



OTTAWA-CARLETON
DISTRICT SCHOOL BOARD

ANNUAL STUDENT ACHIEVEMENT REPORT

2017–2018



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Executive Summary

The *Annual Student Achievement Report (ASAR)* is an in-depth analysis of OCDSB achievement data which is used to measure progress in student learning and to help inform the development of strategies in our Board Improvement Plan for Student Achievement and Well-being. The ASAR data includes 2017-2018 provincial assessments (EQAO), secondary report card marks, and key achievements for students in the secondary panel. Taken together, the evidence helps frame our understanding of our strengths as a system, as well as areas where targeted efforts are needed.

Provincial Assessment Data (EQAO)

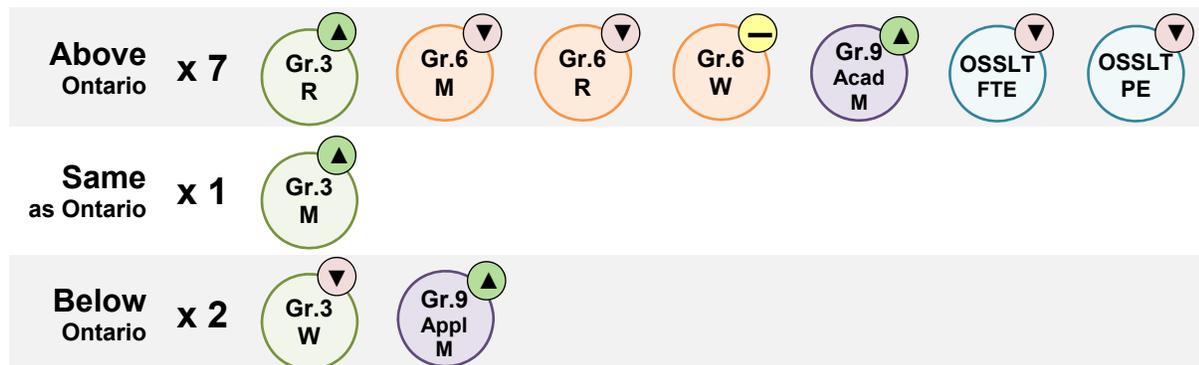
EQAO assessment data provides an objective measure of student learning over time. In the ASAR, we examine EQAO data in terms of our year over year results; trends over time; results relative to the province; and, results for groups of students. We also examine data from the EQAO assessments in relation to the student questionnaires. A quick overview of the data is provided in the chart below:

Primary, Met Standard (All Students):
<ul style="list-style-type: none">• Reading 76% (vs. 73% last year-up 3%); province 75%• Writing 71% (vs. 70% last year-up 1%); province 72%• Math 61% (vs. 58% last year-up 3%); provincd 61%
Junior, Met Standard (All Students):
<ul style="list-style-type: none">• Reading 83% (vs. 84% last yr-down 1%); province 82%• Writing 81% (vs. 79% last yr-up 2%); province 80%• Math 51% (vs. 51% last yr-no change); provincial 49%
Grade 9 Math, Met Standard (All Students):
<ul style="list-style-type: none">• Applied 43% (vs. 37% last yr-up 6%); provincd 45%• Academic 88% (vs. 86% last yr-up 2%); province 84%
OSSLT, Successful (Fully-participating Students):
<ul style="list-style-type: none">• First-time eligible 84% (vs. 86% last year-down 2%); province 79%• Previously eligible 53% (vs. 56% last year-down 3%); province 46%

Highlights:

- Year over year, the District results increased in six assessments, decreased in three assessments and remained the same in one assessment.
- Compared to an average of the previous three years, District trends indicate improvements in: Primary Reading, Primary Mathematics, Grade 9 Applied Mathematics, and Grade 9 Academic Mathematics.
- In 2017-2018, the OCDSB outperformed the province in seven (7) of the ten (10) EQAO assessments.

The following graph depicts our District's performance across (10) EQAO Assessments compared to the province and to previous District performance:



****Board Trends** in success rates are indicated in the superscript above each EQAO assessment bubble (decrease, no change, increase). These are based on comparisons to the District average across the previous three years.

Focused Monitoring of Specific Groups of Students

The OCDSB undertakes regular focused monitoring of specific groups of students that may experience barriers to learning. Throughout the ASAR, achievement data is displayed for all students and for the five groups of students that have been identified for monitoring purposes: boys, English language learners (ELL), students with special education needs (SpEd), students who self-identify as Indigenous (FNMI), and students residing in lower income neighbourhoods (SES). The examination of results for each of these groups of students relative to all students can expose achievement gaps. Understanding achievement gaps from a data perspective is essential to developing effective strategies to overcome barriers and ensure equitable outcomes for all students.

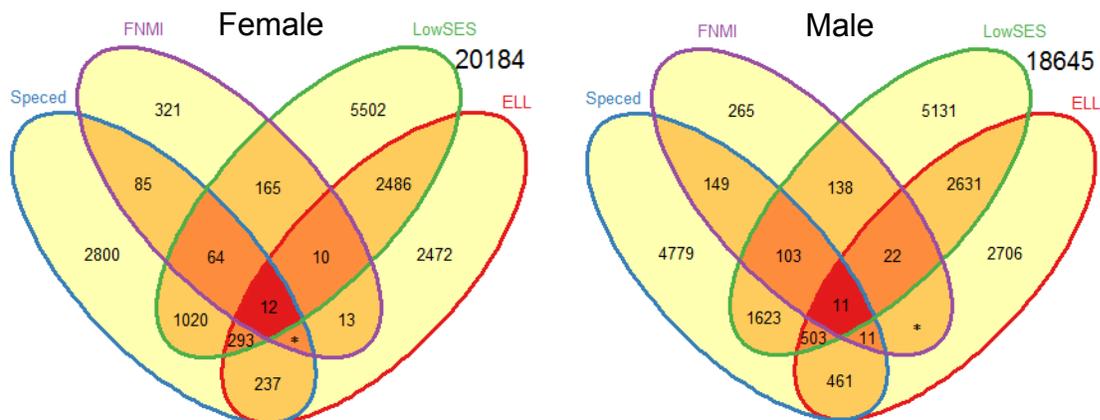
Our data for 2017-2018 shows that achievement gaps have narrowed in seven (7) areas assessed by EQAO for students who self-identified as Indigenous, and in six (6) areas for students with special education needs (excluding Gifted). However, achievement gaps have widened across most assessments for English language learners.

Understanding Intersectionality

Although results are reported separately for each of the five groups, it is important to remember that there is considerable overlap between the groups. The following graph explains the intersectionality of these groups of students - each group is represented by an oval ellipse. The number of students who also belong to another group is indicated within the shaded areas of the ellipses; darker shading represents a greater number of groups to which the student belongs. For example, sections with the darkest shading in each ellipse indicate that students have self-identified as Indigenous, reside in a lower income neighbourhood, and have been recorded as both an ELL and as having a special education need (excluding Giftedness) in Trillium. The number on the outside of

each ellipse represents the number of females and males who do not belong to one of the other four groups – ELL, SpEd, FNMI, or SES.

K-12 Enrolment, Intersectionality of Specific Groups of Students



*fewer than 10

Key considerations to keep in mind when reviewing the information contained within the report include:

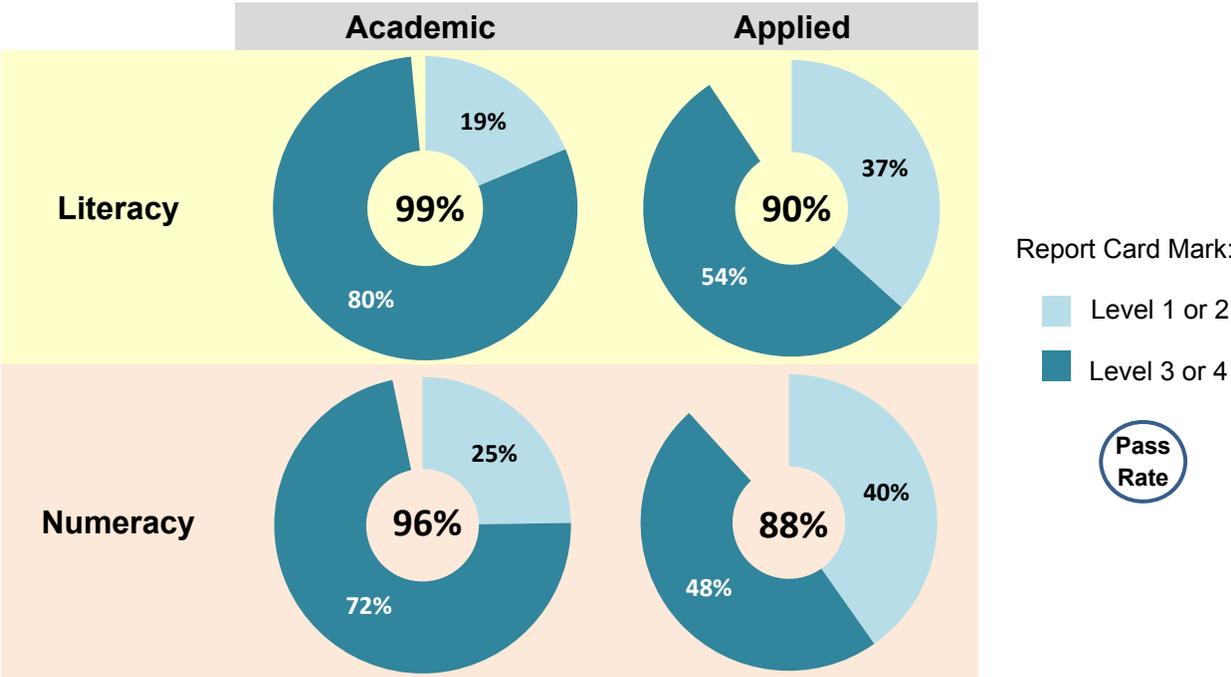
- 43% of female students and 50% of male students belong to at least one of the other four groups of students – ELLs, students with special education needs (excluding gifted; SpEd), students who self-identified as Indigenous (FNMI), and/or students residing in lower-income neighbourhoods;
- 12% of females and 15% of males belong to at least two other groups that are currently monitored;
- the greatest degree of overlap for both females and males is with SES (27%);
- there is a much higher proportion of males with special education needs (excluding gifted) compared to females (21% vs. 13%, respectively); and
- the proportion of females and males who also belong to either the Indigenous or the ELL groups is more evenly distributed.

Report Card Data

Report card data is another valuable source of data for measuring student achievement. Overall, OCDSB students are highly successful, with pass rates staying the same or increasing in 18 of 22 compulsory courses in grades 9 and 10 (English, Core French, Geography, History, Math, Science, Civics, and Careers). Increases were as high as 3%, whereas the four courses which saw decreases did so by between one and three percentage points and were all in the area of literacy.

Despite evidence of improved outcomes for students in applied level courses, performance continues to be lower compared to those in academic level courses; this is true for both pass rates and the proportion of students meeting/exceeding the provincial standard. For example, in 2017-2018, students in applied-level literacy and numeracy courses were (on average) 25% less likely to achieve a level 3 or 4 than their peers enrolled in academic courses. This continues to be an area of concern not only for the District, but for the province, as well.

Average pass rates and percentages of students achieving level 3 or 4 across grades 9 and 10 compulsory credits (based on 2017-2018 report card data)



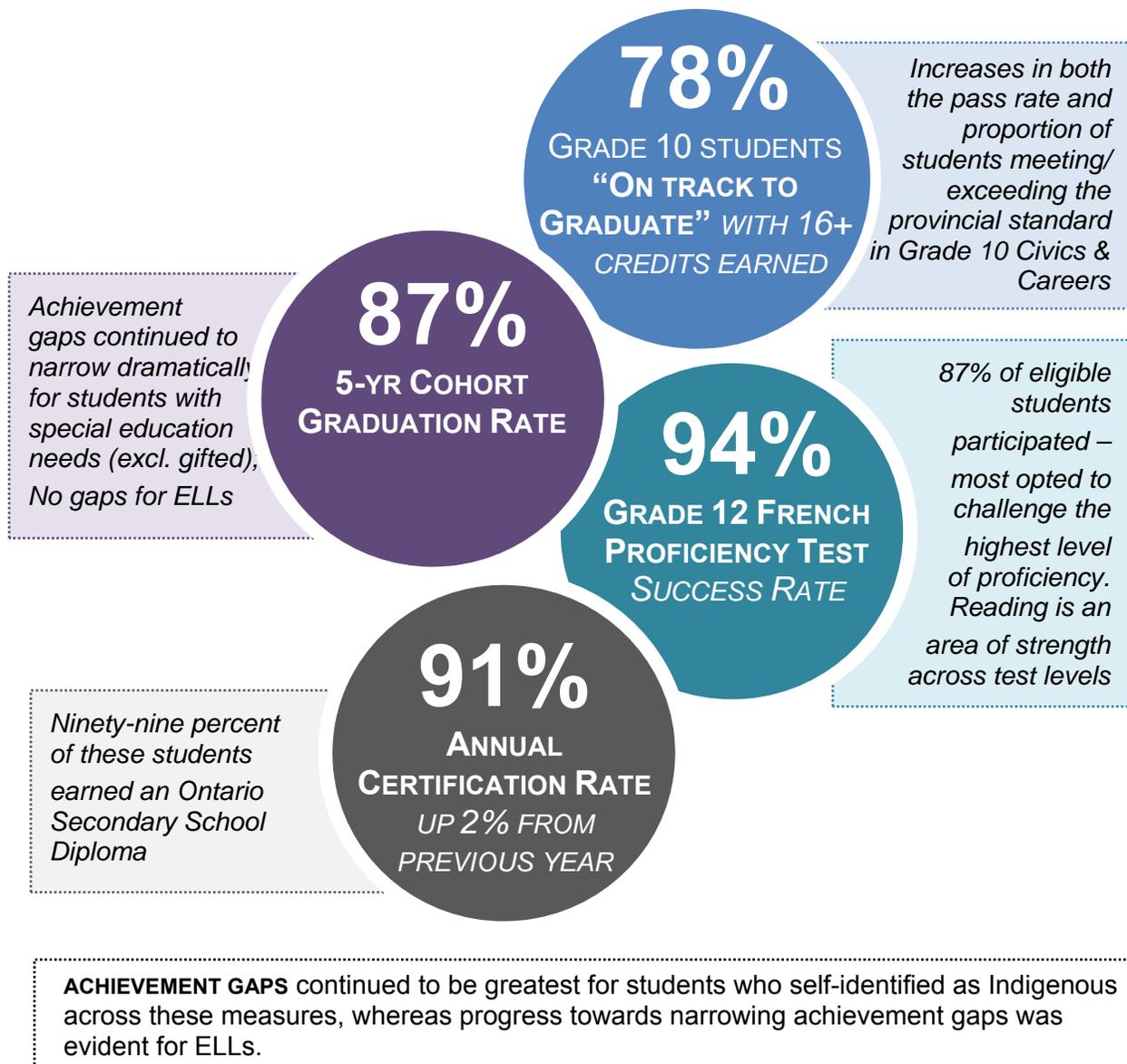
Analyses of report card data for specific groups of students enrolled in academic and applied level courses in grades 9 and 10 revealed the following key observations when comparing data from 2017-2018 to the District average of the previous three years:

- Achievement gaps have narrowed in nine (9) of ten (10) academic level courses for ELLs and students residing in lower-income neighbourhoods, whereas gaps have widened in half the courses for students with special education needs (excluding gifted) and students who self-identified as Indigenous; and
- For students enrolled in applied level literacy and numeracy courses, the greatest progress towards narrowing gaps have been with ELLs and students residing in lower-income neighbourhoods.

