



Office of the Auditor General of Ontario

Value-for-Money Audit
Curriculum
Development,
Implementation
and Delivery



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Curriculum Development, Implementation and Delivery

1.0 Summary

The goal of the Ministry of Education (Ministry) is that students acquire the skills and knowledge they need to reach their full potential. Accomplishing this goal requires curricula that are current, relevant, balanced, developmentally appropriate and coherent from Kindergarten to Grade 12, and are developed based on inter-jurisdictional and pedagogical research and consultations with sector partners and other key stakeholders.

The Ministry is responsible for developing the curricula to be taught to students and assessment policies to be used by educators. School boards are responsible for ensuring that their staff are implementing all curriculum expectations. Teachers are responsible for developing appropriate instructional strategies to help students achieve the curriculum expectations contained in the curriculum documents, and for developing appropriate methods for assessing, evaluating and reporting student achievement of the expectations, while principals supervise and evaluate the performance of teachers in this regard.

A substantial portion of the current curricula in Ontario was developed many years ago. In fact, 15% of curricula subjects taught in the province were developed and put into practice at least 15 years ago (2005 or prior), and an additional 51%

were released between 10 and 14 years ago (from 2006 to 2010). In most cases, the Ministry follows the steps in its review and revision process when revising or developing curricula and develops curriculum based on the research it conducts and the input it receives. However, it bases its decision on when to revise the curriculum on feedback from stakeholders and informal consideration of trends in the subject area.

We also found that there are no formal processes in place at the Ministry, school boards or schools to provide assurance that all curricula are being taught effectively across the entire school system. Although school administrators and curriculum leads (experienced teachers selected to support other teachers in implementing and assessing the curriculum, and co-ordinating staff, budget and resources in their department) undertake several informal actions, such as providing input into lesson plans and assessments, we found that there were no consistent systematic processes at the school level to make sure that the curriculum was being implemented effectively and that students were learning the entire curriculum. Since curriculum leads are also teachers, under their collective bargaining agreement they cannot direct another teacher to take a certain action, evaluate a colleague in any way or make sure that teachers in their departments are implementing the curriculum and assessing students appropriately. Moreover, the Ministry's lack of clarity

and specificity in its policy on student classroom assessment has created opportunities for variation in application of the policy resulting in inconsistent evaluation of students.

During COVID-19, we noted issues with curriculum delivery and student assessment. But we also noted that the ministry made advancements in digital learning including digitization of the new math curriculum and online content for various subjects, training for teachers on remote learning, and provisions for technology for students. The Ministry provided funding to school boards to secure technological devices, such as laptops and tablets for students. The Ministry also provided training to teachers in the spring of 2020 and introduced a mandatory professional development day for all teachers on remote learning at the start of the 2020/21 school year.

Some of our significant audit findings include:

- **Curriculum was released without sufficient time for school boards and schools to review it and for teachers to prepare instructional materials and resources to properly implement it.** We found four of the five most recently released curricula were released with little time for schools to prepare for their effective implementation. For example, the Health and Physical Education Elementary 2019 curriculum was released on August 21, 2019, just 10 days before schools were required to implement it on September 3, 2019, and the Mathematics Elementary 2020 curriculum was released at the end of June 2020, only two months before the target implementation date of September 2020. Most of the school boards we spoke to said they would prefer six months to one year from the time a new curriculum is released to be required to implement it. In contrast to the short timeline in Ontario between the release of new curriculum and its targeted implementation date, other provinces we contacted informed us that they pilot new curriculum for a period of 12 months before

requiring full implementation. In a survey we conducted of teachers, the majority (73%) indicated that for the eight curricula released between 2017 and 2020, which they were responsible to implement, they had not been provided with enough time to understand and prepare for it. Moreover, 43% of teachers indicated that to effectively implement a new or revised curriculum in their class would typically require the curriculum to be released at least six months prior to implementation.

- **Ministry does not always provide training to educators prior to releasing new or revised curriculum.** For the five most recently released curricula, the Ministry had not provided training to school boards and school staff for two curricula: Grade 10 Career Studies 2019 and First Nations, Métis, and Inuit Studies Secondary 2019. A majority of the teachers we surveyed, who were responsible for teaching any of the eight curricula released between 2017 and 2020, responded they did not receive training specific to the implementation of these new or revised curricula. Across the eight curricula, 57% did not receive training. Additionally, of those who did receive training, only 8% responded that it was useful, or very useful.
- **Ministry did not always perform critical stages of its process for curriculum revision.** For the five most recently revised curricula, we reviewed the Ministry's review process to develop a current, relevant and developmentally appropriate curriculum. We found instances where the Ministry did not adhere to its stated curriculum review process. Prior to development, the Ministry had not obtained all stakeholder input or provided sufficient time to allow for proper fact-checking while revising the Health and Physical Education curriculum released in 2019. As well, the Ministry had not obtained current research and analysis while developing the

First Nations, Métis and Inuit Studies Secondary curriculum, also released in 2019.

- **Ministry and school boards rarely solicited teacher feedback on teaching resources to identify which resources most educators found not to be useful.** The Ministry surveyed educators on the usefulness of resources for the math curriculum in 2014 and, to a lesser extent, in 2017/18, as part of a survey on its 2016 renewed math strategy. Further, the Ministry has not taken steps to address the concerns raised with its math resources, or to evaluate the usefulness of resources for other curricula. Our other concerns in relation to teaching resources include teachers being unaware that resources existed or how to access them.
- **Many textbooks are old and not relevant or relatable to students.** Several Ontario curricula have not been revised for over a decade and many of the corresponding textbooks on the Ministry's list of approved books are just as old. For example, Grades 9 and 10 math textbooks have been on the list for use for an average of 15 years since they were initially approved, and Grades 11 and 12 math textbooks have been on the list for an average of 12 years since they were initially approved. Although these textbooks covered 85% of the curriculum content at the time they were last revised for the relevant subjects, they do not always reflect current social, political and environmental issues. Examples in the textbooks are also outdated in some cases. Information that is outdated and not appropriate for students from diverse backgrounds and at different levels of ability does not promote understanding, and will require the teacher to supplement the textbooks with other resources. Although 43% of teachers who responded to our survey indicated that they were not provided with textbooks for the classes they teach, 61% who were provided

with textbooks said the textbooks were not current and relevant to the curriculum.

- **Ministry policy on student assessment does not clearly define the levels of achievement students are to be evaluated upon, leading to inconsistent assessment of students.** Although a framework for consistency exists in the Ministry's policy, *Growing Success: Assessment, Evaluation, and Reporting in Ontario Schools, Kindergarten to Grade 12, 2010*, the policy does not clearly define the performance standards against which teachers are expected to evaluate their students. The policy relies on the professional judgment of teachers when assessing student performance, including which specific curriculum expectations factor into the instruction and assessment. Although each teacher may have a reasonable basis for the judgment they apply, inconsistencies in student assessment are almost assured. Research commissioned by the Ministry has noted that teachers have a desire for more clarity and guidance on assessment to introduce more consistency to the process. Further, the policy document reflects the state of knowledge about the learning experience at the time it was published 10 years ago. For example, no specific examples are provided about assessment of students in an online/virtual setting.
- **Ontario students perform well on national and international assessments, but performance results are stagnating.** While Ontario performs well on national and international assessments, it has not been able to increase the proportion of students meeting baseline levels of achievement in these assessments. Over the last five test cycles of the Programme for International Student Assessment (PISA), which tests 15-year-olds in reading, math and science, Ontario's results have shown a steady decline in all three subjects tested going back to 2006 (except for a slight increase in math between the 2015 and 2018

assessments). Similarly, in national assessments through the Pan-Canadian Assessment Program (PCAP), which tests Grade 8 students in reading, math and science, Ontario performed well compared to other Canadian jurisdictions in the most recent assessment in 2016. However, performance in all three subjects tested has declined or stagnated going back 10 years to 2010. The Ministry did not have a reason why Ontario's performance has slightly declined and not improved over the last 10 years.

- **Province-wide student assessments (EQAO) test only two subject areas and do not provide a good measure of overall learning achieved by students across the province or within school boards.** Assessments by the Education Quality and Accountability Office (EQAO)—a crown agency of the Province—test reading, writing and mathematics. This accounts for only two subject areas (language and math) of the seven mandatory subject areas offered in elementary schools and 18 subject areas offered in secondary schools. Further, assessments occur at four intervals in the span of a student's 12- to 14-year public schooling, but no standardized testing is scheduled in the student's senior years, Grades 11 or 12. We noted that all other Canadian provinces have standardized provincial assessments in select subjects and grades. However, in many cases, the tests are conducted in a student's senior high school year, and the result of a test counts to some degree toward the student's final mark. For example, in Manitoba, Grade 12 students are assessed in both English (or French) and math and these province-wide assessments count for 30% of a student's final course grade in those subjects. This brings value in ensuring that students graduate from the public education system with a consistent basis of knowledge.

- **EQAO assessment results are declining, particularly in math, but the reasons remain unknown to the Ministry.** Over the last five years, provincial EQAO results for most assessments have either declined or stagnated. The exceptions are Grades 3 and 6 reading and Grade 6 writing, which have shown a slight improvement. Students in Ontario have been performing below the Ministry's goal of having 75% of all students in the province achieve the provincial standard in Grades 3, 6 and 9 applied math EQAO assessments for many years – since at least 2011/12. The Ministry analyzed the impact of additional funding that it began to provide in 2016 to select school boards with low student achievement in EQAO math results. The analysis found that the additional funding did not appear to make any significant difference in increasing student performance in math at the elementary level, but had a modest impact on student performance in Grade 9 applied math. Further investigation by the EQAO revealed in a March 2019 report showed that students in Grade 3 and Grade 6 have greater knowledge and understanding of fundamental math skills than they have the ability to apply their skills and to think critically about them.
- **Varying levels of student instruction took place during the COVID-19 pandemic, as the Ministry did not provide clarity on all expectations regarding instruction by teachers.** It was not until May 8, 2020, almost two months after schools were initially shut down, that the Ministry provided clarification on its expectations for remote learning. However, the Ministry did not set expectations for the frequency or duration of teacher-led real-time virtual instruction (referred to as synchronous learning). A survey conducted by the Ministry revealed that 29, or 48%, of school boards reported that only half or less than half of their teachers

were offering their students live, real-time instruction on-line, as of May 20, 2020.

- **Assessment policies that grades could not go down, combined with varying levels of student instruction and engagement, resulted in gaps in student learning during the COVID-19 shutdown which now need to be addressed.** On April 3, 2020, the Ministry announced student grades and marks were not to go down from what they were at the start of the closure period on March 13, 2020. As a result, some students did not feel incentivized to continue to be fully engaged in their studies, as indicated in survey conducted by the Toronto District School Board in which 58% of students reported not being interested in their studies and 47% of students said they were not enjoying learning at home. All of the school boards we spoke with anticipated that there would be gaps in student learning beginning in the 2020/21 school year. That is, students will be behind in the curriculum learning expectations they should have gained by the end of the 2019/20 school year. Based on our analysis of second-term report card marks for elementary students, we found that, across all grades, teachers did not obtain enough evidence of student learning to assign a grade. This was the case for social studies, history and geography, media literacy and in four of the five math areas reported on separately where, for at least 37% of students, on average, the teacher reported not having sufficient evidence to evaluate the student. This means that, in the 2020/21 school year, teachers will need to address their students' potential learning gaps, which, due to the pandemic and school closures, are greater than the learning gap that typically occurs over the summer break. At the time of our fieldwork in August 2020, three of the four school boards that we spoke with had not developed any specific new strategies to

help students catch up academically in the 2020/21 school year.

This report contains 15 recommendations, with 29 action items, to address our audit findings.

Overall Conclusion

Our audit concluded that in most cases the Ministry followed the steps in its review and revision process when revising or developing curricula within the last three years. We also found that the Ministry revises or develops curriculum based on the research it conducts and the input it receives. In most respects, the Ministry process of curriculum development is commensurate with steps taken in other Canadian jurisdictions. However, there are instances where steps are fast-tracked or skipped, such as failing to use the most current research and not providing stakeholders and those engaged to fact-check the curriculum with enough time to do the work properly. In addition, the Ministry has not released recent new or revised curriculum documents with sufficient time in advance of implementation to allow for school boards and teachers to have a full understanding and be prepared to effectively deliver the new or revised curriculum.

Our audit also concluded that the Ministry and school boards do not have formal processes to enable them to gain assurance that the curricula are being delivered consistently to a high standard across the province. Nor does the Ministry have assurance or processes to determine that students are being consistently assessed against curriculum-learning expectations.

Although Ontario performs well on international and national assessments, results have been stagnating or, in some cases, declining in recent years. We also found that the curricula in the province are aging, without a formal process to determine when and what should be updated to ensure that Ontario students are learning the most current and relevant material in a world of quickly changing technology and cultural diversity.

OVERALL MINISTRY RESPONSE

The Ministry of Education thanks the Auditor General and her team for recommendations on how we can continue to improve education in Ontario. Curriculum development, implementation and delivery are vital to helping all students develop the knowledge and skills they need to become informed, productive and responsible citizens.

In June, we issued a new elementary math curriculum on a digital platform, which includes learning about coding, financial literacy, and data collection and analysis—so students develop the knowledge and skills needed to succeed in a rapidly changing world. We also launched the Curriculum and Resources website where educators, parents and students can access Ontario’s curriculum and learning resources. This website will continue to develop with new resources and curriculum, while its features and functionality will evolve through user input. We are committed to breaking down barriers for Black, Indigenous and racialized students and providing all students with an equal opportunity to succeed. As part of this action, we are moving forward with no longer permitting streaming in Grade 9 into applied and academic math courses.

While the COVID-19 outbreak has brought numerous challenges, forcing many changes to our schools and our lives, the importance of equity and access to high-quality education for all remains paramount.

The Ministry is leveraging resources, technologies and services to assist school boards in delivering effective remote learning, including additional funding to improve access to technology and approximately 30,000 technological devices for students, and also to hire additional principals, vice principals and administrative staff to better deliver and oversee remote learning.

While supporting students, we are also committed to finding ways to support our educators. We have provided training and resources to help them teach remotely with live webinars and educator training modules. We are also proud to report that over 44,000 educators have participated in over 120 Ministry webinars since the spring. In addition, starting in the 2020/21 school year, we introduced a mandatory PD day for all teachers on remote learning.

These resources and supports will continue to benefit students after we overcome COVID-19 and transition out of the pandemic. This year has been like no other in recent history, and students, communities and industry have all risen to the challenge.

2.0 Background

2.1 Overview

The goal of the Ministry of Education (Ministry) is to have students acquire the skills and knowledge they need to reach their full potential. The cornerstone of accomplishing this goal is a curriculum based on inter-jurisdictional and pedagogical research and consultations and that is current, relevant, balanced, developmentally appropriate and coherent from Kindergarten to Grade 12.

In Ontario, the Ministry is responsible for developing the curriculum to be taught to students and assessment policies to be used by teachers and educators. The curriculum and assessment policies are intended to provide consistent direction to school boards regarding planning, implementing, evaluating and reporting of student learning and achievement. Each school board is responsible for ensuring that schools are appropriately implementing the curriculum and assessment policies.

The term “Ontario curriculum” refers to curriculum policy documents, which contain mandatory learning expectations and optional teaching supports.

To support school boards and schools with the implementation of a new or revised curriculum, up to the 2019/20 school year, the Ministry provided funding through transfer payment agreements to school boards to cover the cost of training for teachers, including the cost of release time for teachers to attend the training; and to external parties to develop resources such as guidance for educators and classroom materials. Beginning in 2020/21, the Ministry will be including an allocation in its annual funding to school boards for curriculum assessment and implementation in place of providing funding through transfer payments.

School boards are responsible for ensuring that their staff comply with implementing all curriculum expectations and helping teachers to improve their teaching practices so that they can deliver the curriculum effectively. Principals are responsible for supervising and evaluating teachers' performance in both providing the appropriate instruction for their students and assessing and evaluating student work and progress. Teachers are responsible for developing appropriate instructional strategies to help students achieve the curriculum expectations, and for developing appropriate methods for assessing and evaluating student achievement of the expectations.

Ontario has 72 publicly funded school boards and about 5,000 schools, with 126,000 full-time equivalent teachers and 2 million students. In the 2019/20 school year, the Ministry offered about 300 courses at the secondary level for each of English-language and French-language instruction. The courses offered at the secondary level are numerous because many are offered at different levels—for Grades 9 and 10, the levels are Open, Applied and Academic; for Grades 11 and 12, the levels are Open, Workplace Preparation, College Preparation, and University Preparation. To obtain an Ontario Secondary School Diploma, among other things, a student needs to obtain 30 course credits, of which 18 are compulsory and 12 optional.

2.1.1 Ontario Curriculum Documents

The Ministry develops a provincial curriculum for each subject in the elementary and secondary levels. The Ontario curriculum documents are broken down in **Figure 1**. For a complete list of curriculum documents, the last revision release date and those planned to be updated see **Appendix 1**.

There is a difference in the number of English-language and French-language curriculum documents. This is because French-language school boards can choose from two different curricula documents when teaching the English language, depending on the student's familiarity with the English language (one in each of the elementary and secondary levels). Also, there are additional curricula documents for teaching French to newcomers (one at the elementary level) and for those who need support with second-language acquisition (one in each of the elementary and secondary levels). With respect to newcomers, in the English-language system, there is no separate elementary curriculum for newcomers to learn English as a second language. Instead, the Ministry sets out policies and procedures for school boards to develop programs and supports for English language learners in English-language elementary and secondary schools.

Curriculum documents consist of curriculum expectations and curriculum supports. Curriculum expectations describe the knowledge and skills students are expected to acquire, demonstrate and apply by the end of each grade for each subject and course, and on which a student's achievement is to be assessed and evaluated. There are two sets

Figure 1: Number of Ontario Curricula by Grade Level and Language

Source of data: Ministry of Education

	English	French	Total
Kindergarten	1	1	2
Elementary, Grades 1–8	8	11	19
Secondary, Grades 9–12	29	32	61
Total	38	44	82

of curriculum expectations associated with each course in a subject at the secondary level and by subject at the elementary level:

- Overall Expectations — describe in general terms the knowledge and skills that students are expected to demonstrate by the end of each grade or course.
- Specific Expectations — describe the expected knowledge and skills in greater detail.

Teaching supports are components of the curriculum meant to provide teachers with information and examples that illustrate the intended depth and complexity of the expectations. Examples of teaching supports include clarification of key terms or concepts, and sample dialogue between a teacher and student.

Modification of Curriculum for Students with Special Education Needs

In the case of students with special education needs, each school board has procedures in place to identify students who may need special education programs and/or services. An individual education plan must be developed for each child who has been identified as exceptional by the school board's Identification, Placement and Review Committee. An individual education plan can also be prepared for students with special needs who have not been identified by the committee. An individual education plan describes the special education program and services required by a student, including any accommodations, modified expectations and/or alternative expectations or programs.

At the school level, the principal is responsible for programs and services for children entering the school and for ensuring that an individual education plan that conforms to Ministry standards is completed for each child who has been identified as exceptional by the Identification, Placement and Review Committee. An individual education plan is created through collaboration with the student's parents, school staff, other professionals involved

with the student, and the student, if older than 15. The individual education plan identifies the teaching strategies specific to modified and alternative expectations, and assessment methods to be used to determine the student's progress towards achieving these expectations. In the 2019/20 school year, there were 348,000 students with an individual education plan. Of the teachers who responded to our survey, 87% indicated that in their classes they teach both students with and without special needs.

English Language Learners

English language learners are students who's first language is a language other than English or is a variety of English that is significantly different from that used for instruction in Ontario's schools. It is up to the student's teacher to accommodate for this in their classroom. Every curriculum document has a section on supporting English language learners. For example, the elementary language curriculum includes a section on Planning Language Programs for English language learners which discusses how teachers must adapt the instructional program to facilitate student success. The Ministry also develops guides on how to support English language learners. These guides are not part of the curriculum, but are designed to support teachers. The guides include practical techniques, research findings and strategies that can be put to immediate use in the classroom.

2.1.2 Curriculum Review Process

The Ministry's curriculum review process is intended to ensure that the curriculum remains current and relevant and is developmentally appropriate in all subjects from Kindergarten to Grade 12.

The Ministry initiated its curriculum review process in 2003. A review typically takes from three to five years from when it is initiated to when the new curriculum is released and implemented in schools, depending on whether it is a full or focused

Figure 2: Curriculum Review Process

Source of data: Ministry of Education

Process Steps	Description
Research	<ul style="list-style-type: none"> • Technical analysis • Benchmarking • Jurisdictional scan
Engagement	<ul style="list-style-type: none"> • Educators, subject/division associations, federations, post-secondary institutions, industry • Parents and students • Ministry of Education divisions and other ministries • Indigenous partners • Community stakeholders and others
Writing	<ul style="list-style-type: none"> • Writing team is developed and drafts revised curriculum in English and French • Internal education officers guide the writing process
Editing	<ul style="list-style-type: none"> • Editing in English and French through a continual process with communications team and education officers • Draft shared with writers and key stakeholders for feedback
Fact Check	<ul style="list-style-type: none"> • In the later stage of editing, the document undergoes review by external academic experts • External stakeholder review • Editing continues as an iterative process
Finalize	<ul style="list-style-type: none"> • Minister approvals • Compliance with the <i>Accessibility for Ontarians with Disabilities Act, 2005</i> • Issue revised curriculum on digital platform
Implement	<ul style="list-style-type: none"> • Funding • Professional learning and resources supports

review and the complexity of the subject. The length of time to complete each step in the process also varies based on those factors. Various phases of the development process may overlap or be revisited at numerous times throughout the review, as necessary. For example, if new research or topics arise after the writing phase begins, the Ministry may still consider and incorporate any changes, as necessary. According to the Ministry, a curriculum is developed with a shelf life of 10 to 15 years. The review process involves several key steps and stages as shown and described in **Figure 2**.

