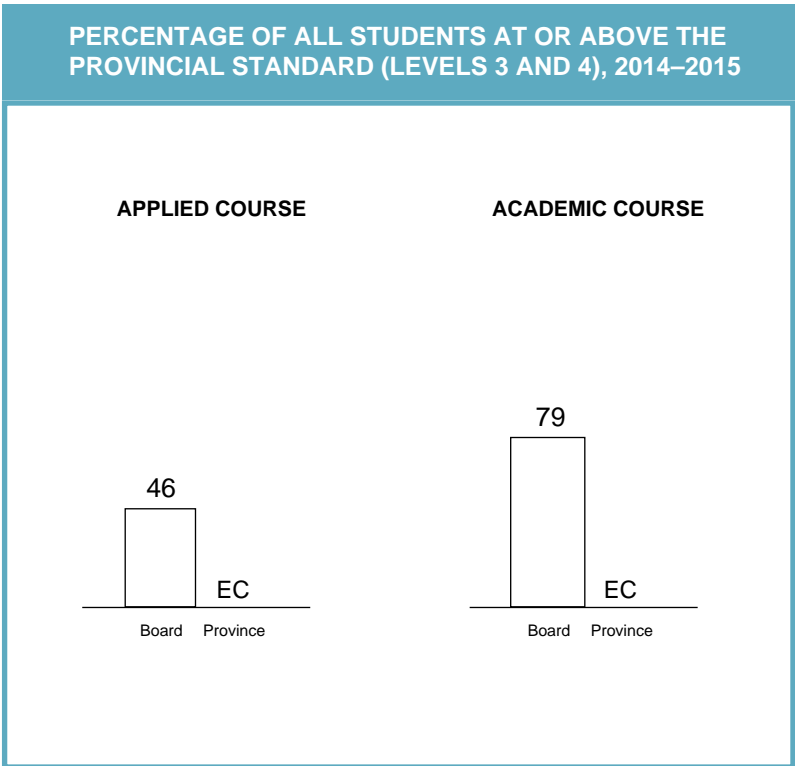
Assessing all students against a provincial standard provides reliable and objective data at the student, school and board levels and helps uncover important trends. By analyzing EQAO data alongside other evidence, school boards and schools can make informed decisions about how to improve student learning and can track their progress toward their goals.

At EQAO, we strongly believe that good information—in the hands of dedicated professionals and school communities—can help to identify areas for improvement and inform targeted interventions. We are pleased to provide reliable and useful information about student achievement from Ontario's provincial assessment program for all partners in the education system.

Sincerely,

Bruce Rodrigues
 Chief Executive Officer
 Education Quality and Accountability Office

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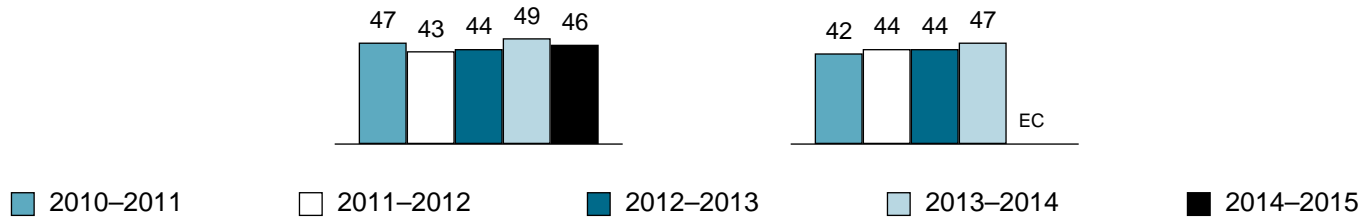
Grade 9 Assessment of Mathematics, 2014–2015

PERCENTAGE OF ALL STUDENTS AT OR ABOVE THE PROVINCIAL STANDARD (LEVELS 3 AND 4) OVER TIME

APPLIED MATHEMATICS

Board

Province



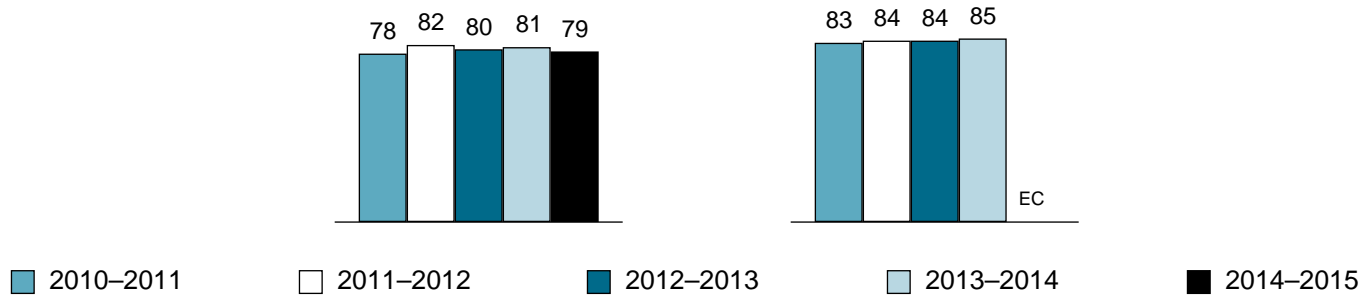
Total Number of Students

	<u>2010–2011</u>	<u>2011–2012</u>	<u>2012–2013</u>	<u>2013–2014</u>	<u>2014–2015</u>
Board	702	669	709	596	595
Province	44 095	41 799	39 881	38 181	EC

ACADEMIC MATHEMATICS

Board

Province



Total Number of Students

	<u>2010–2011</u>	<u>2011–2012</u>	<u>2012–2013</u>	<u>2013–2014</u>	<u>2014–2015</u>
Board	1 067	1 065	1 051	973	961
Province	99 278	97 741	97 158	95 914	EC

TIPS

The applied and academic mathematics courses are different and should be considered separately.

Note: Students in locally developed courses do not participate in these assessments.



Each school or board is unique. To appreciate the distinctive character of a school or board, look at the contextual information to understand the features and characteristics of the community it serves.



This assessment captures the performance of students at one point in time each year. Consider the results along with other information about students' achievement in mathematics.



Exercise caution when interpreting results for small schools or boards. Results may vary considerably from year to year, and differences may look exaggerated. For example, in a school of 30 students, a difference of 10% represents only three students.



Trends may be difficult to identify or to interpret. This is especially true when groups are small or in schools where there is a high turnover in the student population.



EQAO values students' privacy. Beginning in 2012–2013, results are not reported publicly for schools where fewer than 10 students participated because it might be possible to identify individual students. Prior to 2012–2013, results were not reported publicly for schools where fewer than 15 students participated.

ABOUT THIS SCHOOL OR BOARD REPORT

This report shows how well students have met curriculum expectations for either the applied or academic mathematics program to the end of Grade 9. Students complete two booklets that allow them to show what they know in mathematics. The assessment is based on *The Ontario Curriculum: Mathematics, Grades 9 and 10*.

This report includes

- ◆ results for this year;
- ◆ a comparison of results of the current and previous administrations to aid in monitoring improvement and
- ◆ information about the characteristics of the students who participated.

Specifically, you will find

- ◆ summary graphs showing the percentage of students achieving the provincial standard in either applied or academic mathematics;
- ◆ detailed tables and graphs showing results for all levels of achievement, participation information and results for gender
- ◆ student questionnaire results and
- ◆ an explanation of all terms used in this report.

HOW TO USE THIS REPORT

- ◆ Examine the contextual information to understand the similarities and differences between this school, the board and the province; the board and the province. Consider the challenges that any differences might present.
- ◆ Examine the results for applied and academic mathematics.
 - Are these results consistent with what you would expect?
 - How do the school results compare to the board and province; the board results compare to the province?
 - How do these results compare over time?
 - What influence might students' attitudes have on student performance (refer to the questionnaire results)?
- ◆ Speak to the school or board staff about the goals for school improvement related to mathematics.

The Education Quality and Accountability Office is an independent agency that gathers information about student achievement through province-wide assessments. Each year, all Grade 9 students in applied and academic mathematics take part in this assessment across Ontario. Individual results are reported to students and to parents and guardians. School, board and provincial results are released publicly.

Learn more about us at www.eqao.com.

Grade 9 Assessment of Mathematics, 2014–2015, Applied Course

Contextual Information

This information provides a context for interpreting the board's applied mathematics course results.

	Board		Province	
Enrolment				
Number of students in applied mathematics course	595		EC	
Number of classes with students in applied mathematics course	38		EC	
Number of schools with applied mathematics classes	13		EC	
Number Percent Number Percent				
Participation in the Assessment				
Students who participated in the assessment	576	97%	EC	EC
Participating students who received one or more accommodations*	224	39%	EC	EC
Participating students who received one or more special provisions*	2	<1%	EC	EC
Students who did not complete any part of the assessment (no data)*	19	3%	EC	EC
Gender[†] Based on number of students enrolled				
Female	262	44%	EC	EC
Male	333	56%	EC	EC
Gender not specified	0	0%	EC	EC
Student Status[†] Based on number of students enrolled				
English language learners*	7	1%	EC	EC
Students with special education needs (excluding gifted)*	257	43%	EC	EC
Semester/Full Year Based on number of students enrolled				
First-semester course	324	54%	EC	EC
Second-semester course	271	46%	EC	EC
Full-year course	0	0%	EC	EC
Language and School Background^{††}				
<i>Based on Student Questionnaire data</i>				
Number of Respondents:		517	EC	
Speak only or mostly a language other than English at home	7	1%	EC	EC
Speak another language as often as English at home	35	7%	EC	EC
Attended three or more elementary schools from kindergarten to Grade 8	161	31%	EC	EC

* See the Explanation of Terms.