Trends in Pathways

One of the District's strategic priorities is to increase the achievement of students in all educational pathways. The following image captures evidence of achievement trends across four measures that can be used to consider student success by pathway:

- grade 10 credit accumulation – *Are students earning enough credits to graduate with their peers?*;
- cohort graduation rate – *What percentage of students graduate within 5 years of starting grade 9?*;
- annual certification rate – *What percentage of students earn a diploma or certificate in their final year of high school?*; and
- success rate on the *Diplôme d'études en langue français* (DELF; Grade 12 French proficiency test) – *What level of French proficiency have students attained?*



Summary and Next Steps

Generally speaking, OCDSB students have sustained high levels of performance in the areas of literacy and program pathways, progress has been made to improve outcomes in mathematics, and efforts to narrow the achievement gaps for identified groups of students continue. Nevertheless, our results continue to provide strong evidence for the need to continue our intentional focus on the area of mathematics both at the District level and provincially. The Ministry's requirement for school districts to focus on the Fundamentals of Mathematics builds on the foundations that have been embedded in our work over the past few years in relation to the *OCDSB Balanced Math Framework* and professional learning connected to the *Board Improvement Plan for Student Achievement and Well-being (BIPSAW)* and our School Learning Plan cycle. The following strategies will be key to moving us forward in this work:

- **Focused strategies for improvement** - Every School Learning Plan (elementary and secondary) will continue to include a mathematics focus that emphasizes fundamental math concepts and skills that students are expected to know to meet current curriculum expectations. In the OCDSB, concept of number and problem-solving pose the greatest challenge for our students. Intentional focus to narrow achievement gaps for our ELLs, paying particular attention to the intersectionality with other groups (e.g., students residing in lower-income neighbourhoods) will also be important. District support will continue to be provided to develop school-based strategies that will align with the *Board Improvement Plan for Student Achievement and Well-being* and efforts will be strategically targeted at the junior and intermediate divisions to improve student achievement while also promoting greater equity of outcomes for our students.
- **Enhancing teacher expertise** – Every elementary school has a lead math teacher who will continue to participate in math-focused professional development and have access to resources to support peer to peer learning at the school level. Job-embedded professional learning will also continue to be provided by central program departments in order to increase educator knowledge of mathematical concepts and skills, and effective mathematics pedagogy;
- **Focused professional development** – All educators have participated in a full day of PD in October that focused on mathematics. The District is committed to ensuring there is ongoing collaboration across multiple levels of the organization in order to enhance program delivery and improve outcomes for our students.
- **Focused instruction** – Instructional strategies will focus on developing student proficiency in concept of number and problem solving, while simultaneously supporting students in developing characteristics and skills described in the OCDSB Exit Outcomes. By combining these approaches, student confidence and achievement in mathematics should be positively impacted.
- **Parent Communication** – Information and resources about math instruction and provincial assessments will be made available to parents through the District website and in support of parents receiving individual student information about provincial results.

More details can be found in the *2018-2019 BIPSAW*.

Introduction

The *2017-2018 Annual Student Achievement Report* includes information from provincial assessment and local sources of data (e.g., report card data) and, where applicable, places them in the context of national and international trends. The report is divided into three main sections that reflect student achievement in the areas of literacy (K-12), numeracy (K-12), and pathways (7-12). Within each section, information is presented as an overview of the progress made towards improving student achievement and closing achievement gaps for specific groups of students which are among the core priorities of both the Ministry of Education and the Ottawa-Carleton District School Board (OCDSB).

Literacy (K-12): Achievement in the area of literacy is measured by OCDSB student performance on the provincial assessments in primary and junior reading and writing, and on the Ontario Secondary School Literacy Test (OSSLT). Results are provided for: all students; specific groups of students (i.e., females/males, English language learners, students with special education needs (excluding gifted), students who have self-identified as Indigenous (FNMI), and students residing in lower-income neighbourhoods (SES)); and, specific cohorts of students as they move through the education system. An analysis of grades 9 and 10 report card data for English, French, Geography and History are also presented.

Numeracy (K-12): Achievement in the area of numeracy is measured by OCDSB student performance on the provincial assessments in primary, junior, and grade 9 mathematics, as well as analyses of grades 9 and 10 report card data for Mathematics and Science. Similarly to Literacy, results are presented for all students and for specific groups of students.

Pathways to Success (7-12): This section of the report includes an analysis of secondary school report card data for grade 10 Civics and Careers courses. Information is also presented that spans across multiple subject areas that serve as indicators of progress towards successful high school completion (e.g., grade 10 credit accumulation, cohort graduation rate, and annual certification rate). Finally, results on the Grade 12 French proficiency test, *Diplôme d'études en langue française* (DELFP), are included.

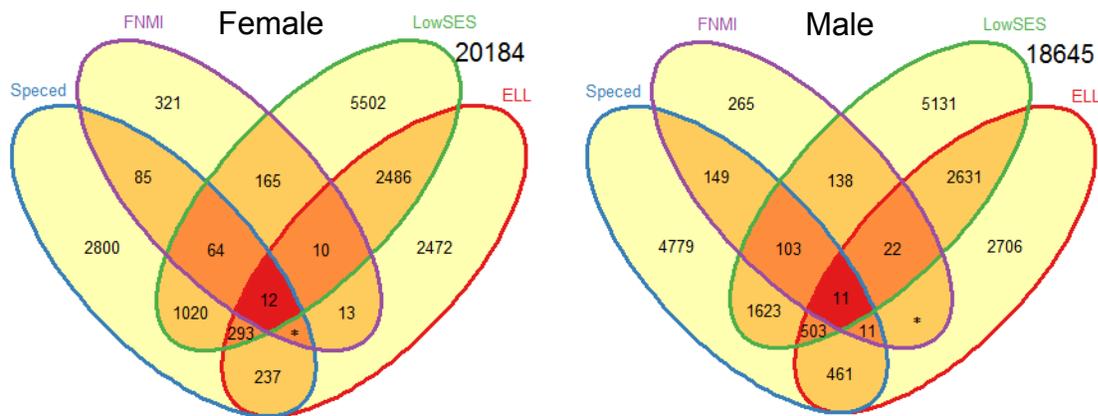
Understanding Intersectionality: It is important to note that although results are reported separately throughout this document for specific groups of students, there is considerable overlap between them. Table 1 provides an overview of the number of students in each group for both the elementary and secondary panels combined.

Table 1: K-12 Enrolment by Specific Group of Students

	Number	Percentage
TOTAL:	72,857	
Female	35,672	49%
Male	37,185	51%
ELL	11,883	16%
Spec. Ed.	12,159	17%
FNMI	1,384	2%
Low SES	19,714	27%

Figure 1 shows the intersectionality of these groups of students; each group is represented by an ellipse. The number of students who belong to another group is indicated within the shaded areas of the ellipses; darker shading represents a greater number of groups to which the student belongs. For example, sections with the darkest shading in each ellipse indicate that students have self-identified as Indigenous, reside in a lower-income neighbourhood, and have been recorded as both an ELL and as having a special education need (excluding Giftedness) in Trillium. The number on the outside of each ellipse represents the number of females and males who do not belong to one of the other four groups – ELL, SpEd, FNMI, or SES.

Figure 1. K-12 Enrolment, Intersectionality of Specific Groups of Students



Key considerations to keep in mind when reviewing the information contained within this report include:

- 43% of female students and 50% of male students also belong to at least one of the other four groups of students – ELLs, students with special education needs excluding gifted (SpEd), students who self-identified as Indigenous (FNMI), and/or students residing in lower-income neighbourhoods;
- 12% of females and 15% of males belong to at least two other groups that are currently monitored;
- the greatest degree of overlap for both females and males is with SES (27%);
- there is a much higher proportion of males with special education needs (excluding gifted) compared to females (21% vs. 13%, respectively), whereas the proportion of females and males who also belong to either the Indigenous or the ELL groups is more evenly distributed.

Literacy (K-12)

Education Quality and Accountability Office (EQAO) Assessments

Student Characteristics – Primary/Junior and OSSLT

The table below shows student participation for both the OCDSB and the province in Primary and Junior EQAO assessments, and for the Ontario Secondary School Literacy Test by eligibility status (i.e., first time eligible (FTE) or previously eligible (PE)). The percentage of PE students earning the literacy requirement through an Ontario Secondary School Literacy Course (OSSLC) has also been included.

Table 2: Student Participation, Primary/Junior & OSSLT EQAO Assessments

	Number of Students	Participation Rate	Fully Exempt	Absent	Deferred
OCDSB					
Primary (Grade 3)	4,901	96%	2%		
Junior (Grade 6)	5,048	97%	2%		
OSSLT: FTE	5,178	92%		1%	6%
OSSLT: PE	2,298	46%		15%	20%
PE : OSSLC		19%			
Province					
Primary (Grade 3)	132,656	97%	2%		
Junior (Grade 6)	132,776	97%	2%		
OSSLT: FTE	132,639	93%		2%	6%
OSSLT: PE	57,133	46%		9%	12%
PE : OSSLC		34%			

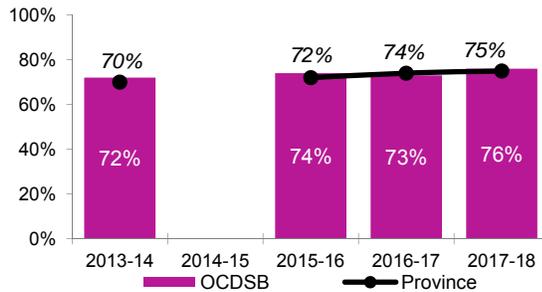
In comparison to the previous three-year average, this information has changed in the following ways for OCDSB students eligible to participate in these assessments:

- the participation rates were the same for both grade 3 and grade 6.
- full exemptions (i.e., an exemption from all three components of the assessment) was down 1% for grade 3 and unchanged for grade 6.
- participation rates for both FTE and PE students have decreased (1% and 9%, respectively). Despite an increase in the proportion of PE students attaining the literacy requirement through the Ontario Secondary School Literacy Course (OSSLC), this rate continues to be much lower than that observed provincially.
- deferral rates for FTE and PE students have each increased by 1%. The rate of deferral for PE students in the OCDSB continues to be higher than the province.

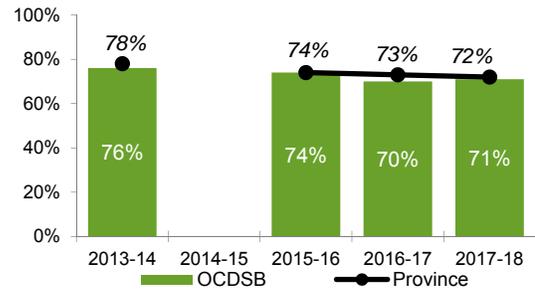
Overall Performance – Primary/Junior Reading & Writing, and OSSLT

The graphs below show the percentage of students in the District and the province who met the provincial standard in *reading* and *writing* and who were successful on the OSSLT over the last five years.

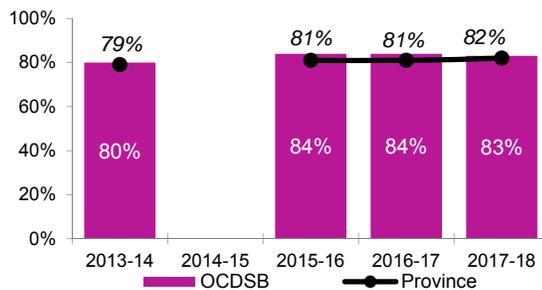
Grade 3 Reading



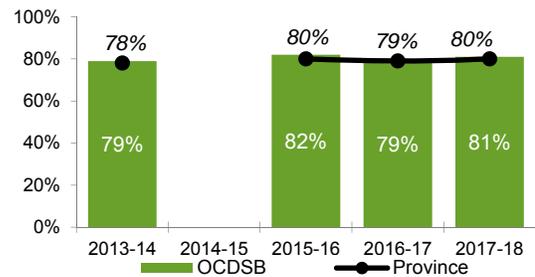
Grade 3 Writing



Grade 6 Reading



Grade 6 Writing

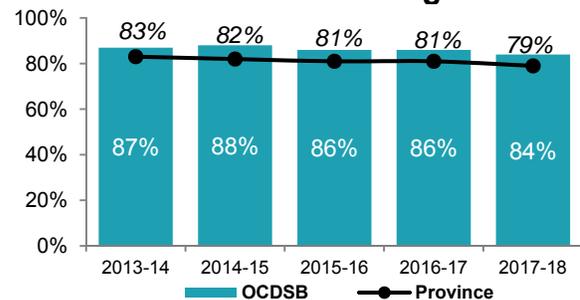


Observations

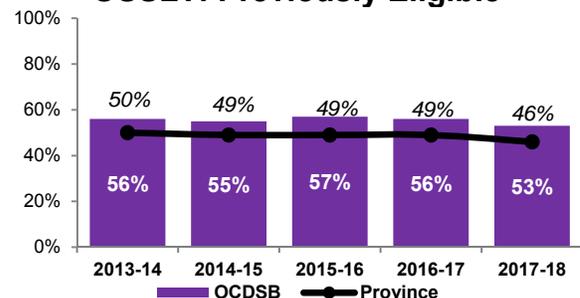
Over a one-year period, both the District and province saw improvements in literacy as measured by the primary and junior assessments of reading and writing, whereas results on the OSSLT declined for both FTE and PE students.

With the exception of grade 3 writing, OCDSB results were higher than the province across all literacy assessments. In elementary, this was also the area in which students showed the weakest performance.

OSSLT: First Time Eligible

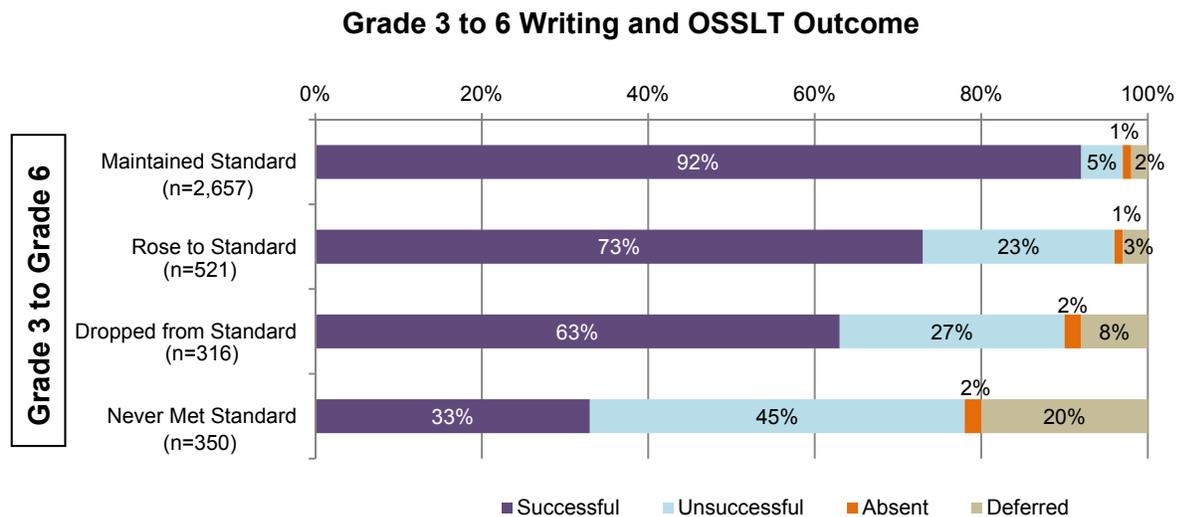
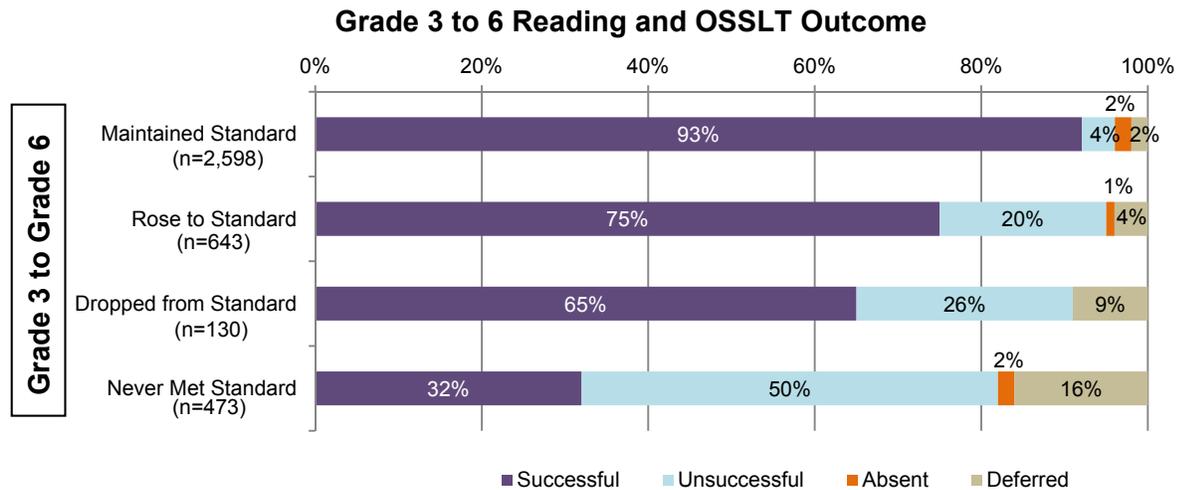


OSSLT: Previously Eligible



Cohort Tracking Over Time, Grade 3 to Grade 6 to OSSLT

Cohort tracking follows a group of students over time. In this case, as they move from grade 3 in 2011 to grade 6 in 2014 to grade 10 in 2018. The graphs below show the achievement results for the cohort of OCDSB students who were first-time eligible to write the OSSLT in March 2018 and for whom both grades 3 and 6 EQAO results are available (n=3,844).