2.1.3 Implementation and Delivery of Curriculum

Under the direction of their school board and school, teachers are to plan units of study, develop a variety of teaching approaches, and select

appropriate resources to address the curriculum expectations, while taking into consideration the needs and abilities of the students in their classes.

School boards are responsible for ensuring that their staff comply with provincial policy on education, including implementing all curriculum expectations and helping teachers to improve their teaching practices so that they can deliver the curriculum effectively. Principals are responsible for supervising and evaluating the performance of teachers in both providing appropriate instruction to their students and evaluating student work and progress.

Many factors outside of the curriculum also have an impact on how well students are able to learn. As noted in our 2017 audit report, *School Boards' Management of Financial and Human Resources*, a Ministry-funded study by the Canadian Education Association in 2010 found that teachers can teach more competently and effectively in smaller classes,

and students can learn more academically and socially and be more engaged and less disruptive in smaller classes. Further, social and economic factors can also have a significant impact on student learning, including being from low-income households, having immigrated from a non-English-speaking country within the last five years, having parents with low levels of education, and living in single-parent households. The Ministry has acknowledged these factors and provides additional funding to school boards with the largest number of students who are at risk of poor academic achievement due to social and economic factors.

Evaluation of Teacher Performance

Principals are responsible for conducting performance appraisals of all teachers assigned to their school. The teacher is evaluated on 16 competencies listed in the Ontario College of Teachers' *Standards of Practice for the Teaching Profession*, which describes the skills, knowledge and attitudes that teachers must reflect in their teaching practice. New teachers are evaluated on the eight competencies considered most important. The evaluation process also includes classroom observation of the teacher by the principal. The process culminates with a summative report to the teacher of the appraisal including feedback and opportunities for growth and a rating that reflects the principal's assessment of a teacher's overall performance.

Experienced teachers receive a rating of either satisfactory or unsatisfactory, while new teachers can be rated as satisfactory, development needed or unsatisfactory. A principal must develop a plan for improvement and conduct an additional performance appraisal within 12 months in cases where a new teacher is rated as development needed. Where teachers are rated as unsatisfactory (either new or experienced), the principal is to give the teacher an improvement plan that provides a written explanation of what is lacking in their performance and sets out the recommended steps and actions the teacher should take to improve it.

New teachers must be appraised twice in the first 12 months of teaching, whereas experienced teachers are appraised once every five years. A teacher is considered new for the first 24 months of being hired into a permanent position by a school board, or until they complete the New Teacher Induction Program. For the 2020/21 school year, performance appraisals for experienced teachers were temporarily paused to allow school boards to focus on new teachers. This means that the 2020/21 evaluation year for experienced teachers is delayed to 2021/22, and subsequent evaluation years are also delayed by one year. A principal may also conduct additional appraisals if he or she considers it advisable to do so in light of circumstances related to a teacher's performance.

The Ministry requires school boards to provide mandatory professional support for new permanent teachers through the New Teacher Induction Program (NTIP), to help teachers develop the required skills and knowledge to become an effective teacher in Ontario. The NTIP is a mentorship program in which a newly appointed teacher is matched with an experienced teacher working in the same school. According to the Ministry, as part of this program, staff and principals or vice-principals are to also engage in discussions about effective teaching strategies, content (curriculum expectations) and assessment practices. The program is intended to allow a new teacher to build a network of supports with other teachers and the principal or vice-principal, through which intentional sharing is encouraged. The principal is responsible for reviewing and signing off on the new teacher's individual NTIP strategy (which includes the new teacher's goals and strategies).

2.1.4 Assessment of Student Learning

The province's key policy documents regarding the assessment, evaluation and reporting of student learning are:

- *Growing Success: Assessment, Evaluation, and Reporting in Ontario Schools, 2010*; and

- *Growing Success—The Kindergarten Addendum: Assessment, Evaluation, and Reporting in Ontario Schools, 2016.*
- *Growing Success: The Mathematics Addendum, Grades 1 to 8, 2020* (released October 2020)

How well students have developed proficiency in the Ontario curricula is based almost entirely on classroom assessment and evaluation. For select subjects, provincial standardized testing, which is carried out by the Education Quality and Accountability Office (EQAO)—a crown agency of the Province established in 1996—is used to provide a picture of the level of student achievement across the province.

Classroom Assessments

Classroom assessment and evaluation strategies are developed and implemented by classroom teachers to determine and inform their students and parents of the student's achievement. Curriculum documents include an achievement chart which is intended to guide teachers on how to grade students. Teachers are to use the charts to judge whether a student demonstrates limited/some/considerable/thorough knowledge of content or understanding of concepts.

It is up to the professional judgment of the teacher to determine the form, frequency and weighting of assignments and tests to arrive at student grades. The Ministry does provide the following parameters in its assessment policy, *Growing Success*. For Grade 9 to 12 students, a final grade (percentage mark) is determined for every course as follows:

- 70% of the grade will be based on evaluation conducted throughout the course. This portion of the grade should reflect the student's most consistent level of achievement throughout the course, although special consideration should be given to more recent evidence of achievement.
- 30% of the grade will be based on a final evaluation administered at or toward the end

of the course. This evaluation is to be based on evidence from one or a combination of the following: an examination, a performance, an essay, and/or another method of evaluation suitable to the course content. The final evaluation allows the student an opportunity to demonstrate comprehensive achievement of the overall expectations for the course.

Province-Wide Assessments

Province-wide assessments are administered by the EQAO. It conducts annual assessments of the following:

- reading, writing and mathematics for primary division (Grade 3);
- reading, writing and mathematics for junior division (Grade 6);
- math for Grade 9; and
- the Ontario Secondary School Literacy Test (OSSLT) in Grade 10.

According to the Ministry, these areas of the curriculum and grades were chosen as it believed that proficiency in these three areas supports learning in all other subject areas. The assessments are at key stages (grades 3, 6, 9 and 10) and the timing of the assessments is designed to allow sufficient time for teachers to respond to and remediate challenges identified in individual student results.

The assessments (or EQAO tests, as they are most commonly referred to) contain questions requiring written responses and multiple-choice questions. Each question is mapped to a learning expectation contained in the respective curriculum documents. The EQAO tests are written in a paper format and are scored by educators who have successfully completed specific training requirements.

EQAO tests evaluate student achievement in relation to four levels of performance (levels 1 to 4, with 4 being the highest). To meet the provincial standard, a student must achieve a level 3, which is equivalent to a B grade. The Ministry's objective is for students in the province to achieve level 3 or higher.

Students are required to successfully pass the OSSLT with a grade of 75% or more to receive their Ontario Secondary School Diploma. A student who is unsuccessful on their first attempt may retake the test. If unsuccessful again, the student will need to take and pass the Ontario Secondary School Literacy Course offered by their high school prior to the end of Grade 12 to complete the graduation requirement.

EQAO results over the last 10 years for each assessment are shown in **Figure 3**.

During the 2020/21 school year, the Grade 9 math EQAO assessment will be piloted in an on-line format. The Grade 3 and Grade 6 assessments will not be held in 2020/21 due to COVID-19 and to allow for the implementation of the new Elementary Math curriculum. The Ministry has also waived the literacy graduation requirement (OSSLT) for all students graduating during the 2020-21 school year.

National and International Student Assessment

Ontario students regularly participate in one national and three international assessments in order to assess the skills and competencies of Ontario's students compared to those in other jurisdictions. The EQAO co-ordinates Ontario's participation in national and international assessments.

Student selection for the assessments is based on a two-stage stratified random sample. The first stage is to select a sample of schools in which students of the grade or age of interest are to be assessed from each participating jurisdiction (these schools can be public or private) based on several geographic and demographic factors. In the second stage, for one of the assessments (PISA), students are randomly selected from the sample of schools to participate in the assessment. For the other three assessments (PCAP, PIRLS and TIMSS), intact classes within the selected schools are randomly selected to write the exam. Factors on which students can be excluded from the selection include

functional disabilities, intellectual disabilities and limited proficiency in the assessment language.

See **Appendix 2** for the four types of national and international assessments in which Ontario students participate.

Appendix 3 shows Ontario's performance in the latest national and international assessments.

2.1.5 Online Delivery of Some of the Curriculum

In addition to in-class learning that takes place in schools, the other primary form of curriculum delivery is through online courses, in which students earn credits toward graduation. This system was in place before school closures due to COVID. In the 2019/20 school year, school boards offered 127 English-language and 109 French-language online courses based on Ontario's approved secondary school curricula through the Ministry's learning management system, called the Virtual Learning Environment (also known as BrightSpace). This digital learning platform is funded by the Ministry and available to all publicly funded school boards at no cost. The platform provides teachers with the content for use in online program delivery, including course templates, assignments, scoring guides (rubrics), lessons linked to curriculum expectations, and quizzes. All public-school teachers have access to the virtual learning environment. The virtual learning environment is used to deliver online learning courses, blended learning and other digital resources for Ontario students, educators and board and Ministry staff. Of these online courses, 32 English-language and 31 French-language online courses satisfy the 18 compulsory credits required to graduate high school in Ontario.

In 2018/19, 29% of the 133,000 students who graduated earned at least one credit through online learning. The number of students who had chosen to earn credits through online learning was not available for the 2019/20 school year at the time of our audit as the Ministry extended the due date for school boards to submit this data so they could

Figure 3: Percentage of Student Writers that Achieved the Provincial Standard¹ on Province-Wide Tests Administered by the Education Quality and Accountability Office (EQAO), School Years 2009/10–2018/19²

Source of data: Ministry of Education

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15 ³	2015/16	2016/17	2017/18	2018/19
Grade 3										
Reading	65	68	69	71	72	n/a	75	77	78	78
Writing	73	76	78	79	80	n/a	77	76	75	72
Math	73	71	71	69	69	n/a	66	65	63	61
Grade 6										
Reading	74	76	78	79	81	n/a	83	84	85	84
Writing	73	75	77	79	80	n/a	82	82	82	84
Math	64	61	61	59	57	n/a	53	53	52	52
Grade 9										
Academic Math ⁴	82	83	84	85	85	n/a	84	84	85	85
Applied Math ⁴	42	44	47	46	49	n/a	47	46	47	47
Grade 10										
Ontario Secondary School Literacy Test (OSSLT) ⁵	79	77	76	76	77	77	76	76	74	75

Note: Percentages in bold are above the provincial standard of 75%.

1. EQAO results show the percentage of students that achieve a level of 3 or 4, at or above the provincial standard, respectively.
2. EQAO tests were not conducted in the 2019/20 school year as a result of school closures due to COVID-19.
3. Province-wide data for 2014/15 is unavailable. Due to labour disruptions during the 2014/15 school year, a significant proportion of schools did not participate in EQAO testing.
4. Academic math focuses on core subject content and the theory behind it. Applied math stresses practical, concrete application of concepts and focuses on hands-on activities.
5. The OSSLT is the only EQAO test that has repeat writers because students have to pass this test to get their high school diploma. The results for all attempts are combined.

focus efforts on a return to school following closure due to COVID-19.

Controls over the delivery of online courses generally require an external proctor to administer mandatory in-person exams. Further, when registering for online courses, students at boards we spoke with are typically registered by their home school guidance counsellor, and there may be supervised rooms available for students during the school day to complete online courses should they choose to do them while at school. Students can also do their courses remotely. Guidance counsellors, student success teachers, administration, an eLearning co-ordinator and the course teacher are all points of contact and support for the students.

2.1.6 Delivery of Education during COVID-19

Learning during School Closures in Response to the COVID-19 Pandemic

Most recently, due to school closures resulting from emergency measures put in place by the Province on March 16, 2020 to curtail the spread of COVID-19, the Ministry provided a continuation of student learning in two phases:

- Phase 1 involved the Ministry, in partnership with TVO, offering elementary resources and television programming to help young students learn at home through entertaining activities and content. TVO also offered Mathify (real-time math tutoring led by Ontario College of Teachers educators) for students between Grades 6 and 10, and provided free access to the content of its online courses for secondary students. Secondary school activities and resources were designed with a focus on science, technology, engineering and math, and to ensure that core competencies and skills in these areas were reinforced.
- Phase 2, which began April 6, 2020, included school boards providing students in need of laptops or internet services with those items, and teachers digitally providing their students with a continuation of the curriculum. In this phase, the Ministry also set minimum

hours of study expected per week by each student depending on their grade.

Subsequent to our audit work, on November 26, 2020 the government announced new TVO and TFO portals for students and parents, which contain curriculum-aligned, digital resources for Grades 1 to 8 students who are self-screening, quarantining at home, or wishing to build their skills by accessing additional educational resources. Secondary students could continue to freely access TVO's Independent Learning Centre (ILC) Open House and TVO ILC in French-language, which provide access to over 100 Grade 9 to 12 courses. These resources are not for credit but are designed to provide flexible learning opportunities to help students keep up with their learning or deepen their understanding of a specific subject.

Planning for the 2020/21 School Year

In June 2020, the Ministry first provided guidance to school boards for the school year beginning September 2020. Under the Ministry's plan, the decision for students to return to school in the fall is left to parents. For parents who chose not to send their children back to school, school boards were to be prepared to offer remote education. The Ministry asked all school boards to prepare for three learning scenarios and adopt different forms of delivery depending on public health circumstances, including a remote learning model, an in-class model and a hybrid of the two approaches. As part of remote learning, school boards were instructed to offer synchronous learning (teacher-led instruction with students in real time) either through online instruction for the entire class, in smaller groups of students and/or in a one-on-one context. Asynchronous learning does not happen in real time, but it may involve students watching pre-recorded video lessons, completing assigned tasks or contributing to online discussion boards.

On July 30, 2020, the Ministry announced the Province's plans for reopening schools on September 8, 2020. The plan included guidelines for reopening and health and safety protocols.

Elementary schools were expected to open for in-class learning five days a week for students from Kindergarten to Grade 8. Only students in Grades 4-12 were required to wear masks indoors on school property. The plan did not include a change to class size.

The plan required that students in Kindergarten to Grade 8 were to receive 300 minutes (or 5 hours) of instruction per day while remaining with the same class of students for the full day, including during recess and lunch. School boards and schools were expected to provide the full range of the elementary curriculum, including the new Grades 1-8 mathematics curriculum. Schools were expected to identify strengths and gaps in learning resulting from the prolonged absence from the classroom, to ensure that students have the fundamental building blocks prior to introducing new content.

Secondary schools in 24 designated school boards were expected to open with an adapted model of class cohorts of approximately 15 students, on alternate schedules that would include in-person attendance for at least 50% of instructional days. School board designation was dependent on the size of the school board, the number and size of the board's secondary schools, the size of secondary grade cohorts and whether the board is predominantly urban. Secondary schools in non-designated schools were to open with conventional

in-person instruction with enhanced health and safety protocols.

For students with special education needs, the Ministry instructed school boards to consider additional planning and transition time for returning to the classroom and to support attendance options, including allowing those students to attend class in-person daily when an adapted timetable or remote learning may be challenging based on student needs. School boards were also to consider changes in the school environment and/or remote learning needs when reviewing and updating individual education plans.

On August 13, 2020, the Ministry released a policy for remote learning that required school boards to provide a consistent approach and a predictable schedule for synchronous learning by grade during the period in which conventional in-person learning is interrupted.

Specifically, during remote learning, where students are home for more than three days in a given week, students and parents must be provided with a daily schedule that includes 300 minutes of learning opportunities, with a combination of synchronous (see **Figure 4**) and asynchronous learning activities. Teachers must be available to students at all times during the teacher's assigned teaching timetable, similar to if they were face-to-face in a classroom setting, and should work from

Figure 4: Guidelines for Daily Minimum Synchronous Learning¹ Time Requirement²

Source of data: Ministry of Education

Grade Level	Daily Minimum ³
Kindergarten	180 minutes
Grades 1-3	225 minutes
Grades 4-8	225 minutes
Grades 9-12	The higher of 60 minutes for each 75-minute class period – or 225 minutes per day for a full course schedule. ⁴

1. Synchronous learning is defined as teacher-led instruction with students in real time, either through whole class online instruction, in smaller groups of students and/or in a one-on-one context.
2. The synchronous learning time requirements outlined may be divided into shorter periods throughout the school day. This may also include students working independently or in small groups while engaged in a virtual classroom with the teacher overseeing their learning and being available for questions. In the case where students are able to attend in-person classes and also participate in remote learning, school boards should plan, where possible, to assign different educators to facilitate both formats of instruction. School boards must allow for students to be exempt from the minimum requirements for synchronous learning, on an individual basis at the request of the parents or students who are 18 years of age or older.
3. This is in addition to asynchronous learning time.
4. The synchronous learning time requirement for any period that is not 75 minutes should be adjusted to reflect this ratio.

a school or board facility, where possible. In addition, educators are also expected to provide more opportunities than the minimum requirements for synchronous learning for students with special education needs.

School boards are to be responsible for ensuring students have access to remote-learning devices and the internet. In addition, to provide a consistent learning experience, school boards must provide teachers with a standardized suite of synchronous learning platforms and with the necessary training on these platforms, as well as training for student and staff safety. School boards are also responsible for addressing student and parent comfort levels with technology, effective use of digital tools, effective pedagogy and assessment, student and staff mental health and well-being, and accessibility and differentiated instruction for all students, including students with special education needs.

The Ministry has also required that school boards collect data to be able to report on the number of students engaged in remote learning, provided with the minimum requirements for synchronous learning, and exempted from the minimum requirements for synchronous learning.

To help with the protection of privacy and cybersecurity of educators, students and parents, the Ministry instructed that school boards must review their cybersecurity and privacy policies and develop updates related to remote learning. This is important as our 2018 audit report, *School Boards - IT Systems and Technology in the Classroom*, found that school boards are vulnerable to cyberattacks.

On August 26, 2020, the Ministry released Operational Guidance: *COVID-19 Management in Schools*, protocols to monitor and respond to student illness and cases of COVID-19 in schools. Under this guidance, local health units are responsible for determining if an outbreak exists, declaring an outbreak, providing direction on outbreak control measures to be implemented and declaring when an outbreak is over. Schools have the responsibility for reporting COVID-19 cases and absenteeism related to COVID-19 within their school to the

local public health unit and to the Ministry through a daily reporting tool. School administrators and the school board are to ensure they maintain accurate records of staff, students and visitors, and be able to produce this information for any and all class cohorts. The document also provides guidance on the management of ill individuals during school hours, individuals exposed to COVID-19 outside the school, and confirmed COVID-19 diagnosis in the school community.

At various times during the summer break, the Ontario government announced additional funding to school boards totalling \$406 million as part of the school reopening plan: \$29 million announced on June 19, 2020; \$309 million on July 30, 2020; and \$79 million on August 13, 2020. On August 13, 2020, the government also granted school boards permission to access up to 2% of their operating budget from their prior year accumulated surplus, totalling \$496 million across all boards. On August 26, 2020, the Federal Government announced \$381 million in funding to Ontario through its Safe Return to Class Fund.

2.1.7 Organizational Structure and Operations

Primary responsibility for the review, development and implementation of curricula resides with the Curriculum, Assessment, and Student Success Policy Branch and the French-Language Teaching and Learning Branch of the Ministry of Education. See **Appendix 4** for an organizational chart of the Ministry pertaining to curriculum development and implementation.

These two branches collectively employ 82 full-time equivalent employees (FTEs), of which 16 are seconded from school boards. These staff are primarily responsible for the development of policy in the areas of elementary and secondary curriculum, K-12 assessment and reporting and the Ontario Secondary School Diploma (OSSD) and certificate requirements.

These branches also liaise with the EQAO to ensure provincial assessments reflect the Ontario curriculum and to inform the quality of student learning.

The Ministry previously had a Curriculum Council to provide advice to the Minister on emerging trends and other curriculum-related matters. In its 2019 Budget, the Ontario government announced that it was dissolving the Council following the recommendations of the Agency Review Task Force, which noted that the Ministry could obtain specific curriculum advice from stakeholder/expert working groups, rather than the Council. Reported expenditures of the Council in 2018/19 was about \$1,000.

2.2 Funding and Financial Information

As seen in **Figure 5**, over the last five years (2015/16 to 2019/20), the departments at the

Ministry of Education spent over \$512 million to develop, implement and review the English and French language curricula. Most costs have been consistent over the years, except for the costs of implementation, which were impacted by the number of curriculum releases, as well as a three-year, \$150 million investment (2014/15 – 2016/17) in technology and research of innovative practices to transform learning and teaching. Between the five-year period of 2015/16 to 2019/20, the Ministry revised nine curricula: Health and Physical Education; Canadian and World Studies; Classical Studies and International Languages; Elementary Social Studies, History and Geography; Cooperative Education; First Nations, Métis, and Inuit studies; Guidance and Career Studies; Mathematics (elementary); History and Geography; and the addendum to the Kindergarten Program.

Figure 5: Ministry of Education Spending on Curriculum Development and Implementation, and Province-Wide Testing, 2015/16–2019/20 (\$ million)

Source of data: Ministry of Education

	2015/16	2016/17	2017/18	2018/19	2019/20	5-Year Total	% of 5-Year Total	% Change
Curriculum Assessment and Student Policy Branch (English-language curriculum)								
Curriculum Development and Review	3.4	4.4	4.5	3.3	3.4	19.0	4	0
Assessment and Evaluation ¹	0.8	0.9	0.9	0.8	0.9	4.3	1	13
Implementation ²	97.1	79.8	29.4	24.2	23.8	254.3	50	(75)
Subtotal	101.3	85.1	34.8	28.3	28.1	277.6	55	(72)
French Language Teaching and Learning Branch³ (French-language curriculum)								
	18.4	17.4	17.5	14.0	10.6	77.9	15	(42)
Education Quality and Accountability Office (EQAO) – Operating costs								
	31.3	31.3	31.3	31.3	31.6	156.8	30	1
Total	151.0	133.8	83.6	73.6	70.3	512.3	100	(53)

1. Assessment and Evaluation includes costs for ongoing teacher training and guidance for assessing and evaluating students against curriculum expectations.
2. The drop in implementation costs beginning in 2017/18 is due to the end of a 3-year (2014/15–2016/17) \$150 million investment called the Technology Learning Fund. This funding was for the acquisition of technology and resources, such as laptops, tablets and software for classrooms and the related training for educators.
3. The Ministry does not have a breakdown of the costs by function for the French Language Teaching and Learning Branch.