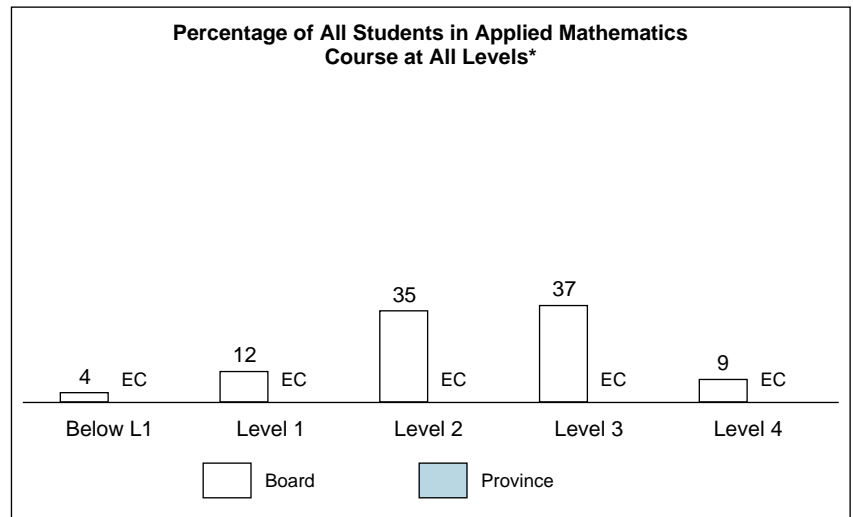
[†] Contextual data pertaining to "gender" and "student status" are provided by schools and/or boards through the Student Data Collection process. Some data may be missing because they were not provided by the school or the board.

^{††} Contextual data pertaining to "school background" and "language" are gathered from the Student Questionnaire completed by students. Some data may be missing because they were not provided by the students.

Grade 9 Assessment of Mathematics, 2014–2015, Applied Course

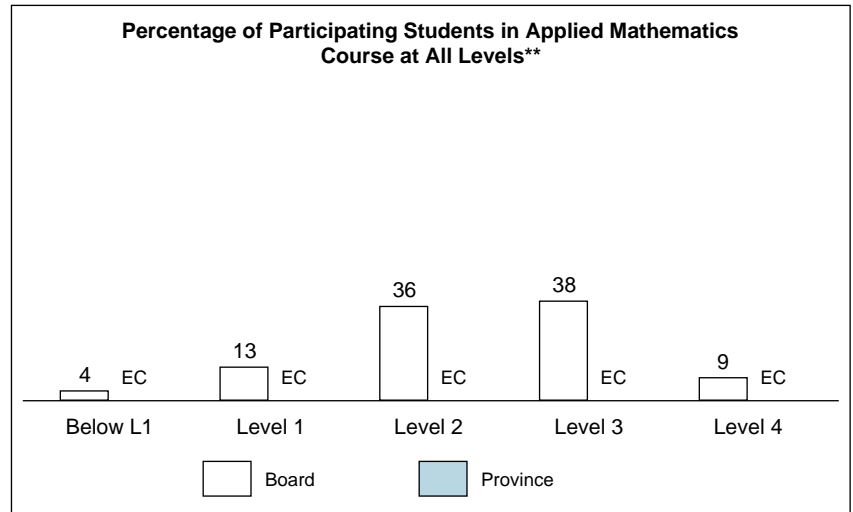
Results for All Students

All Students*			
Number of Students	Board 595		Province EC
	#	%	%
Level 4	52	9%	EC
Level 3	221	37%	EC
Level 2	206	35%	EC
Level 1	74	12%	EC
Below Level 1	23	4%	EC
Participating Students	576	97%	EC
No Data	19	3%	EC
At or Above Provincial Standard (Levels 3 and 4) †	46%		EC



Results for Participating Students (excludes "no data" category)

Participating Students**			
Number of Students	Board 576		Province EC
	#	%	%
Level 4	52	9%	EC
Level 3	221	38%	EC
Level 2	206	36%	EC
Level 1	74	13%	EC
Below Level 1	23	4%	EC
At or Above Provincial Standard (Levels 3 and 4) †	47%		EC



* Because percentages in tables and graphs are rounded, and because graphs do not show all reporting categories, percentages may not add up to 100.

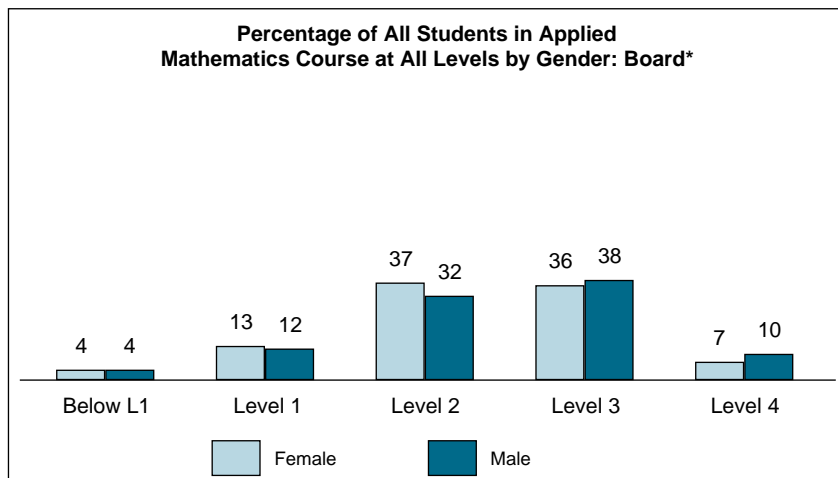
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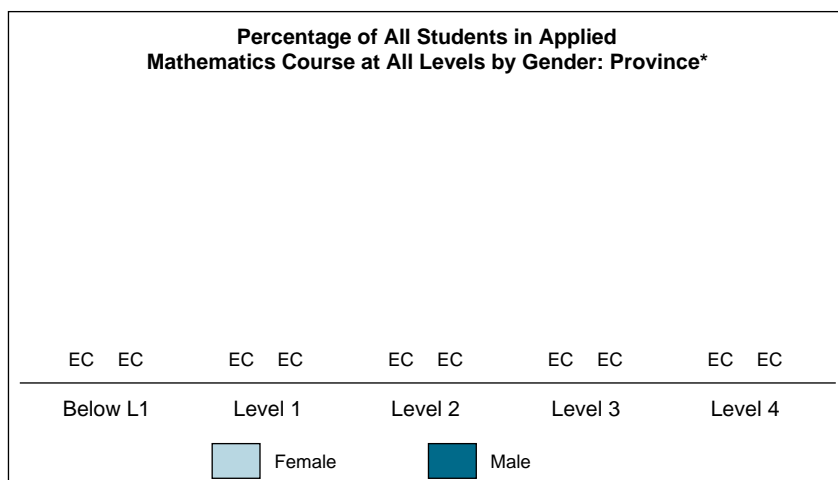
Grade 9 Assessment of Mathematics, 2014–2015, Applied Course

Results by Gender^{††}

All Students: Board by Gender*				
Number of Students	Female 262		Male 333	
	#	%	#	%
Level 4	19	7%	33	10%
Level 3	94	36%	127	38%
Level 2	98	37%	108	32%
Level 1	33	13%	41	12%
Below Level 1	11	4%	12	4%
Participating Students	255	97%	321	96%
No Data	7	3%	12	4%
At or Above Provincial Standard (Levels 3 and 4) [†]		43%	48%	



All Students: Province by Gender*				
Number of Students	Female EC		Male EC	
	#	%	#	%
Level 4	EC	EC	EC	EC
Level 3	EC	EC	EC	EC
Level 2	EC	EC	EC	EC
Level 1	EC	EC	EC	EC
Below Level 1	EC	EC	EC	EC
Participating Students	EC	EC	EC	EC
No Data	EC	EC	EC	EC
At or Above Provincial Standard (Levels 3 and 4) [†]		EC	EC	



* Because percentages in tables and graphs are rounded, and because graphs do not show all reporting categories, percentages may not add up to 100.
[†] These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.
^{††} Includes only students for whom gender data were available.

Grade 9 Assessment of Mathematics, 2014–2015, Academic Course

Contextual Information

This information provides a context for interpreting the board's academic mathematics course results.

	Board		Province	
Enrolment				
Number of students in academic mathematics course	961		EC	
Number of classes with students in academic mathematics course	46		EC	
Number of schools with academic mathematics classes	12		EC	
Number Percent Number Percent				
Participation in the Assessment				
Students who participated in the assessment	948	99%	EC	EC
Participating students who received one or more accommodations*	57	6%	EC	EC
Participating students who received one or more special provisions*	0	0%	EC	EC
Students who did not complete any part of the assessment (no data)*	13	1%	EC	EC
Gender[†] Based on number of students enrolled				
Female	510	53%	EC	EC
Male	451	47%	EC	EC
Gender not specified	0	0%	EC	EC
Student Status[†] Based on number of students enrolled				
English language learners*	4	<1%	EC	EC
Students with special education needs (excluding gifted)*	70	7%	EC	EC
Semester/Full Year Based on number of students enrolled				
First-semester course	564	59%	EC	EC
Second-semester course	397	41%	EC	EC
Full-year course	0	0%	EC	EC
Language and School Background^{††} Based on Student Questionnaire data				
	Number of Respondents:		897	EC
Speak only or mostly a language other than English at home	12	1%	EC	EC
Speak another language as often as English at home	39	4%	EC	EC
Attended three or more elementary schools from kindergarten to Grade 8	171	19%	EC	EC

* See the Explanation of Terms.

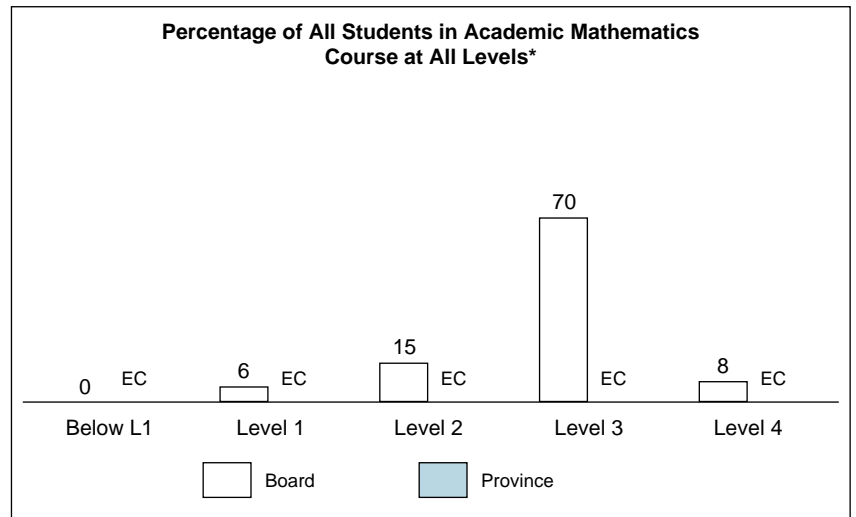
[†] Contextual data pertaining to "gender" and "student status" are provided by schools and/or boards through the Student Data Collection process. Some data may be missing because they were not provided by the school or the board.