Observations: OCDSB Cohort Tracking

Students who met the provincial standard on both the primary and junior assessments of reading/writing were more likely to be successful on the OSSLT as first-time eligible students compared to students who either dropped from standard or who never met the standard. Deferral rates were substantively higher for students who had not met the provincial standard in either grade 3 or grade 6. Further investigation of the factors that may be contributing to these high deferral rates is currently underway.

Literacy Links to National/International Studies - Highlights

Students are randomly selected to participate in several national and international assessments on a 3-5 year cyclical basis. Results are reported at the country level and, where there are sufficient numbers of participating students, at the provincial level.

Across four literacy based assessments, Ontario students have been shown to be among the most successful in the world:

- performance of Ontario students in reading on the Pan-Canadian Assessment Program was the same as the Canadian average and higher than five Canadian provinces (PCAP in 2016);
- Ontario students have sustained high scores in overall reading achievement since 2000 on the Programme for International Student Assessment (PISA in 2015);
- Ontario students continue to be highly successful on the Progress in International Reading Literacy Study (PIRLS 2011); and
- Students in Ontario scored significantly higher than the international average on the International Computer and Information Literacy Study (ICILS in 2013).

Achievement Gaps for Specific Groups of Students – Primary, Junior and OSSLT

The OCDSB monitors progress towards narrowing achievement gaps for specific groups of students: boys, English language learners (ELLs), students with special education needs (excluding gifted), students who self-identified as Indigenous (FNMI), and students residing in lower income neighbourhoods (SES). While it is understood that there is overlap between these groups of students, results are reported on the following pages for each group separately. The table below shows the number of students in each of these groups, as well as the proportion of the overall eligible cohort, for the primary and junior assessments of reading and writing, and for first-time eligible (FTE) and previously eligible (PE) students on the OSSLT.

Table 3: Distribution of Specific Groups of Students - Primary, Junior and OSSLT

Assessment	Females	Males	ELLs	SpEd	FNMI	SES
Primary (n = 4,901)	2,389 49%	2,512 51%	766 16%	953 19%	116 2%	1,353 28%
Junior (n = 5,047)	2,459 49%	2,588 51%	1,103 22%	1,175 23%	102 2%	1,303 26%
OSSLT - FTE (n = 5,178)	2,600 50%	2,577 50%	1,026 20%	1,168 23%	85 2%	1,297 25%
OSSLT - PE (n = 2,298)	942 41%	1,337 58%	826 36%	826 36%	83 4%	993 43%

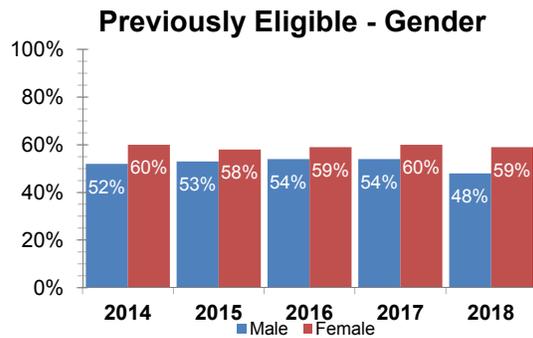
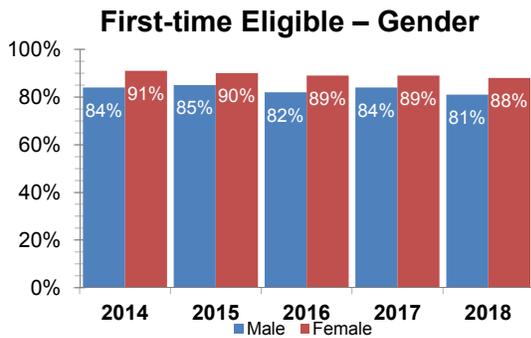
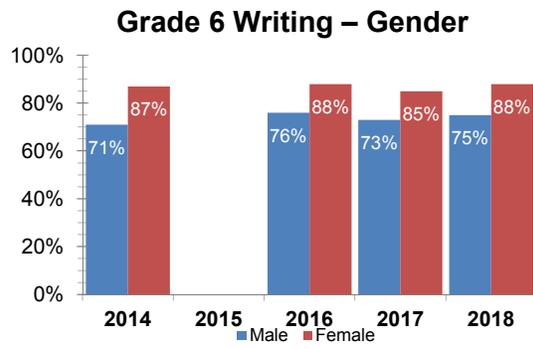
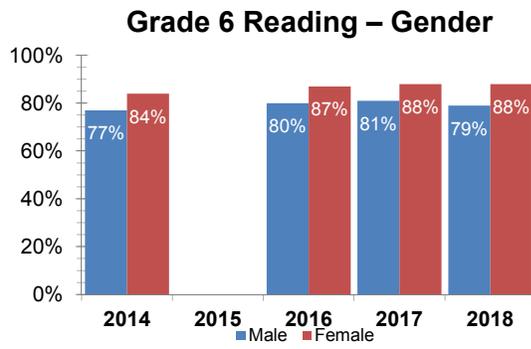
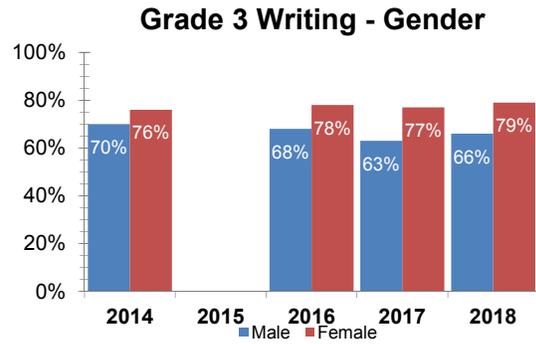
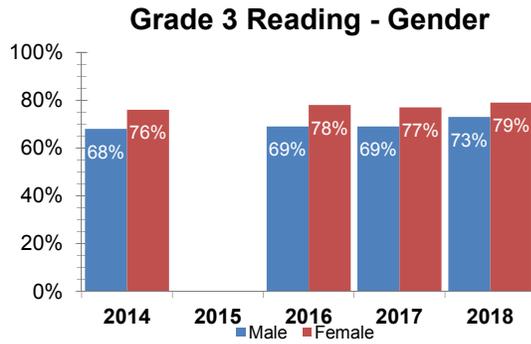
Compared to the OCDSB student population as a whole, boys, English language learners (ELLs), students with special education needs (excluding gifted; SpEd), students who self-identified as Indigenous (FNMI), and students residing in lower income neighbourhoods (SES) continued to achieve at lower levels in reading and writing. The graphs on the following pages show the progress that's been made in narrowing the achievement gaps in reading and writing on the primary and junior EQAO assessments and on the OSSLT for these groups of students over the past few years.

¹ It should be noted that the District recognizes that gender is not a binary construct (see *OCDSB Gender Identity and Gender Expression Guide to Support Our Students*). Due to the small number of students recorded on the OSSLT, both FTE and PE, as "gender not specified", disaggregation of achievement data for 2017-2018 continues to be reported for the binary male-female distinction.

² Provincial comparisons could not be made for FNMI students as a group. At the provincial level, EQAO does not report the number or percentage of students who met the provincial standard at the FNMI group level. EQAO only reports the percentage of students who met the provincial standard for each of the three Aboriginal groups who make up the larger FNMI group (i.e., First Nation, Métis, and Inuit). Without the corresponding provincial numbers for each of these percentages, the percentage of FNMI who met the provincial standard, as a group, could not be calculated.

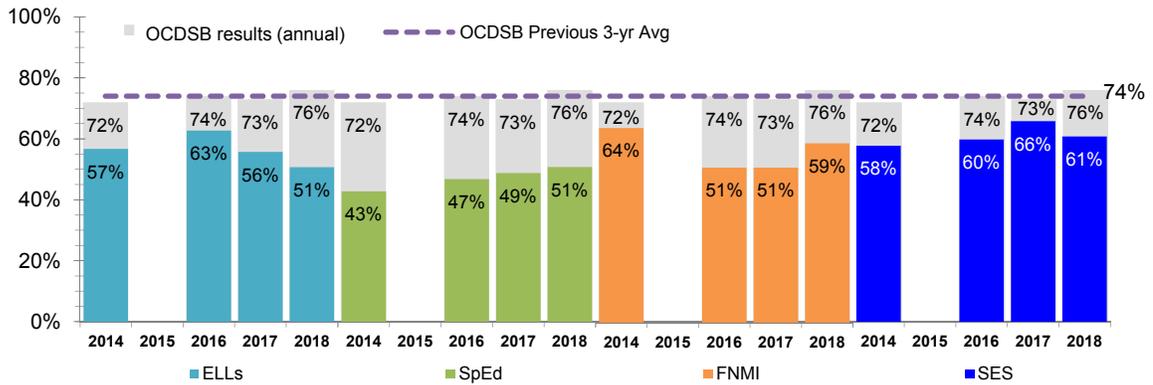
³ This group includes students whose postal code is within a geographic area in which the proportion of families living below the low income measure after tax is greater than that for the City of Ottawa as a whole. More details about this calculation can be found in *Report No. 15-041: Achievement Gaps for Students Residing in Lower-Income Neighbourhoods (SES): Baseline Report (March, 2015)*.

Gender Gaps in Reading, Writing and OSSLT

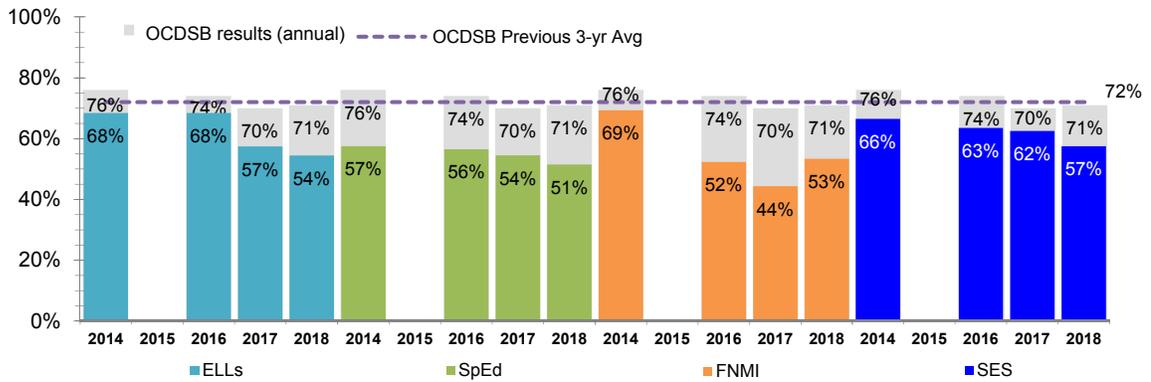


Achievement Gaps Between All Students and ELL, SpEd, FNMI, SES

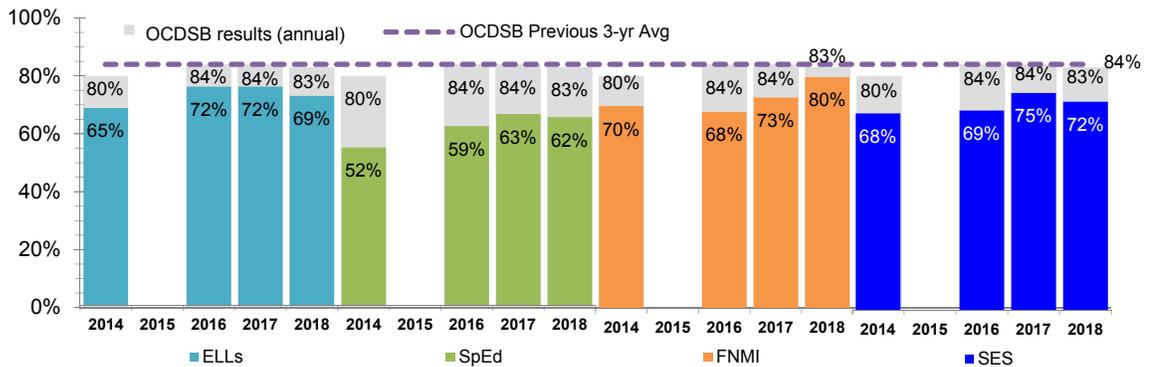
Grade 3 Reading



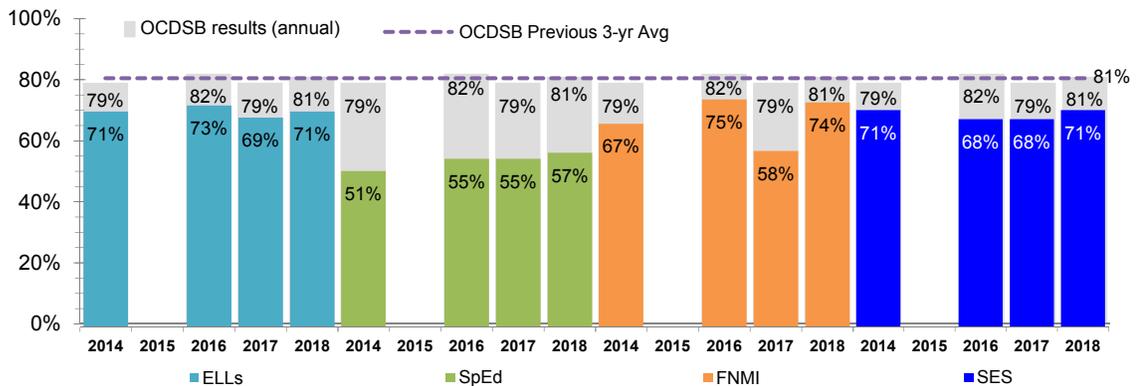
Grade 3 Writing



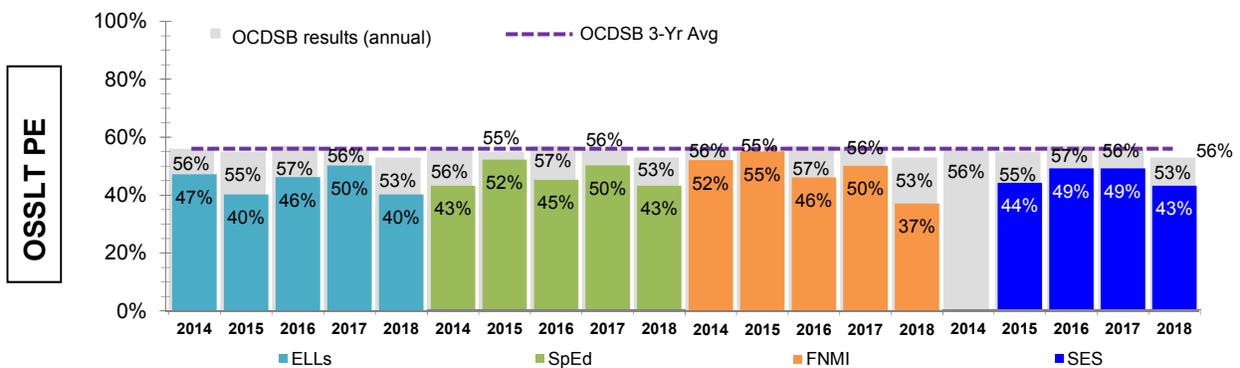
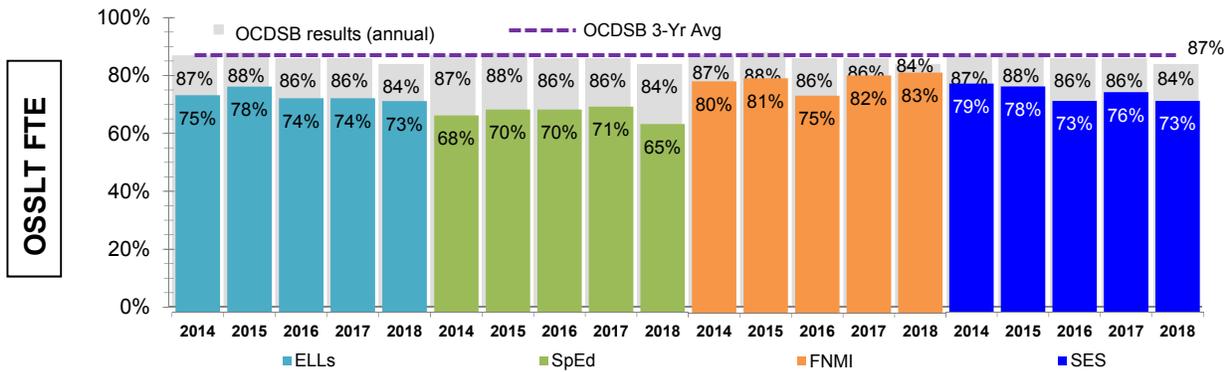
Grade 6 Reading