3.0 Audit Objective and Scope

The objective of the audit was to assess whether the Ministry of Education has effective systems and processes to:

- develop curricula that are current, relevant and developmentally appropriate;
- oversee, in conjunction with school boards, that the curricula are implemented consistently across the province; and
- in conjunction with school boards, assess and evaluate students against curricula expectations on a consistent basis across the province.

Before starting our work, we identified the audit criteria that we would use to address our audit objectives. These criteria were established based on a review of applicable legislation, policies and procedures, internal and external studies and best practices. Senior management at the Ministry reviewed and agreed with the suitability of our audit objectives and related criteria as listed in **Appendix 5**.

We conducted our audit from January to September 2020, and obtained written representation from the Ministry that effective November 30, 2020, it has provided us with all the information it was aware of that could significantly affect the findings or the conclusion of this report.

We assessed whether the Ministry had a robust process in place to continuously review curricula to ensure that content is appropriate for the grade level being taught and in line with best practices in other high-performing jurisdictions in national and international assessments. We also assessed whether in revising the curricula, the Ministry made evidenced-based decisions and sought the input of key stakeholders and that the input was reflected in the revisions. Recently revised curriculum for which the Ministry's processes were assessed included:

- Cooperative Education Secondary (2018);

- Health and Physical Education Elementary (2019);
- First Nations, Métis, and Inuit Studies Secondary (2019);
- Career Studies (2019); and
- Mathematics Elementary (2020).

In addition to our review of the development of the First Nations, Métis, and Inuit Studies curriculum, our Office also conducted a value-for-money audit this year on Indigenous Affairs.

For our audit, we conducted a survey of key stakeholders who had been solicited by the Ministry for input and feedback during the curricula revision process, namely members of subject associations (self-organized groups of educators independent of the Ministry that conduct workshops and prepare learning resources for teachers, e.g., the Ontario Association of Physics Teachers), post-secondary institutions, business groups and focus groups, to understand their satisfaction level with the process and feedback on the appropriateness of learning expectations.

We compared Ontario's curriculum-development information to the eight other provinces that have subject-specific curriculum documents (Quebec develops one provincial set of standards and expectations for the entire curricula (all subjects and grades). We also had discussions with staff at departments/ministries of education in other jurisdictions (Canadian provinces and the United Kingdom) about curriculum development and implementation practices.

We discussed various issues outlined in our report with the four teacher unions in Ontario to obtain their feedback on the impact of those issues on their membership. With the co-operation of the unions, we conducted a survey of all regular classroom teachers to obtain feedback on whether the resources, textbooks and other supports received from the Ministry of Education and/or school boards help teachers to effectively deliver the required curricula. The survey also asked for feedback about curriculum delivery and student assess-

ment. We received 8,057 full or partial responses to the survey.

We also held discussions with university faculties of education regarding programs for providing student teachers with consistent practices for assessment of student learning which is in line with Ministry policy, as well as post-secondary admission offices regarding adjustment to student grades dependent on the high school the student attended.

We met with staff at the Education Quality and Accountability Office (EQAO) to discuss student performance on standardized testing and to determine how the EQAO office ensures provincial assessments are linked to curriculum expectations.

We conducted our work primarily at the Ministry's head office in Toronto and with four school boards, namely Toronto District School Board (Toronto); Catholic District School Board of Eastern Ontario (Eastern Ontario), located in Kemptville Ontario; District School Board Ontario North East (Ontario North East), located in Timmins, Ontario; and Near North District School Board (Near North) located in North Bay, Ontario.

We also engaged the use of two experts to provide input and insights to our audit plan and findings in the areas of curriculum development, implementation and assessment.

Due to the closure of schools in March 2020 in response to COVID-19, we were unable to visit schools or observe teachers in order to assess the consistency and degree with which teachers were implementing curriculum expectations and conducting assessments of the curriculum. Instead, we held discussions with a sample of elementary and secondary school principals and curriculum leads at secondary schools from the boards we engaged with.

We conducted our work and reported on the results of our examination in accordance with the applicable Canadian Standards on Assurance Engagements—Direct Engagements issued by the Auditing and Assurance Standards Board of the Chartered Professional Accountants of Canada. This included obtaining a reasonable level of assurance.

The Office of the Auditor General of Ontario applies the Canadian Standard on Quality Control and, as a result, maintains a comprehensive quality-control system that includes documented policies and procedures with respect to compliance with rules of professional conduct, professional standards and applicable legal and regulatory requirements.

We have complied with the independence and other ethical requirements of the Code of Professional Conduct of the Chartered Professional Accountants of Ontario, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

4.0 Detailed Audit Observations

4.1 Curriculum Review Process and Method of Review

4.1.1 Ontario's Curricula Are Aging

The age of Ontario's core curricula is comparable to other Canadian jurisdictions, with the exception of British Columbia, which has updated all of its core curricula within the last four years. We defined core curricula as those that are compulsory for graduation in the majority of provinces. As seen in **Figure 6**, the age of Ontario curricula in these areas range from less than one year to 14 years old at the elementary level and two to 15 years old at the secondary level. Much of the Ontario curricula has not been revised in at least 10 years. We found that 15%, or 12 of 82, of Ontario's curriculum documents were released 15 or more years ago (2005 or prior), including math for Grades 9 and 10. In addition, another 51%, or 42 of 82, curriculum documents were released between 10 and 14 years ago (from 2006 to 2010), including Computer Studies and Technological Education at the secondary level. The percentage of elementary and secondary curricula that were at least a decade old was

Figure 6: Years Since Ontario Curricula was Last Revised in Core Subject Areas

Source of data: Ministry of Education

Subject Area	English Curriculum	French Curriculum	Years Since Curricula was Last Revised
Elementary			
Arts	2009	2009	11.00
French as a Second Language	2013	2006/2013 ¹	9.30 ²
Health and Physical Education ³	2019	2019	1.00
Kindergarten ⁴	2019	2019	1.00
Language	2006	2006	14.00
Mathematics	2020	2020	0.00
Science and Technology	2007	2007	13.00
Social Studies, History and Geography ⁵	2018	2018	2.00
Secondary			
Arts	2010	2010	10.00
English as a Second Language and English Literacy Development	2007	2010	11.50 ²
French as a Second Language	2014	2007/2013 ⁶	8.70 ²
Health and Physical Education	2015	2015	5.00
English	2007	2007	13.00
Science	2008	2008	12.00
Canadian World Studies, Grades 9 and 10 ⁵	2018	2018	2.00
Canadian World Studies, Grades 11 and 12	2015	2015	5.00
Mathematics, Grades 9 and 10	2005	2005	15.00
Mathematics, Grades 11 and 12	2007	2007	13.00
Social Sciences and Humanities	2013	2013	7.00

1. French as a Second Language consists of two curriculum documents. One was last revised in 2006 and the most recent one was revised in 2013.

2. The age of the curriculum is an average as it was revised in multiple years.

3. The most recent revision in 2019 was a focused review. The curriculum also underwent a focused review in 2015 and the last full revision was in 2010.

4. The most recent revision in 2019 was a focused review. The last full revision was in 2016.

5. The most recent revision in 2018 was a focused review for the Truth and Reconciliation Commission to inform students about what happened in Indian Residential Schools. The last full revision was in 2013.

6. French as a Second Language consists of three curriculum documents. Two were last revised in 2007, and the most recent one was revised in 2013.

20% and 80%, respectively. For elementary and secondary curriculum documents combined that were released at least a decade ago, only 31%, or 17 of 54, have a planned update and release date. See **Appendix 1** for a complete list of curriculum documents, the last revision release date and those planned to be updated.

We contacted other provinces and reviewed publicly available information about the age of core English-language curricula of eight other provinces that have subject-specific curriculum documents (Quebec develops one provincial set of standards

and expectations for the entire curricula) and noted that Ontario was generally in line with the average of all provinces we reviewed. Although there were three other provinces with curricula that were at least 20 years old, Ontario's curriculum in science and technology, language (elementary), and English (secondary), elementary arts, and secondary level mathematics, were among the oldest, as shown in **Figure 7**. In June 2020, the Ministry released a new elementary math curriculum and tentatively has plans to release a new curriculum for science and secondary math. It does not have plans to release a new language curriculum.

Figure 7: Average Age of English-Language Curricula in Core Subject Areas by Province (Years)

Prepared by the Office of the Auditor General of Ontario

	BC	AB	SK	MB	ON	NB	PE	NS	NL	ON Ranking
Elementary										
Arts	4	33	10	9	11	16	11	5	10	6
Health and Physical Education	4	19	11	20	1	12	12	5	8	1
Language	3	19	7	3	14	15	15	5	7	6
Mathematics*	4	9	12	7	0	11	8	6	5	1
Science	4	18	10	21	13	17	9	5	4	6
Social Studies	4	15	11	17	2	13	11	5	12	1
Secondary										
Arts	2	32	9	5	10	16	13	13	3	5
Health and Physical Education	2	19	6	20	5	12	8	9	10	2
English	2	17	16	3	13	8	8	15	6	6
Mathematics	2	13	9	6	14	7	8	8	5	9
Science	2	9	4	14	12	13	10	12	5	7
Social Studies	2	26	27	8	5	11	9	14	4	3

* Ontario released Math curriculum for elementary students on June 26, 2020. Prior to this update, the curriculum was 15 years old and comparatively would have ranked in ninth place.

We also reviewed the age of the curriculum of some international jurisdictions and found that they all have national-level curricula and have revised their curricula within the last five years. Australia and New Zealand last made changes to their national curriculum in 2015, while the United Kingdom and Finland updated components of their national curriculum in 2016 and 2017, respectively. Australia plans to review its curriculum again in 2020 (particularly in math and science).

4.1.2 Ontario's Curriculum Revision Process Could Benefit from Practices in Other Jurisdictions

We compared Ontario's curriculum review process to eight other provinces. Three of these provinces (Alberta, British Columbia and Nova Scotia), along with Quebec and Ontario, had the highest student test results among Canadian provinces in reading, math and science in the 2018 Programme for International Student Assessment. As seen in **Figure 8**,

we found that the higher-performing provinces generally shared the same fundamental steps in their processes for developing curriculum, with a few exceptions.

Our review consisted of publicly available information and discussions with, and materials provided by, the eight other Canadian provinces. We noted practices that could benefit Ontario if incorporated into its process, namely, identifying curriculum for revision using a formal risk-based process, piloting draft curriculum before full implementation, releasing draft curriculum to schools within a specified time period before the implementation date, and separating students into applied and academic courses at a later grade (starting in Grade 10, instead of Grade 9).

Need for a Risk-Based Process for Selecting Curriculum for Revision

We noted other jurisdictions (namely, Manitoba, New Brunswick and Newfoundland and Labrador)

Figure 8: Comparison of Ontario's Curriculum Revision Process to Eight Canadian Provinces

Prepared by the Office of the Auditor General of Ontario

	ON	AB	BC	NS	MB	NB	NL	PE	SK
Formal risk-based process for selecting curriculum to revise	x	x	x	✓	✓	✓	✓	x	x
Benchmarking:									
Jurisdictional Scan – Canadian Provinces	✓	✓	x	✓	✓	✓	✓	✓	✓
Jurisdictional Scan – International	✓	✓	✓	✓	✓	✓	✓	x	✓
Do consultations include:									
Public	✓	✓	✓	✓	x	✓	✓	x	✓
Relevant industry stakeholders (like employers, professional associations etc.)	✓	✓	✓	✓	✓	✓	✓	x	✓
First Nations, Metis and Inuit	✓	✓	✓	✓	✓	✓	✓	x	✓
Educational institutions – post-secondary/ teachers etc.	✓	✓	✓	✓	✓	✓	✓	x	✓
Curriculum revised by Subject for all grades	✓	✓	✓	✓	x	✓	✓	x	✓
Curriculum written by:									
Contracted teachers	✓	x	✓	✓	✓	✓	✓	✓	✓
Contractors	✓	x	✓	x	✓	✓	✓	x	✓
Internal Ministry staff	✓	✓	x	✓	✓	✓	x	x	✓
Feedback collected while curricula is written	✓	✓	✓	✓	✓	✓	✓	✓	✓
French and English revised concurrently	✓	✓	✓	✓	✓	x	✓	x	✓
Mandatory lens check to ensure diverse student needs are met									
Indigenous	✓	✓	✓	✓	✓	✓	✓	n/a ²	✓
Equity/Inclusiveness/Well-Being	✓	✓	✓	✓	✓	✓	✓	n/a ²	✓
STEM and Financial Literacy	✓	✓	x	✓	x	x	x	n/a ²	✓
Curriculum is piloted before implementation	x	✓	✓	✓	✓	✓	✓	✓	✓
Defined timeline for schools to receive curriculum before implementation	x	✓	✓	✓	✓	✓	✓	✓	✓
Ministry develops training resources	✓	n/a ¹	x	✓	✓	✓	✓	✓	✓
Ministry holds training sessions	✓	n/a ¹	x	✓	✓	✓	✓	✓	✓
Separating students by stream starting in Grade 10	x	✓	✓	✓	✓	✓	✓	✓	✓

1. At the time of our fieldwork, Alberta was in the process of revising its entire curricula, therefore information on those elements marked as n/a was not available.

2. Prince Edward Island performs one collaborative lens check with various stakeholders to consider all perspectives at once.

utilize risk-based frameworks with established criteria to determine the need for reviewing and updating curriculum. Factors considered include demand from industry, age of the curriculum, scope of revisions under consideration, stakeholder recommendations, societal demands, demographics, research engagement and achievement data. In Manitoba, Nova Scotia, New Brunswick and

Newfoundland and Labrador, for example, policy dictates that curriculum be reviewed continuously and on an annual basis, although changes to the curriculum are not necessarily made. Staff in these provinces monitor the curriculum to assess if updates are needed and, if so, the level of revision required; for example, an update to resources only, a section of the curriculum or a complete

revision. Although these four provinces have not realized the same performance results as Ontario in national and international assessments, this practice helps toward ensuring that the curriculum is current and relevant.

According to the Ministry, its current process for determining when a curriculum should be revised includes receiving input through consultation from education stakeholders, research partners and academics, and other experts. The Ministry has also stated that in determining if a revision is required, it considers how current the curriculum is (such as new trends in the subject/discipline, pedagogical approaches, development and innovations in technology), and if there is coherence from Kindergarten through Grade 12. However, the Ministry was not able to provide any documented analysis to confirm its consideration of these factors in prioritizing curricula for an update. The Ministry provided us with a timeline for curricula it is planning to update between 2019/20 and 2022/23; however, there was no documented justification provided for why these curricula were selected over others.

Curricula which covers subject matter that can become outdated quickly, such as computer science and other science and technology-based courses, should be reviewed more frequently. However, none of Ontario's science or technology-based curricula has been reviewed more than once in the last 17 years.

We noted that Ontario's accounting courses in the business studies curriculum are out of date. The accounting courses still make mention of accounting principles (for example, the matching principle which changed with the introduction of International Financial Reporting Standards) and professional associations (for example, the Canadian Institute of Chartered Accountants, Certified General Accountants Association of Ontario, and the Society of Management Accountants of Ontario) that have been out of date since 2011 and 2013, respectively.

In Ontario, Draft Curriculum Not Piloted before Full Implementation

We also noted that all the provinces we reviewed pilot draft curriculum in schools and incorporate feedback from the pilot process into the final curriculum document. Ontario is the only province that does not currently have a system for piloting curriculum before it is released. The expert we consulted noted that piloting of curriculum would be a beneficial process for teachers and students as the literature on implementation in schools suggests that if direction on how to implement the curriculum has not been clearly defined and supported, there is a large impact on whether students achieve a standard of learning.

We also noted that, in Ontario, the Province often leaves little preparation time for teachers prior to releasing a curriculum (as discussed in **Section 4.3.3**). Other provinces have a defined timeline to release curriculum revisions to schools prior to the date teachers are expected to implement the revised curriculum. For example, in British Columbia, the curriculum is released one year before mandatory implementation in schools. Saskatchewan provides schools at least one academic semester before curriculum must be implemented. Depending on the curriculum, Nova Scotia releases curriculum one to two years ahead of mandatory implementation.

The amount of lead-time provided to Ontario teachers in the five most recently released new or revised curricula ranged from 10 days to five months. The expert we consulted about the optimum amount of lead-time noted that a good practice would be to develop a release plan that maps out the critical steps involved in the preparation for and use of the new curriculum. Although there are different strategies that could be developed for a release plan, virtually all involve a multi-year process.

Separating Students by Academic Ability to Start in Grade 10

Another notable difference between Ontario and the provinces we reviewed is the process, referred to as streaming, which divides students entering high school into either the applied stream or an academic stream that determines their post-secondary pathway. In Ontario, streaming starts in Grade 9, whereas in other provinces streaming starts in Grade 10 or Grade 11. In July 2020, the Ministry announced that it would defer the process of streaming into applied and academic courses from Grade 9 to Grade 10, starting with the new foundational Grade 9 math course for all students in September 2021, in an effort to break down barriers for Indigenous, Black and racialized students.

Research has shown that these students are disproportionately represented in the applied stream. For example, a 2017 report by York University found that 53% of Black students in the Toronto District School Board were in academic programs compared to 81% of white students and 80% of other racialized groups. Conversely, 39% of Black students were enrolled in applied programs compared to 16% of white students and 18% of other racialized groups.

RECOMMENDATION 1

In order to improve the process of developing and implementing curriculum, we recommend that the Ministry of Education:

- develop a formal risk-based approach for selecting curriculum to revise;
- set a defined amount of time between when it releases curriculum and the implementation date; and
- pilot new or revised curriculum in schools prior to full implementation.

MINISTRY RESPONSE

The Ministry of Education agrees with the Auditor General's recommendation and will integrate a more formal assessment of risk into

a defined curriculum renewal approach that ensures the development of relevant and timely curriculum to support student learning.

As part of the development of a risk-based curriculum renewal approach, the Ministry will work toward establishing a consistent time between the issuance of curriculum and the mandatory implementation date. The Ministry recognizes the value of access to a new curriculum ahead of a mandatory implementation date. The Ministry will undertake a review of possible approaches to piloting curriculum, which will include consideration of the short- and long-term outcomes and equitable learning opportunities for all students.

4.1.3 In Some Cases, Ministry Does Not Perform All Stages of the Curriculum Review Process

We reviewed the Ministry's process to develop current, relevant and developmentally appropriate curricula. Our review included the five most recently revised curricula: Health and Physical Education Elementary (2019); Cooperative Education Secondary (2018); First Nations, Métis, and Inuit Studies Secondary (2019); Career Studies (2019); and Mathematics (2020). We found several instances where the Ministry did not adhere to its stated curriculum review process. These are summarized in **Figure 9** for each of the curricula reviewed, and exceptions are explained in further detail throughout this section.

We also found that the Ministry had not obtained comprehensive stakeholder input or provided sufficient time to allow for proper fact-checking while revising the 2019 Health and Physical Education Elementary curriculum. As well, the Ministry had not updated all necessary stakeholder input while developing the 2019 First Nations, Métis, and Inuit Studies Secondary curriculum.

Figure 9: Results of Our Testing of the Ministry's Curriculum Review Process, as shown in Figure 2

Prepared by the Office of the Auditor General of Ontario

Steps	Detailed Procedures	Health and Physical Education Elementary (2019) ¹	First Nations, Métis, and Inuit Studies Secondary (2019) ²	Mathematics Elementary (2020)	Cooperative Education Secondary (2018)	Career Studies (2019)
Research	Technical analysis (such as media scan, subject matter experts consulted, third-party studies)	✓	x	✓	✓	✓
	Benchmarking to international jurisdictions	✓	x	✓	n/a ³	x
Engagement (Stakeholder Feedback)	Benchmarking to provincial jurisdictions	✓	x	✓	✓	✓
	Educators/subject or division associations	x	x	✓	✓	✓
	Teacher federations	x	x	✓	✓	✓
	Post-secondary institutions/expert consultants	x	x	✓	✓	✓
	Industry	x	x	✓	✓	✓
	Indigenous	x	x	✓	✓	✓
	General public (parents, students, etc.)	✓	x	✓	✓	✓
	Relevant Ministry of Education divisions and other Ministries	x	✓	✓	✓	✓
	Community education stakeholders	x	x	✓	✓	✓
	Synthesis/recommendations report prepared to guide curriculum review	x	✓	✓	✓	✓
Writing	English and French curriculum written at the same time	✓	✓	✓	✓	✓
Editing	Internal Education Officers guide process	✓	✓	✓	✓	✓
	Drafts shared with writers and key stakeholders for feedback	✓	✓	✓	✓	✓
	External academic experts on curriculum topic	x	✓	✓	✓	✓
	Equity lens check	x	✓	✓	✓	✓
	Indigenous (First Nations, Metis, Inuit)	x	x	✓	x	✓
	Environmental education	x	✓	✓	✓	x
	Financial literacy	x	✓	✓	✓	✓

✓ No exception to the process noted during our testing.

x Exception(s) to the process noted during our testing.

1. Fact checkers were provided with less than the Ministry's recommended 8 days to review the curriculum.

2. Consultations held with Chiefs of Ontario representing Anishinaabek, Mushkegowuk, Onkwehonwe, and Lenape Peoples.

3. There is no international equivalent. Other high-performing jurisdictions such as Finland, England and Australia stream students into different schooling systems based on if they want to enter vocational work versus academics (Finland) or issue policy documents which can be tailored to the local curriculum needs (England and Australia).

4. Although not listed as a review process step, we have noted that the Ministry has completed this practice for some curriculum and considers it to be a good practice.