^{††} Contextual data pertaining to "school background" and "language" are gathered from the Student Questionnaire completed by students. Some data may be missing because they were not provided by the students.

Grade 9 Assessment of Mathematics, 2014–2015, Academic Course

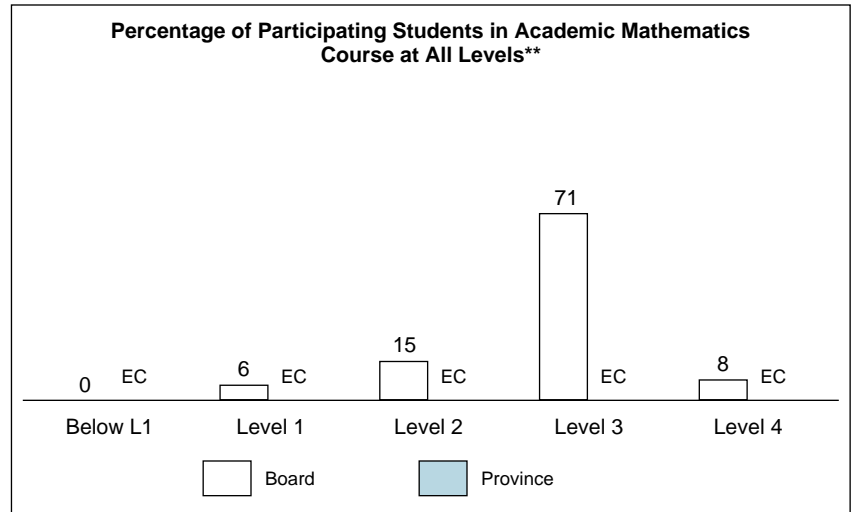
Results for All Students

All Students*			
Number of Students	Board 961		Province EC
	#	%	%
Level 4	78	8%	EC
Level 3	677	70%	EC
Level 2	140	15%	EC
Level 1	53	6%	EC
Below Level 1	0	0%	EC
Participating Students	948	99%	EC
No Data	13	1%	EC
At or Above Provincial Standard (Levels 3 and 4) †	79%		EC



Results for Participating Students (excludes "no data" category)

Participating Students**			
Number of Students	Board 948		Province EC
	#	%	%
Level 4	78	8%	EC
Level 3	677	71%	EC
Level 2	140	15%	EC
Level 1	53	6%	EC
Below Level 1	0	0%	EC
At or Above Provincial Standard (Levels 3 and 4) †	80%		EC



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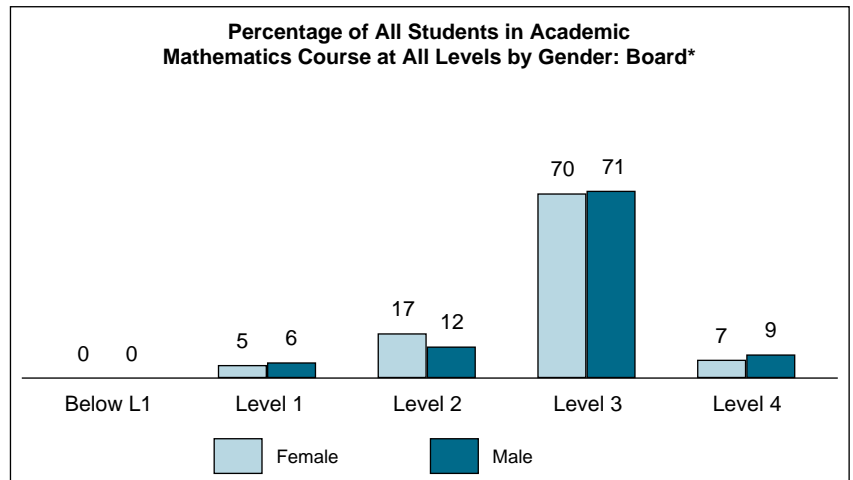
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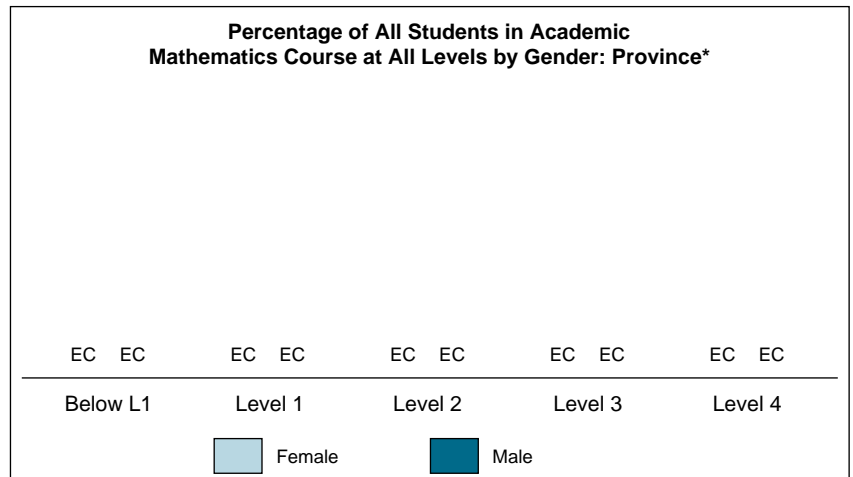
Grade 9 Assessment of Mathematics, 2014–2015, Academic Course

Results by Gender††

All Students: Board by Gender*				
Number of Students	Female 510		Male 451	
	#	%	#	%
Level 4	37	7%	41	9%
Level 3	356	70%	321	71%
Level 2	87	17%	53	12%
Level 1	25	5%	28	6%
Below Level 1	0	0%	0	0%
Participating Students	505	99%	443	98%
No Data	5	1%	8	2%
At or Above Provincial Standard (Levels 3 and 4) †		77%	80%	



All Students: Province by Gender*				
Number of Students	Female EC		Male EC	
	#	%	#	%
Level 4	EC	EC	EC	EC
Level 3	EC	EC	EC	EC
Level 2	EC	EC	EC	EC
Level 1	EC	EC	EC	EC
Below Level 1	EC	EC	EC	EC
Participating Students	EC	EC	EC	EC
No Data	EC	EC	EC	EC
At or Above Provincial Standard (Levels 3 and 4) †		EC	EC	



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 † These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.
 †† Includes only students for whom gender data were available.

Grade 9 Assessment of Mathematics, 2014–2015

Contextual Information over Time: Applied Mathematics Course

This information provides a context for interpreting the board's results of the current and previous administrations.

	2010–2011	2011–2012	2012–2013	2013–2014	2014–2015	
Enrolment						
Number of students in applied mathematics course	702	669	709	596	595	
Number of classes with students in applied mathematics course	39	38	40	34	38	
Number of schools with applied mathematics classes	13	13	13	13	13	
Participation in the Assessment						
Students who participated in the assessment	94%	96%	95%	96%	97%	
Participating students who received one or more accommodations*	25%	33%	32%	31%	39%	
Participating students who received one or more special provisions*	0%	<1%	<1%	<1%	<1%	
Students who did not complete any part of the assessment (no data)*	6%	4%	5%	4%	3%	
Gender[†] Based on number of students enrolled						
Female	43%	44%	41%	43%	44%	
Male	57%	56%	59%	57%	56%	
Gender not specified	0%	0%	0%	0%	0%	
Student Status[†] Based on number of students enrolled						
English language learners*	0%	<1%	<1%	<1%	1%	
Students with special education needs (excluding gifted)*	34%	38%	39%	37%	43%	
Semester/Full Year Based on number of students enrolled						
First-semester course	36%	42%	46%	43%	54%	
Second-semester course	42%	38%	54%	57%	46%	
Full-year course	22%	20%	<1%	0%	0%	
Language and School Background^{††} Based on Student Questionnaire data						
	Number of Respondents:	617	576	593	510	517
Speak only or mostly a language other than English at home	2%	2%	1%	1%	1%	
Speak another language as often as English at home	6%	5%	7%	3%	7%	
Attended three or more elementary schools from kindergarten to Grade 8	32%	32%	30%	33%	31%	

* See the Explanation of Terms.

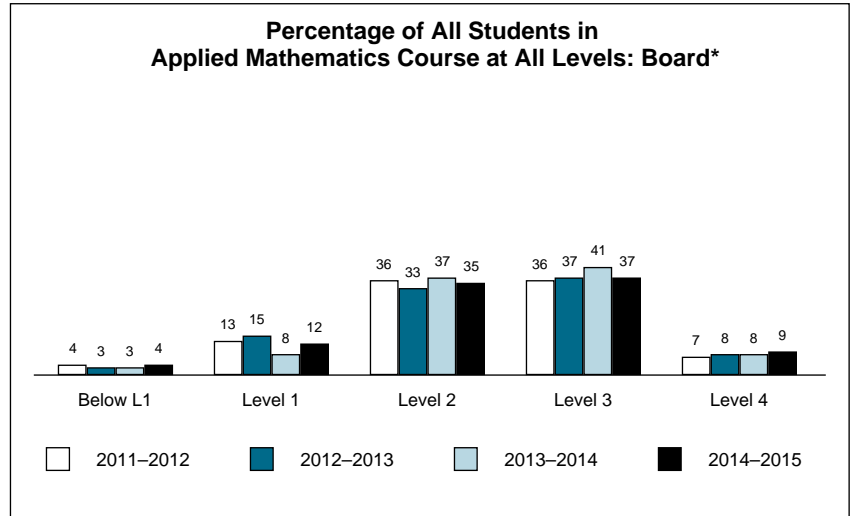
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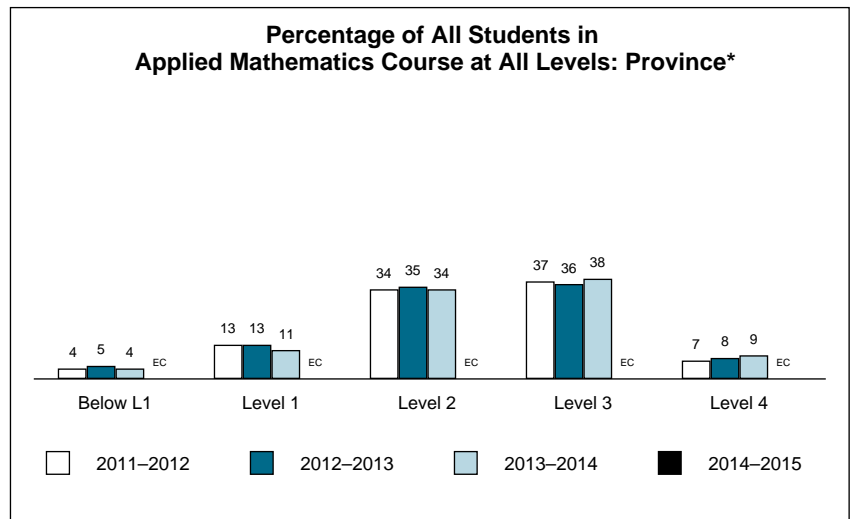
Results over Time, 2011–2012 to 2014–2015