Grade 6 Writing



Achievement Gaps Between All Students and ELL, SpEd, FNMI, SES



Observations: Achievement Gaps on Provincial Assessments of Reading and Writing

Achievement gaps persist for all groups of students, but tend to be largest for English language learners, students identified with special education needs (excluding gifted) and those who self-identify as Indigenous. Compared to the province, students with special education needs in the OCDSB perform better on the provincial assessments, and efforts to narrow gaps for this group of students is particularly evident in the junior division and in primary reading. More attention and support is required particularly when it comes to our English language learners where achievement gaps in the OCDSB are larger than those observed provincially and have widened in comparison to the previous three-year average gap (more details can be found in the table on the next page).

TRENDS IN LITERACY		How large were our achievement gaps in 2017-2018?	How do our achievement gaps compare to the province?	How do our 2017-2018 achievement gaps compare to the average achievement gaps for the previous 3 years?	
Males vs. Females	Grade 3 Reading	6%		▼ 2%	▼ 3%
	Grade 3 Writing	10%		▼ 1%	▼ 1%
	Grade 6 Reading	9%		— 0%	▲ 2%
	Grade 6 Writing	13%		▲ 1%	▲ 1%
	FTE OSSLT	7%		▼ 1%	▲ 1%
	PE OSSLT	11%		▲ 2%	▲ 6%
ELL	Grade 3 Reading	25%		▲ 18%	▲ 11%
	Grade 3 Writing	17%		▲ 13%	▲ 8%
	Grade 6 Reading	14%		▲ 5%	▲ 2%
	Grade 6 Writing	10%		▲ 4%	▲ 1%
	FTE OSSLT	11%		▼ 1%	— 0%
	PE OSSLT	13%		▲ 4%	▲ 2%
SpEd	Grade 3 Reading	25%		▼ 4%	▼ 1%
	Grade 3 Writing	20%		▼ 1%	▲ 3%
	Grade 6 Reading	21%		▼ 7%	▼ 2%
	Grade 6 Writing	24%		▼ 6%	▼ 1%
	FTE OSSLT	19%		▼ 12%	▲ 3%
	PE OSSLT	10%		▼ 6%	▲ 3%
FNMI	Grade 3 Reading	17%			▼ 5%
	Grade 3 Writing	18%			▼ 6%
	Grade 6 Reading	3%			▼ 11%
	Grade 6 Writing	7%			▼ 7%
	FTE OSSLT	1%			▼ 6%
	PE OSSLT	16%			▲ 10%
SES	Grade 3 Reading	15%			▲ 5%
	Grade 3 Writing	14%			▲ 5%
	Grade 6 Reading	11%			▼ 1%
	Grade 6 Writing	10%			▼ 2%
	FTE OSSLT	11%			— 0%
	PE OSSLT	10%			▲ 1%

TRENDS SUMMARY LEGEND
▼ Narrowed achievement gap
— No change
▲ Widened achievement gap

Secondary Report Card Data – Grades 9 and 10: English, Core French, Geography, and History

Student Characteristics

Table 4 (below) shows the total number of students enrolled in each of grades 9 and 10 academic and applied level English, core French, Geography and History courses during the 2017-2018 school year, as well as a breakdown for specific groups of students. Enrolment in academic level courses continues to be at least four times that of applied level courses, with the exception of core French. Compared to academic level courses, applied level courses also tend to have modestly higher proportions of students who self-identified as Indigenous (FNMI), and substantially higher proportions of boys, ELLs, students with special education needs (excluding gifted), and students residing in lower income neighborhoods. This information will help to provide context for the achievement results that follow.

Table 4: Enrolment Distribution, Grades 9 and 10 Compulsory Courses - English, French, Geography & History

Course	Program	Enrolment	Females	Males	ELLs	SpEd	FNMI	SES
Grade 9								
English (ENG)	Academic (1D)	4,423	2,272 51%	2,151 49%	644 15%	687 16%	73 2%	898 20%
	Applied (1P)	706	267 38%	439 62%	136 19%	459 65%	32 5%	292 41%
Core French (FSF)	Academic (1D)	1,612	745 46%	867 54%	313 19%	313 19%	31 2%	343 21%
	Applied (1P)	917	375 41%	542 59%	240 26%	361 39%	31 3%	338 37%
Geography (CGC)	Academic (1D)	2,223	2,223 51%	2,121 49%	668 15%	670 15%	70 2%	896 21%
	Applied (1P)	1,023	397 39%	626 61%	345 34%	571 56%	44 4%	453 44%
Grade 10								
English (ENG)	Academic (2D)	4,641	2,452 53%	2,189 47%	830 18%	683 15%	53 1%	1,012 22%
	Applied (2P)	929	377 41%	552 59%	271 29%	443 48%	33 4%	404 43%
Core French (FSF)	Academic (2D)	851	502 59%	349 41%	159 19%	132 16%	* *	211 25%
	Applied (2P)	97	52 54%	45 46%	28 29%	33 34%	* *	36 37%
History (CHC)	Academic (2D)	4,138	2,184 53%	1,954 47%	635 15%	602 15%	47 1%	815 20%
	Applied (2P)	1,086	445 41%	641 59%	385 35%	501 46%	24 2%	428 39%

*fewer than 10

Overall Performance

OCDSB pass rates in grades 9 and 10 compulsory English, core French, and Geography courses are shown in the following table. Information for specific groups of students follows.

Table 5: Grades 9 and 10 Pass Rates and Percentages of Students Achieving at Level 3 or 4 in Compulsory Credits Based on Full Year Report Card Data, June 2018¹

Course	Level	Pass Rates					Percentage of Students Achieving at Level 3 or 4				
		2013-14	2014-15	2015-16	2016-17	2017-18	2013-14	2014-15	2015-16	2016-17	2017-18
Grade 9 English (ENG)	Academic	98%	98%	98%	98%	99%	78%	79%	78%	78%	79%
	Applied	86%	84%	86%	89%	87%	48%	45%	50%	51%	46%
Grade 10 English (ENG)	Academic	96%	94%	97%	98%	98%	75%	76%	77%	75%	78%
	Applied	80%	84%	87%	88%	90%	36%	42%	48%	46%	44%
Grade 9 Core French (FSF)	Academic	100%	99%	99%	99%	98%	71%	76%	77%	77%	77%
	Applied	92%	94%	96%	96%	93%	54%	59%	58%	61%	62%
Grade 10 Core French (FSF)	Academic	99%	99%	99%	99%	99%	78%	79%	81%	80%	82%
	Applied	98%	96%	95%	95%	94%	74%	80%	77%	75%	69%
Grade 9 Geography (CGC)	Academic	98%	98%	99%	99%	99%	77%	78%	79%	80%	82%
	Applied	85%	87%	87%	86%	89%	44%	46%	48%	47%	53%
Grade 10 History (CHC)	Academic	97%	97%	97%	98%	98%	74%	78%	78%	77%	81%
	Applied	84%	85%	83%	88%	91%	42%	46%	49%	46%	50%

increase

no change

decrease



Observations: Report Card Data - Literacy

Pass rates have remained constant or increased in 8 of 12 courses over 2017-2018 results; declines in the remaining courses range from 1% to 3%. Similarly, the proportion of students meeting/exceeding the provincial standard have increased or remained the same in 9 of 12 courses; declines in the remaining courses range from 2% to 6%. Performance of students in applied level courses continues to be lower compared to those in academic level courses. For students in applied level Geography and History, however, increases in both the pass rate and the proportion of students meeting or exceeding the provincial standard have been observed over 2016-2017. In fact, these rates are the highest rates observed over the past five years.

¹ Data was extracted from the Trillium Student Information System in August 2018.

Achievement Gaps for Specific Groups of Students – Literacy

Trends	Males	ELL	SpEd	FNMI	SES
<u>Pass Rates:</u>					
How large were our achievement gaps in <i>academic level</i> English, French, Geography and History in 2017-2018?	0-2%	0-1%	0-3%	0-6%	0-2%
In which <i>academic level</i> courses has progress been made in narrowing the achievement gaps over the past few years?	FSF2D	ENG1D CGC1D	FSF1D FSF2D	FSF1D FSF2D CHC2D	CHC2D
How large were our achievement gaps in <i>applied level</i> English, French, Geography and History in 2017-2018?	1-12%	0-3%	0-3%	11-44%	1-5%
In which applied level courses has progress been made in narrowing the achievement gaps over the past few years?	-	FSF1P FSF2P CGC1P	FSF2P	-	ENG2P CGC1P CHC2P
<u>Provincial Standard:</u>					
How large were our achievement gaps in <i>academic level</i> English, French, Geography and History in 2017-2018?	1-15%	4-13%	9-19%	1-23%	3-10%
In which <i>academic level</i> courses has progress been made in narrowing the achievement gaps over the past few years?	ENG1D FSF1D FSF2D CGC1D	ENG1D ENG2D FSF1D CGC1D CHC2D	FSF2D CGC1D	ENG2D FSF2D CHC2D	ENG1D ENG2D FSF1D CGC1D
How large were our achievement gaps in <i>applied level</i> English, French, Geography and History in 2017-2018?	4-25%	0-8%	0-13%	5-69%	0-8%
In which applied level courses has progress been made in narrowing the achievement gaps over the past few years?	ENG1P ENG2P CGC1P	ENG1P ENG2P FSF1P FSF2P CGC1P	FSF2P	CHC2P	ENG1P ENG2P FSF2P CGC1P



Observations: Report Card Data – Literacy (continued)

Achievement gaps have narrowed for many groups of students, most notably in: (i) pass rates for ELLs in applied and academic level grade 9 Geography, in applied level French courses, and in grade 9 academic level English; (ii) meeting/exceeding the provincial standard for boys, ELLs and students residing in lower-income neighbourhoods in a majority of academic level courses; and (iii) meeting/exceeding the provincial standard for ELLs and students residing in lower-income neighbourhoods in a most applied level courses.

For students who self-identify as Indigenous (FNMI), progress towards narrowing the gap in both the pass rate and in the proportion of students meeting/exceeding the provincial standard in grade 10 academic level core French and History was achieved. In addition, performance of students residing in lower income neighborhoods exceeded that of other students in terms of both pass rates and in the proportion that met/exceeded the provincial standard in and applied level grade 9 English, Geography, French, and in grade 10 academic English and History.

Numeracy (K-12)

Education Quality and Accountability Office (EQAO) Assessments

Student Characteristics – Primary/Junior and Grade 9

The table below shows grade 3, 6 and 9 student participation in the 2017-2018 EQAO mathematics assessments. Participation results are presented for the OCDSB and for the province.

Table 6: Student Participation, Primary/Junior & Grade 9 EQAO Assessments

	Number of Students	Participation Rate	Fully Exempt
OCDSB			
Primary (Grade 3)	4,901	96%	2%
Junior (Grade 6)	5,048	97%	2%
Grade 9 (Applied)	1,056	92%	
Grade 9 (Academic)	4,176	99%	
Province			
Primary (Grade 3)	132,656	97%	2%
Junior (Grade 6)	132,776	97%	2%
Grade 9 (Applied)	33,451	96%	
Grade 9 (Academic)	96,996	99%	

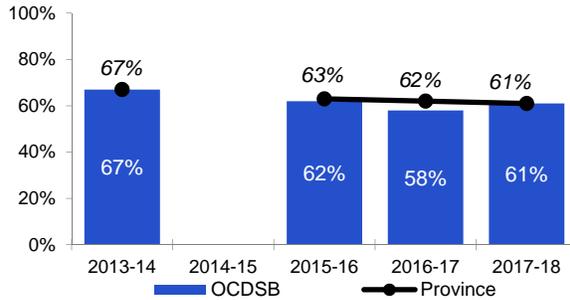
Compared to the previous three-year average, this information has changed in the following ways for OCDSB students eligible to participate in these assessments:

- no change in the participation rate for both the grade 3 or grade 6 assessments;
- a 1% decrease in full exemptions on the grade 3 assessment (i.e., an exemption from all three components of the assessments); no change for grade 6; and
- a 3% drop in the participation rate in grade 9 applied level mathematics; no change in academic.

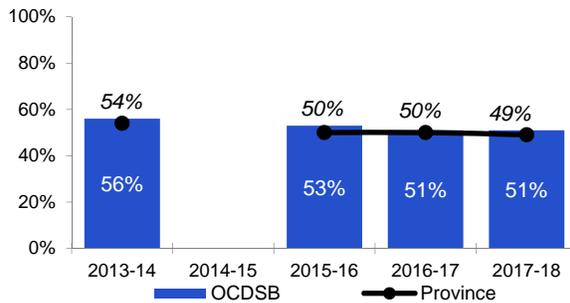
Overall Performance – Primary/Junior & Grade 9

The graphs below show the percentage of elementary and secondary students in the District and the province who met the provincial standard in *mathematics* over the last five years.

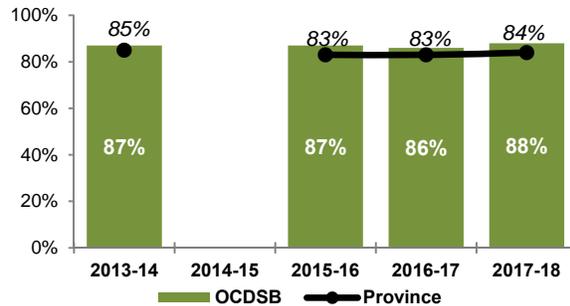
Grade 3 Mathematics



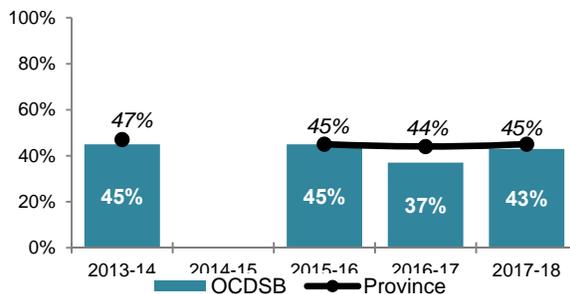
Grade 6 Mathematics



Grade 9 Academic Math



Grade 9 Applied Math



Observations

OCDSB student performance has improved on the primary and grade 9 assessments of mathematics, and have remained stable in grade 6 since the previous administration of the EQAO assessments in 2017.