Health and Physical Education Elementary (2019)

The only type of consultation conducted for the Health and Physical Education Elementary curriculum was general public consultation (versus including other stakeholders noted in **Figure 9**), held between September and December 2018, which was part of a larger consultation about changes to the Ontario education system in general. The other topics consulted on included standardized testing, cell phones in classrooms, science/technology/engineering and math education. These public consultations were held at a cost of \$973,000. The resulting Health and Physical Education Elementary curriculum was not significantly different from the 2015 version of the curriculum. Changes to the curriculum included revisions to reflect the legalization of cannabis, and new information about concussions and sexually explicit media. Other changes included the addition of consent and additional learning about healthy relationships in every grade, not just in Grades 7 and 8; education in every grade about mental health; additional learning about online safety; and learning about sexual orientation in Grades 5 and 7, in addition to the learning already delivered in Grades 6 and 8.

Further, the Ministry noted that organizations involved in education or student well-being, such as the various subject associations and Children's Mental Health Ontario, were not individually solicited for their input on the curriculum prior to it being developed. Although some key stakeholders provided comments through the general online consultations held in 2018 or later during the fact check process, it would have been prudent for the Ministry to directly solicit the expertise of such organizations to ensure all relevant stakeholder input was received.

We conducted a survey of stakeholders consulted for input during the development of the Health and Physical Education Elementary curriculum and found that 68% of respondents thought that insufficient time was provided to analyze the revised curriculum.

Regarding the fact-checking of the revised Health and Physical Education Elementary curriculum documents, we noted that six of the 11 consultants contracted were provided only one day to accept the Ministry's request to review the curriculum. This resulted in one-third of the Ministry's preferred external fact checkers being unable to take part in the process due to the short timeline.

First Nations, Métis, and Inuit Studies Secondary (2019)

In our review of the First Nations, Métis, and Inuit Studies Secondary (2019) curriculum, we found that much of the research (such as benchmarking to comparable provincial curricula, school board surveys and literature scans) used to inform the curriculum revisions in 2019 took place in 2009 and 2010, almost 10 years prior to the release of the curriculum. The Ministry did not endeavour to obtain more updated analysis before releasing the new curriculum. In addition, the Ministry did not consistently apply a process for obtaining current perspectives from Indigenous communities, as recommended by Indigenous partners, a process adopted for other curriculum being revised by the Ministry at the time. This was also the case in revising the Cooperative Education Secondary curriculum.

According to the Ministry, the reason for the 10-year gap between when research and revisions to the curriculum began and the release of the curriculum was the extent of revisions necessary, and the required time to engage with Indigenous partners. In addition, constant staffing changes of those with expertise in this area of the curriculum also contributed to the length of time needed for the revisions. The person in the lead role in the revisions changed five times in the 10-year period, and many of the staff with expertise on the Indigenous perspective through the Truth and Reconciliation Commission were reassigned other work related to Indigenous education.

Formal consultations used to inform the curriculum revisions included Indigenous communities

and Elders, teacher federations, school boards, student groups, post-secondary institutions, industry and nine other ministries. However, these took place primarily in 2009 and 2010. The Ministry did supplement these older consultations by involving representatives from First Nations, Métis, and Inuit leaders and communities in the editing process of the final curriculum documents before they were released in 2019.

Between February and June 2018, just prior to the release of the curriculum, the Ministry consulted the First Nations Lifelong Learning Table, which is composed of Ministry and First Nation representatives. The First Nations Lifelong Learning Table, which identifies and works on First Nation education and training priorities, includes an Education Co-Ordination Unit whose goal is to facilitate inter-governmental liaison with provincial government officials to promote the collective interest of First Nations.

Based on our survey of stakeholders consulted during the development of the First Nations, Métis, and Inuit Studies Secondary curriculum, we found that:

- 47% of respondents thought that insufficient time was provided to analyze the curriculum; and
- 53% felt that their feedback was not incorporated into the curriculum. Multiple survey participants also noted that, due to the nature of the subject matter, it would have been beneficial to involve Indigenous communities throughout the entire process, not only at the final review stage prior to the release of the curriculum.

Note that similar responses were provided by those consulted during the development of the Mathematics Elementary curriculum in which 55% of respondents indicated that insufficient time was given to provide feedback. Of the respondents who reviewed the math curriculum, 48% felt their feedback was not incorporated into the curriculum.

RECOMMENDATION 2

To allow for development of curricula that is research-based, evidenced-informed and reflective of stakeholder views, we recommend that the Ministry of Education establish procedures that ensure that each step in its own process for curriculum development is completed on a timely basis and that fulsome research and relevant stakeholder feedback are obtained.

MINISTRY RESPONSE

The Ministry will continue to build upon its current approach to curriculum development that includes research and evidence, subject-matter expertise and relevant stakeholder engagement, advice and feedback.

While the Ontario model is robust, the Ministry agrees to develop a standard procedures guideline that will be used throughout the curriculum revision process to support the consistency of each step.

4.2 Implementation of Curriculum Expectations

4.2.1 Neither the Ministry nor School Boards Have Formal Oversight of Whether Curricula Are Being Consistently Implemented across the Province

School boards and the schools we engaged with did not have a formal and sustained process to make sure that the curriculum was being implemented effectively across all schools.

Based on our review of school board practices and discussions with a sample of school principals, we noted that most of the responsibility to implement the curriculum is at the school level. School principals are responsible for making sure that the curriculum is being properly implemented in all classrooms in their school and that appropriate resources are made available to teachers and students. Teachers are responsible for preparing

lessons that align with the curriculum, selecting resources and teaching strategies, and assessing, evaluating and reporting students' achievement of the curriculum expectations. To this end, teachers are expected, at the beginning of the school year, to prepare long-range plans that provide a broad overview and timeline for student learning in every subject area they teach for the entire year. Teachers are allowed the flexibility to choose the format of these plans, but they typically identify the curriculum topics (big ideas) and units to be taught with the overall expectations in each unit and subject. The plans also typically include when the units and overall expectations will be taught. At the secondary level, teachers are expected to prepare course outlines which provide a schedule of what is to be covered in the course and tell students what the course expectations are and provide a timeline for achievement of these expectations. Course outlines also provide a schedule of assignments and their associated weighting toward a final grade, as well as a reading list for the course.

In addition to the long-range plans, teachers are also required to prepare detailed unit and daily lesson plans of what is to be taught and assessed, and how the expectations will be achieved. Further, teachers are to indicate the resources that will be used and any modifications and accommodations required for specific students. Teachers normally create unit and daily lesson plans as the year progresses and gather assessment data to identify students' individual strengths and needs. Teachers' lesson plans also vary from teacher to teacher. Although teachers are required to teach what is in the curriculum, how they teach what students are supposed to learn is up to the teacher.

We found that, although school administrators and curriculum leads take several informal actions to make sure that the curriculum is being implemented, there were no consistent systematic processes at the school level to make sure that the curriculum was being implemented effectively and that the students were learning all of the required curriculum. For example:

- All the school principals and vice-principals we spoke with at the elementary and secondary levels conducted routine walkthroughs of classrooms. The purpose of the walkthrough is to see if students are engaged in learning and if the lesson being taught by the teacher is relevant, well prepared and organized. During a walkthrough, a principal can spend anywhere from five to 10 minutes in a classroom, having conversations with students and asking them to explain what they are learning and why they are learning it. They also explained that they look around the classroom to see if teachers have identified and posted learning goals. The walkthroughs are not intended to be an assessment or evaluation of the teacher. We were told walkthroughs are part of their daily routines, and they try to get into a few classrooms every day, but that does not always happen because other pressing matters arise during the day.
- Principals informed us that, at the beginning of the school year, they required teachers to submit long-range plans, and secondary teachers were also required to submit course outlines. However, principals did not normally require teachers to submit their unit and daily lesson plans, and most principals said that they do not routinely review teacher plans in detail. Principals stated that an in-depth review of a teacher's instructional and assessment practices is done in the year of the teacher's formal performance evaluation, which for experienced teachers occurs only once every five years (unless performance issues have been identified) and for new teachers twice within the first 12 months of employment. The advisors we engaged for our audit noted that it is not possible to assess the quality or depth of teaching by reviewing a teacher's lesson plans, as experienced teachers who are generally teaching the same grade or grades from one year to the next often do not include the level of detail

required for an assessment of their plans because they are guided more by experience.

- The Ministry provides school boards with funds to staff secondary schools with curriculum leads who are experienced teachers selected to, among other things, support and facilitate other teachers in their department in implementing the curriculum. The number of curriculum lead positions at each school varies depending on the number of teachers and students at a school. The typical role of curriculum leads is to provide staff with professional learning opportunities and education materials and resources, mentor staff, help develop teaching strategies and assessment techniques, interpret and disseminate achievement data (e.g., EQAO results) and help design strategies to address the results. In addition, the curriculum leads have administrative responsibilities such as developing and managing the department budget. School board staff told us that the level of engagement of curriculum leads varied. While some curriculum leads embrace their leadership role, others stick to management duties such as managing the budget, ordering supplies and co-ordinating department meetings. However, all school board and school administrators we spoke to told us that, in adherence with their collective agreement, because curriculum leads are also teachers, they cannot direct a teacher to take a certain action, evaluate a teacher in any way or make sure that teachers in their departments are implementing the curriculum and assessing students appropriately.

According to responses to our teacher survey, as seen in **Figure 10**, 22% of elementary teachers and 11% of secondary teachers reported that they did not collaborate on development of teaching plans and tests and major assessments with colleagues who teach the same grade or course in their school to help provide consistent delivery and assessment of curriculum. In addition, as seen in **Figure 11**,

Figure 10: Teacher Survey Responses on Collaboration with Other Teachers

Source of data: Survey conducted by the Office of the Auditor General of Ontario

Items Collaborated On	Elementary (%)	Secondary (%)
Long range plans	54	58
Unit plans	41	52
Lesson plans	37	38
Tests and major assignments	35	58
Exams	n/a	63
No collaboration on any of the above	22	11

responses to our survey of teachers reported that 71% of elementary teachers indicated their long-range plans for curriculum delivery are reviewed primarily by principals or vice-principals. However, other types of plans and student assessment tools they prepare are reviewed much less frequently; for example, only 8% said that principals or vice principals reviewed their tests and major assignments and 15% reported that principals or vice-principals reviewed their unit plans. At the secondary level, 79% of teachers indicated that exams are reviewed by either school curriculum leads, principals or vice-principals. Teaching plans were reviewed much less frequently with between 51% and 78% of teachers reporting that no review took place their long-range plans and lesson plans, respectively.

Our teacher survey also found that 81% of teachers stated they were not able to teach all of the curriculum expectations in adequate depth during the instructional time provided in a school year. Further, we asked teachers whether certain factors had an impact on their ability to effectively deliver curricula. Respondents indicated that each area we enquired about had a major impact. This included number of students with special needs (76%), class size (70%), availability of student resources (54%), and availability of teacher resources and exemplars (49%).

If students are not being taught the curriculum effectively and in its entirety, they may not be

Figure 11a: Teacher Survey Responses on Review of Elementary Teacher Implementation Plans and Assessments

Source of data: Survey conducted by the Office of the Auditor General of Ontario

	Reviewed Primarily by Principal or Vice Principal (%)	Not Reviewed by Anyone (%)
Long range plans	71	29
Unit plans	15	85
Lesson plans	14	86
Tests and major assignments	8	92

Figure 11b: Teacher Survey Responses on Review of Secondary Teacher Implementation Plans and Assessments

Source of data: Survey conducted by the Office of the Auditor General of Ontario

	Reviewed Primarily by Principal or Vice Principal (%)	School Curriculum Lead (%)	Not Reviewed by Anyone (%)
Long range plans	26	22	51
Unit plans	10	23	67
Lesson plans	11	11	78
Tests and major assignments	5	25	70
Exams	29	50	21

acquiring the necessary knowledge and skills to transition to post-secondary education or into the labour force. However, the Ministry has only collected data and conducted analysis on the number of students who enter publicly funded post-secondary education in Ontario, but has not collected information related to first-year success in post-secondary school (drop-out rate or unsuccessful completion of courses).

RECOMMENDATION 3

In order to understand and address barriers and challenges to the effective implementation of new or major curriculum revisions, we recommend that the Ministry of Education:

- collect data and information through surveys of educators and other means to evaluate the level of implementation following major curriculum revisions;
- provide specific and focused training and supports in areas identified by surveys to be impeding effective implementation; and

- collect and examine data related to students' performance in the first year of post-secondary pursuits to gain an understanding of any knowledge or skills gaps of Ontario students and address the gaps.

MINISTRY RESPONSE

The Ministry agrees that evaluating the effectiveness of new curriculum implementation is important. Building on the Ministry response to Recommendation 2, we will work with our education partners to explore opportunities to gather feedback from educators on the level of implementation, challenges and barriers to implementation, and best practices and opportunities for improvement. This can be a step in the development of the curriculum revision process.

In addition to the Ministry's current process of gathering input on training, resources and supports, the Ministry will use the feedback

from education partners to inform the development of curriculum-specific training, resources and support.

The Ministry will continue its ongoing work with the Ministry of Colleges and Universities and other areas of government to gather additional information on the experience and outcomes of students after secondary school as they transition to post-secondary institutions, apprenticeship programs and the labour market.

RECOMMENDATION 4

We recommend that school boards ensure principals or vice-principals consistently complete a review of teachers' annual long-range plans and a sample of lesson plans to ensure all curriculum expectations are planned to be taught to an appropriate level of depth.

RESPONSE FROM SCHOOL BOARDS

The Near North District School Board will implement consistent monitoring processes that enable principals and vice-principals to review educators' annual long-range plans and a sample of lesson plans to ensure curricula are taught to an appropriate level of depth.

The Catholic District School Board of Eastern Ontario has developed a reference tool of suggested long-range plans for all grade levels 1-8 to follow the curriculum along the same timeline. This will support project-based and cross-curricular learning across the grades and subject -areas for teachers. The long-range plan reference tool was created this year to facilitate and support our grade 1-8 students in the virtual school and brick schools with the possible changes from learning face-to-face to virtual or vice-versa to prevent students from missing strands or subjects. We will work with administrators to ensure that this information is shared with teachers annually and that long-range plans and lesson plans reflect the most

current changes to curriculum as they are communicated to us from the Ministry.

District School Board Ontario North East commits to completing this action within a two-year timeframe. This action will be added to the annual principal's checklist. Superintendents of Education will monitor the work of the principals and vice-principals. Superintendents, principals and vice-principals will review sample annual long-range plans and sample lesson/unit plans to ensure a common approach to assessing the quality of the planning. At the secondary level, the department heads will take a leadership role in reviewing the long-range plans for their department. The school board will consult with the teachers' federations. The school board will review/revise or develop sample templates that will be promoted as common templates for long-range and lesson/unit plans, and support school staff with this work.

The Toronto District School Board recognizes the role of principals and vice-principals as instructional leaders is critical. In order to ensure that curriculum expectations are planned to be taught to an appropriate level of depth, a number of strategies will be implemented and/or reinforced. This includes inserting expectations around reviewing long-range plans, lesson plans in the school board's Principal Checklist, reminding principals and vice-principals to communicate expectations around long-range plans and lesson plans to teachers, and reviewing them through other oversight processes. Administrators will collect course outlines and long-range plans from all staff and a modified version of course outlines/long-range plans/course outlines will be shared with students and families by educators.

Further, as part of capacity building for principals and vice-principals, the TDSB will share and reinforce best practices for monitoring long range and lesson planning. For example, long range plans may be embedded into grade team/division/course planning on an ongoing basis

as evident through daily lesson plans and must align with assessment, evaluation and reporting for consistency.

MINISTRY RESPONSE

The Ministry will engage with partners to identify additional leadership opportunities for principals and vice-principals to support educators in their classroom instruction by reviewing long-range plans and sample lesson plans while considering existing policies and processes.

4.2.2 Most Educators Are Not Finding Ministry Resources Useful and No Routine Mechanism Exists for Teachers to Provide Input or Feedback on the Development of Resources

Teacher resources and instructional materials are important for teachers to effectively deliver and implement the curriculum. Over the past 15 years, the Ministry has developed an array of resources to help teachers improve their effectiveness in teaching and to improve student learning for both English- and French-language curricula. However, we noted that the Ministry surveyed educators specifically on the usefulness of resources for the math curriculum in 2014 and, to a lesser extent, in 2017/18 as part of a survey on its math strategy. Despite the concerns described below being raised in the survey with respect to math resources, the Ministry has not taken steps to address the concerns raised in the survey, or to evaluate the usefulness of resources for other curricula. The Ministry updated and re-published some math resources in 2017/18 to align with recommendations in the evaluation report. However, the Ministry has not followed up with educators to determine if the updated resources are now any more useful.

In 2014, the Ministry contracted a third-party consultant to evaluate the usefulness of math resources for teachers of all grades in both languages of instruction, and to evaluate the dis-

semination and distribution of these resources. The evaluation looked at 92 math resources in English and 60 math resources in French, produced by the Ministry between 2002 and 2013. The resources reviewed covered many forms, such as materials available in print and online, interactive websites, videos and webinars. The evaluation was conducted through a combination of interviews, focus groups and a survey of educators.

Resources were considered most useful if they were aligned with teaching needs so that they fit with the instructional program, suitable for grade levels being taught, aligned with the curriculum and with school board and Ministry goals, clear and easy to understand, ready for use in lesson plans and if they provided hands-on activities.

The evaluation report to the Ministry also found that:

- Teachers were aware that there are numerous resources available for them; however, they were not always well informed on how to access these resources or even where to start their research for resources. There were inconsistent practices on how resources were disseminated, and information did not necessarily get passed on to teachers by school administrators.
- The success of these resources in reaching teachers through administrators was highly dependent upon principals sharing resources with teachers, with some principals actively suggesting resources to teachers and others not bringing resources forward. School administrators do not necessarily have time to review all the resources before distributing them, so distribution could be inconsistent and ad hoc. In addition, board personnel sometimes felt uninformed when it came to the distribution of the resources, as resources seemed to go straight from the Ministry to schools without the board necessarily being alerted.
- The methods of obtaining feedback on the resources were quite informal. Until the 2014 evaluation, there was no official means of

collecting feedback from teachers, administrators and board personnel on the use and usefulness of the resources.

In December 2017 and January 2018, the Ministry surveyed educators for feedback on the 2016 renewed math strategy. The survey included feedback on educator resources. In reviewing the survey, we found that the feedback from educators echoed findings from the 2014 evaluation report. Specifically, most educators still did not find math learning and teaching resources very useful. Of the 17 resources listed in the survey, there were only two that at least 50% of educators said were among their most useful. These were the math curriculum document (50%) and the manipulatives resource (objects or materials that students can touch and move around in order to help them learn mathematical and other concepts), which 65% of respondents found most useful. In comparison, of the remaining 15 resources reviewed, only 2% to 38% of educators found them to be among their most useful.

In the survey we conducted of teachers, we asked them how useful they found resources provided by the Ministry or their school board regarding the eight new and revised curricula that had been released in the last three years (2017-2020). More than one-quarter (26%) of respondents said they were not provided any resources related to the curriculum they are responsible for. This ranged from 18% for the Kindergarten Program to 47% for the Cooperative Education Grades 11 and 12 curriculum. For those respondents who indicated that they had been provided with resources, for the eight curricula combined, 41% noted the resources were not useful or only somewhat useful, while 16% considered them useful, or very useful.

Further, teachers overwhelmingly (87%) responded to our survey that they would find it valuable to provide input and feedback to the Ministry during the development of resources. However, only 3% of teachers indicated that the Ministry had ever solicited their feedback when developing resources.

RECOMMENDATION 5

In order to provide teachers and other educators with useful resources and materials needed to support teaching the curricula, we recommend that the Ministry of Education, in conjunction with the school boards:

- communicate the availability of new resources to teachers and school board staff upon the release of the resources, including where and how they can be accessed;
- collect feedback and input from teachers on the usefulness of the resources and on suggestions for improvement, through surveys or other means, within two years of releasing the resources; and
- use and incorporate feedback received into future resource development.

MINISTRY RESPONSE

The Ministry is committed to building on and strengthening the provision and awareness of curriculum resources for educators. The Ministry is developing a Curriculum and Resources website. This new digital space will help educators access curriculum and learning resources in a user- and mobile-friendly manner and will become increasingly interactive over time with new content and features based on user feedback. The platform will be available in both French and English at all stages.

As a timely understanding of the effectiveness of resources for educators is important, the Ministry will engage with education partners to explore effective ways to solicit this feedback and their perspectives in a reasonable time period to assess the effectiveness of a curriculum resource.

The Ministry will also respond to feedback on curriculum resources in ongoing resource development, including analysis of additional sources of feedback when available.

4.2.3 Training Provided to Teachers on Implementation and Assessment of New or Revised Curriculum Is Not Reaching Enough Teachers in a Timely Way

For a curriculum to be implemented effectively, educators must understand and be knowledgeable about the curriculum. Educators must also know how to implement and teach the curriculum using a variety of instructional strategies and methods to meet their students' learning needs and be prepared to provide students with suitable and high-quality instructional materials and resources. School boards and schools that bear the responsibility for implementing the curriculum must also be given enough time to properly train teachers on how to implement the curriculum and provide teachers with instructional materials and resources.

Little Time between Release of Curriculum and Implementation Date

For five of the most recently released or revised curricula, we reviewed the amount of lead-time the Ministry provided to school boards and schools to allow them to properly prepare teachers with training and provide them with appropriate instructional materials and resources to be able to effectively implement the curriculum.

We found that in four of the five recently revised curricula we reviewed, the curriculum was released without sufficient time for school boards and schools to review the curriculum and prepare teachers and instructional materials and resources to properly implement the curriculum. Specifically, the Health and Physical Education Elementary 2019 curriculum was released on August 21, 2019, just 10 days before schools were required to implement it on September 3, 2019. The First Nations, Métis, and Inuit Studies Secondary 2019 curriculum was released in May 2019 for a September 2019 implementation; the Grade 10 Career Studies Course 2019 was released in July 2019 for a September implementation that same year; and the Mathematics Elementary 2020 curriculum was

released at the end of June 2020, only two months before the target implementation date of September 2020. In each of these cases, the curriculum was released during or immediately prior to the period when teachers are not typically working.