Applied Mathematics Course for All Students

Board*				
Year	'11-'12	'12-'13	'13-'14	'14-'15
<i>Number of Students</i>	669	709	596	595
Level 4	7%	8%	8%	9%
Level 3	36%	37%	41%	37%
Level 2	36%	33%	37%	35%
Level 1	13%	15%	8%	12%
Below Level 1	4%	3%	3%	4%
<i>Participating Students</i>	96%	95%	96%	97%
No Data	4%	5%	4%	3%
At or Above Provincial Standard (Levels 3 and 4)†	43%	44%	49%	46%



Province*				
Year	'11-'12	'12-'13	'13-'14	'14-'15
<i>Number of Students</i>	41 799	39 881	38 181	EC
Level 4	7%	8%	9%	EC
Level 3	37%	36%	38%	EC
Level 2	34%	35%	34%	EC
Level 1	13%	13%	11%	EC
Below Level 1	4%	5%	4%	EC
<i>Participating Students</i>	95%	96%	96%	EC
No Data	5%	4%	4%	EC
At or Above Provincial Standard (Levels 3 and 4)†	44%	44%	47%	EC



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† These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.

Grade 9 Assessment of Mathematics, 2014–2015

Contextual Information over Time: Academic Mathematics Course

This information provides a context for interpreting the board's results of the current and previous administrations.

2010–2011 2011–2012 2012–2013 2013–2014 2014–2015

Enrolment

Number of students in academic mathematics course	1 067	1 065	1 051	973	961
Number of classes with students in academic mathematics course	51	49	49	43	46
Number of schools with academic mathematics classes	12	12	12	12	12

Participation in the Assessment

Students who participated in the assessment	99%	99%	99%	99%	99%
Participating students who received one or more accommodations*	2%	4%	4%	4%	6%
Participating students who received one or more special provisions*	0%	0%	<1%	<1%	0%
Students who did not complete any part of the assessment (no data)*	1%	1%	1%	1%	1%

Gender[†] Based on number of students enrolled

Female	52%	54%	51%	54%	53%
Male	48%	46%	49%	46%	47%
Gender not specified	0%	0%	0%	0%	0%

Student Status[†] Based on number of students enrolled

English language learners*	<1%	0%	<1%	1%	<1%
Students with special education needs (excluding gifted)*	4%	5%	6%	5%	7%

Semester/Full Year Based on number of students enrolled

First-semester course	42%	44%	53%	56%	59%
Second-semester course	43%	38%	47%	44%	41%
Full-year course	16%	19%	0%	0%	0%

Language and School Background^{††}

Based on Student Questionnaire data

	Number of Respondents:	1 001	1 022	1 000	917	897
Speak only or mostly a language other than English at home	2%	2%	2%	2%	1%	
Speak another language as often as English at home	5%	4%	6%	4%	4%	
Attended three or more elementary schools from kindergarten to Grade 8	19%	20%	18%	18%	19%	

* See the Explanation of Terms.

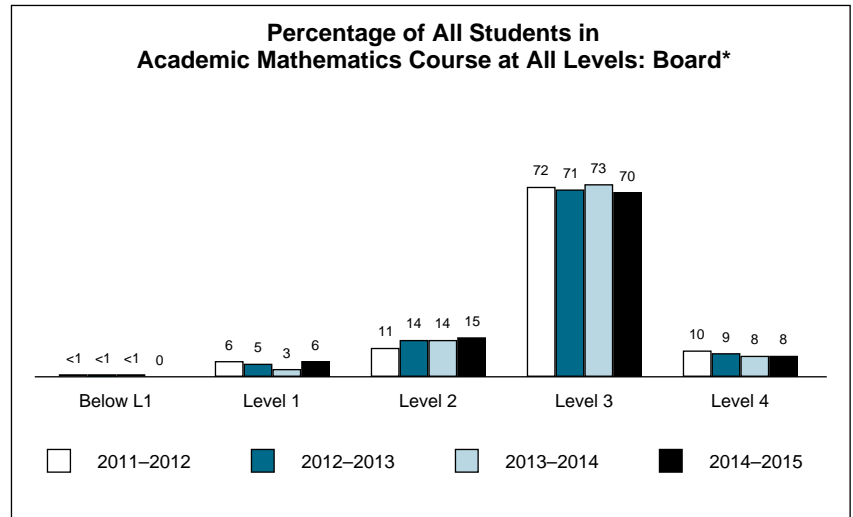
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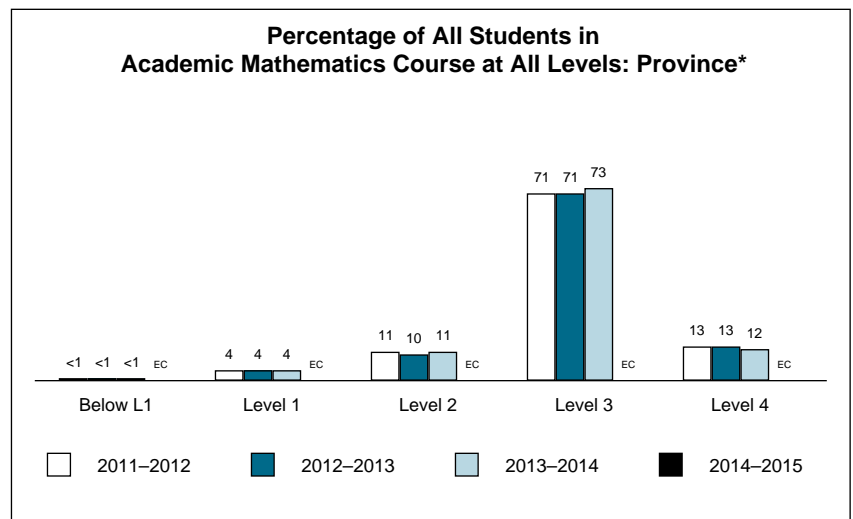
Results over Time, 2011–2012 to 2014–2015

Academic Mathematics Course for All Students

Board*				
Year	'11-'12	'12-'13	'13-'14	'14-'15
<i>Number of Students</i>	1 065	1 051	973	961
Level 4	10%	9%	8%	8%
Level 3	72%	71%	73%	70%
Level 2	11%	14%	14%	15%
Level 1	6%	5%	3%	6%
Below Level 1	<1%	<1%	<1%	0%
<i>Participating Students</i>	99%	99%	99%	99%
No Data	1%	1%	1%	1%
At or Above Provincial Standard (Levels 3 and 4)†	82%	80%	81%	79%



Province*				
Year	'11-'12	'12-'13	'13-'14	'14-'15
<i>Number of Students</i>	97 741	97 158	95 914	EC
Level 4	13%	13%	12%	EC
Level 3	71%	71%	73%	EC
Level 2	11%	10%	11%	EC
Level 1	4%	4%	4%	EC
Below Level 1	<1%	<1%	<1%	EC
<i>Participating Students</i>	99%	99%	99%	EC
No Data	1%	1%	1%	EC
At or Above Provincial Standard (Levels 3 and 4)†	84%	84%	85%	EC