OCDSB performance was the same as, or higher than, the province in all numeracy assessments except grade 9 applied math.

Numeracy Links to National/International Studies - Highlights

Students are randomly selected to participate in several national and international assessments on a 3-5 year cyclical basis. Results are reported at the country and, where there are sufficient numbers of participating students, provincial level.

Across three numeracy based assessments, Ontario students have been shown to perform exceptionally well:

- Performance of Ontario students was the same as the Canadian average on the mathematics component of the Pan-Canadian Assessment Program, being only one of two provinces to achieve this. Quebec was the only province where students surpassed the Canadian average. In science, however, performance of Ontario students was the same as the Canadian average (PCAP 2016);
- Ontario's student achievement in science and mathematics continues to exceed the OECD average on the Programme for International Student Assessment (PISA 2015); and
- More than two-thirds of Canadian students met the Intermediate benchmarks for mathematics and science on the Trends in International Mathematics and Science Study. With the exception of grade 4 mathematics, performance of Canadian students was similar to or better than the international average. (TIMSS 2015).

Achievement Gaps for Specific Groups of Students – Primary, Junior, Grade 9 Mathematics

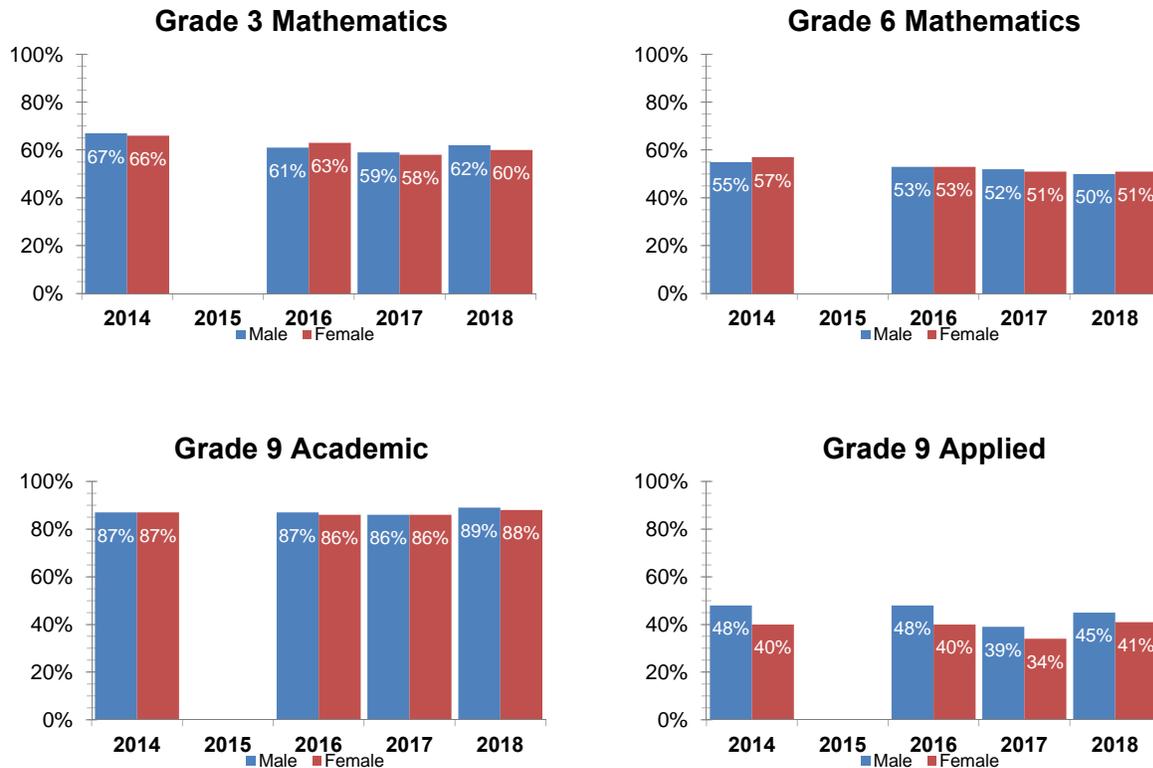
The OCDSB monitors progress towards narrowing achievement gaps for specific groups of students: boys, English language learners (ELLs), students with special education needs (excluding gifted; SpEd), students who self-identified as Indigenous (FNMI), and students residing in lower income neighbourhoods (SES). While it is understood that there is overlap between these groups of students, results are reported on the following pages for each group separately. The table below shows the number of students in each of these groups, as well as the proportion of the overall eligible cohort, for the primary, junior, and grade 9 mathematics assessments – academic and applied.

Table 7: Distribution of Specific Groups of Students - Primary, Junior and Grade 9 EQAO Mathematics Assessments

Assessment	Females	Males	ELLs	SpEd	FNMI	SES
Primary (n = 4,901)	2,389 49%	2,512 51%	766 16%	953 19%	116 2%	1,353 28%
Junior (n = 5,047)	2,459 49%	2,588 51%	1,103 22%	1,175 23%	102 2%	1,303 26%
Academic Math (n = 4,176)	2,073 50%	2,103 50%	707 17%	558 13%	62 2%	887 21%
Applied Math (n = 1,056)	491 46%	565 54%	331 31%	477 45%	37 4%	435 41%

Compared to the OCDSB student population as a whole, (ELLs), students with special education needs (excluding gifted; SpEd), students who self-identified as Indigenous (FNMI), and students from lower-income neighbourhoods (SES) continued to achieve at lower levels in mathematics. The graphs that follow show the progress we have made in narrowing the elementary and secondary achievement gaps in mathematics for these specific groups of students over the last five years.

Gender Gaps in Mathematics

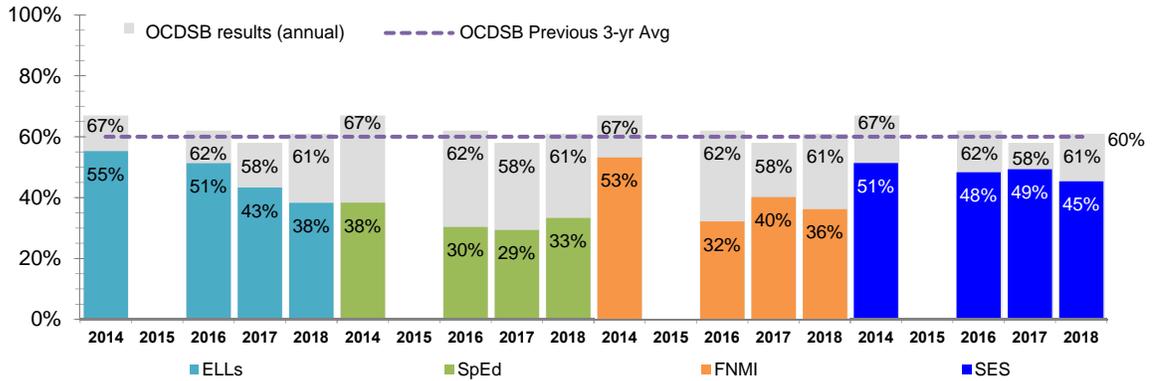


Observations: Gender Gaps on Provincial Assessments of Mathematics

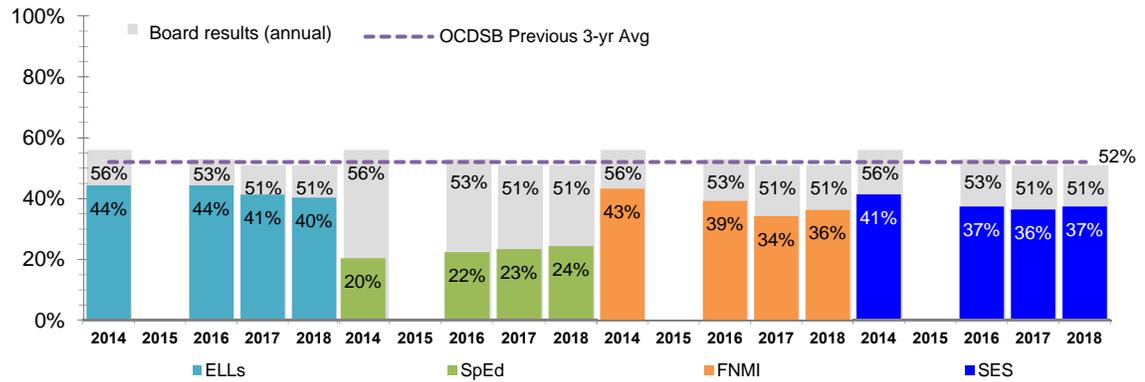
While achievement gaps were not as predominant across genders, it is important to note that the increase in the gaps compared to the average of the previous three years is reflective of the shift in results now favouring boys. Achievement gaps were most pronounced in the applied level program. Achievement gaps in the OCDSB are similar to those observed provincially.

Achievement Gaps Between All Students and ELLs, SpEd, FNMI, SES

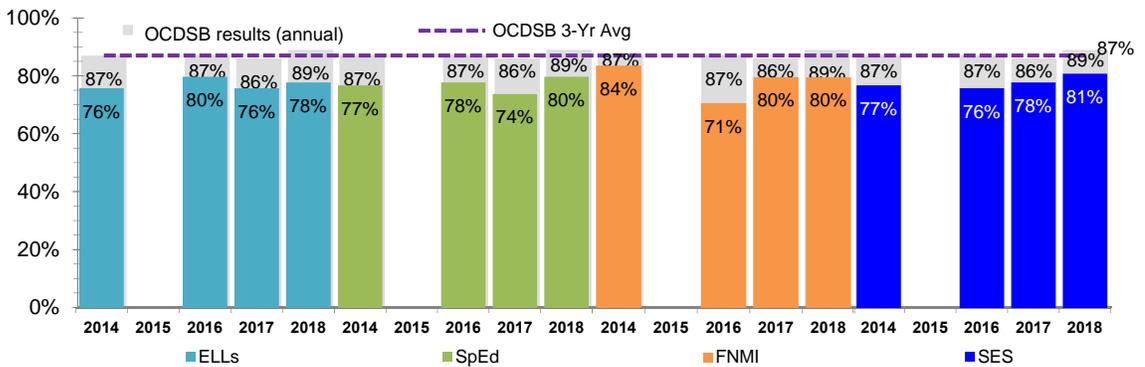
Grade 3 Math



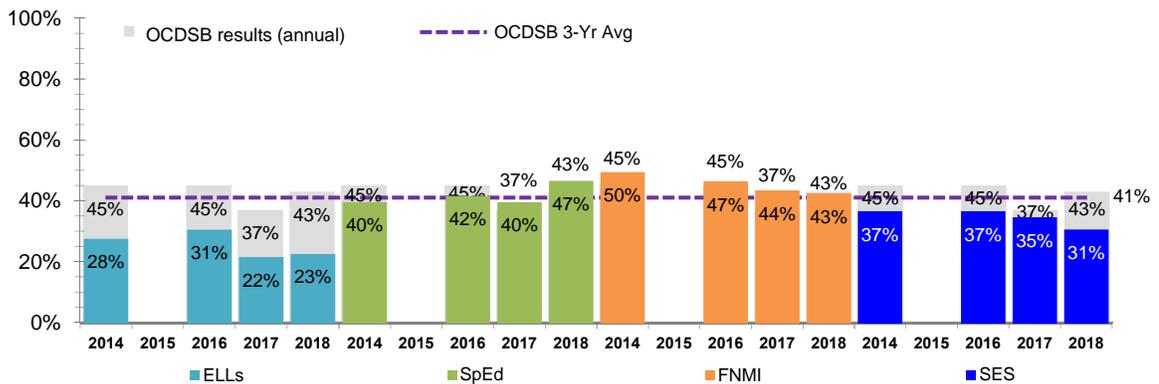
Grade 6 Math



Grade 9 Academic Math



Grade 9 Applied Math



TRENDS IN NUMERACY		How large were our achievement gaps in 2017-2018?	How do our achievement gaps compare to the province?	How do our 2017-2018 achievement gaps compare to the average achievement gaps for the previous 3 years?	
Males vs. Females	Grade 3 Mathematics	2%		▲ 1%	▲ 3%
	Grade 6 Mathematics	1%		— 0%	▲ 2%
	Grade 9 Academic	1%		— 0%	— 0%
	Grade 9 Applied	4%		▼ 1%	▼ 3%
ELL	Grade 3 Mathematics	23%		▲ 18%	▲ 10%
	Grade 6 Mathematics	11%		▲ 5%	▲ 2%
	Grade 9 Academic	10%		▲ 5%	▲ 1%
	Grade 9 Applied	20%		▲ 11%	▲ 5%
SpEd	Grade 3 Mathematics	28%		▼ 4%	▼ 3%
	Grade 6 Mathematics	27%		▼ 5%	▼ 3%
	Grade 9 Academic	8%		▼ 5%	▼ 3%
	Grade 9 Applied	4%		▼ 11%	▲ 4%
FNMI	Grade 3 Mathematics	25%			▲ 1%
	Grade 6 Mathematics	15%			▼ 1%
	Grade 9 Academic	8%			▼ 3%
	Grade 9 Applied	0%			▲ 5%
SES	Grade 3 Mathematics	16%			▲ 5%
	Grade 6 Mathematics	14%			▼ 2%
	Grade 9 Academic	7%			▼ 3%
	Grade 9 Applied	12%			▲ 7%

TRENDS SUMMARY LEGEND
▼ Narrowed achievement gap
— No change
▲ Widened achievement gap



Observations: Achievement Gaps on Provincial Assessments of Mathematics (continued)

Substantive gaps persist in mathematics for our remaining four groups of students. The widening gap for ELLs in all assessments was of particular concern. Despite relatively large gaps in performance between students with special education needs (excluding gifted) and all students, particularly on the primary and junior assessments, gaps were smaller in the OCDSB compared to the province and have narrowed over time. In applied level courses where nearly half the students have been identified with special education needs (excluding gifted), performance has historically been higher than for all students in the course.

Characteristics of Students Who Met vs. Did Not Meet the Provincial Standard in Mathematics

Table 8 (below) displays student characteristics for students who participated in the 2017-2018 EQAO mathematics assessments. Characteristics are reported separately for students who met the provincial standard, and for those who did not meet the provincial standard, within each grade level.

Table 8: Student Characteristics, Primary/Junior & Grade 9 EQAO Assessments

	Number of Students*	Male	Female	ELL	SpEd (excl. Gifted)	Home language not English**	Entered Board during year of assessment
Primary (Grade 3)							
Met	2,968	52%	48%	10%	11%	22%	6%
Did not meet	1,763	49%	51%	23%	32%	28%	9%
Junior (Grade 6)							
Met	2,559	51%	49%	17%	11%	26%	6%
Did not meet	2,319	51%	49%	26%	34%	28%	7%
Grade 9 Applied							
Met	454	56%	44%	17%	50%	7%	15%
Did not meet	514	51%	49%	44%	45%	14%	18%
Grade 9 Academic							
Met	3,695	51%	49%	15%	12%	9%	15%
Did not meet	429	47%	53%	34%	23%	16%	17%

*Number of students adds up to Participating students within each grade level

**Based on student self-report on questionnaire item; responses "Mostly" or "Only" language(s) other than English at home.