As stated, the Ministry released the Elementary Math curriculum at the end of June 2020. The curriculum underwent a full revision to its content and structure. For example, new content was added, including curriculum components for financial literacy (to build understanding of the value and use of money, basic concepts of financial management, and to develop consumer and civic awareness), social-emotional learning skills (meant to help students to develop confidence, cope with challenges and think critically). It follows that these new concepts will take time for teachers to fully understand and prepare strategies to implement. In addition, the new curriculum added specific expectations relating to computer programming concepts (coding) and skills to connect math with real-life problem solving, and the algebra component was changed to focus on algebraic thinking and reasoning, in addition to recognizing patterns.

To be fully implemented, these changes will most likely require significant shifts in program development, instructional practice and pedagogy, particularly for teachers with less background in mathematics, coding and financial literacy. Teachers will also require practical resources that are aligned with the revised curriculum. However, the curriculum was released at the end of a 10-week school closure due to COVID-19. This means that teachers will need time to be able to address their students' potential learning gaps, which may have widened due to the circumstances with the pandemic and school closures, at the same time as they are expected to implement the new curriculum. At the time of our audit, the Ministry had developed resources for the new elementary math curriculum, including an overview of the changes to the curriculum, key concepts, sample activities and glossaries.

Two of the school boards we engaged with told us that they would like to receive new or revised curriculum six to eight months prior to it being implemented. Another board told us that it needs three to four months before the beginning of the school year, at a minimum, before being expected to implement any new or revised curriculum. The fourth board said it would like to receive the curriculum 12 months in advance (in the fall for implementation in the fall of the following school year). It stated that this timeline would allow its school board and school staff to understand the curriculum changes and determine the professional learning required for teachers, both for curriculum content and pedagogy (instructional strategies and practices). School boards also noted that the longer timeline they are requesting before implementation of a new or revised curriculum would give the board and its schools enough time to make sure they are able to provide teachers with proper resources, and would also give publishing companies enough time to create new textbooks and other resources that are aligned with the new curriculum.

Specifically, in regard to the Elementary Mathematics 2020 curriculum released at the end of June 2020 and required to be implemented in September 2020, all school boards we spoke with told us that this was not enough time to prepare teachers and provide them with instructional materials and resources to properly implement the curriculum. In fact, one school board told us that, without sufficient time between the release of new curriculum and the implementation date, the curriculum would initially be implemented at a surface level. A further concern this board expressed is that with such a short lead-time, teachers would not understand the revised curriculum content in any adequate depth or have the knowledge of instructional strategies and practices they should be using to be able to deliver it effectively.

In the survey we conducted of teachers, we obtained their opinion on whether they were provided with enough time to understand and prepare so that they could effectively implement the eight

new or revised curricula that had been released in the last three years (2017-2020). Between 57% (Social Studies Elementary) and 97% (Math Elementary) of teachers responsible for implementing each respective curriculum indicated that not enough time was provided to understand and prepare the content for implementation.

In addition, 46% of teachers indicated that, in order for them to effectively implement a new or revised curriculum in their class, they would typically require that the curriculum be released at least three to six months prior to the implementation date. A further 43% said more than six months is needed.

Ministry Training for New or Revised Curricula Not Always Provided before the Curriculum Takes Effect

The Ministry often provides training to some staff at school boards and schools, including classroom teachers, curriculum leads in schools and senior school board staff with responsibilities related to the applicable curriculum. School board and school staff who attend the Ministry training are encouraged, but not required, to train teachers in their school board. In addition, the Ministry often provides school boards with funds to be used for training and instructional materials and resources that teachers can use to implement the new or revised curriculum.

For the five most recently released new or revised curricula we reviewed, we noted that the Ministry had provided training for three: the new Cooperative Education Secondary 2018, Health and Physical Education Elementary 2019, and Mathematics Elementary 2020 curricula, as noted in **Figure 12**. In the case of the Cooperative Education Secondary curriculum, the Ministry held face-to-face training with a select number of educators from each school board in April 2018, five months prior to when schools were required to have it implemented. In the case of the revised Health and Physical Education Elementary curriculum, in July 2019, the Ministry contracted the Ontario Physical

Figure 12: Ministry Training Provided for New or Recently Revised Curricula

Source of data: Ministry of Education and survey conducted by the Office of the Auditor General of Ontario

Revised Curriculum	Date Implemented	Ministry Training Provided (Y/N)	Date(s) Training Provided
Cooperative Education, Secondary (2018)	Sep 2018	Y	Apr 2018
First Nations, Metis, and Inuit Studies, Secondary (2019)	Sep 2019	N	n/a
Career Studies Course, Grade 10 (2019)	Sep 2019	N	n/a
Health and Physical Education, Elementary (2019) ¹	Sep 2019	Y	Oct 2019–May 2020*
Mathematics, Elementary (2020) ¹	Sep 2020	Y	Aug 2020–Sep 2020

* Training sessions were held between October 2019 and May 2020. Five training sessions were held in each of English and French.

and Health Education Association, a subject association, to develop five training webinars, which were made available to teachers and other educators between October 2019 and May 2020, within eight months after schools were required to implement the revised curriculum (September 2019). For the Mathematics Elementary curriculum, the Ministry held a series of webinars for school board and school staff in August and September 2020.

However, as of September 2020, the Ministry had not yet provided any training for the other curricula we reviewed: Grade 10 Career Studies Course 2019 and First Nations, Métis, and Inuit Studies Secondary 2019, implemented in September 2019. The Ministry told us regional implementation sessions had been developed for the Career Studies Course 2019, but had not yet been scheduled due to COVID-19. The Ministry is working with community partners to develop and facilitate implementation sessions for the First Nations, Métis, and Inuit Studies Secondary 2019 curriculum, but the timing to provide this training had not yet been determined.

A majority of teachers we surveyed responded that they did not receive training specific to the implementation of the eight curricula released between 2017 and 2020 (for those which they were responsible to teach). Across the eight curricula, on average, 57% of teachers said they did not receive training. This ranged from 48% of teachers who taught elementary math to 70% who taught the Career Studies course. Additionally, of those who did receive training, only 8% responded that it was useful, or very useful.

At Least One-third of Teachers Were Not Satisfied with Ministry Training Related to the 2016 Math Strategy

Educators' feedback from the survey the Ministry conducted in December 2017 and January 2018 on the renewed math strategy also provided some insights into educators' experiences with the math professional learning that they had been engaged in since the launch of the Ministry's Renewed Math Strategy in fall 2016. Some results were concerning, for example:

- 37% of educators did not think that the professional learning they had been engaged in was time well spent.
- 39% did not feel their confidence in learning and teaching math had increased because of the professional learning.
- 34% said they had not gained any new knowledge and understanding about math, while 31% said they were not able to apply the new knowledge to shift their practice and do their work differently as a result of the professional learning.

These survey results indicate that many educators felt that the math professional learning was not useful and did not have a positive impact on student learning in math. However, at the time of our audit, the Ministry had not taken any significant action to address how to improve professional learning in math for teachers.

RECOMMENDATION 6

To allow teachers to understand new or revised curriculum in adequate depth and to have the knowledge of instructional strategies and practices they should be using to be able to deliver it effectively, we recommend the Ministry of Education:

- provide a sufficient amount of lead-time prior to the curriculum implementation date, ranging from six months to one year, depending on the scope of revision; and
- deliver the necessary training, tools and resources to teachers several months before the curriculum is to be taught.

MINISTRY RESPONSE

The Ministry recognizes the value of access to a new curriculum ahead of a mandatory implementation date. The Ministry will work toward establishing a consistent time between the issuance of curriculum and the mandatory implementation date, as part of its development of a risk-based approach to curriculum renewal.

The Ministry will provide educators with training, tools, and resources before mandatory implementation of curriculum. The Ministry will also continue to provide these opportunities and resources during the implementation phase so that educators benefit from on-the-job training.

4.2.4 Many Textbooks Are Old and Contain Outdated Material and Information No Longer Relevant to Students

In order to make sure that textbooks used by students are aligned with the Ontario curriculum expectations and adhere to other Ministry policies and priorities, the Ministry has a list—one for the English-language curriculum and one for the French-language curriculum—of approved textbooks for most subjects and courses, known as the Trillium List/Liste Trillium ().

Although school boards and schools are not required to use textbooks from the list in their classrooms, if a school or teacher wants to purchase a class set of textbooks, it must be from the list. In addition, teachers can also use resources or lesson supports found elsewhere, such as on EduGAINS, the Ministry's website for resources that contains materials developed by the Ministry and from subject associations or other educational providers.

To make sure students are provided with the most current information possible, textbooks should be reviewed and updated periodically. How often textbooks should be updated is influenced by the subject matter. For example, it is reasonable that English and Math textbooks would not have to be changed as often as science and computer studies because their information does not change as frequently.

The Ministry sets out eligibility criteria and requirements that textbooks must successfully meet before it approves a textbook for use in schools. Most importantly, the textbook content must cover at least 85% of the curriculum expectations in an elementary subject or secondary course. Among other things, textbooks must also be accompanied by a teacher's resource guide; use Canadian examples and references wherever possible; support a broad range of instructional strategies and learning styles; provide opportunities for students to engage in higher-order thinking and problem solving, and be appropriate for students from diverse backgrounds and at different levels of learning ability.

There is no limit on the number of years an approved textbook can remain on the Trillium List and be used in schools. Only when the curriculum is revised would textbooks be re-evaluated to determine if they still meet the Ministry's eligibility criteria or if an entirely new textbook needs to be created. Textbooks are not periodically re-evaluated or regularly reviewed to assess the currency and relevance of the information and whether they are still an appropriate and suitable resource for students. As noted in **Section 4.1.1**, several Ontario curricula have not been revised for over a decade and many

of the corresponding textbooks on the list are just as old. For example, we reviewed the approved English-language textbooks on the list for math and science and found:

- Textbooks for the Grade 9 and 10 Math curriculum, last updated in 2005, have been on the list for an average of 15 years since they were initially approved. In fact, more than half of the approved textbooks were published prior to the release of the revised curriculum and are on average 19-years old. The Ministry told us that that these textbooks would have undergone a re-evaluation when the curriculum was revised in 2005 to ensure that they still met the criteria for approval and supported the curriculum, but they have not been re-evaluated since that time.
- Textbooks for the Grades 11 and 12 math curriculum, last updated in 2007, have been on the list for an average of 12 years since they were initially approved.
- Secondary science textbooks have been on the list for an average of nine years since they were initially approved, while elementary science textbooks have been on the list for an average of 11 years.

Although these textbooks covered 85% of the curriculum content at the time they were last revised, they do not always reflect current social, political and environmental issues. The currently available Grade 11 marketing textbook, which was published in 2003 and has been approved for use until August 31, 2021, contains several instances of outdated material. For example, the textbook references Future Shop as a leader in e-commerce in Canada; however, it has been five years since Future Shop ceased operations. The book also references a survey that includes the top five reasons consumers are reluctant to shop online. However, the survey was conducted nearly 20 years ago and a lot has changed with regard to online shopping and consumer behaviour since then. Other examples in this textbook include discussion of DVD rentals, and the Nintendo Gamecube, neither

of which are current or relevant to students in 2020. As another example, we noted a school using a Grade 10 History textbook, published in 2000, which includes discussion of “Aboriginal Peoples”, which is no longer acceptable terminology. Moreover, although this book is being used by students, it is no longer on the list and therefore should not be used in the classroom.

Outdated information and information that is not appropriate for students from diverse backgrounds and at different levels of ability does not promote understanding and will require the teacher to supplement the textbooks with other resources. School board staff we spoke with at three of the school boards with which we engaged also raised concerns about the age of textbooks, noting that they provide a good base for teaching but that the content needs to be relevant and relatable for students. One of the school boards told us that, for this reason, emphasis has been placed on online learning materials and digital interactive resources. Administrators at the fourth board we contacted did not have an opinion on whether textbooks on the Trillium List are outdated.

At the time of our audit, we further noted that the Ministry was not aware when publishers would be developing new textbooks or updating existing textbooks to align with the revised Math Elementary curriculum released in June 2020. Since the new math curriculum was released just two-and-a-half months before the start of the school year, the elementary math textbooks on the list should have been reviewed and updated to allow schools to purchase books before the start of the school year.

While the Ministry provides funding for the purchase of all learning and teaching resources through its Grants for Student Needs, school boards and schools make all decisions concerning the selection, purchase and use of all resources. The Ministry does not track which resources schools select or use or how much funding is expended on the purchase of these resources. The school boards we spoke with also confirmed that they do not track the utilization of textbooks or other resources in

their schools as it is often the case that different schools within a board use different textbooks for the same subject or course. Neither the Ministry nor school boards are therefore able to determine which textbooks, if any, are most widely used and preferred by teachers. Such information could help schools acquire textbooks at a lower price through bulk purchasing.

In the survey we conducted of teachers, 43% of respondents indicated that no textbook was provided to them for the classes they teach. Of those who noted they were provided with textbooks, 61% said the textbook was not current and relevant to the current curriculum. For example, one high school teacher noted that “all high school math textbooks are at least 10 years from their original publication date. We no longer have funding to replace damaged books, so we work with fewer books than students. The curriculum hasn’t been updated since 2005 or 2008, depending on the course. So, our courses and textbooks are not relevant to current technology, pedagogical content knowledge and trends in math education globally. We are severely out of date.” In another example, a teacher responded that “books for English and French class are too old and not reflective of students’ lives in 2020 and/or are not diverse. There is no specific money being provided to allow teachers to purchase new resources, so people end up using the same old stuff that is now decades old. Department budgets are so small that they cannot provide this either.” Similarly, another teacher noted that for a Grade 10 Canadian history course, the textbook “does not reflect the significant addition of Indigenous history and the histories of minority groups in Canada that we are required to teach in the new curriculum”.

As part of our survey, we also asked classroom teachers overall what supports their school boards could provide to help them better implement curricula more effectively for their students. The top three supports identified by teachers of special needs students were support personnel (85%); resources teachers (67%); and instructional materials, including teaching strategies and methods (49%). The

top three supports identified by teachers of students without special needs were time to explore and discuss with colleagues (80%); instructional materials, including teaching strategies and methods (72%); and training and professional development (69%).

RECOMMENDATION 7

To provide students with textbooks for their studies that are relevant and relatable, we recommend the Ministry of Education:

- review the listing of textbooks on the Trillium List and gain assurance that they are current and relevant to student learning for each subject;
- discontinue the ability to purchase textbooks that are no longer considered relevant; and
- ensure textbooks are made available for the Math Elementary 2020 curriculum.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General that textbooks are an important resource for students and that they should be relevant and relatable. The Ministry also recognizes the various other resources related to current and new curriculum that educators and student use, including digital resources.

The Ministry will work with textbook evaluation partners toward completing a periodic review of textbook titles for each subject/course on the Liste Trillium List to ensure they are current and relevant.

While school boards are responsible for the provision of textbooks, the Ministry commits to communicating the roles and responsibilities of school boards as it relates to the purchasing of textbooks and informing the boards of textbooks when they are no longer considered relevant, and should therefore not be purchased.

The Ministry is reviewing the recommendations provided by the textbook evaluation partner on a number of textbooks for the revised elementary Mathematics curriculum.

RECOMMENDATION 8

In order to determine which textbooks, if any, are most widely used and preferred by teachers, we recommend school boards track the utilization of textbooks in their schools and use this information to make bulk purchase orders, potentially lowering overall cost.

RESPONSE FROM SCHOOL BOARDS

The Near North District School Board will implement a process to track the utilization of textbooks in our schools and use this information to make strategic purchases, potentially lowering overall cost.

At the Catholic District School Board of Eastern Ontario, textbook purchases are done through the purchasing department. The board will use this information to track and analyze utilization across schools. Further, the school board has begun piloting programs using digital resources for some subjects, rather than traditional textbooks, which will allow the board to document and track school and student preferences and usage while ensuring that textbooks are relevant and reflect current curriculum content.

The District School Board Ontario North East commits, within a two-year timeframe, to tracking the utilization of textbooks in schools. The school board has already begun to take steps to streamline the use of resources in the district. One step that was taken was the purchase of board-wide licenses for Math and Literacy resources.

The Toronto District School Board purchasing department staff will investigate methods of tracking and assessing textbook utilization in its schools, and opportunities for bulk purchasing from publishers and distributors with a view to possibly reducing cost. TDSB staff is also reaching out to purchasing colleagues in other school boards to determine if any can share best practices in bulk textbook ordering.

MINISTRY RESPONSE

The Ministry commits to encouraging school boards to continue to examine their resource purchasing practices.

4.3 Classroom Assessment of Student Learning

Teachers rely on a wide variety of assessment strategies to inform them about their students' knowledge, understanding and abilities. These strategies include observation, student-teacher conversations and student work and testing. Information received through these strategies is crucial for teachers to be able to plan and implement an instructional program for the class as a whole, while being able to modify the plan based on individual student capabilities and needs. Assessments also provide teachers with benchmarks against which to assess the performance of students.

4.3.1 Ministry Policy on Assessment and Evaluation Does Not Clearly Define Student Performance Standards to Enable Greater Consistency in Assessment

Assessment is the ongoing process of gathering information that reflects how well a student is achieving the curriculum expectations in a subject or course. The primary purpose of assessment is to provide students with feedback and supports to improve student learning. Evaluation refers to the process of judging the quality of student learning (through assignments and tests) and assigning a value or grade to represent that quality.

Growing Success: Assessment, Evaluation, and Reporting in Ontario Schools, Kindergarten to Grade 12, 2010 (Growing Success), the Ministry's key policy document for student assessment and evaluation, states that its purpose is to promote fairness, transparency and equity. The policy document further states that students and parents need to know that evaluations are based on evidence of

student learning and that there is consistency in the way grades are assigned across school boards and schools throughout the province. This knowledge is also key for students to confidently make decisions about secondary pathways and post-secondary opportunities.

We reviewed the policy document and noted that although a framework for consistency exists, the policy does not clearly define the performance standards against which teachers are to evaluate their students. The policy relies on the professional judgment of teachers when assessing student performance, and, although each teacher may have a reasonable basis for the judgment they apply, inconsistencies in student assessment are almost assured.

The key tools used to guide the evaluation of student performance are achievement charts included in each curriculum document and described in the policy, *Growing Success*. An achievement chart identifies four areas in which students are to be assessed: knowledge and understanding, thinking, communication and application. For each area of assessment, the chart identifies four levels of achievement. However, the different levels of achievement are not clearly defined and are subject to interpretation. A teacher is to judge whether a student demonstrates limited (level 1), some (level 2), considerable (level 3), or a high degree/thorough (level 4) knowledge of content or understanding of concepts. The policy does not define the terms associated with each level such as providing information on what would be considered a thorough level of knowledge.

Ministry policy requires that students demonstrate overall expectations but not all specific expectations. Teachers decide which specific expectations in the curriculum to include in the evaluation of overall expectations toward a student's grade. Moreover, teachers are also to select how much relative importance to place on each specific expectation. This adds further inconsistencies to the process of student evaluation.

The need for more clarity in the Ministry's assessment, evaluation and reporting policy was

noted in research commissioned by the Ministry in Spring 2019 to inform the elementary math curriculum. Researchers from universities across Canada reported that teachers want and need more guidance on assessment. They need a clear understanding of what is to be assessed, as well as the criteria with which to assess their students. Other research the Ministry cited on student assessment of mathematics in Ontario (including faculties of education consultations, and the Ontario Colleges Mathematics Council position paper on the K-12 mathematics curriculum), also echoed these statements.

Further, the final report of the Independent Review of Assessment and Reporting, *Ontario: A Learning Province* (April 2018), completed by the education advisors to the Premier and the Minister of Education, noted the need for revision to the evaluation policy. The report noted that teachers, schools and board leaders expressed a lack of clarity as to what aspects of the province-wide policy needed to be applied consistently versus what aspects are more open to local discretion. At the time of our audit, the Ministry did not have an action plan in place to address the recommendations from this report, nor was it tracking whether any of the recommendations have been implemented, including providing further clarity to provide consistency to assessment practices.

To better understand whether teachers were provided with instruction on assessment practices, which would promote consistency through their studies toward becoming a teacher, we reached out to faculties of education at Ontario universities regarding Ministry guidance provided to them for teaching assessment practices to student teachers. Each faculty of education we contacted indicated that they base teaching on the Ministry assessment policy, *Growing Success*, and that much of the student teachers' learning regarding assessment strategies is through the practicum component of their program in which they are mentored by a classroom teacher in a school.

RECOMMENDATION 9

We recommend that the Ministry of Education update its assessment policy, *Growing Success: Assessment, Evaluation, and Reporting in Ontario Schools*, 2010, to provide teachers with further guidance and tools regarding assessment, including definitions of the various levels of achievement, formal criteria in each learning category and examples of student work at the various levels, as well as guidance on assessment during remote learning for all grade levels.

MINISTRY RESPONSE

It is an ongoing Ministry priority to provide educators with policy guidance required to support assessment, evaluation and reporting of student achievement. The Ministry recognizes that there are opportunities to strengthen its guidance in these areas.

The Ministry will move forward with a review and engagement with education and community partners in order to develop additional policy guidance.

4.3.2 Ministry's Key Policy on Student Assessment and Evaluation Is Not Culturally Relevant and Responsive to Student Needs

The policy document *Growing Success* also needs to be updated to reflect changing curriculum and modes of curriculum delivery. *Growing Success* mentions that policies and procedures for assessment, evaluation and reporting need to develop over time as more information is available about how students learn. However, the policies in the document reflect the state of knowledge about the learning experience at the time it was published 10 years ago, in 2010. The report of the Ministry's independent review, *Ontario: A Learning Province (2018)*, also brought up the issue that the current document does not include policy or guidance concerning culturally relevant assessments and noted focused revisions and updates of *Grow-*

ing Success are required to take into account changing knowledge about assessment and new commitments to early childhood learning, equity, inclusion, special educational needs, culturally relevant and responsive pedagogy and the use of technology. The following also emphasize the need for culturally and linguistically relevant and responsive education practices:

- The Ministry's 2017 *Equity Action Plan* was developed to provide guidance in identifying and eliminating discriminatory practices, systemic barriers and bias from schools and classrooms through changes to practices and organizational culture;
- *First Nations, Métis, and Inuit Education Policy Framework* includes approaches for schools and school boards to boost Indigenous student achievement, help close the gap in achievement between Indigenous and non-Indigenous students, and increase public confidence in publicly funded education. Strategies include increasing the number of Indigenous staff working in the Ministry to support school boards, improving students' literacy and numeracy skills, training teachers in teaching methods that are appropriate for Indigenous students, and encouraging more parents to get involved in their children's education or school. Although this framework was introduced by the Ministry of Education in 2007 with a 10-year life, the Ministry told us that school boards are still using it as a guide; and
- *Politique d'aménagement linguistique de l'Ontario pour l'éducation en langue française* is a policy to foster well-being by promoting and expanding the francophone context in which the students are educated to meet their linguistic, educational and cultural needs.