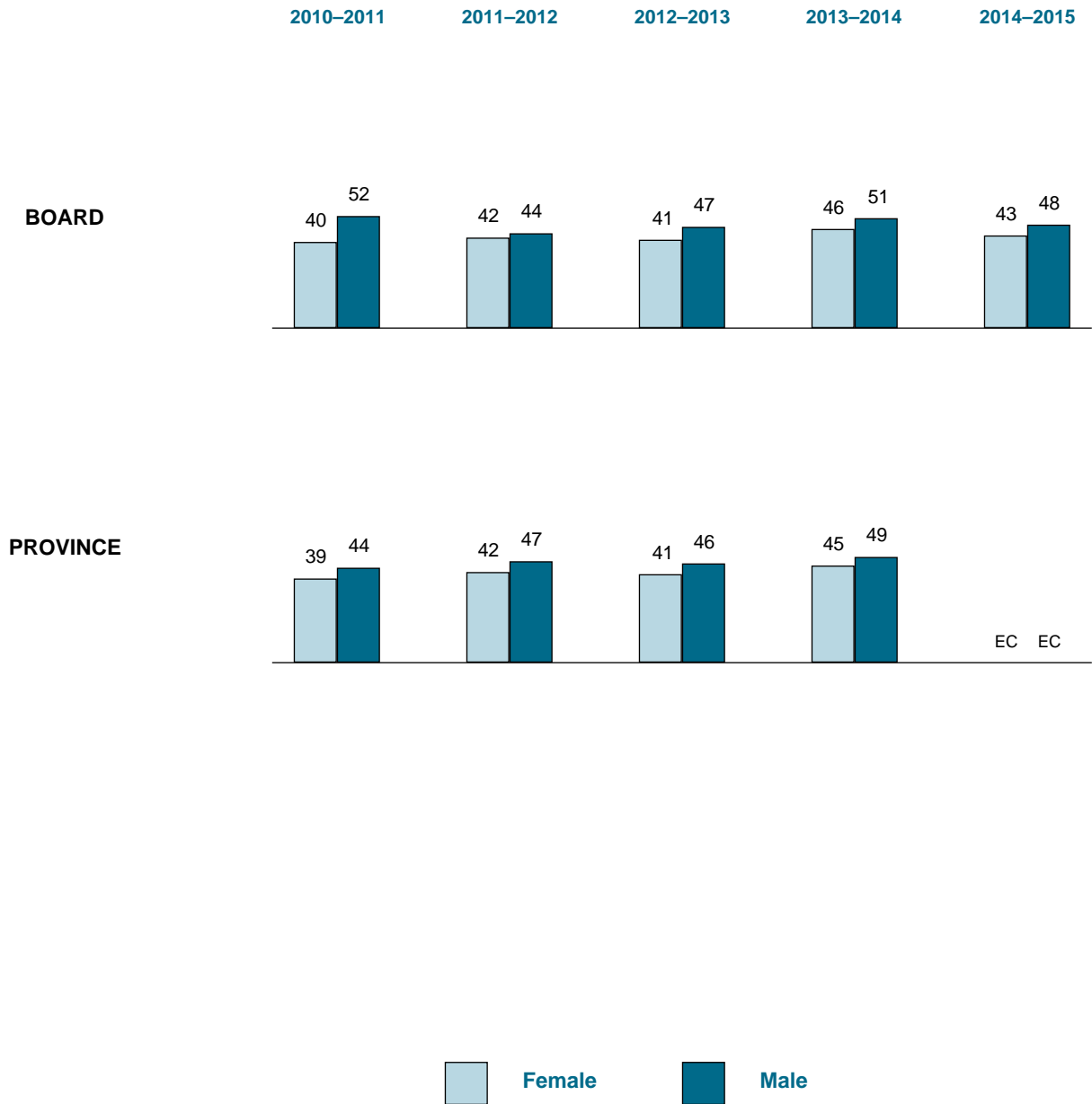


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† These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.

RESULTS FOR ALL STUDENTS OVER TIME BY GENDER †

**Percentage of Students At or Above the Provincial Standard (Levels 3 and 4):
GRADE 9 APPLIED MATHEMATICS**



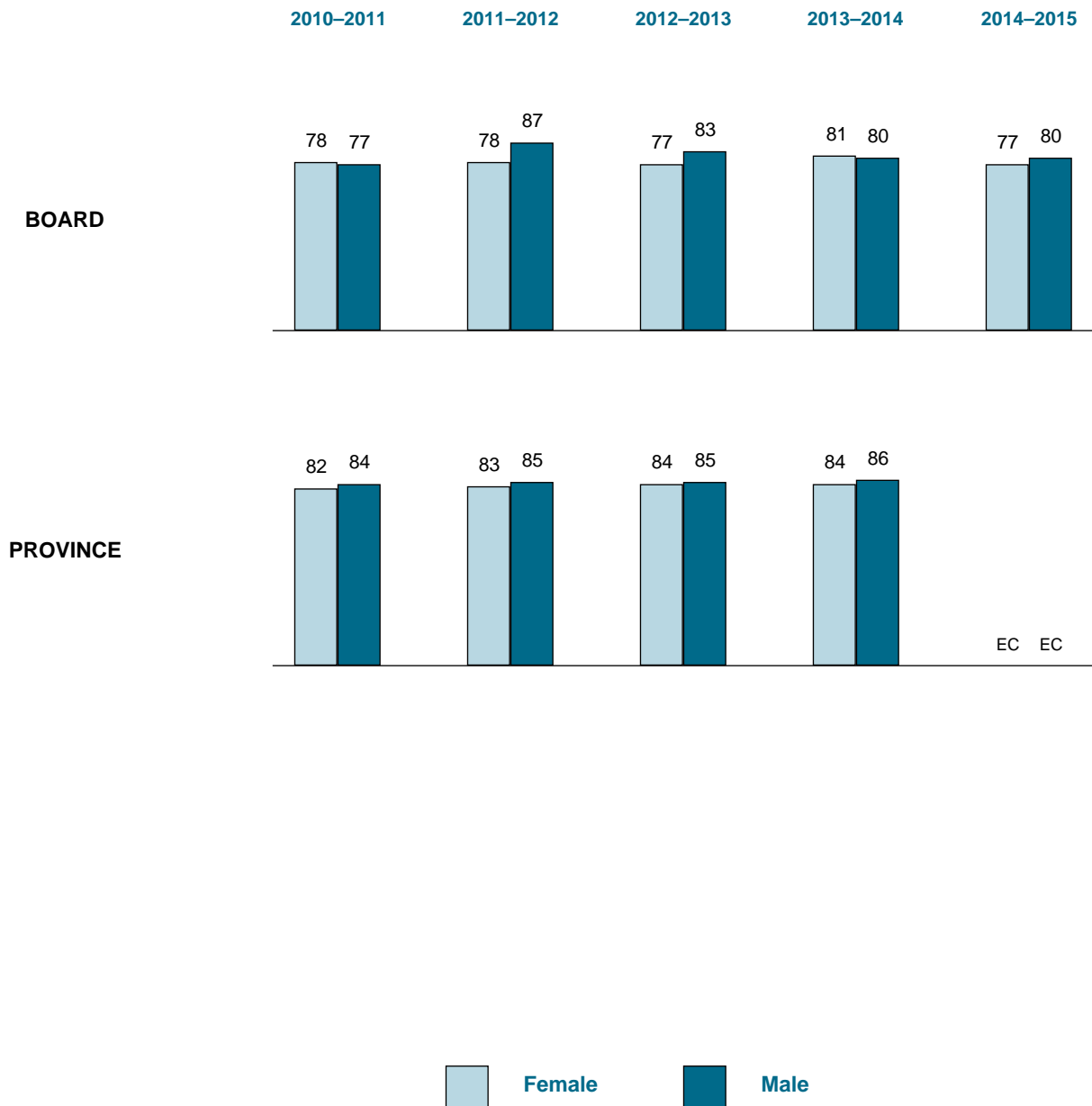
Total Number of Students in Applied Mathematics Course†

	2010-2011		2011-2012		2012-2013		2013-2014		2014-2015	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Board	301	401	295	374	292	417	255	341	262	333
Province	19 721	24 374	18 563	23 236	17 695	22 181	16 662	21 519	EC	EC

† Includes only students for whom gender data were available.

RESULTS FOR ALL STUDENTS OVER TIME BY GENDER †

**Percentage of Students At or Above the Provincial Standard (Levels 3 and 4):
GRADE 9 ACADEMIC MATHEMATICS**



Total Number of Students in Academic Mathematics Course †

	2010-2011		2011-2012		2012-2013		2013-2014		2014-2015	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Board	559	508	572	493	537	514	527	446	510	451
Province	50 814	48 464	50 134	47 607	49 986	47 171	49 157	46 757	EC	EC

† Includes only students for whom gender data were available.

Grade 9 Assessment of Mathematics, 2014–2015, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# =517)

Strongly Disagree/Disagree
 Neither agree nor disagree
 Agree/Strongly agree

STUDENTS' ATTITUDES TOWARD MATHEMATICS

How much do you agree or disagree with the following statements?	Percentage of Students*	Number of students who answered "agree" or "strongly agree"
I like mathematics.		160
I am good at mathematics.		164
I am able to answer difficult mathematics questions.		133
Mathematics is one of my favourite subjects.		100
I understand most of the mathematics I am taught.		293
Mathematics is an easy subject.		114
I do my best in mathematics class.		431
The mathematics I learn now is useful for everyday life.		144
The mathematics I learn now helps me do work in other subjects.		222
I need to do well in mathematics to study what I want later.		233
I need to keep taking mathematics for the kind of job I want after I leave school.		196





Not at all confident
 Somewhat confident
 Confident
 Very confident

How confident are you that you can answer mathematics questions related to the following?

How confident are you that you can answer mathematics questions related to the following?	Percentage of Students*	Number of students who answered "very confident"
number sense (e.g., operations with integers, rational numbers, exponents)		37
algebra (e.g., solving equations, simplifying expressions with polynomials)		61
linear relations (e.g., scatter plots, lines of best fit)		79
measurement (e.g., perimeter, area, volume)		158
geometry (e.g., angles, parallel lines)		78

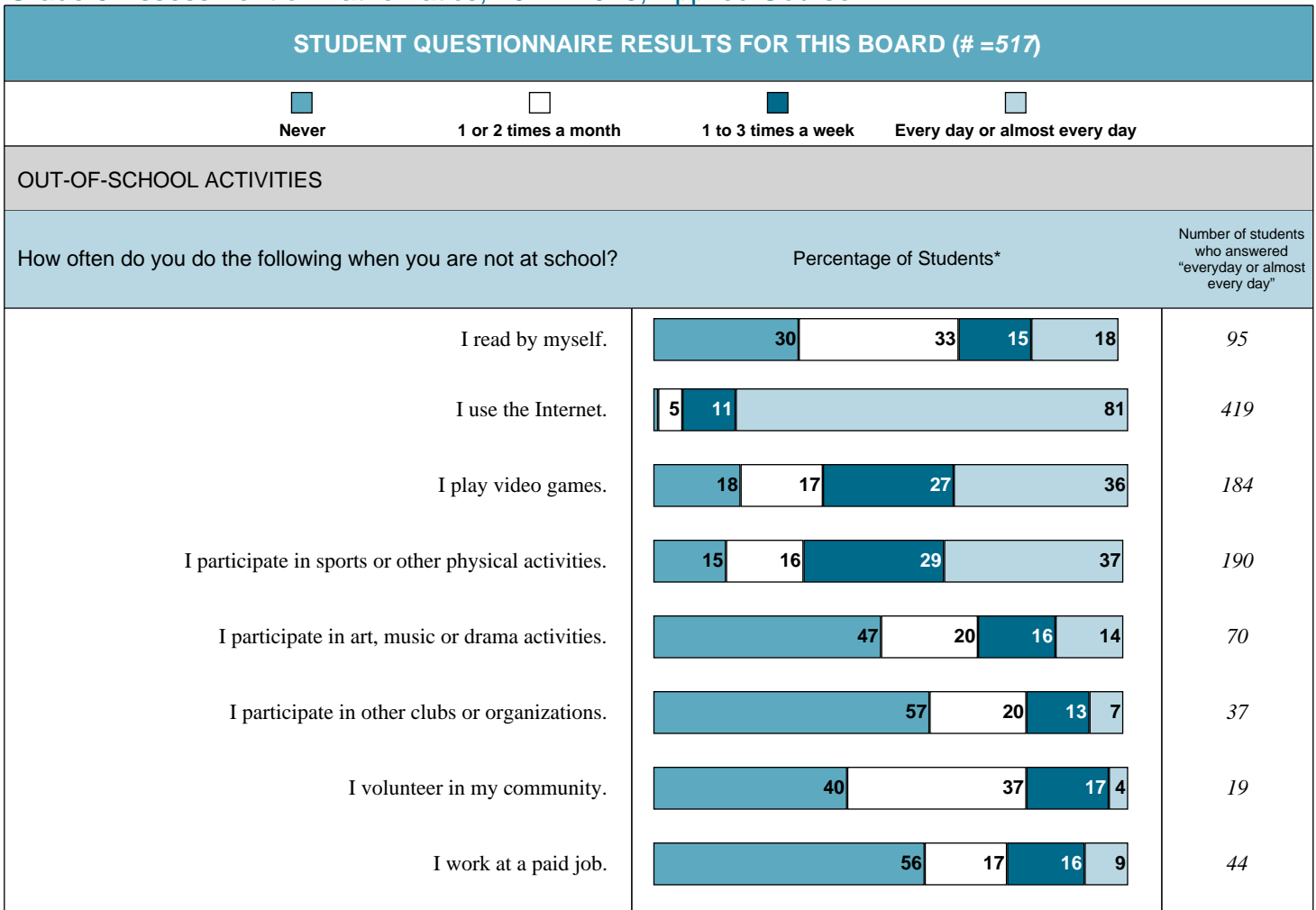
* Percentages may not add up to 100, due to rounding or to ambiguous or blank responses. Where there is no number in a bar, the percentage of responses is smaller than four.