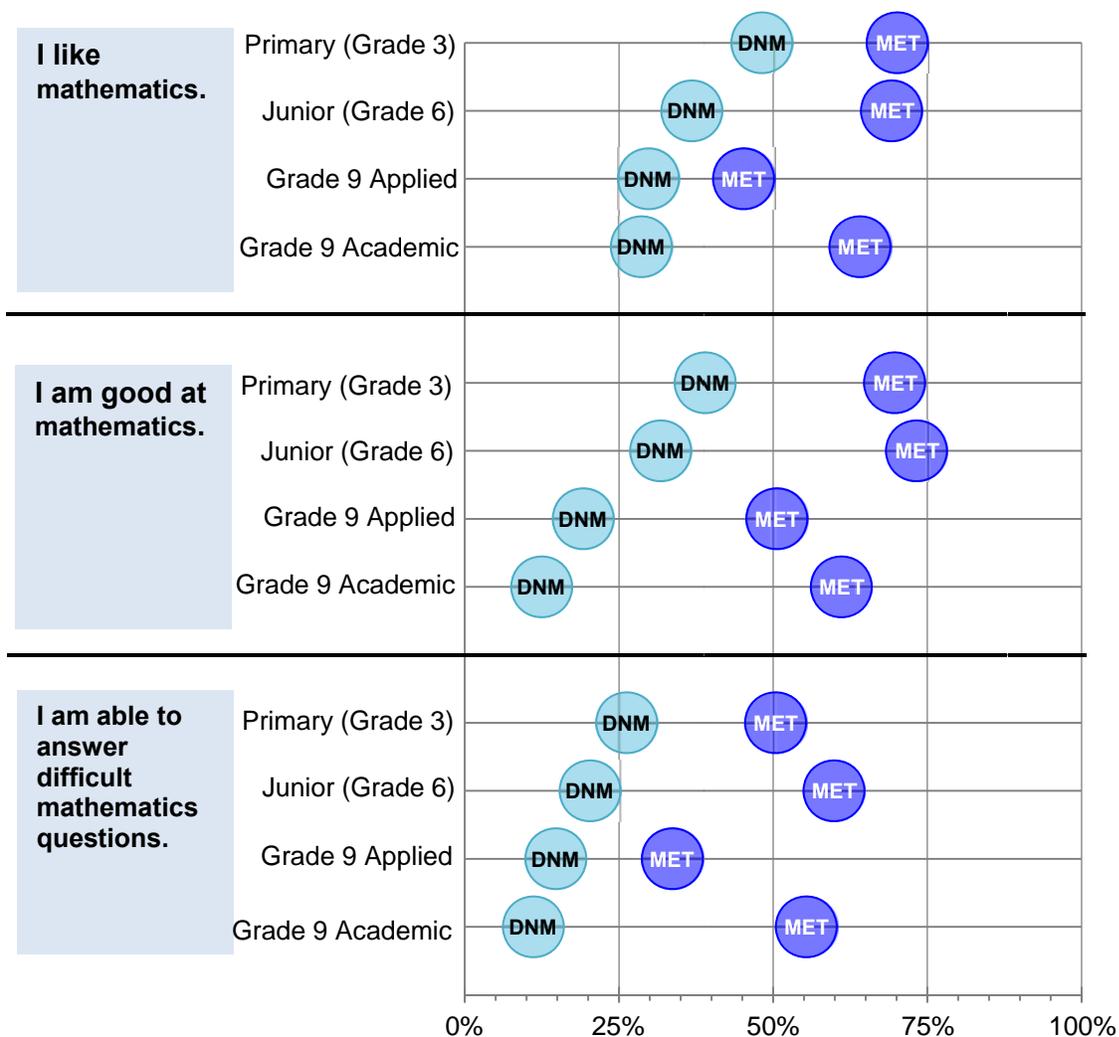


Observations

Compared to students who met the provincial standard in math, those who did not meet it were more likely to: be an ELL, have special education needs (with the exception of Grade 9 Applied); report their home language was something other than English; and, have entered our Board during the year of the assessment. These demographics are similar to those observed last year, with the exception of home language where there has been a significant increase in the proportion of students on the primary and junior assessments reporting a home language as something other than English. Identifying strategies/supports targeted specifically for these students will be necessary for their success in school and leading up to the assessments.

Common Questions Across EQAO Mathematics Assessments

The chart below shows the percentage of students at each grade level—divided into two groups to reflect those who met and those who did not meet provincial standard—who agreed with the three statements on mathematics below.



Note: Scales for P/J and Secondary questions vary slightly. P/J results reflect the percentages of students who answered “Most of the time” on a 3-point response scale, while Secondary results reflect the percentage of students who answered “Agree” or “Strongly Agree” on a 5-point response scale.

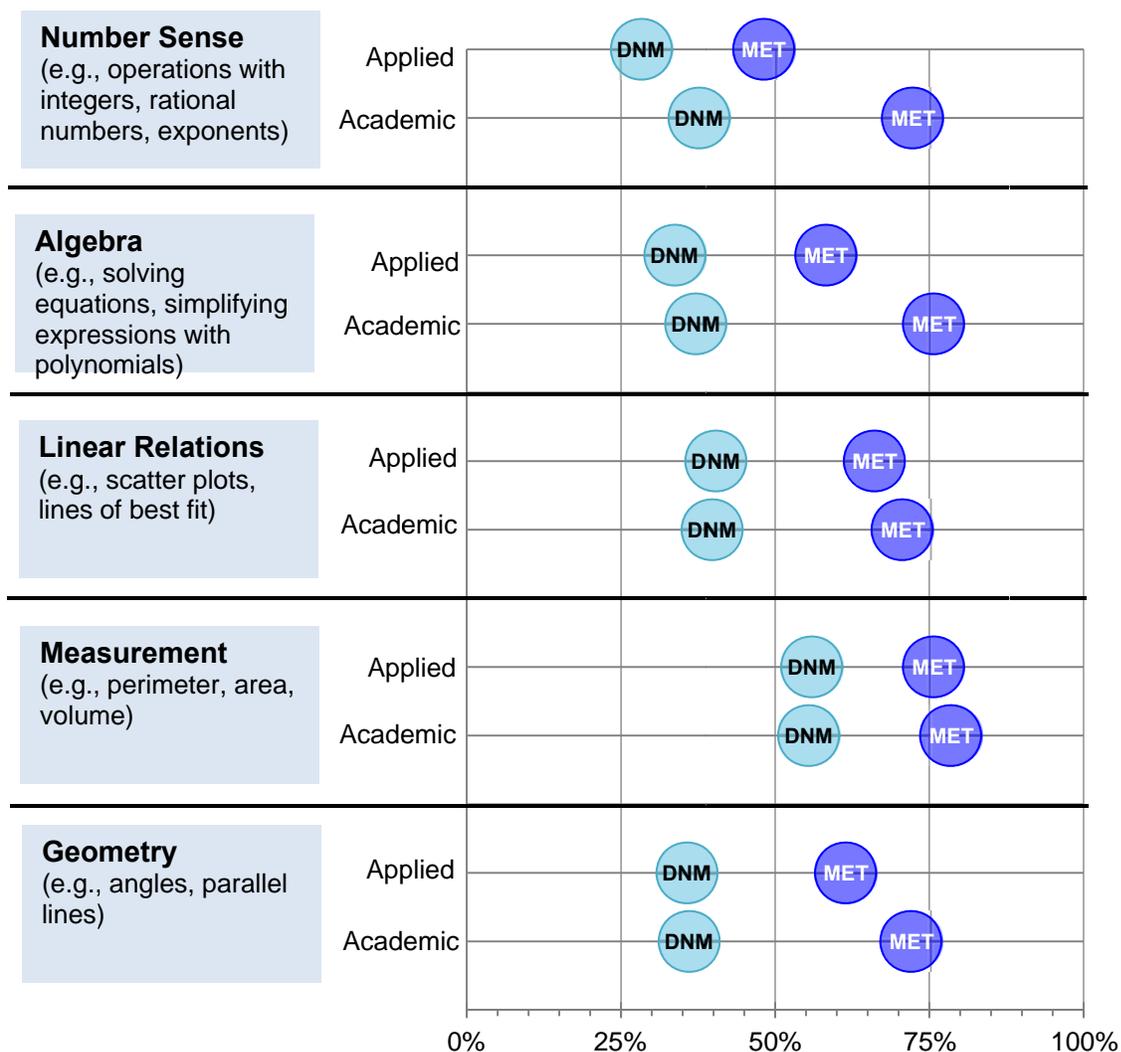


Observations

Consistent with trends observed in 2016-2017, students who did not meet provincial standard in mathematics reported enjoying math less, and had less positive beliefs about their ability in math and their efforts towards math activities. Gaps between these groups were larger in grade 6 than in grade 3, and in grade 9 academic compared to applied. Making math enjoyable for students and finding ways to help students believe they are capable math learners will likely be important for narrowing these gaps.

Grade 9 Mathematics: Confidence by Mathematics Area

The chart below shows the percentage of grade 9 students—divided into two groups to reflect those who met and those who did not meet provincial standard—in Applied and Academic mathematics who responded *confident* and *very confident* to questions aimed at specific math strands. Specifically, students were asked, *How confident are you that you can answer mathematics questions related to the following?*

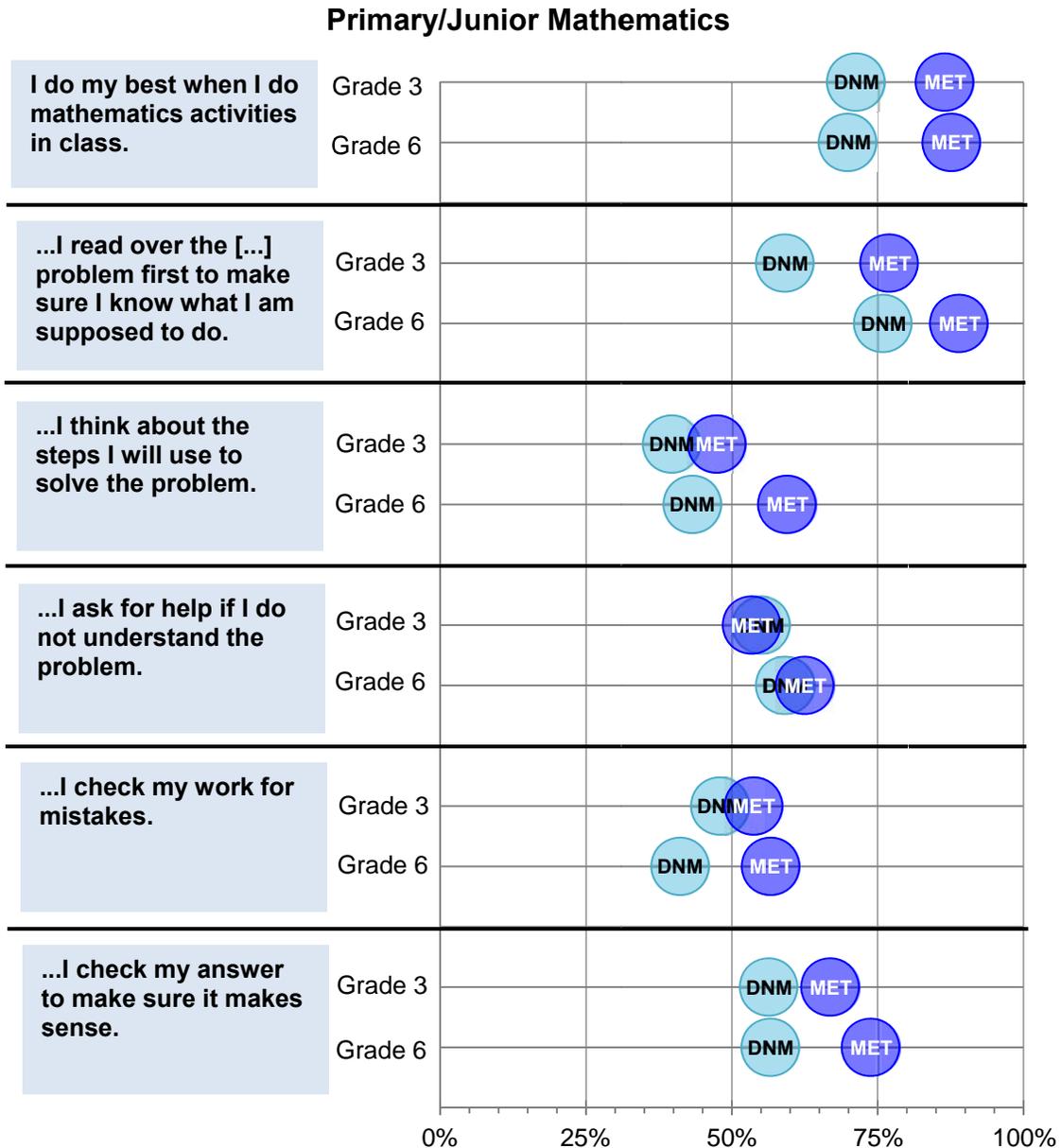


Observations

Students who did not meet provincial standard reported less confidence across all math areas in both course levels. At the applied level, both groups of students expressed the least confidence in the area of *Number Sense*, while academic level students expressed the least confidence in answering questions related to *Geometry*.

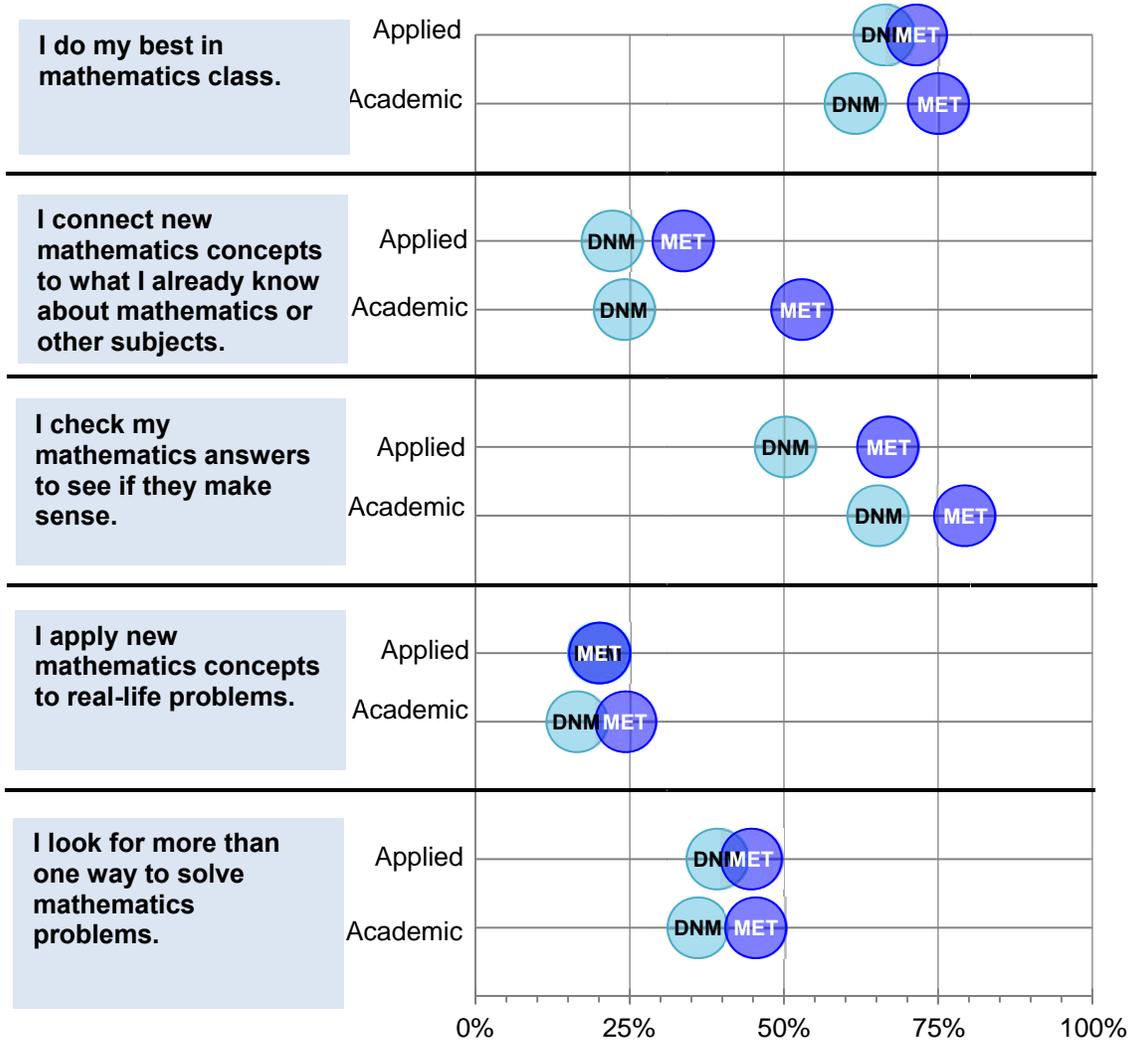
Mathematics Attitudes, Strategies and Behaviours

The chart below shows the percentage of students at each grade level – divided into two groups to reflect those who met and those who did not meet provincial standard – who agreed with the following statements on mathematics.