Moreover, learning from home as a result of school closures due to COVID-19 highlighted the need to update the policy document in regard to e-learning and online/virtual assessment of students. Currently, *Growing Success* includes a short

section on e-learning; however, this section focuses on e-learning for students at the secondary level working on completing graduation requirements and preparing for post-secondary destinations. Although the policy mentions that online courses meet the same rigorous assessment and evaluation standards as courses taught in traditional classrooms, it does not give specific examples or direction of how this is achieved, given the different modes of interaction and ways for students to demonstrate their knowledge.

RECOMMENDATION 10

We recommend that the Ministry of Education update its assessment policy, *Growing Success: Assessment, Evaluation, and Reporting in Ontario Schools, 2010*, to reflect the most current knowledge about assessment, equity, inclusion, special educational needs, culturally relevant and responsive pedagogy and the use of technology for remote learning.

MINISTRY RESPONSE

The Ministry is committed to equity, inclusion, anti-discrimination, anti-racism, human rights and support for the success of all students across our education system. This commitment permeates across our work in curriculum, assessment, evaluation and reporting, as well as in the delivery of education both in-person and remotely. This lens will be applied to our work in response to **Recommendation 9** in which the Ministry is committed to develop additional policy guidance.

4.3.3 Ministry and School Boards Do Not Provide the Necessary Oversight to Ensure Consistent Assessment of Students

Given the degree of professional judgment that can be applied when using the Ministry's assessment and evaluation policy, there is opportunity for there to be differences in interpretation and

application of the policy. The 2018 report, *Ontario: A Learning Province*, by the education advisors to the Premier and Minister of Education, reported that there is a strong desire among educators for continued and increased trust in teachers' professional judgment and also a desire to build more consistency in understanding and practices for assessments across classrooms, schools and school boards, thereby making it necessary to find the appropriate balance between consistency and being able to address local needs. According to the report, potential solutions included professional learning and development to support educators' individual assessment knowledge, skills and practices, and collaborative learning to develop shared understanding and practices. There was also interest expressed for moderated marking (teachers marking an assignment separately, then discussing differences in assessment to collaboratively agree on an approach) and professional collaboration within and across schools, with district teams, and educator networks across the province.

Until 2006, the Ministry provided teachers with exemplars of assessments that demonstrated the characteristics of student work at each level of achievement for each grade. However, the Ministry stopped producing the exemplars and, instead, began to embed more support (i.e., teacher prompts, sample questions and examples) directly in the revised curriculum document alongside specific expectations, and also throughout the curriculum. Although this was useful, a recurring comment from teachers in previously conducted studies and research was that teachers would appreciate examples demonstrating what assessment principles and strategies look like in practice, and materials and resources that they could use, such as assessment scoring guides (rubrics). Two faculties of education we contacted also told us that they continue to use the older Ministry exemplars in course work with student teachers, as the exemplars are helpful in understanding varying levels of performance when assessing student work. One faculty of education further told us that the

Ministry should continue to produce the exemplars, but should produce multiple exemplars of a level so as to make teachers aware that performance at a specific level could be presented in various ways.

It follows that continuous oversight is needed by the Ministry and school boards to ensure that students are consistently assessed and evaluated across the boards and the province. We engaged an advisor for the audit with 35 years of experience as an educator, 10 of which were in the role of school principal. Our advisor noted that key to guidance regarding assessment are concrete materials, types of tests and exemplars of the assessment of student work that teachers can use in their classrooms to assess students and report back to their principal and, ultimately, to the Ministry, to show that students are meeting the expectations as laid out in curriculum documents.

The Ministry's role concerning consistency in student assessment is to develop curriculum and to develop and require implementation of curriculum assessment policies intended to provide consistent direction to school boards. To this end, the Ministry last released its main assessment policy, *Growing Success*, in 2010.

School boards have responsibility for ensuring schools are appropriately implementing student assessment and evaluation policies and typically have board-level curriculum leads to provide support in curriculum implementation and assessment practices. Neither the Ministry nor the school boards we spoke with do work to systemically ensure that consistency in assessment is occurring across schools or boards. We were told by all school boards we spoke with that any review of teacher assessments to ensure consistent practices is completed at the school level. The school boards also noted that this might be done through teacher performance appraisals completed by principals as comments in the performance appraisal templates, and that the process is meant to reflect the quality of implementation and assessment of students' learning of the curriculum expectations. However, as previously noted, teacher performance apprais-

als are only required to be completed once every five years for experienced teachers. Therefore, this is not an effective process to ensure students are being assessed and evaluated consistently on an ongoing basis.

Due to school closures resulting from COVID-19, we were unable to visit schools to discuss and review assessment practices. However, we interviewed a sample of principals of elementary, middle and high schools, as well as curriculum leads from high schools from the four selected school boards we audited. Only one of the five secondary school principals informed us that their students write common exams for all subjects and in all grades and that students who take the same course write the same exam. The school principal and curriculum lead at this school noted that having students write common exams promotes consistent teaching and evaluation and enhances accountability among teachers. It is a way to make sure that teachers are covering all topics and units in the curriculum. Further, although teachers have the flexibility to choose how to teach the curriculum, having students write a common exam prevents teachers who may not like teaching, or struggle with teaching, a certain unit or topic from skipping it or not teaching it thoroughly, since their students are going to be tested on it. They also noted that it encourages teachers to collaborate and be transparent about what they are teaching, which also promotes consistency in teaching.

Inconsistencies Noted between EQAO Results and Marks Assigned by Teachers

One of the school boards we visited conducted an analysis comparing student EQAO marks to report card marks for Grade 3 and Grade 6 students for the three school years 2016/17-2018/19. The results showed inconsistencies between EQAO results and marks assigned by teachers. A higher proportion of students achieved at levels 3 and 4 in EQAO assessments for reading and writing in both the primary and junior division than the proportion that achieved at levels 3 and 4 for teacher marks.

Conversely, a considerably lower proportion of students achieved at levels 3 and 4 in EQAO assessments compared to teacher marks in mathematics for both the primary and junior division.

We also compared student report card marks to the students' EQAO levels in those subjects tested by EQAO (namely, Grade 3 math, Grade 6 math and Grade 9 applied and academic math) for all students in the province. Similar to the results the school board found, we found that there were inconsistencies between EQAO marks and classroom marks, which again suggest inconsistencies in classroom assessment and the standardized evaluation occurring across the province. Neither the Ministry nor the school board could provide us with a reason for the differences between EQAO results and marks assigned by teachers. The Ministry did note that large-scale assessments like EQAO differ from classroom assessment and evaluation in their purposes and in the way they are designed, administered and scored.

Post-secondary institutions know there are inconsistencies in student assessment and evaluation among secondary schools. As evidence of this fact, a national news outlet reported in 2018 that the Faculty of Engineering at one Ontario university has been using a list of which Ontario high schools' marks matched the marks their graduates got in the first year of engineering school, and which did not. The media report noted that the university made a list of which high schools' graduates had small variances and which had large ones – they called this the adjustment factor, and used this when assessing applicants. We discussed this with the Associate Registrar at the Admissions Office at the university who told us that the adjustment factor gets updated every year and that it has been using this practice for decades. The university posts this practice publicly on its engineering webpage. We discussed this practice with other university admissions offices in the province. They all told us that they did not apply any adjustment to student marks based on the high school they attended.

RECOMMENDATION 11

To gain assurance that consistency in student assessment is being achieved across the province and in each particular board, we recommend the Ministry of Education:

- require school boards to analyze student performance data (that is, the consistency between EQAO scores and classroom grades);
- compile and analyze data provided by school boards;
- follow up and address issues where consistent assessment does not appear to be the case; and
- establish a province-wide educator network to create and share assessment materials, strategies and practices.

MINISTRY RESPONSE

The Ministry will continue to support school boards in analysis of their local data about student achievement, including EQAO assessment results and student course/report card marks, and require them to compare EQAO scores with classroom grades.

The Ministry will explore options for expanding the scope of data available to boards for analysis through the interactive tools the Ministry has posted for boards on the Ministry's Education Information Centre.

The Ministry will compile and analyze data submitted by boards to identify notable trends and insights related to student achievement.

In instances where analysis of data indicates possible data-quality issues and inconsistencies in assessment, the Ministry would facilitate follow-up and review.

The Ministry will build on current networks, such as the Managing Information for Student Achievement leads in school boards, to support the creation and sharing of assessment materials, strategies and practices among educators. The Ministry will explore options with our education partners on how we can work together to develop and maintain this network.

4.4 Province-Wide Assessments

4.4.1 Ontario Students Perform Well on National and International Assessments, but Results Stagnating

Ontario students regularly participate in four inter-jurisdictional student assessments: one national and three international assessments. These are:

- The Pan-Canadian Assessment Program (PCAP) tests **Grade 8 students in science, reading and math** and is administered by the Council of Ministers of Education, Canada.
- The Programme for International Student Assessment (PISA) tests **15-year-old students in science, reading and math** and is administered by the Organisation for Economic Co-operation and Development.
- The Trends in International Mathematics and Science Study (TIMSS) tests **Grade 4 and Grade 8 students in science and math** and is administered by the International Study Center at Boston College's Lynch School of Education.
- The Progress in International Reading Literacy Study (PIRLS) tests **Grade 4 students in reading** and is administered by the International Study Center at Boston College's Lynch School of Education.

Research indicates there are limitations to using international assessments for drawing more than broad-brush pictures about achievement in different countries. A 2014 paper by the Mathematics Education Research Group of Australasia noted limitations, including problems with competencies that cannot be easily demonstrated through a paper-and-pencil test tend to be neglected, and contextual and cultural differences among the countries. However, the paper does state that very rigorous methodologies are adopted in these studies, and hence, within the limitations, results are rather reliable and in using them, jurisdictions should focus on trends in achievement scores.

The latest assessment for which results are publicly available was the Programme for International

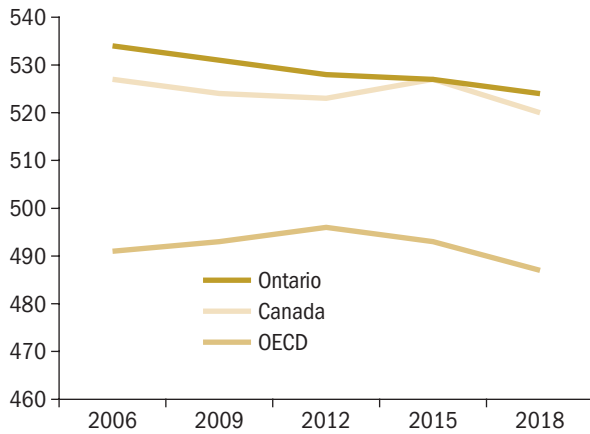
Student Assessment (PISA) in 2018. In all subjects tested (reading, math and science), Ontario performed above the average for all participating countries: that is, member countries of the Organisation for Economic Co-operation and Development (OECD), and Ontario performed either at or above the average for Canadian provinces. As a nation, Canada ranked fourth in reading, seventh in science and ninth in math, among the 79 participating countries. **Appendix 3** shows Ontario's performance, as well as the performance of all Canadian provinces, in the latest national and international assessments.

While both Ontario elementary and secondary students perform well on national and international assessments, Ontario has not been able to increase the proportion of students meeting baseline levels of achievement in these assessments. Over the last five test cycles of the PISA competition going back to 2006, Ontario's results have shown a steady decline in all three subjects tested (except for a slight increase in math between the 2015 and 2018 assessments) as seen in **Figure 13**. Although this downward trend is also the case for Canada as a whole and for the OECD, it is a signal that Ontario should be striving for improvement. Similarly, in national assessments through the Pan-Canadian Assessment Program (PCAP), Ontario performed well compared to other Canadian jurisdictions, performing second in reading, second in math, and third in science in the most recent assessment in 2016 of Grade 8 students. However, performance in all three subjects tested has declined or stagnated going back 10 years to 2010, as seen in **Figure 14**. Most concerning is that, while Ontario has continued to decline or stagnate, the Canadian average has continued to climb, surpassing Ontario in the 2016 math assessment. Improvement in math was noted in all provinces except Ontario, as well as improvements made by five provinces in each of reading (British Columbia, Manitoba, Quebec, New Brunswick, Nova Scotia and Prince Edward Island) and science (Manitoba, Quebec, New Brunswick, Nova Scotia and Prince Edward Island).

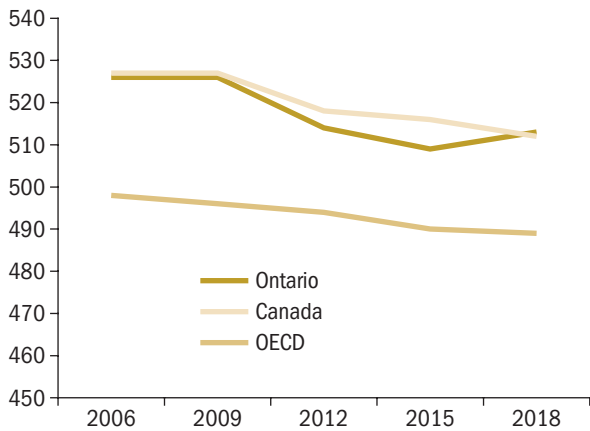
Figure 13: Programme for International Student Assessment (PISA) Results for Ontario Students, Every Third Year, 2006–2018

Source of data: Council of Ministers of Education, Canada

Reading



Mathematics



Science

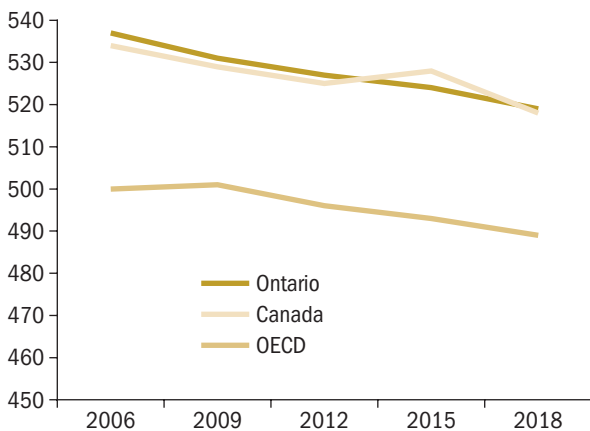
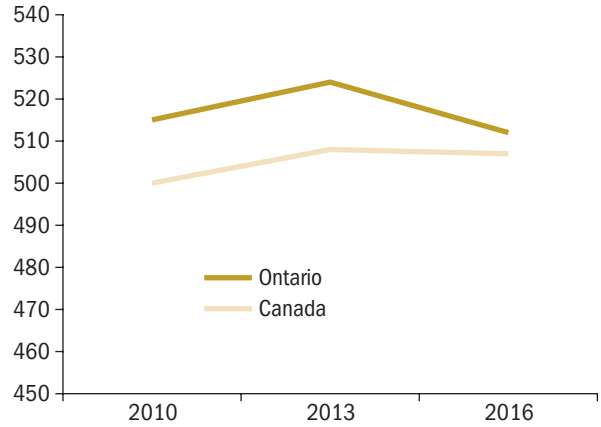


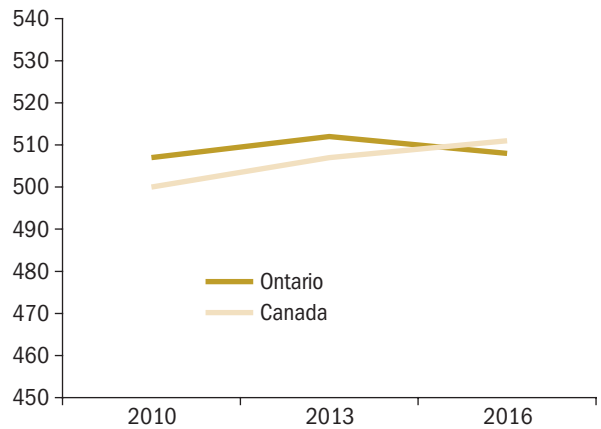
Figure 14: Ontario Pan-Canadian Assessment Program (PCAP) Results, Every Third Year, 2010–2016

Source of data: Council of Ministers of Education, Canada

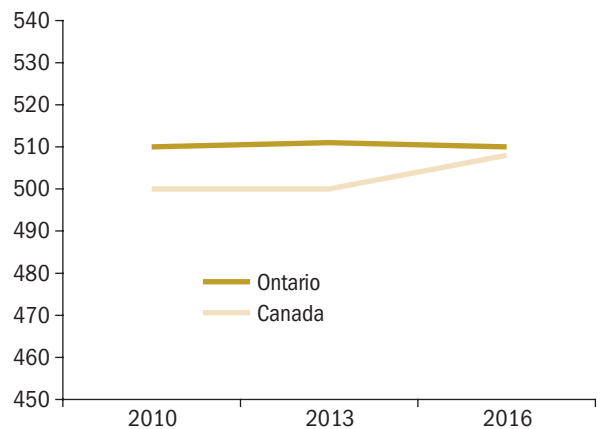
Reading



Mathematics



Science



We discussed with the Ministry whether it had determined the reason for Ontario's stagnating performance on the national and international assessments. The Ministry did not have a reason for why Ontario's performance has not improved over the years.

RECOMMENDATION 12

We recommend that the Ministry of Education include, as part of its curriculum revision, a process to investigate the causes where Ontario's performance in national and international assessments shows a decline or lack of improvement over time, and develop strategies to address gaps and shortcomings in student learning.

MINISTRY RESPONSE

The Ministry will regularly analyze Ontario's performance in national and international assessments to inform curriculum revisions, and explore strategies that address gaps in student learning.

4.4.2 The Narrow Assessment of Student Competencies Provided by the EQAO Does Not Provide a Good Measure of Overall Learning Achieved by Students across the Province or within School Boards

EQAO assessments test reading, writing and mathematics. This accounts for only two subject areas (language and math) of the seven mandatory subject areas offered in elementary schools and 18 subject areas offered in secondary schools. Assessments occur at four intervals in the span of a student's 12- to 14-year public schooling, but no standardized testing is scheduled in the student's senior years of Grades 11 or 12.

Similar to Ontario, all other Canadian provinces have standardized provincial assessments in select subjects and grades. However, in many cases, the test result counts to some degree toward the

student's final mark. As seen in **Figure 15**, seven provinces have standardized provincial testing in various subjects and grades at the secondary level which are worth some component of the final course grade, ranging from 10% to 50%, and in some cases a test must be passed in order for the student to graduate. For example, in Manitoba, Grade 12 students are assessed in both English (or French) and math and these province-wide assessments count for 30% of a student's final course grade in those subjects. Through these assessments, school boards and the ministries of education in those provinces can gain some assurance that a consistent minimum level of knowledge of the curricula has been learned by students across their province upon graduation.

As a further example, Alberta has a common final exam for Grade 12 courses in the subject areas of language, math, science and social studies. The courses in these subjects include English, French, Math, Biology, Chemistry, Physics and Social Studies. The exam mark is worth 30% of the respective courses' final grade. Alberta also conducts provincial assessments in Grades 6 and 9 which measure English, French, Math, Science and Social Studies. Numeracy and literacy are assessed in Grade 3; however, the results of those assessments are used internally and are not publicly shared.

We discussed the use of common final exams with the Ministry, which stated that, at this time, there are no plans to implement province-wide exams in place of classroom assessments and evaluations. The Ministry told us that its position is based on the 1995 Royal Commission on Learning Report, which indicated that, in the 1960s, the government discontinued exit exams for Grade 13 courses based on research findings that showed that exit exams were no more predictive of post-secondary success than teachers' classroom grades. Further, the exit exams introduced arbitrary barriers to success for some students and were very costly. In addition, the Ministry stated that having different exams and final evaluations across the province is beneficial as they can be planned to relate to the curriculum

Figure 15: Jurisdictional Comparison of Standardized Tests in Canada

Prepared by the Office of the Auditor General of Ontario

Province	Grades and Tested Subjects	Weight included in Final Grade
NL ¹	Grades 3, 6, 9 – Reading and Math	Not tied to grades
	Grade 12 – Sciences (Biology, Chemistry, Physics, Earth Systems), World History, World Geography, English/Français and Math	40%
NB ²	Grades 4 and 6 – Language (Reading), Math, Science	Not tied to grades
	Grade 9 – Language (English Language Proficiency Test)	
	Grade 10 – Reading (French), Math and Science	
	Grade 12 – French Oral Proficiency Assessment	
PE	Grades 3 and 6 – Language and Math	Not tied to grades
	Grade 9 – Math	10%
	Grade 11 – Math	25%
QC ³	Grade 6 – Language and Math	Not tied to grades
	Grades 10 and 11 – Language, Math, Science, History	50%
SK ⁴	Grade 12 – Language, Sciences (Biology, Chemistry, Physics), and Math	40%
NS	Grades 3, 6 and 8 – Language and Math	Not tied to grades
	Grade 10 – Language and Math	20%
MB	Grade 3 – Language and Math (Grade 4 for French Immersion Language)	Not tied to grades
	Grade 7 – Math	
	Grade 8 – Language	
	Grade 12 – Language and Math	30% (20% for Essential Math)
AB	Grades 6 and 9 – Language, Math, Science, and Social Studies	Not tied to grades
	Grade 12 – Language, Math, Science, and Social Studies	30%
BC	Grades 4 and 7 – Language and Math	Not tied to grades
	Grade 10 – Language and Math	Graduation Requirement
	Grade 12 – Language	Graduation Requirement (starting 2020/21)
ON ⁵	Grades 3 and 6 – Language and Math	Not tied to grades
	Grade 9 – Math	0% to 30% – teacher discretion
	Grade 10 – Literacy	Graduation Requirement

1. Beginning May 2020, Newfoundland and Labrador was expected to implement Provincial Math and Reading assessment at grades 3, 6 and 9.