Grade 9 Assessment of Mathematics, 2014–2015, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# =517)					
	 Never or almost never	 Sometimes	 Often	 Very Often	
DOING MATHEMATICS					
How often do you do the following when studying mathematics or working on a mathematics problem?	Percentage of Students*			Number of students who answered "very often"	
I connect new mathematics concepts to what I already know about mathematics or other subjects.	20	56	18	15	
I check my mathematics answers to see if they make sense.	8	35	45	10	52
I apply new mathematics concepts to real-life problems.	37	43	15	15	
I take time to discuss my mathematics assignments with my classmates.	45	38	11	13	
I look for more than one way to solve mathematics problems.	18	44	28	7	36
How often do you complete your mathematics homework?	Percentage of Students*			Number of students	
I am not usually assigned any mathematics homework	22			113	
Never or almost never	9			48	
Sometimes	20			101	
Often	28			143	
Always	16			85	











* Percentages may not add up to 100, due to rounding or to ambiguous or blank responses. Where there is no number in a bar, the percentage of responses is smaller than four.

Grade 9 Assessment of Mathematics, 2014–2015, Applied Course



* Percentages may not add up to 100, due to rounding or to ambiguous or blank responses. Where there is no number in a bar, the percentage of responses is smaller than four.

Grade 9 Assessment of Mathematics, 2014–2015, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# =517)			
SCHOOLS ATTENDED			
How many schools did you attend from kindergarten to Grade 8?		Percentage of Students*	Number of students
1 school		40	206
2 schools		27	138
3 schools		13	67
4 schools		8	43
5 or more schools		10	51
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  Only English/Mostly English </div> <div style="text-align: center;">  Another language (or other languages) as often as English </div> <div style="text-align: center;">  Mostly another language (or other languages)/Only another language (or other languages) </div> </div>			
LANGUAGES SPOKEN			Number of students who answered "only English" or "mostly English"
Languages student speaks at home		90.7	467
Languages in which people speak to student at home		90.5	465

* Percentages may not add up to 100, due to rounding or to ambiguous or blank responses. Where there is no number in a bar, the percentage of responses is smaller than four.

Grade 9 Assessment of Mathematics, 2014–2015, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# =517)		
USE OF THE ASSESSMENT IN CLASS MARKS		
Will your teacher count some or all parts of the Grade 9 Assessment of Mathematics as part of your class mark?	Percentage of Students*	Number of students
Yes	38	199
No	1	4
Don't know	58	301
<i>Total number of students:</i>		199
Were you told how much the assessment will count as part of your class mark (e.g., 5%)? †	Percentage of Students*	Number of students
Yes	79	157
No	21	42
<i>Total number of students:</i>		199
Does counting the Grade 9 Assessment of Mathematics as part of your class mark motivate you to take the assessment more seriously? †	Percentage of Students*	Number of students
Yes	66	132
No	18	36
Undecided	16	31

* Percentages may not add up to 100, due to rounding or to ambiguous or blank responses.

† Numbers and percentages are based on the number of students who indicated that their teacher will count some or all parts of the assessment as part of their class mark.

Grade 9 Assessment of Mathematics, 2014–2015, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 517)	Female* (# = 234)	Male* (# = 283)	All Students (# = EC)	Female* (# = EC)	Male* (# = EC)
STUDENTS' ATTITUDES TOWARD MATHEMATICS						
Percentage of students indicating they "agree" or "strongly agree" with the following statements: †						
I like mathematics.	31%	29%	33%	EC	EC	EC
I am good at mathematics.	32%	26%	36%	EC	EC	EC
I am able to answer difficult mathematics questions.	26%	19%	31%	EC	EC	EC
Mathematics is one of my favourite subjects.	19%	19%	20%	EC	EC	EC
I understand most of the mathematics I am taught.	57%	53%	60%	EC	EC	EC
Mathematics is an easy subject.	22%	15%	28%	EC	EC	EC
I do my best in mathematics class.	83%	88%	80%	EC	EC	EC
The mathematics I learn now is useful for everyday life.	28%	26%	29%	EC	EC	EC
The mathematics I learn now helps me do work in other subjects.	43%	42%	44%	EC	EC	EC
I need to do well in mathematics to study what I want later.	45%	49%	42%	EC	EC	EC
I need to keep taking mathematics for the kind of job I want after I leave school.	38%	35%	40%	EC	EC	EC
Percentage of students indicating they feel "confident" or "very confident" that they can answer mathematics questions related to the following: ‡						
number sense (e.g., operations with integers, rational numbers, exponents)	35%	29%	40%	EC	EC	EC
algebra (e.g., solving equations, simplifying expressions with polynomials)	43%	38%	46%	EC	EC	EC
linear relations (e.g., scatter plots, lines of best fit)	55%	50%	58%	EC	EC	EC
measurement (e.g., perimeter, area, volume)	66%	66%	66%	EC	EC	EC
geometry (e.g., angles, parallel lines)	50%	43%	56%	EC	EC	EC

* Includes only students for whom gender data were available.

† Other response options were "strongly disagree," "disagree" and "neither agree nor disagree."

‡ Other response options were "not at all confident" and "somewhat confident."

Grade 9 Assessment of Mathematics, 2014–2015, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 517)	Female* (# = 234)	Male* (# = 283)	All Students (# = EC)	Female* (# = EC)	Male* (# = EC)
DOING MATHEMATICS						
Percentage of students indicating they do the following “very often” when studying mathematics or working on a mathematics problem: †						
I connect new mathematics concepts to what I already know about mathematics or other subjects.	3%	2%	4%	EC	EC	EC
I check my mathematics answers to see if they make sense.	10%	11%	10%	EC	EC	EC
I apply new mathematics concepts to real-life problems.	3%	2%	4%	EC	EC	EC
I take time to discuss my mathematics assignments with my classmates.	3%	4%	1%	EC	EC	EC
I look for more than one way to solve mathematics problems.	7%	6%	7%	EC	EC	EC
Percentage of students indicating they complete their mathematics homework at the following frequencies: ‡						
I am not usually assigned any mathematics homework	22%	22%	22%	EC	EC	EC
Never or almost never	9%	6%	12%	EC	EC	EC
Sometimes	20%	21%	19%	EC	EC	EC
Often	28%	29%	27%	EC	EC	EC
Always	16%	17%	16%	EC	EC	EC

* Includes only students for whom gender data were available.

† Other response options were “never or almost never,” “sometimes” and “often.”

‡ Percentages may not add up to 100, due to rounding or to ambiguous or blank responses.

Grade 9 Assessment of Mathematics, 2014–2015, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 517)	Female* (# = 234)	Male* (# = 283)	All Students (# = EC)	Female* (# = EC)	Male* (# = EC)
OUT-OF-SCHOOL ACTIVITIES						
Percentage of students indicating they do the following “every day or almost every day” when they are not at school: †						
I read by myself.	18%	29%	9%	EC	EC	EC
I use the Internet.	81%	86%	77%	EC	EC	EC
I play video games.	36%	15%	52%	EC	EC	EC
I participate in sports or other physical activities.	37%	29%	43%	EC	EC	EC
I participate in art, music or drama activities.	14%	21%	8%	EC	EC	EC
I participate in other clubs or organizations.	7%	8%	7%	EC	EC	EC
I volunteer in my community.	4%	5%	3%	EC	EC	EC
I work at a paid job.	9%	6%	10%	EC	EC	EC
SCHOOLS ATTENDED						
Percentage of students indicating the number of schools they attended from kindergarten to Grade 8: ‡						
1 school	40%	35%	44%	EC	EC	EC
2 schools	27%	26%	27%	EC	EC	EC
3 schools	13%	12%	14%	EC	EC	EC
4 schools	8%	11%	6%	EC	EC	EC
5 or more schools	10%	13%	7%	EC	EC	EC
LANGUAGES SPOKEN						
Percentage of students indicating that they speak the following languages at home: ‡						
Only English/Mostly English	90%	90%	91%	EC	EC	EC
Another language (or other languages) as often as English	7%	8%	6%	EC	EC	EC
Mostly another language (or other languages)/ Only another language (or other languages)	1%	<1%	2%	EC	EC	EC
Percentage of students indicating the languages people speak to them at home: ‡						
Only English/Mostly English	90%	88%	92%	EC	EC	EC
Another language (or other languages) as often as English	5%	6%	4%	EC	EC	EC
Mostly another language (or other languages)/ Only another language (or other languages)	1%	1%	2%	EC	EC	EC

* Includes only students for whom gender data were available.

† Other response options were “never,” “1 or 2 times a month” and “1 to 3 times a week.”

‡ Percentages may not add up to 100, due to rounding or to ambiguous or blank responses.