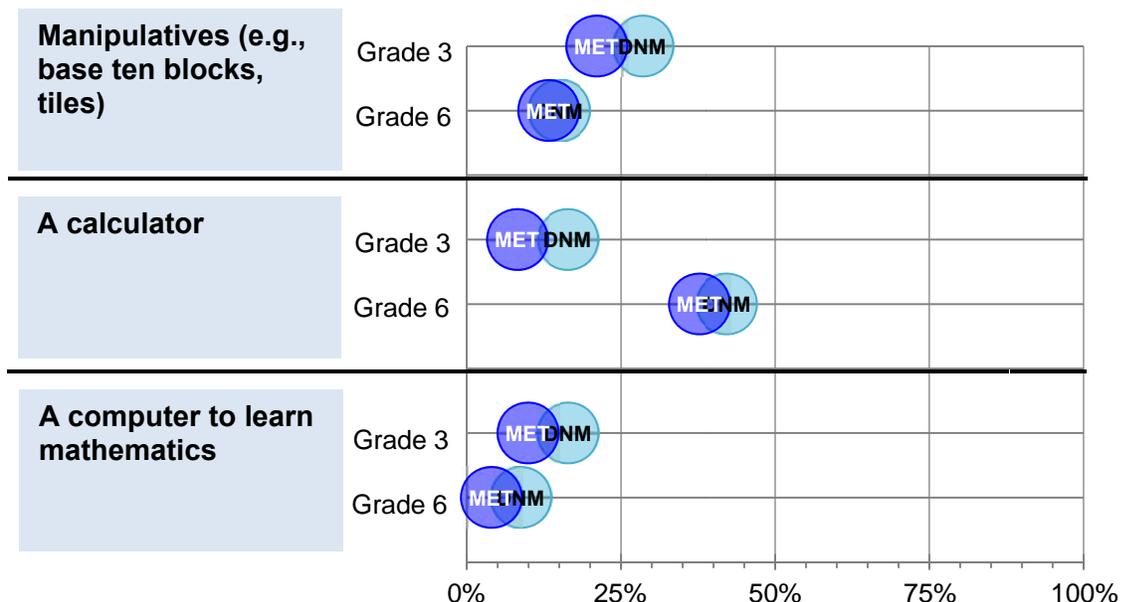
Note: Scales for P/J and Secondary questions vary slightly. P/J results reflect the percentages of students who answered “Most of the time” on a 3-point response scale, with the exception of “I do my best in mathematics class,” which reflects the percentage of students who answered “Agree” or “Strongly Agree” on a 5-point scale. Grade 9 results reflect the percentage of students who answered “Often” or “Very Often” on a 4-point scale.

Grade 9 Mathematics



Primary/Junior Mathematics, Use of Instructional Tools

The chart below shows the percentage of students at each grade level – divided into two groups to reflect those who met and those who did not meet provincial standard – who indicated using the following instructional tools “most of the time” during mathematics activities at school.



Analysis of Item Information Reports

The Item Information Reports produced by EQAO afford the opportunity to identify areas of the curriculum that are posing challenges for students. Since items range in level of difficulty from year to year and the number of items assessing a particular strand, category or expectation are relatively few, analyses are performed across three years of data. An analysis of District level results compared to provincial results suggest that students in both the primary and junior divisions were weaker in the area of *Geometry and Spatial Sense*. Students in the primary division were also less skilled in the area of *Application*, while students in the junior division performed lower on questions related to *Knowledge and Understanding*.

For students in grade 9 applied level mathematics, results differ across winter and spring administrations, with students in the winter term demonstrating greater challenges in questions related to *Measurement & Geometry* and those in the spring having the most difficulty with *Number Sense & Algebra*. Students across both semesters showed the least skill in *Knowledge & Understanding*.

For students in grade 9 academic level mathematics, *Linear Relations* (for students in the winter term) and *Measurement and Geometry* (for students in the spring term) were the strands that posed the greatest level of challenge. In both the winter and spring administrations, students demonstrated the weakest performance in *Knowledge and Understanding*. For students participating in the assessment in the spring, *Thinking* was also identified as an area of weakness.



Observations

Across all grade levels, students who did not meet provincial standard reported less engagement in mathematics in class, and were less likely to make use of cognitive strategies to solve mathematics problems. The differences between the two groups tended to be more pronounced in grade 6 than in grade 3. At secondary, the largest gap between the two groups was observed in relation to connecting new math concepts with what is already known in math and/or other subject areas.

Overall, less than half of all grade 9 students reported connecting new math concepts to their existing knowledge, applying mathematics to real-life problems, or looking for more than one way to solve mathematics problems. At the elementary level, only about half of grade 3 and grade 6 students reported thinking about the steps they would use to solve the problem or checking their work for mistakes. Taken together, this suggests that engaging students in authentic learning of mathematics while also focusing on strategies/processes to support them in their learning would be of benefit.

When it came to the frequency with which students in grade 3 and grade 6 reported using instructional tools during math class, students who met the provincial standard on the assessment reported less frequent use compared to students who did not meet standard. This is something that at the school level may be important to explore further to help provide context for these results, as patterns such as these have emerged in the past and have yielded the following considerations: (i) familiarity with the term “manipulative” that is used on the questionnaire vs. another term such as “math tools” that may be used during classroom instruction; (ii) whether or not students are permitted to use calculators during math class or encouraged to use other problem solving strategies to find solutions/answers; and, (iii) how technology, computer or other, is integrated into the teaching of mathematics and the comfort level or confidence of the classroom teacher doing so.

Secondary Report Card Data – Grades 9 and 10 Math and Science

Student Characteristics

Table 9 (below) shows the total number of students enrolled in each of grades 9 and 10 academic and applied level mathematics and science courses during the 2017-2018 school year, as well as a breakdown for specific groups of students. Enrolment in academic level courses continues to be three to five times that of applied level courses. Compared to academic level courses, applied level courses also tend to have modestly higher proportions of boys and students who self-identified as Indigenous, and substantially higher proportions of ELLs, students with special education needs (excluding gifted), and students residing in lower income neighborhoods. This information will help to provide context for the achievement results that follow.

Table 9: Enrolment Distribution, Grades 9 and 10 Mathematics and Science Courses

Course	Program	Enrolment	Females	Males	ELLs	SpEd	FNMI	SES
Grade 9								
Mathematics (MPM/MFM)	Academic (1D)	4,287	2,127 50%	2,160 50%	738 17%	580 14%	63 1%	906 21%
	Applied (1P)	1,143	543 48%	600 52%	345 30%	513 45%	40 3%	487 43%
Science (SNC)	Academic (1D)	4,455	2,249 50%	2,206 50%	747 17%	658 15%	68 2%	932 21%
	Applied (1P)	817	336 41%	481 59%	254 31%	447 55%	29 4%	367 45%
Grade 10								
Mathematics (MPM/MFM)	Academic (2D)	4,144	2,142 52%	2,002 48%	814 20%	487 12%	44 1%	883 21%
	Applied (2P)	1,332	623 47%	709 53%	326 24%	539 40%	27 2%	497 37%
Science (SNC)	Academic (2D)	4,383	2,274 52%	2,109 48%	809 18%	590 13%	47 1%	948 22%
	Applied (2P)	1,063	452 44%	564 56%	270 27%	471 46%	26 3%	403 40%

Overall Performance

OCDSB pass rates and the percentages of students meeting/exceeding the provincial standard in grades 9 and 10 compulsory Mathematics and Science courses are shown in the table below. Information for specific groups of students follows.

Table 10: Grades 9 and 10 Pass Rates and Percentages of Students Achieving at Level 3 or 4 in Compulsory Credits Based on Full Year Report Card Data, June 2018¹

Course	Level	Pass Rates					Percentage of Students Achieving at Level 3 or 4				
		2013-14	2014-15	2015-16	2016-17	2017-18	2013-14	2014-15	2015-16	2016-17	2017-18
Grade 9 Math	Academic	96%	96%	96%	96%	97%	66%	71%	71%	72%	73%
	Applied	87%	86%	86%	86%	87%	43%	45%	43%	45%	49%
Grade 9 Science	Academic	98%	97%	97%	98%	98%	71%	73%	73%	76%	76%
	Applied	88%	84%	84%	87%	88%	41%	40%	48%	49%	50%
Grade 10 Math	Academic	94%	94%	94%	95%	95%	62%	65%	66%	65%	68%
	Applied	88%	86%	86%	87%	89%	45%	48%	49%	49%	49%
Grade 10 Science	Academic	97%	96%	96%	96%	97%	67%	68%	69%	69%	71%
	Applied	89%	87%	87%	88%	89%	38%	38%	43%	45%	44%

increase

no change

decrease



Observations: Report Card Data - Numeracy

Pass rates and the proportion of students meeting/exceeding the provincial standard have remained the same or increased over 2017-2018 results in all areas with the exception of grade 10 applied level science where results decreased by one percentage point. In fact, the proportions of students meeting or exceeding the provincial standard are the highest they have been in the past five years. Performance of students in applied level courses continues to be lower compared to students in academic level courses.

¹ Data was extracted from the Trillium Student Information System in August 2018.

Achievement Gaps for Specific Groups of Students – Numeracy

Trends	Males	ELL	SpEd	FNMI	SES
<u>Pass Rates:</u>					
How large were our achievement gaps in <i>academic</i> level Math and Science in 2017-2018?	0-2%	2-4%	2-4%	1-5%	2-4%
In which <i>academic</i> level courses has progress been made in narrowing the achievement gaps over the past few years?	MPM2D	MPM1D MPM2D SNC1D	MPM1D	MPM2D SNC2D	MPM2D SNC2D
How large were our achievement gaps in <i>applied</i> level Math and Science in 2017-2018?	1-3%	0-3%	0-2%	8-20%	3-6%
In which <i>applied</i> level courses has progress been made in narrowing the achievement gaps over the past few years?	MFM2P SNC2P	MFM2P SNC1P	-	-	MFM2P SNC1P
<u>Provincial Standard:</u>					
How large were our achievement gaps in <i>academic</i> level Math and Science in 2017-2018?	4-10%	4-9%	18-21%	0-17%	7-9%
In which <i>academic</i> level courses has progress been made in narrowing the achievement gaps over the past few years?	MPM2D SNC1D	MPM1D MPM2D SNC1D SNC2D	-	MPM1D MPM2D SNC2D	MPM1D MPM2D SNC1D SNC2D
How large were our achievement gaps in <i>applied</i> level Math and Science in 2017-2018?	6-14%	1-10%	1-4%	6-22%	1-10%
In which <i>applied</i> level courses has progress been made in narrowing the achievement gaps over the past few years?	-	SNC1P SNC2P	MFM1P MFM2P	-	SNC2P



Observations: Report Card Data – Numeracy (continued)

While achievement gaps for specific groups of students persist, progress has been made in narrowing achievement gaps for many. Of particular note is the narrowing of the achievement gaps for ELLs enrolled in academic level courses in terms of both the pass rate and in the proportion meeting/exceeding the provincial standard. Similarly, gaps have narrowed in all four academic level courses for students residing in lower income neighbourhoods when it comes to meeting/exceeding the provincial standard.

For boys enrolled in grade 10 applied level math and science courses, achievement gaps in pass rates have also narrowed. Progress towards narrowing the achievement gap in applied level science for ELLs, and applied level math for students with special education needs (excluding gifted), when it comes to meeting/exceeding the provincial standard has also been observed this past year.

It is important to note that the pass rate was higher for students with special education needs (excluding gifted) in grades 9 and 10 applied level mathematics and the same in grade 10 applied level science compared to all students enrolled in these classes.

Pathways (7-12)

Secondary Report Card Data – Grade 10 Civics and Careers

Student Characteristics

Table 11 (below) shows the total number of students enrolled in grade 10 open level Civics and Careers during the 2017-2018 school year, as well as a breakdown for specific groups of students. This information will help to provide context for the achievement results that follow.

Table 11: Enrolment Distribution, Grade 10 Civics and Careers, 2017-2018

Course	Program	Enrolment	Females	Males	ELLs	SpEd	FNMI	SES
Grade 10								
Civics (CHV)	Open (20)	4,339	2,129 49%	2,210 521%	900 21%	996 23%	81 2%	1,132 26%
Careers (GLC)	Open (20)	4,885	2,409 49%	2,478 51%	991 20%	1,221 25%	100 2%	1,318 27%

Overall Performance

OCDSB pass rates and the proportion of students meeting/exceeding the provincial standard in grade 10 Civics and Careers are shown in the table below. Information for specific groups of students follows.

Table 12: Grades 9 and 10 Pass Rates and Percentages of Students Achieving at Level 3 or 4 in Compulsory Credits Based on Full Year Report Card Data, June 2018¹

Course	Pass Rates					Percentage of Students Achieving at Level 3 or 4				
	2013-14	2014-15	2015-16	2016-17	2017-18	2013-14	2014-15	2015-16	2016-17	2017-18
Grade 10 Civics	92%	93%	95%	95%	96%	66%	69%	74%	72%	75%
Grade 10 Careers	94%	93%	95%	95%	97%	74%	73%	77%	76%	78%

increase

no
change

decrease

¹ Data was extracted from the Trillium Student Information System in August 2018.

Achievement Gaps for Specific Groups of Students – Pathways

Achievement Gaps:	Males	ELL	SpEd	FNMI	SES
<u>Pass Rates:</u>					
How large were our achievement gaps in Civics and Careers in 2017-2018?	1-2%	0-1%	3-4%	11%	4-5%
In which course(s) has progress been made in narrowing the achievement gaps over the past few years?		CHV20 GLC20	GLC20	-	CHV20 GLC20
<u>Provincial Standard:</u>					
How large were our achievement gaps in Civics and Careers in 2017-2018?	13-15%	5-7%	14-18%	18-22%	10-12%
In which course(s) has progress been made in narrowing the achievement gaps over the past few years?	-	CHV20 GLC20	GLC20	-	CHV20



Observations: Report Card Data – Pathways

Both pass rates and the proportion of students meeting or exceeding the provincial standard in grade 10 Civics and Careers have increased since 2016-2017, and are the highest results observed in these courses over the past five years.

While achievement gaps for these groups of students persist, progress has been made in narrowing achievement gaps for: (i) ELLs in both courses (in terms of both pass rates and in the proportion of students meeting the provincial standard); (ii) students with special education needs (excluding gifted) in Careers; and, (iii) students residing in lower-income neighborhoods in terms of pass rates in both courses and in the proportion of students meeting/exceeding the provincial standard in Civics.

Grade 10 Credit Accumulation

Grade 10 credit accumulation serves as an important indicator in targeting students who may be at risk for dropping out of high school prior to earning a diploma.²

Student Characteristics

Table 13 shows the total number of students included in the measure of grade 10 credit accumulation for 2017-2018, as well as a breakdown for specific groups of students. This information will help to provide context for the results that follow.

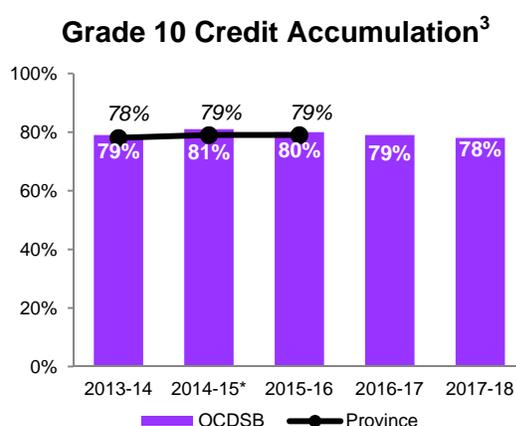
Table 13: Enrolment Distribution, Grade 10 Credit Accumulation (2017-2018)

Outcome	Enrolment	Females	Males	ELLs	SpEd	FNMI	SES
Credit Accumulation	5,428	2,729	2,699	1,050	1,226	91	857
		50%	50%	19%	23%	2%	16%



Observations

More than 75% of OCDSB students over the past five years have consistently attained 16 or more credits by the end of grade 10. OCDSB rates have tended to be higher than provincial rates. Gaps have widened, and were largest, for students who identified as Indigenous and those with special education needs (excluding gifted) this past year.