2. New Brunswick has different assessment schedules for the Anglophone and Francophone school systems.

3. Each year, the Ministry chooses a certain number of subjects for which it prepares ministerial examinations.

4. Provincial exams are only for students instructed by non-accredited teachers, home-based educated students and for adults wishing to earn Level 30 credits.

5. Grade 9 math assessment can count for up to 30% of students' final course marks. Schools and/or school boards decide whether to count the provincial assessment and for how much. Teachers may score any components of the assessment prior to returning the test materials to the Education Quality and Accountability Office (EQAO).

expectations in varying ways and, as much as possible, to the interests, learning styles and preferences, needs and experiences of all students within a local context. In this way, they are intended to provide students with equitable opportunities to demonstrate their achievement of the curriculum expectations.

While teachers assess student achievement of the same curriculum expectations across the province, the curriculum expectations are written to be sufficiently broad that students can demonstrate their achievement of the curriculum expectations in many different ways. For this reason, culminations

of learning vary widely across the province, even as students are demonstrating their achievement of the same curriculum expectations. However, the Ministry's approach does not allow for the ability to compare learning achieved by students across the province or within school boards. Whether or not a student scores on EQAO assessments are included as a component of the student's final mark, there is benefit to extending province-wide testing in the senior grades, as it provides a snapshot of the strengths and weaknesses of the education system at a point in time.

In September 2017, the government announced an Independent Review of Assessment and Reporting. This review was undertaken by the education advisors to the Premier and the Minister of Education. The final report, *Ontario: A Learning Province*, was released on April 26, 2018 and contained 18 recommendations for improvement of the Ministry's assessment and reporting. Although the report did not recommend an expansion of large-scale assessments or exit exams, key recommendations supporting the broadening of subjects tested and for testing more student knowledge in the secondary years included:

- re-design EQAO assessments to modernize the Grade 6 assessment (i.e., to be more similar to students' learning experiences and environments in classrooms and to incorporate digital technologies), discontinue the Ontario Secondary School Literacy Test, and design and implement a new Grade 10 assessment of key knowledge, skills and competencies, including consideration of literacy, numeracy and competencies needed to equip students for success in post-secondary school or work, and to phase out assessments in Grade 3 and Grade 9; and
- consider the potential for one-off cyclical (three-to-five years) research or assessment of priority subjects and/or competencies for a broader understanding of the performance of Ontario's education system.

As discussed in Background **Section 2.1.4**, changes to modernize EQAO testing are underway by the Ministry; however, the recommendations noted above are not part of the plan.

RECOMMENDATION 13

To provide better assurance that Ontario students have acquired a consistent minimum level of knowledge in core subject areas, we recommend the Ministry of Education:

- assess practices in other jurisdictions that have standardized provincial testing in various subjects and grades at the secondary level which are worth some component of the final course grade, and adjust its standardized testing, as appropriate, based on the review; and
- conduct cyclical assessment of priority subjects.

MINISTRY RESPONSE

The Ministry will review best practices from other provincial testing programs and consider how this might inform adjustments in Ontario.

The Ministry recognizes that large-scale assessments like EQAO testing differ from classroom assessment in their purpose. It also recognizes that in the 2018 consultations on education, education partners and the public had mixed views regarding the need for more large-scale assessment. The Ministry will review its assessment program to determine the need for further adaptations, including cyclical assessment of priority subjects.

4.4.3 EQAO Provincial Assessment Results Are Declining, Particularly in Math

As seen in **Figure 3**, over the last five years provincial EQAO results for most assessments have either declined or stagnated. The exceptions are Grades 3 and 6 reading and Grade 6 writing, which have shown a slight improvement. Of particular

concern are achievement results in math at all grade levels tested (with the exception of Grade 9 academic math, which, although stagnant, has been consistently above the provincial goal of 75% achievement).

Students in Ontario have been performing below the Ministry's goal of having 75% of all students in the province achieve the provincial standard (level 3 or level 4, the equivalent of a B grade) in Grades 3, 6, and 9 applied math EQAO assessments since at least 2011/12. Furthermore, math results for Grade 3 and Grade 6 EQAO math assessments have shown a significant decline since at least 2011/12, while Grade 9 applied math results have remained relatively consistent since then but have still been well below the provincial standard.

At a school board level, results showed that, except for Grade 9 academic math and Grade 6 reading and writing, fewer than three-quarters of school boards met the provincial standard in 2019 EQAO assessments, as shown in **Figure 16**.

We also examined the trend in EQAO results for the period 2011/12 to 2018/19 and noted that few school boards were able to increase the percentage of students who achieved the provincial standard by at least 5%. Most concerning was the trend in EQAO results over the last eight annual assessments during which 65%, 56% and 26% of school boards saw at least a 5% decrease in the percentage of students achieving the provincial standard in Grade 3, Grade 6 and Grade 9 (applied) math assessments, respectively.

We analyzed EQAO math assessment results for Grades 3 and 6 math and Grade 9 applied math by excluding students with special education needs and English or French language learners who tend to score lower on EQAO assessments, and found that more students met the provincial standard on EQAO math assessments across all assessment grades (ranging from 6% to 9% better). However, as seen in **Figure 17**, the same general trends were still apparent. Since at least 2011/12, students had not met the provincial standard in Grade 6 and

Figure 16: Analysis of School Boards and School Results of Province-Wide Testing, 2011/12–2018/19

Source of data: Ministry of Education

2019 Assessments	Grade 3			Grade 6			Grade 9		OSSLT*
	Reading	Writing	Math	Reading	Writing	Math	Academic Math	Applied Math	
# of School Boards	72	72	72	72	72	72	70	70	70
# of Schools	3,509	3,508	3,555	3,375	3,375	3,375	760	768	812
% of School Boards meeting provincial standard of 75%	57	31	8	90	76	11	91	0	70
% of Schools meeting provincial standard	61	47	24	78	75	15	79	7	66
8-Year Trend 2011/12–2018/19 (%)									
School boards to increase the % of students achieving provincial standard by at least 5%	43	3	0	10	29	4	19	20	3
School boards to decrease the % of students achieving provincial standard by at least 5%	0	28	65	0	14	56	1	26	21

* OSSLT results represent the combined achievement of first-time and previously eligible writers.

Figure 17a: Percentage of Students that Achieved the Provincial Standard on the Grade 3 EQAO Math Assessment, 2011/12–2018/19

Source of data: Ministry of Education

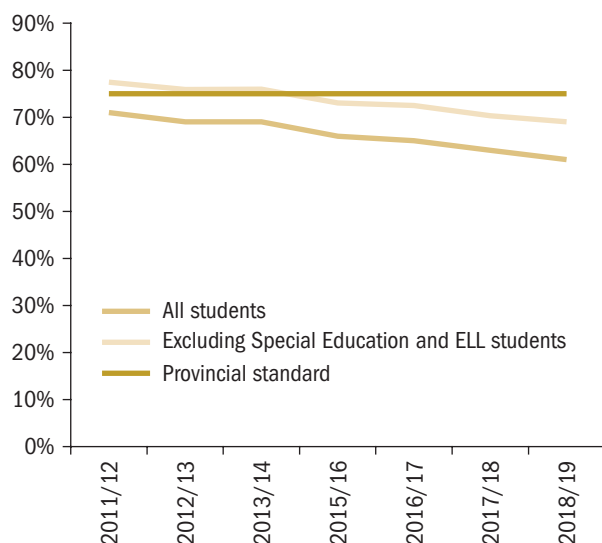


Figure 17b: Percentage of Students that Achieved the Provincial Standard on the Grade 6 EQAO Math Assessment, 2011/12–2018/19

Source of data: Ministry of Education

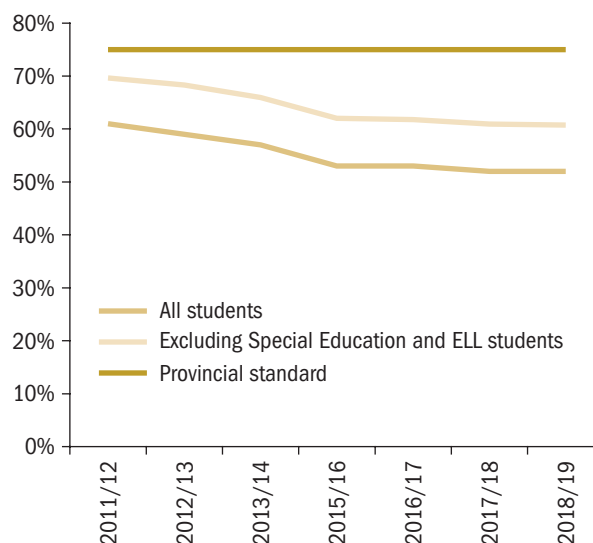
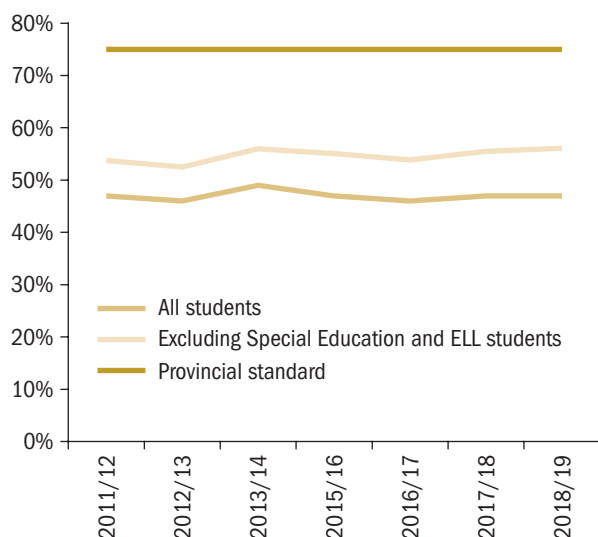


Figure 17c: Percentage of Students that Achieved the Provincial Standard on the Grade 9 Applied EQAO Math Assessment, 2011/12–2018/19

Source of data: Ministry of Education



Grade 9 applied math assessments. For Grade 3, students last achieved the provincial standard in 2013/14 (76%).

In an effort to determine if there are obvious inconsistencies in assessments across the province,

we compared students' report card marks to their EQAO scores in those subjects in which there are comparable report card marks. We found that EQAO results for reading and writing more closely reflected report card marks than EQAO results for math. As seen in **Figure 18**, report card marks in math were 48% to 71% higher than EQAO results.

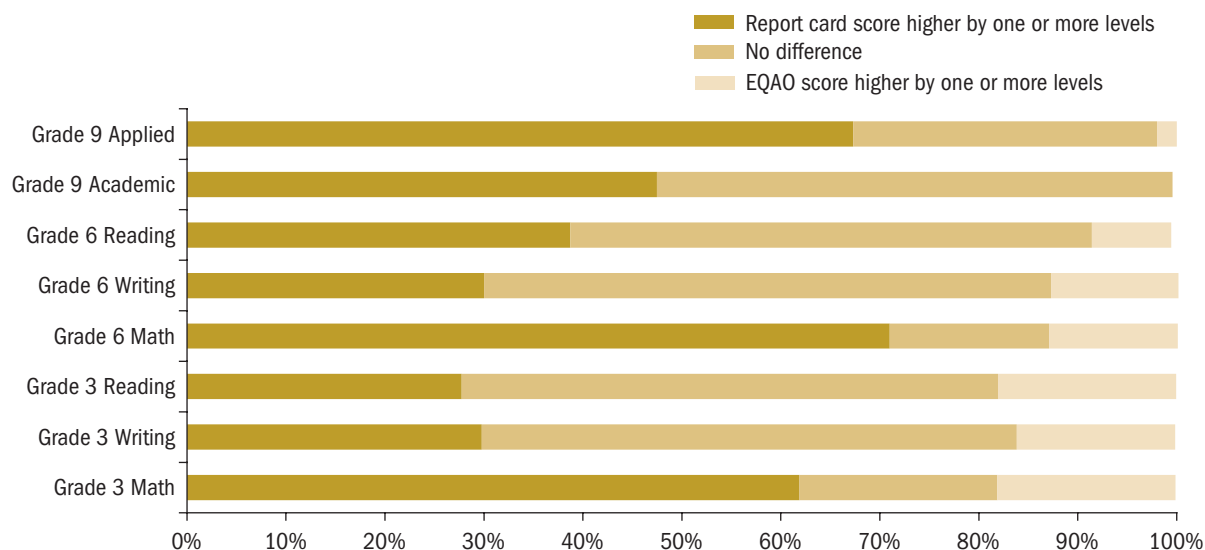
Steps Taken by Ministry and EQAO to Determine Reason for Low Math Scores

We asked the Ministry if it had attempted to investigate the reasons and causes of the decline in math assessment results and why so many students were not meeting the provincial standard in EQAO testing. The Ministry told us that there are several factors that influence student test performance, including individual, classroom and school-level factors for which data may not be available. Therefore, it is not possible to isolate causes or reasons for the decline on EQAO assessments or why students are performing below the standard.

The Ministry analyzed board-level EQAO mathematics results from 2015/16 to 2018/19 to determine whether the English-language schools

Figure 18: Comparison of Student Scores on EQAO Tests and Report Cards, 2018/19

Source of data: Ministry of Education

**Figure 19: Percentage of Students Meeting Expectations on Fundamental Math Skills¹**

Source of data: Education Quality and Accountability Office

Grade Level	Multiple-Choice ²	Open-Response	Knowledge and Understanding ³	Application ⁴	Critical Thinking ⁵
Primary (Grade 3)	71	54	81.5	68	58
Junior (Grade 6)	66	59	72.5	65	58

- Results for English- and French-language students are presented as one average percentage, as statistical differences were not observed.
- Multiple-choice questions are divided into three categories: Knowledge and Understanding, Application, and Critical Thinking.
- Knowledge and Understanding: Students must demonstrate only subject-specific content (knowledge) or comprehension of its meaning and significance (understanding), or both, in order to answer the question. These questions assess basic knowledge or understanding of concepts.
- Application: Students must select the appropriate tool or take the necessary information and “fit” it to the problem. A question may change from Knowledge and Understanding to Application if context is added.
- Critical Thinking: Students are required to select and sequence a variety of tools (e.g., add first, then subtract) or demonstrate a critical-thinking process (e.g., reasoning). There may be more than one way to answer these questions.

identified as receiving “intensive support” or “increased support” in the 2016 Math Strategy reflected any significant changes in student performance. The level of support (increased or intensive) is differentiated by the amount of funding provided. The Ministry found the strategy did not appear to make any significant difference in increasing student performance in Grade 3 or Grade 6 math. At the secondary level, only those schools which received what the Ministry classified as intensive support appeared to have a modest increase in student performance in Grade 9 applied mathematics.

The EQAO shared a March 2019 report with us that offered a preliminary investigation into student achievement on fundamental skills in mathematics among primary and junior students. The analysis drew from data gathered in 2016, 2017 and 2018. As seen in **Figure 19**, the results show that students are better able to demonstrate their skills in the multiple-choice format than on open-response items. Also, the investigation found that students in Grades 3 and 6 have stronger knowledge and understanding of fundamental math skills than the ability to apply their skills and to think critically about them. The challenge, as described by the

EQAO, is that mathematics may be less about students “knowing” math and more about their ability to apply math knowledge and to engage in critical thinking. The analysis can serve as a baseline toward continuous improvement as educators focus on the fundamentals of mathematics in schools.

In June 2020, the Ministry released a new Math Elementary curriculum to provide more focus on instruction and learning expectations of math fundamentals. However, any impact on student performance will not be seen until at least 2022, as the Ministry cancelled the 2020/21 EQAO assessment to allow for teachers and students to become accustomed to the new curriculum.

RECOMMENDATION 14

In utilizing testing information as a tool to improve curricula and student education, we recommend that the Ministry of Education:

- perform detailed analysis and identify reasons for stagnating or declining EQAO scores; and
- have school boards put in place supports to directly impact those groups of students who may be struggling.

MINISTRY RESPONSE

The Ministry will continue to engage with our partners, including the EQAO and school boards, to further shed light on these factors, including performing detailed analysis of results to try to isolate reasons for stagnating or declining scores.

Where there is declining performance, for example, in math, and in recognition of the need to support all students and remove barriers to student success, the Ministry intends to work with school boards to put in place supports to directly impact groups of students who have been marginalized and who have struggled in the past.

4.5 The Effects of COVID-19 on Curriculum Delivery and Student Assessment

In the 2019/20 school year, schools were closed beginning on March 13, 2020 until the end of the school year as a result of emergency measures put in place by the Province to control the outbreak of COVID-19. This shifted student learning from primarily in-class, teacher-led learning to online and more independent-based learning.

4.5.1 Ministry Did Not Provide Clear Expectations for Remote Instruction, Leading to Varying Levels of Instruction

On March 12, 2020, the Minister of Education issued a Ministerial Order to close all publicly funded schools until April 6, 2020, because of the COVID-19 pandemic. On March 31, 2020, school closures were further extended, eventually resulting in schools being closed for the remainder of the 2019/20 school year.

In recognition of the fact the schools were to remain closed for some time and the uncertainty as to when students would go back to school with traditional in-class instruction, on March 31, 2020, the Ministry provided direction to school boards on its expectations for continuity of learning. The implementation of the direction was to begin on April 6, 2020. The Minister told school boards that the “government expects that every student will continue to learn while in-school classes are suspended.”

The Ministry directed school boards to contact their students as soon as possible to assess how to best establish ongoing contact between students and their teacher(s). School boards were directed to re-establish teacher-led learning and communicated minimum guidelines of hours of work per student and the suggested areas of curriculum focus by grade grouping (see **Figure 20**). Compared to in-class learning before the shutdown, the minimum hours of work per student were much lower than during regular schooling as a student

Figure 20: Guidelines for Hours of Student Work During School Closures, (April 6–June 25, 2020)

Source of data: Education

Grade Range	Minimum School Work Per Student*	Recommended Areas of Curriculum Focus
K–Grade 3	5 hours/week	Literacy and math
Grades 4–6	5 hours/week	Literacy and math + science and social studies
Grades 7–8	10 hours/week	Core math, literacy, science and social studies
Grades 9–12	12 hours/week, i.e.: <ul style="list-style-type: none"> • 3 hours of work per course per week for semestered students; and • 1.5 hours of work per course per week for non-semestered students 	Achieving credits/completion /graduation

* Hours refer to the approximate amount of time students would spend on the work assigned by teachers.

is normally in school for about five hours a day (or 25 hours per week) of guided instruction.

On March 31, 2020, the Ministry further encouraged school boards to use the provincially licensed virtual learning environment (Bright Space) or other education platforms, and directed school boards to immediately begin identifying and supporting other forms of teacher-student connectivity, including telephone contact, contact by mail and the delivery of printed curriculum packages, based on the specific needs of students.

The Ministry stated that, although teacher engagement with students was expected, it would vary depending on circumstances and could include a range of ways that teachers would connect with their students. However, the Ministry did not provide direction on how to implement remote learning, such as work requirements for teachers, including whether live, real-time interaction was required and, if so, the expected frequency and duration. Rather, the Ministry left it up to the individual school boards. The Ministry also did not define or provide direction of what synchronous (virtual, real-time instruction) learning included at that time.

It was not until May 8, 2020, almost two months after schools were initially shut down, that the Ministry provided clarification on its expectations for remote learning when it stated that, “while the expectation of the Ministry is that educators would embrace the use of synchronous learning

during the school closure period, there has been an inconsistent uptake of this mode of learning. Recognizing there are a wide range of modes through which learning takes place between educators and their students, the Ministry’s expectation was that synchronous learning be used as part of whole class instruction, in smaller groups, and/or in a one-on-one context.”

However, once again, the Ministry did not set expectations for the frequency or duration of teacher-led real-time instruction and did not clearly define what constituted synchronous learning.

We asked the school boards we engaged with during our audit if they had provided additional guidance and set clearer expectations for teachers on remote-learning requirements over and above what the Ministry had directed. Two of the four school boards we engaged with provided additional guidance to their teachers. One board did not require Kindergarten to Grade 8 teachers to conduct real-time instruction for students, but Grades 9–12 teachers were required to provide one hour of real-time, whole-class instruction through teleconferencing, audioconferencing or videoconferencing per week. The other school board set the requirement that elementary and secondary semestered schools provide a minimum of 15 minutes of real-time learning two times a week, and for secondary non-semestered schools, 15 minutes once a week.

The results of a survey conducted by the Ministry show that, as of May 20, 2020, teacher-led

real-time instruction (synchronous learning) was still not being utilized consistently by teachers across the province. Specifically, of the 61 of 72 school boards that responded, only 51% reported that more than half of their teachers were offering synchronous learning opportunities. School boards also noted in the survey that the biggest obstacles faced in implementing a consistent synchronous learning experience for students were:

- equity, because of a lack of connectivity as some students could not participate in synchronous learning since they did not have access to the internet due to socioeconomic reasons and/or services unavailable in remote and small communities across the province;
- families juggling multiple needs for internet access and learning devices in the home;
- conflicting and/or unclear messaging to teachers from their union and the Ministry;
- student engagement difficulties depending on grade level, differences in individual learning needs and family situations; and
- teachers' comfort with teaching remotely, using and accessing technology as well as juggling family and work.

Sixty-five percent of boards that responded to the survey indicated that clearer direction was required by the Ministry for remote delivery of the curriculum. The two primary areas where school boards wanted clearer direction from the Ministry were on:

- assessment, evaluation and reporting – particularly regarding report cards (for example, how to complete comments, and how to report on half-credit courses that began at school closure); and
- expectations for teachers on how to implement remote learning – such as frequency of synchronous learning, and the number of hours a teacher needs to engage in teaching.