Grade 9 Assessment of Mathematics, 2014–2015, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 517)	Female* (# = 234)	Male* (# = 283)	All Students (# = EC)	Female* (# = EC)	Male* (# = EC)
USE OF THE ASSESSMENT IN CLASS MARKS						
Percentage of students indicating their teacher will count some or all parts of the Grade 9 Assessment of Mathematics as part of their class mark: †						
Yes	38%	37%	40%	EC	EC	EC
No	1%	<1%	1%	EC	EC	EC
Don't know	58%	59%	57%	EC	EC	EC
Percentage of students indicating they were told how much the assessment will count as part of their class mark: †‡						
	All Students (# = 199)	Female* (# = 87)	Male* (# = 112)	All Students (# = EC)	Female* (# = EC)	Male* (# = EC)
Yes	79%	71%	85%	EC	EC	EC
No	21%	29%	15%	EC	EC	EC
Percentage of students indicating that counting the Grade 9 Assessment of Mathematics as part of their class mark motivates them to take the assessment more seriously: †‡						
	All Students (# = 199)	Female* (# = 87)	Male* (# = 112)	All Students (# = EC)	Female* (# = EC)	Male* (# = EC)
Yes	66%	63%	69%	EC	EC	EC
No	18%	16%	20%	EC	EC	EC
Undecided	16%	21%	12%	EC	EC	EC

* Includes only students for whom gender data were available.

† Percentages may not add up to 100, due to rounding or to ambiguous or blank responses.

‡ Numbers and percentages are based on the number of students who indicated that their teacher will count some or all parts of the assessment as part of their class mark.

Grade 9 Assessment of Mathematics, 2014–2015, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# =897)

Strongly Disagree/Disagree
 Neither agree nor disagree
 Agree/Strongly agree

STUDENTS' ATTITUDES TOWARD MATHEMATICS

How much do you agree or disagree with the following statements?	Percentage of Students*			Number of students who answered "agree" or "strongly agree"
I like mathematics.	22	31	47	424
I am good at mathematics.	19	29	52	467
I am able to answer difficult mathematics questions.	21	34	44	394
Mathematics is one of my favourite subjects.	46	20	33	296
I understand most of the mathematics I am taught.	11	18	70	627
Mathematics is an easy subject.	34	35	30	269
I do my best in mathematics class.	9		88	785
The mathematics I learn now is useful for everyday life.	41	32	27	239
The mathematics I learn now helps me do work in other subjects.	21	28	50	450
I need to do well in mathematics to study what I want later.	13	31	56	500
I need to keep taking mathematics for the kind of job I want after I leave school.	16	31	52	465





Not at all confident
 Somewhat confident
 Confident
 Very confident

How confident are you that you can answer mathematics questions related to the following?

How confident are you that you can answer mathematics questions related to the following?	Percentage of Students*				Number of students who answered "very confident"
number sense (e.g., operations with integers, rational numbers, exponents)	4	36	44	15	131
algebra (e.g., solving equations, simplifying expressions with polynomials)	8	28	39	23	207
linear relations (e.g., scatter plots, lines of best fit)	9	34	38	18	159
analytic geometry (e.g., slope, y-intercept, equations of lines)	12	33	34	19	174
measurement (e.g., perimeter, area, volume)	17	42	36		327
geometry (e.g., angles, parallel lines)	4	24	41	28	253

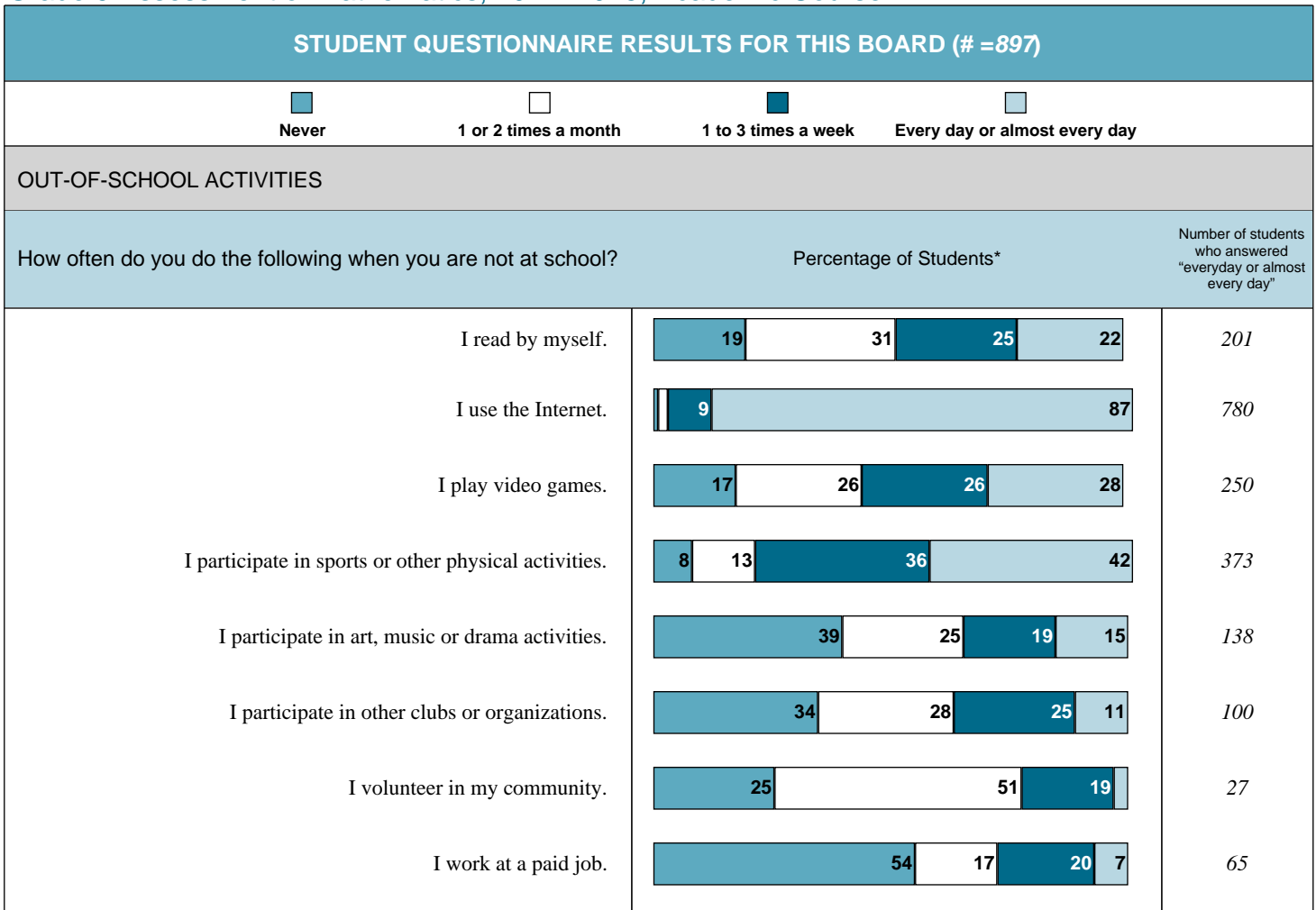
* Percentages may not add up to 100, due to rounding or to ambiguous or blank responses. Where there is no number in a bar, the percentage of responses is smaller than four.

Grade 9 Assessment of Mathematics, 2014–2015, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# =897)					
	 Never or almost never	 Sometimes	 Often	 Very Often	
DOING MATHEMATICS					
How often do you do the following when studying mathematics or working on a mathematics problem?		Percentage of Students*		Number of students who answered "very often"	
I connect new mathematics concepts to what I already know about mathematics or other subjects.	10	47	33	8	76
I check my mathematics answers to see if they make sense.	4	25	44	25	228
I apply new mathematics concepts to real-life problems.	33	47	15	4	33
I take time to discuss my mathematics assignments with my classmates.	27	45	20	7	64
I look for more than one way to solve mathematics problems.	14	43	30	12	105
How often do you complete your mathematics homework?		Percentage of Students*		Number of students	
I am not usually assigned any mathematics homework	2				16
Never or almost never	6				51
Sometimes		24			212
Often			35		313
Always				30	272

* Percentages may not add up to 100, due to rounding or to ambiguous or blank responses. Where there is no number in a bar, the percentage of responses is smaller than four.

Grade 9 Assessment of Mathematics, 2014–2015, Academic Course



* Percentages may not add up to 100, due to rounding or to ambiguous or blank responses. Where there is no number in a bar, the percentage of responses is smaller than four.






Grade 9 Assessment of Mathematics, 2014–2015, Academic Course

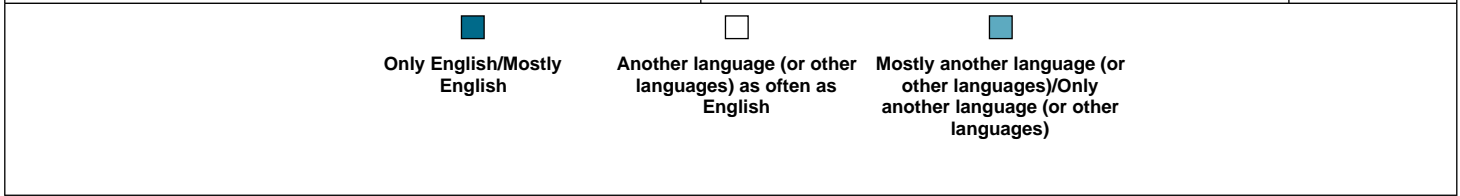
STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# =897)

SCHOOLS ATTENDED

How many schools did you attend from kindergarten to Grade 8?


Percentage of Students* Number of students

1 school		462
2 schools		242
3 schools		83
4 schools		53
5 or more schools		35











LANGUAGES SPOKEN

Percentage of Students* Number of students who answered "only English" or "mostly English"

Languages student speaks at home		824
Languages in which people speak to student at home		810

* Percentages may not add up to 100, due to rounding or to ambiguous or blank responses. Where there is no number in a bar, the percentage of responses is smaller than four.