Achievement Gaps:	Males	ELL	SpEd	FNMI	SES
How large were our gaps in grade 10 credit accumulation in 2017-2018?	5%	12%	18%	27%	11%
How do these gaps compare to the average of the previous three years?	same	3% smaller	1% larger	11% larger	5% smaller

² Zegarac, G. & Franz, R. (2007) Secondary School Reform in Ontario and the Role of Research, Evaluation and Indicator Data. Paper presented at the American Educational Research Association, Chicago, IL. <http://www.edu.gov.on.ca/eng/research/SSreform.pdf>

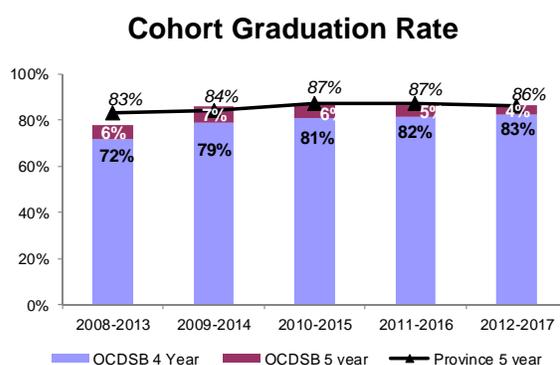
³ Provincial data is not yet available for 2016-2017 or 2017-2018.

Cohort Graduation Rate

The cohort graduation rate, calculated as the percentage of students earning an Ontario Secondary School Diploma (OSSD) within five years of starting grade 9 in an OCDSB secondary school, has been steadily increasing for the past few years (see graph below). Prior to the 2009-2014 cohort, graduation rates calculated by the District were somewhat lower than the provincial rates observed over the same time period due to the inability to track students who began their secondary schooling in the OCDSB and transferred to (and graduated from) another secondary school in Ontario.^{4,5, 6} This changed in the spring of 2015 when, for the first time, the Ministry of Education (MOE) also released district-level graduation rates.

Overall Performance

The graph below shows outcomes for the 5,215 students that comprised the 2012-2013 grade 9 cohort for the OCDSB, reflecting district-level results released by the province (a portion of whom the District is unable to track).



Observations

The OCDSB cohort graduation rate was slightly higher than that of the province. Of the students who did not graduate within five years of starting secondary school, some returned for a sixth year.

Achievement gaps were greatest for students residing in lower-income neighbourhoods and for those who self-identified as Indigenous; gaps for these groups of students have remained unchanged or narrowed, respectively. There is currently no gap between English language learners and all students.

⁴ Ottawa-Carleton District School Board. (May 2012). *Report No. 12-119: Graduation Rate and Progress Towards Meeting the Board Target of 20% by 2020*. Ottawa, ON: Ottawa-Carleton District School Board

⁵ Ottawa-Carleton District School Board. (April 2013). *Report No. 13-043: Graduation Rate for the 2008-2009 Grade 9 Cohort*. Ottawa, ON: Ottawa-Carleton District School Board.

⁶ In the spring of 2015, the Ministry of Education made further refinements to the cohort graduation rate methodology to exclude students who are no longer living in the province of Ontario.

Student Characteristics

Since the province does not disaggregate the cohort graduation rate for specific groups of students, we must rely on the information that we are able to track within our own District. The information below reflects the proportion of students from the 2012-2017 grade 9 cohort ($N= 5,038$) who graduated from an OCDSB secondary school within five years (i.e., 84% or 4,229 of 5,038).

Table 14 shows the total number of students included in the most recent cohort graduation rate, as well as a breakdown for specific groups of students. This information will help support the results that follow.

Table 14: Enrolment Distribution, Cohort Graduation Rate (2016-2017)

Outcome	Enrolment	Females	Males	ELLs	SpEd	FNMI	SES
Cohort Graduation Rate	5,038	2,417	2,621	458	988	151	1,230
		48%	52%	9%	20%	3%	24%

Achievement Gaps:	Males	ELL	SpEd	FNMI	SES
How large were our gaps in the 2012-2017 cohort graduation rate?	4%	0%	3%	13%	14%
How do these gaps compare to the average of the previous three years?	2% larger	5% smaller	14% smaller	same	3% smaller

Annual Certification Rate (ACR)

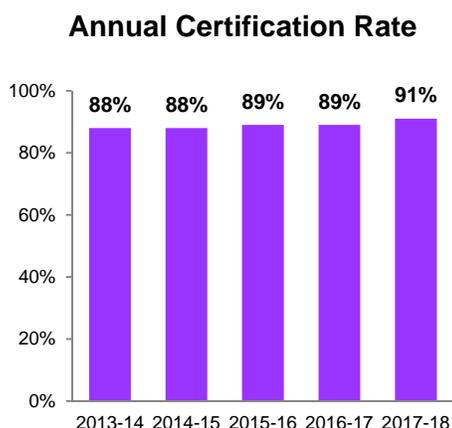
The Annual Certification Rate⁷ reflects the proportion of students who have earned an OSSD, an Ontario Secondary School Certificate (OSSC), or a Certificate of Accomplishment (COA) from an OCDSB secondary school (or Crystal Bay and Clifford Bowey) in what is theoretically their final year of school.

Student Characteristics

Table 15 shows the total number of students included in the calculation of the annual certification rate for 2017-2018, as well as a breakdown for specific groups of students. This information will help to provide context for the results that follow.

Table 15: Enrolment Distribution, Annual Certification Rate (2017-2018)

Outcome	Females	Males	ELLs	SpEd	FNMI	SES
Annual Certification Rate (n = 4,7,64)	2,437 51%	2,327 49%	762 16%	1,112 23%	90 2 %	1,240 26%



Observations

The majority of students (99%) receiving a diploma or certificate upon graduation earn an OSSD. In 2017-2018, the remaining 1% of students earned either an OSSC ($n = 12$) or a COA ($n = 46$); numbers are similar to 2016-2017.

Achievement gaps were evident for all groups of students, but were largest for students who self-identified as Indigenous despite continuing to make progress towards narrowing the gap for this group of students compared to the previous three-year average.

Achievement Gaps:	Males	ELL	SpEd	FNMI	SES
How large were our gaps in the annual certification rate?	5%	2%	3%	13%	7%
How do these gaps compare to the average of the previous three years?	1% larger	3% smaller	3% larger	5% smaller	1% smaller

⁷ Detailed methodology for this calculation can be found in *Report No. 15-023: 2013-2014 Annual Certification Rate* (March 2015).

Grade 12 French Proficiency: Diplôme d'études en langue française (DEL F)

The *Diplôme d'études en langue française* (DEL F) is an internationally-recognized diploma issued by the French Ministry for National Education to validate the language skills of a person whose first language is not French. In order to receive this diploma, candidates must pass both a written exam and an oral interview in French. Test levels vary in difficulty, and reflect the six levels of language proficiency described in the *Common European Framework of Reference*. At each test level, proficiency is measured across four competencies: oral comprehension (listening), oral expression (speaking), written comprehension (reading), and written expression (writing). Twice a year (in the fall and spring), the OCDSB offers its Grade 12 FSL students the opportunity to challenge the DEL F at one of three test levels: A2 (least difficult), B1, or B2 (most difficult).

Student Characteristics

To provide context for the results that follow, the table below summarizes student participation in the DEL F during the 2017-2018 school year.

Table 16: DEL F Participation (2017-2018), Representation of Specific Groups

DEL F 2016-2017	Enrolment	Females	Males	ELLs	SpEd	FNMI	SES
Eligible	1,789	1,121	668	119	202	18	285
% Participating		89%	83%	80%	79%	78%	81%
Participating	1,550	999	551	95	160	14	231
% All Participating		64%	36%	6%	10%	1%	15%

Overall Performance

Student interest in the DEL F has continued to grow each year, as evidenced in the table below. Success rates for students who choose to participate remain high. Differences in success rates by DEL F Level reflect test level difficulty, and are also influenced by student participation.

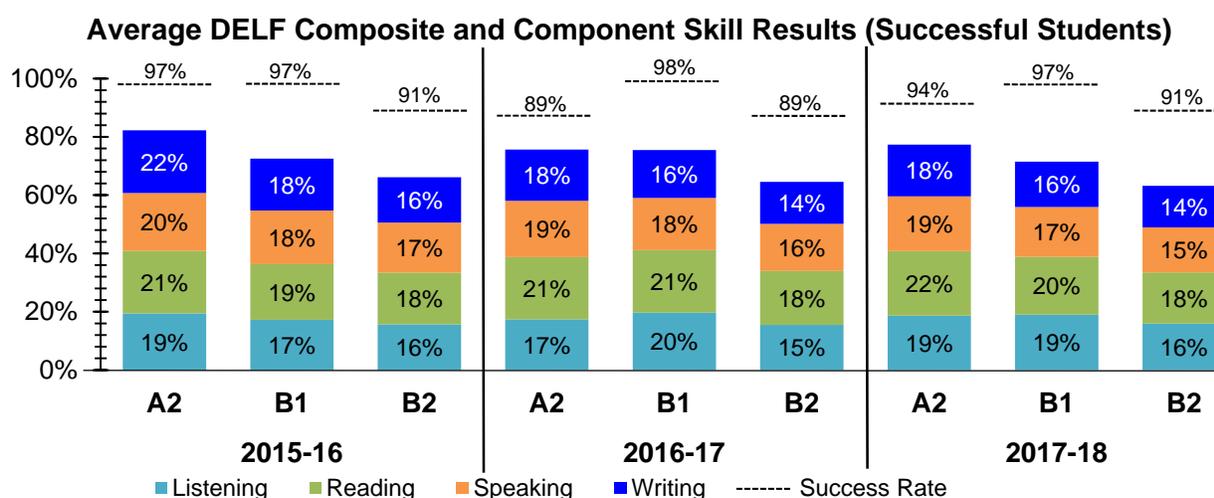
Table 17: Success Rates on the DEL F, OCDSB

Year	Eligible Students	Students who Completed DEL F		Successful Students	
		All	By DEL F Level (A2, B1, B2)	All	By DEL F Level (A2, B1, B2)
2015-2016*	1,664	1,174 (70.6%)	31% 66%	1,089 (92.8%)	97% 97% 91%
2016-2017	1,749	1,455 (83.2%)	42% 55%	1,354 (93.1%)	89% 98% 89%
2017-2018	1,789	1,550 (86.6%)	40% 57%	1,451 (93.6%)	94% 97% 91%

*A labour disruption at the beginning of this year resulted in unforeseen changes to the administration of the DEL F. Such changes may account for the divergence from consistent results over the previous testing administrations (e.g., discrepancy between registration for and completion of the DEL F as well as success rate).

Student performance across competencies

DELFL scores (out of 100) are comprised of four component skill scores (each out of 25): listening, speaking, reading, and writing. To be successful, students must have a composite score of at least 50, and a minimum score of 5.0 in each of the component skills. While differences in overall performance can reflect variance in test level difficulty, component skill results provide an indicator of language skill strengths and weaknesses. In the graphic below, average scores on each component skill (out of 25) are stacked to form the average DELFL composite score (out of 100) for each test level, by year. Skills that students found easiest have higher scores, while those they found more difficult have lower scores.



Achievement Gaps:	Males	ELL	SpEd	FNMI	SES
How large were our gaps in success rates on the DELFL?	5%	0%	2%	8%	4%
How do these gaps compare to the average of the previous three years?	3% larger	4% smaller	1% smaller	4% larger	3% larger



Observations: DELFL

On average, Level B2 has been the most popular (and most difficult) level to challenge. Level A2 (least difficult) remains the least-popular option, accounting for only about 3% of participating students. Overall success rates continue to be greater than 90%.

Performance across the four competencies has varied over the past three years, and can also vary by test level. Overall, students' strongest FSL language skill appears to be Reading, while the area of weakness varies between Writing and Listening.

Modest gaps in success rates for specific groups of students range from 0-8%. These gaps show a noticeable increase for boys, FNMI and SES groups compared to the previous three years. For students who identify as Indigenous, this may be in part due to the small cohort size (see Table 16).

Summary and Concluding Remarks

The *Annual Student Achievement Report* is intended to provide an overview of OCDSB student achievement across multiple data sources, and in relation to the provincial, national and international contexts. The observations and conclusions drawn from the analysis of provincial assessment data, secondary report card marks in grades 9 and 10 applied and academic level English, French, Geography, History, Mathematics, Science, Civics and Careers, Grade 10 Credit Accumulation, Cohort Graduation Rates, Annual Certification Rates, and DELF Success Rates provides an opportunity for us to celebrate our accomplishments:

- The OCDSB has improved in all three provincial assessments at the grade 3 level and is now above the province in Reading, within 1% of the province in Writing, and the same as the province in Mathematics;
- The OCDSB is above the provincial results in all three assessments at the grade 6 level;
- The OCDSB continues to be above the provincial results in grade 9 academic math and for first-time and previously-eligible students on the OSSLT;
- Grade 10 credit accumulation and cohort graduation rates remain high and on par with those observed provincially;
- Participation rates on the DELF continue to climb, while high rates of success have been maintained; and,
- The further narrowing of achievement gaps for students with special education needs (excluding gifted) not only on provincial assessments, but in applied and academic level grades 9 and 10 compulsory courses, and on other outcome measures (i.e., cohort graduation and DELF success rates).

Analysis of this data also provides a strong case to continue focusing our efforts in the area of mathematics and numeracy across our District with careful attention to narrowing achievement gaps for our identified groups of students. This will be particularly important for our ELLs, where we have seen substantive growth in the proportion of students on the primary and junior EQAO assessments who have identified their home language as being something other than English and where achievement gaps are widening. At the secondary level, where provincial assessment data shows a widening achievement gap for ELLs, yet report card data shows progress being made to narrow the gaps for these students, further investigation is warranted both centrally and at the school level to better understand the factors that are contributing to these results.

Details of the strategies/initiatives that will be undertaken to help address these challenges can be found in the *2018-2019 Board Improvement Plan for Student Achievement and Well-being*. The following will be key to moving us forward in this work:

- **Focused strategies for improvement** - Every School Learning Plan (elementary and secondary) will continue to include a mathematics focus that emphasizes fundamental math concepts and skills that students are expected to

know to meet current curriculum expectations. In the OCDSB, concept of number and problem-solving pose the greatest challenge for our students. Intentional focus to narrow achievement gaps for our ELLs, paying particular attention to the intersectionality with other groups (e.g., students residing in lower-income neighbourhoods) will also be important. District support will continue to be provided to develop school-based strategies that will align with the *Board Improvement Plan for Student Achievement and Well-being* and efforts will be strategically targeted at the junior and intermediate divisions to improve student achievement while also promoting greater equity of outcomes for our students.

- **Enhancing teacher expertise** – Every elementary school has a lead math teacher who will continue to participate in math-focused professional development and have access to resources to support peer to peer learning at the school level. Job-embedded professional learning will also continue to be provided by central program departments in order to increase educator knowledge of mathematical concepts and skills, and effective mathematics pedagogy;
- **Focused professional development** – All educators have participated in a full day of PD in October that focused on mathematics. The District is committed to ensuring there is ongoing collaboration across multiple levels of the organization in order to enhance program delivery and improve outcomes for our students.
- **Focused instruction** – Instructional strategies will focus on developing student proficiency in concept of number and problem solving, while simultaneously supporting students in developing characteristics and skills described in the OCDSB Exit Outcomes. By combining these approaches, student confidence and achievement in mathematics should be positively impacted.
- **Parent Communication** – Information and resources about math instruction and provincial assessments will be made available to parents through the District website and in support of parents receiving individual student information about provincial results.

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