Grade 9 Assessment of Mathematics, 2014–2015, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# =897)		
USE OF THE ASSESSMENT IN CLASS MARKS		
Will your teacher count some or all parts of the Grade 9 Assessment of Mathematics as part of your class mark?	Percentage of Students*	Number of students
Yes	 66	588
No	 1	7
Don't know	 31	277
<i>Total number of students:</i>		588
Were you told how much the assessment will count as part of your class mark (e.g., 5%)? †	Percentage of Students*	Number of students
Yes	 86	508
No	 13	79
<i>Total number of students:</i>		588
Does counting the Grade 9 Assessment of Mathematics as part of your class mark motivate you to take the assessment more seriously? †	Percentage of Students*	Number of students
Yes	 70	411
No	 12	73
Undecided	 18	103

* Percentages may not add up to 100, due to rounding or to ambiguous or blank responses.

† Numbers and percentages are based on the number of students who indicated that their teacher will count some or all parts of the assessment as part of their class mark.

Grade 9 Assessment of Mathematics, 2014–2015, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 897)	Female* (# = 482)	Male* (# = 415)	All Students (# = EC)	Female* (# = EC)	Male* (# = EC)
STUDENTS' ATTITUDES TOWARD MATHEMATICS						
Percentage of students indicating they "agree" or "strongly agree" with the following statements: †						
I like mathematics.	47%	42%	53%	EC	EC	EC
I am good at mathematics.	52%	46%	59%	EC	EC	EC
I am able to answer difficult mathematics questions.	44%	38%	51%	EC	EC	EC
Mathematics is one of my favourite subjects.	33%	28%	38%	EC	EC	EC
I understand most of the mathematics I am taught.	70%	66%	74%	EC	EC	EC
Mathematics is an easy subject.	30%	25%	36%	EC	EC	EC
I do my best in mathematics class.	88%	92%	82%	EC	EC	EC
The mathematics I learn now is useful for everyday life.	27%	24%	30%	EC	EC	EC
The mathematics I learn now helps me do work in other subjects.	50%	48%	53%	EC	EC	EC
I need to do well in mathematics to study what I want later.	56%	54%	57%	EC	EC	EC
I need to keep taking mathematics for the kind of job I want after I leave school.	52%	50%	54%	EC	EC	EC
Percentage of students indicating they feel "confident" or "very confident" that they can answer mathematics questions related to the following: ‡						
number sense (e.g., operations with integers, rational numbers, exponents)	58%	52%	66%	EC	EC	EC
algebra (e.g., solving equations, simplifying expressions with polynomials)	62%	61%	63%	EC	EC	EC
linear relations (e.g., scatter plots, lines of best fit)	55%	50%	61%	EC	EC	EC
analytic geometry (e.g., slope, y-intercept, equations of lines)	54%	51%	58%	EC	EC	EC
measurement (e.g., perimeter, area, volume)	79%	72%	87%	EC	EC	EC
geometry (e.g., angles, parallel lines)	70%	61%	79%	EC	EC	EC

* Includes only students for whom gender data were available.

† Other response options were "strongly disagree," "disagree" and "neither agree nor disagree."

‡ Other response options were "not at all confident" and "somewhat confident."

Grade 9 Assessment of Mathematics, 2014–2015, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 897)	Female* (# = 482)	Male* (# = 415)	All Students (# = EC)	Female* (# = EC)	Male* (# = EC)
DOING MATHEMATICS						
Percentage of students indicating they do the following “very often” when studying mathematics or working on a mathematics problem: †						
I connect new mathematics concepts to what I already know about mathematics or other subjects.	8%	8%	9%	EC	EC	EC
I check my mathematics answers to see if they make sense.	25%	29%	21%	EC	EC	EC
I apply new mathematics concepts to real-life problems.	4%	3%	5%	EC	EC	EC
I take time to discuss my mathematics assignments with my classmates.	7%	8%	6%	EC	EC	EC
I look for more than one way to solve mathematics problems.	12%	9%	14%	EC	EC	EC
Percentage of students indicating they complete their mathematics homework at the following frequencies: ‡						
I am not usually assigned any mathematics homework	2%	2%	2%	EC	EC	EC
Never or almost never	6%	5%	7%	EC	EC	EC
Sometimes	24%	18%	30%	EC	EC	EC
Often	35%	34%	36%	EC	EC	EC
Always	30%	38%	21%	EC	EC	EC

* Includes only students for whom gender data were available.

† Other response options were “never or almost never,” “sometimes” and “often.”

‡ Percentages may not add up to 100, due to rounding or to ambiguous or blank responses.

Grade 9 Assessment of Mathematics, 2014–2015, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 897)	Female* (# = 482)	Male* (# = 415)	All Students (# = EC)	Female* (# = EC)	Male* (# = EC)
OUT-OF-SCHOOL ACTIVITIES						
Percentage of students indicating they do the following “every day or almost every day” when they are not at school: †						
I read by myself.	22%	32%	11%	EC	EC	EC
I use the Internet.	87%	89%	85%	EC	EC	EC
I play video games.	28%	10%	49%	EC	EC	EC
I participate in sports or other physical activities.	42%	36%	48%	EC	EC	EC
I participate in art, music or drama activities.	15%	19%	11%	EC	EC	EC
I participate in other clubs or organizations.	11%	13%	9%	EC	EC	EC
I volunteer in my community.	3%	4%	2%	EC	EC	EC
I work at a paid job.	7%	6%	9%	EC	EC	EC
SCHOOLS ATTENDED						
Percentage of students indicating the number of schools they attended from kindergarten to Grade 8: ‡						
1 school	52%	51%	52%	EC	EC	EC
2 schools	27%	27%	27%	EC	EC	EC
3 schools	9%	9%	10%	EC	EC	EC
4 schools	6%	7%	5%	EC	EC	EC
5 or more schools	4%	4%	4%	EC	EC	EC
LANGUAGES SPOKEN						
Percentage of students indicating that they speak the following languages at home: ‡						
Only English/Mostly English	92%	91%	92%	EC	EC	EC
Another language (or other languages) as often as English	4%	5%	4%	EC	EC	EC
Mostly another language (or other languages)/ Only another language (or other languages)	1%	1%	2%	EC	EC	EC
Percentage of students indicating the languages people speak to them at home: ‡						
Only English/Mostly English	90%	90%	91%	EC	EC	EC
Another language (or other languages) as often as English	3%	4%	3%	EC	EC	EC
Mostly another language (or other languages)/ Only another language (or other languages)	2%	2%	3%	EC	EC	EC

* Includes only students for whom gender data were available.

† Other response options were “never,” “1 or 2 times a month” and “1 to 3 times a week.”

‡ Percentages may not add up to 100, due to rounding or to ambiguous or blank responses.

Grade 9 Assessment of Mathematics, 2014–2015, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 897)	Female* (# = 482)	Male* (# = 415)	All Students (# = EC)	Female* (# = EC)	Male* (# = EC)
USE OF THE ASSESSMENT IN CLASS MARKS						
Percentage of students indicating their teacher will count some or all parts of the Grade 9 Assessment of Mathematics as part of their class mark: †						
Yes	66%	65%	66%	EC	EC	EC
No	1%	1%	1%	EC	EC	EC
Don't know	31%	31%	31%	EC	EC	EC
Percentage of students indicating they were told how much the assessment will count as part of their class mark: †‡						
	All Students (# = 588)	Female* (# = 315)	Male* (# = 273)	All Students (# = EC)	Female* (# = EC)	Male* (# = EC)
Yes	86%	84%	89%	EC	EC	EC
No	13%	15%	11%	EC	EC	EC
Percentage of students indicating that counting the Grade 9 Assessment of Mathematics as part of their class mark motivates them to take the assessment more seriously: †‡						
	All Students (# = 588)	Female* (# = 315)	Male* (# = 273)	All Students (# = EC)	Female* (# = EC)	Male* (# = EC)
Yes	70%	70%	70%	EC	EC	EC
No	12%	11%	14%	EC	EC	EC
Undecided	18%	19%	15%	EC	EC	EC

* Includes only students for whom gender data were available.

† Percentages may not add up to 100, due to rounding or to ambiguous or blank responses.

‡ Numbers and percentages are based on the number of students who indicated that their teacher will count some or all parts of the assessment as part of their class mark.

Grade 9 Assessment of Mathematics, 2014–2015

EXPLANATION OF TERMS

All Students	Results are reported for all students in the course.
Participating Students	Results are reported only for those students who took part in the assessment (excludes the "no data" category).
Provincial Standard	The Ministry of Education, in <i>The Ontario Curriculum, Grades 9 and 10: Mathematics</i> , has set Level 3 as the provincial standard.
Level 4 (80–100%)	The student has demonstrated a very high to outstanding level of achievement. Achievement is <i>above</i> the provincial standard.
Level 3 (70–79%)	The student has demonstrated a high level of achievement. Achievement is <i>at</i> the provincial standard.
Level 2 (60–69%)	The student has demonstrated some of the required knowledge and skills. Achievement is <i>below, but approaching</i> , the provincial standard.
Level 1 (50–59%)	The student has demonstrated a passable level of achievement. Achievement is <i>below</i> the provincial standard.
Below Level 1/ Below L1	The student has not demonstrated sufficient achievement of curriculum expectations (below 50%).
No Data	Students who did not have a result due to absence or other reasons.
English Language Learners	Students who have been identified by the school in accordance with <i>English Language Learners: ESL and ELD Programs and Services: Policies and Procedures for Ontario Elementary and Secondary Schools, Kindergarten to Grade 12</i> (2007).
Students Receiving One or More Special Provisions	Students identified by the school as receiving special provisions. Detailed information about special provisions is available in EQAO's <i>Guide for Accommodations and Special Provisions</i> .
Students with Special Education Needs (excluding gifted)	Students who have been formally identified by an Identification, Placement and Review Committee, as well as students who have an Individual Education Plan. Students whose sole identified exceptionality is giftedness are not included.
Students Receiving One or More Accommodations	Students identified by the school as receiving accommodations. Detailed information about accommodations is available in EQAO's <i>Guide for Accommodations and Special Provisions</i> .
N/R	"Not reported" indicates that the number of students participating (fewer than 10 in a group) or responding to the Student Questionnaire (fewer than six in a group) is so small that identification of individual student results might be possible; therefore, results are not reported.
N/D	"No data available" is used to indicate that there were no students in the course for the years specified.
W	Results are being withheld by EQAO. For further information, please contact personnel at the board.
EC	Due to exceptional circumstances in 2015, provincial data are unavailable to report provincial results.
NP	Non-participating indicates that due to exceptional circumstances, some or all of the school's or board's students did not participate in 2015.