During the months of April and May 2020, one of the school boards we engaged with conducted three online surveys—one of principals and vice-

principals, one of educators and one of parents—to learn about their thoughts, experiences, concerns and suggestions with remote learning. Respondents included about 500 administrators, 4,000 educators and 39,000 parents.

We reviewed the summary of responses for all groups, which the school board compiled using a random sample of comments from all exchanges. Educators noted there was a wide spectrum of comfort levels in using remote learning technologies and moving content online. For many teachers remote learning was a steep learning curve, and there were not consistent workload expectations for teachers and students, with some staff feeling that they did not want to overwhelm families with too much schoolwork. Families also commented that students were experiencing inconsistency in live interaction expectations within and across schools. Specifically, families expressed having a range of experiences in terms of live interactions with teachers and classmates – from daily opportunities for live interaction with teachers and/or classmates to no opportunities at all. Families were very concerned about the lack of direct instruction teachers had been providing to date. Many families commented that teachers were only posting assignments for students, leaving parents to facilitate instruction. Families noted that when their children were engaged and enjoying remote learning, they tended to be receiving some form of direct instruction, often in live format.

Further, staff at the Toronto District School Board noted that it was difficult to meet the needs of a diverse classroom (such as students with special education needs and English language learners) in a remote environment. Families commented that current teaching practices in remote learning are not working for students who need additional supports and argued that both live interaction and direct instruction are really important for these students in particular.

Through our survey, we asked teachers whether they were provided with various tools during the COVID-19 school closures to assist with remote

Figure 21: Teacher Survey Responses on Usefulness and Provision of Teaching Tools During COVID-19 (%)

Source of data: Survey conducted by Office of the Auditor General of Ontario

Tool	Tool Provider	Useful/Very Useful	Neutral	Somewhat Useful/Not Useful	Not Provided	Total
Online teaching platforms	Ministry	20	13	36	31	100
	Board	47	14	31	8	100
Professional learning webinar	Ministry	11	14	40	35	100
	Board	30	17	38	15	100
Remote learning resources	Ministry	8	15	55	22	100
	Board	25	17	35	23	100
Lesson plan structure for online learning	Ministry	3	9	29	59	100
	Board	8	13	22	57	100
Computer equipment	Ministry	18	10	16	56	100
	Board	37	11	17	35	100
Information technology support	Ministry	13	14	25	48	100
	Board	32	18	31	19	100
Assessment and reporting guidelines	Ministry	9	15	46	30	100
	Board	19	19	40	22	100

teaching such as online teaching platforms, and lesson plans suitable for online learning. As seen in **Figure 21**, many teachers were not provided with the tools listed by the Ministry or their school board. For those teachers who indicated that the tool was provided, less than half or 47% found the tool to be useful or very useful.

As clear direction and expectations were not set for teachers on remote learning, specifically on the frequency and duration of teacher-led real-time instruction (that is, synchronous learning), and the amount of instruction students received during the school closure period varied across the province, it was expected that students would be academically behind to varying degrees when they began the 2020/21 school year.

As described in Background **Section 2.1.6**, on August 13, 2020, the Ministry released further requirements for remote learning for schools to set minimum expectations and provide a consistent approach and a predictable schedule for synchronous learning by grade for those students who continue schooling from home or during interruption to future in-class schooling.

4.5.2 Curriculum for 2019/20 School Year Not Fully Implemented, Leaving Gaps in Student Learning that Will Need to Be Addressed

For elementary and secondary students in a non-semestered school, traditional in-class learning did not occur for one-third of the school year. For students following a semestered program, in-class learning did not occur for half of the semester. At the time of our audit, the impact school closures had on student learning/outcomes, and the magnitude of the student learning gaps expected, was largely unknown. However, it is reasonable to conclude that there were a variety of gaps in student learning compared to a typical year, but the extent of the learning gaps will not be fully understood until reviewed after children have returned to school in the fall of 2020 or are assessed after they start post-secondary schooling. The Ministry has recognized this, noting in its August 13, 2020 school re-opening plan that students should be supported in transitioning to their next grade or course, given the prolonged absence from the classroom.

Due to the shift to a remote learning environment without in-class teacher-led instruction during school closures, all school boards we spoke with also anticipated gaps in student learning; that is, students being behind in the curriculum learning expectations they should have gained by the end of the 2019/20 school year. For example, one school board explained that not all of the curriculum expectations were fully implemented during the 2019/20 school year, as subjects other than language and math were not mandatory during remote learning for students in Kindergarten to Grade 6. Staff at another school board we spoke with said that they expect significant learning gaps in all subject areas, as curricular areas not identified by the Ministry as a focus area (language and math) had minimal implementation. This school board also told us that secondary students participated in varying amounts in all their subject areas, which is likely to create large and unquantifiable variance in the amount of learning experienced across all of their secondary students.

The Toronto District School Board conducted a series of surveys during the COVID-19 shutdown period. In response to surveys conducted in June 2020 of staff and students in Grades 7-12, student feedback indicated that engagement with remote learning was low as less than half of students, 42%, reported being interested in their studies and almost half of students, 47%, said they were not enjoying learning at home. Eighty-seven percent of teachers were concerned about students falling behind in their learning.

Another of the school boards we engaged with conducted a survey of its teachers to gather information about student participation in remote learning. The survey results showed that elementary teachers said that 56% of students were regularly participating in remote learning, while 17% of students were not participating at all. Secondary teachers surveyed indicated that 44% of students were regularly participating in synchronous learning, while 22% of students were not participating at all in remote learning. Further, the survey reported

just over half, 54%, of students were submitting work regularly.

In regard to strategies to be used to close the expected learning gaps in the 2020/21 school year, at the time of our fieldwork school boards we engaged with told us that teachers are to identify where students are behind in their learning and are to employ strategies to close those gaps, such as using differentiated instruction to address the needs of all students and targeting instruction to those curricula areas students are struggling with the most.

School boards recognized that assessment through remote learning would be difficult. In fact, in the survey conducted by the Toronto District School Board in April and May 2020, many educators commented that assessment was difficult and that work produced at home is not appropriate to use for reporting grades, specifically at the elementary level, as most students are not working independently.

4.5.3 Assessment and Evaluation of Student Learning during the COVID-19 Shutdown Were Inconsistent

The Ministry temporarily amended the assessment and evaluation policy during the COVID-19 shutdown. On April 3, 2020, teachers were instructed by the Ministry to determine a student's final grade based on information they had gathered before March 13, 2020. Teachers were further encouraged to take into consideration learning completed during the school closure period, only if it served to improve the student's final grade. That is, student grades and marks were not to go down from what they were at the start of the closure period. This applied to both elementary and secondary students. We were told that, because students knew that their grades could not go down from what they were on March 13, 2020, if a student was satisfied with their mark, many disengaged from their studies for the remainder of the school year. This was more of a concern for secondary students because students

are more independent and parents may not have had as much influence over their children's academic studies, as compared to elementary students.

Teachers also did not have to adhere to the assessment policy of a 70/30 mark breakdown (that is, 70% of the final mark based on classroom assignments and 30% based on a final exam or other final culminating task). Instead, teachers were allowed to adjust and individualize the weighting of assigned tasks to determine the final mark, as needed. In all cases, the final mark could only be better than what the student's mark was at the time the school shutdown was imposed in mid-March. In addition, principals could grant credits to ensure student progression based on work completed to date and efforts made in extenuating circumstances.

The school boards we spoke to did not track the number of students whose final mark was based on their mark at the time of the shutdown or the number of times principals granted credits, where they

otherwise were not earned, to have the student progress through their grade.

Further, some diploma requirements were waived for those graduating in 2019/20. Specifically, the requirements to pass the Ontario Secondary School Literacy Test and to complete 40 hours of community involvement were waived for all students graduating from publicly funded, private and First Nation schools. Full disclosure of marks where a Grade 11 or 12 student did not receive a credit for a course was not required: that attempt did not have to be entered into the Ontario Student Transcript and, therefore, would not appear on a student's record.

The Ministry directed elementary teachers to use the code "I" (insufficient evidence to determine a grade) on the student's final report card for subjects and discipline areas where they could not determine a final grade or mark for the student because they did not have enough information.

Figure 22: Percentage of Students in Grades 1 to 8 Receiving an "I"¹ on Term 2 Report Cards²

Source of data: Ministry of Education

Subject	Grades	Average (%)	Range (%)
Language			
Reading	1-8	4	3-6
Writing	1-8	4	3-5
Oral	1-8	15	12-19
Media Literacy	1-8	37	28-46
Math			
Number Sense and Numeration	1-8	12	9-16
Measurement	1-8	40	36-44
Geometry and Spatial Sense	1-8	39	33-43
Patterning and Algebra	1-8	56	43-61
Data Management and Probability	1-8	59	57-62
Science			
Science	1-8	19	10-29
Social Studies/History and Geography			
Social Studies	1-6	41	38-43
History	7-8	37	36-39
Geography	7-8	37	34-39

1. An "I" means that the student cannot be evaluated due to insufficient information.

2. Report card data is submitted in the June OnSIS submission, and represented 49% of students as of September 4, 2020.

3. Social Studies is taught in Grades 1 to 6.

4. History and Geography are taught in Grades 7 and 8.

The use of this code does not prevent a student from advancing to the next grade. We analyzed the percentage of students in each elementary grade that received an “I” for each report card area in the subjects of language, math, science and social studies, history and geography, in the second term of the year, during which time students were learning remotely. As seen in **Figure 22**, across all elementary grades, teachers did not obtain enough evidence of student learning to assign a grade for an average of at least 37% of students in four of the five math areas, in media literacy and in social studies, history and geography. This demonstrates that in many areas of the curriculum, the amount of student learning which took place during school closures is unknown and it will be necessary for teachers to bring students to the level of knowledge they should be at.

RECOMMENDATION 15

In order to have students achieve the level of learning they should be at in their current grade level, as indicated by assessment of all areas of the curriculum, we recommend the Ministry of Education develop strategies throughout the 2020/21 school year to provide to school boards to close the learning gap students experienced during remote learning required by COVID-19.

MINISTRY RESPONSE

The Ministry recognizes that students may need additional supports as a result of the school closures in 2019/20.

School boards are expected to provide the full range of curriculum during the 2020/21 school year, including planning for a refresher period for students as is always done in September but which may be more robust this year. Content review for students should be integrated through the school year at key instructional times to ensure students have fundamental building blocks before each new unit.

Summer Learning Opportunities were offered to mitigate potential impacts of the school closure period and summer learning loss. These opportunities included expanded summer school, new course upgrading, support for high school students in key areas of curriculum, and targeted programs for vulnerable students, students with special education needs, and Indigenous students.

The Ministry is continuing to meet regularly with education partners to further support educators and students during the school year, including access to digital learning resources that students and educators can access to support instruction.

Appendix 1: Ontario Curriculum Revision Release Dates

Source of data: Ministry of Education

Curriculum	Eng.	Fr.	Release Date ¹	Planning Underway for Future Release
Elementary				
The Arts/ Éducation artistique	✓	✓	2009	—
French as a Second Language/Anglais pour débutants/Anglais (French has two curricula rather than one)	✓	✓	2013/2013/2006	—
Health and Physical Education/ Éducation physique et santé	✓	✓	2019	—
The Kindergarten Program/Programme de la maternelle et du jardin d'enfants	✓	✓	2016 Addendum 2019	—
The 2019 Addendum to The Kindergarten Program/Supplément de 2019 au Programme de la maternelle et du jardin d'enfants				
Language/Français	✓	✓	2006	—
Mathematics/Mathématiques	✓	✓	2020	—
Native Languages/Langues autochtones	✓	✓	2001	—
Science and Technology/Sciences et technologie	✓	✓	2007	✓
Social Studies, History and Geography/Études sociales, histoire et géographie	✓	✓	2018	—
Actualisation linguistique en français (ALF) – no English equivalent		✓	2010	—
Programme d'appui aux nouveaux arrivants (PANA) – no English Equivalent		✓	2010	—
Secondary				
American Sign Language as a Second Language and Langue des signes québécoise (LSQ) langue seconde Grade 9/Level 1 course				✓
The Arts/Éducation artistique	✓	✓	Grades 9–12, 2010	—
Business Studies/Affaires et commerce	✓	✓	Grades 9–12, 2006	—
Canadian and World Studies/Études canadiennes et mondiales	✓	✓	Grades 9–10, 2018 Grades 11–12, 2015	✓ ²
Classical Studies and International Languages/Études classiques et langues internationales	✓	✓	Grades 9–12, 2016	—
Computer Studies/Études informatiques	✓	✓	Grades 10–12, 2008	✓
Cooperative Education/Éducation coopérative	✓	✓	Grades 11–12, 2018	—
English/Français	✓	✓	Grades 9–12, 2007	—
The Ontario Secondary School Literacy Course/Cours de compétences linguistiques des écoles secondaires de l'Ontario	✓	✓	EOSSL/CLESO, 2003	—
Programme d'appui aux nouveaux arrivants (PANA)		✓	Grades 9–12, 2010	—
First Nations, Métis, and Inuit Studies (formerly Native Studies)/Études des Premières Nations, des Métis et des Inuits (anciennement Études autochtones)	✓	✓	Grades 9–12, 2019	—
French as a Second Language/Anglais pour débutants/Anglais (French has two curricula rather than one)	✓	✓	Grades 9–12 2014/2013/2007	—

Curriculum	Eng.	Fr.	Release Date ¹	Planning Underway for Future Release
Guidance and Career Education/Orientation et formation au cheminement de carrière	✓	✓	Grades 9–10, 2006 Grades 11–12, 2006 Career Studies, 2019	— — —
Revised Course: Advance Release of the Curriculum Expectations/ Parution anticipée des attentes et des contenus d'apprentissage				
Health and Physical Education/Éducation physique et santé	✓	✓	Grades 9–12, 2015	—
Interdisciplinary Studies/Études interdisciplinaires	✓	✓	Grades 11–12, 2002	—
Mathematics/Mathématiques	✓	✓	Grades 9–10, 2005 Grades 11–12, 2007	✓ ³
Mathematics Transfer Course, Applied to Academic/ Mathématiques transition du cours appliqué au cours théorique	✓	✓	Grade 9 Transfer Course, 2006	—
Native Languages/Langues autochtones	✓	✓	Grades 9–10, 1999 Grades 11–12, 2000	— —
Science/Sciences	✓	✓	Grades 9–12, 2008	✓
Social Sciences and Humanities/Sciences humaines et sociales	✓	✓	Grades 9–12, 2013	—
Technological Education/Éducation technologique	✓	✓	Grades 9–12, 2009	✓
Actualisation linguistique en français (ALF)		✓	Grades 9–12, 2010	—

1. Release date is the same for English language and French language curriculum unless otherwise stated.

2. Updated planned for the Civics and Citizenship course.

3. Update planned for Grade 9 and Grade 10 Mathematics.

Appendix 2: National and International Assessments in which Ontario Participates

Prepared by the Office of the Auditor General of Ontario

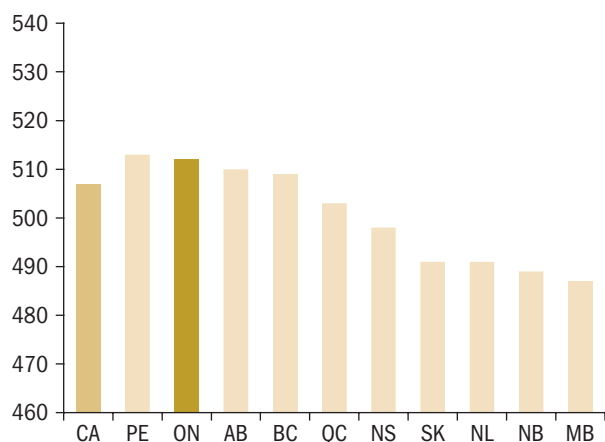
	Pan-Canadian Assessment Program (PCAP)	Programme for International Student Assessment (PISA)	Trends in International Mathematics and Science Study (TIMSS)	Progress in International Reading Literacy Study (PIRLS)
Latest Assessment	2016	2018	2015	2016
Subjects Tested	Science, Reading, Math	Science, Reading, Math	Science, Math	Reading
Grades Tested	Grade 8	15-year-old students	Grades 4, 8	Grade 4
Frequency	Every 3 years	Every 3 years	Every 4 years	Every 5 years
Countries Participating	Canada	79 countries	57 countries	50 countries
Canadian Jurisdictions Participating (most recent assessment)	All provinces	All provinces	Grade 4 – AB, MB, ON, QC, NL Grade 8 – MB, ON, QC, NL	BC, AB, SK, MB, ON, QC, NB, NL
# of Students Participating in Canada (most recent assessment)	27,000	22,500	21,000	18,000
Assessment Format	<ul style="list-style-type: none"> 90-minute examination - multiple choice and written response questions contextual questionnaire - students, teachers, school principals 	<ul style="list-style-type: none"> 2-hour examination of reading, math and science 35-minute contextual questionnaire administered to students 45-minute school questionnaire administered to school principals 1-hour test assigned to students who participate with special education needs who could not successfully complete the full versions. 	<ul style="list-style-type: none"> Grade 4: 72-minute assessment completed in 2 parts Grade 8: 90-minute assessment completed in 2 parts contextual questionnaire administered to students and Early Learning Survey for parents/guardians of Grade 4 students only school questionnaire administered to teachers 	<ul style="list-style-type: none"> 80-minute examination of reading literacy- multiple choice and written response questions contextual questionnaire administered to students and parents 35-minute teacher questionnaire 30-minute school questionnaire-completed by principals curriculum questionnaire-completed by ministers and departments of education
Overseeing Body	Council of Ministers of Education, Canada	Organisation for Economic Co-operation and Development (OECD)*	International Study Center, Boston College, Lynch School of Education	International Study Center, Boston College, Lynch School of Education

* OECD is an inter-governmental economic organization of 37 member countries, founded in 1961 to stimulate economic progress and world trade.

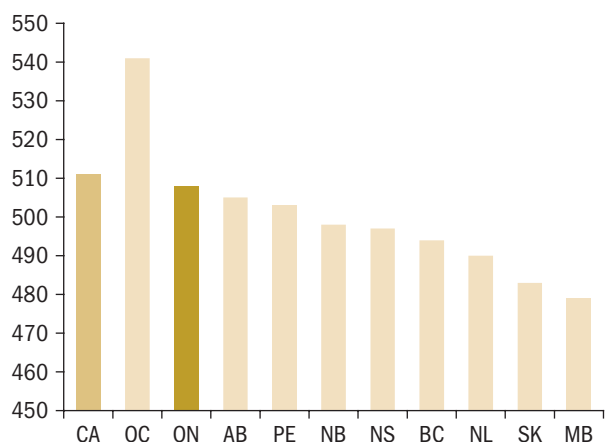
Appendix 3: Results of National and International Student Achievement Assessments in Which Ontario Participated between 2015 and 2018

Prepared by the Office of the Auditor General of Ontario using published results from Programme for International Student Assessment (PISA)—Organisation for Economic Co-operation and Development (OECD), 2018; Pan-Canadian Assessment Program (PCAP)—Council of Ministers of Education, Canada, 2016; Trends in International Mathematics and Science Study (TIMSS)—International Study Center at Boston College's Lynch School of Education, 2015; Progress in International Reading Literacy Study (PIRLS)—International Study Center at Boston College's Lynch School of Education, 2015.

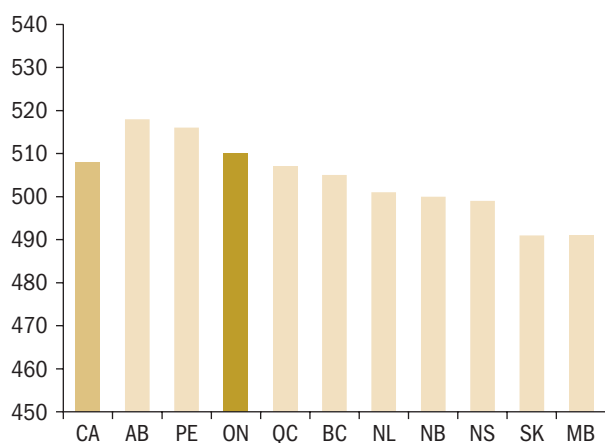
2016 PCAP—Reading

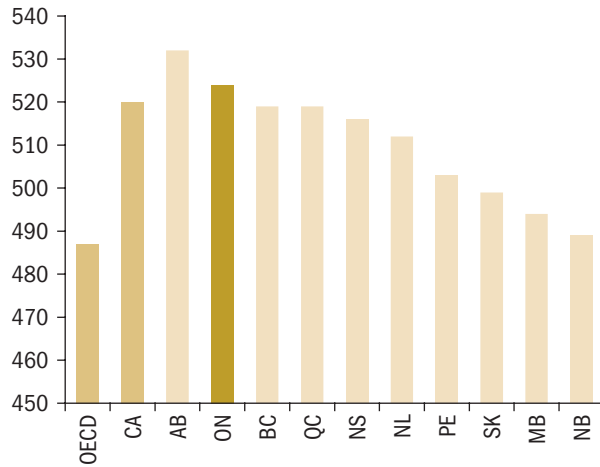
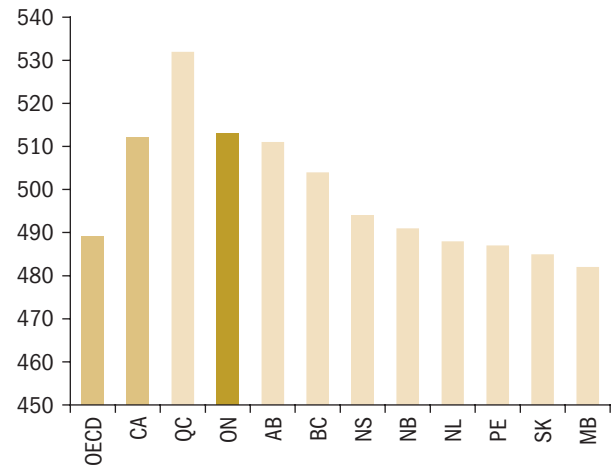
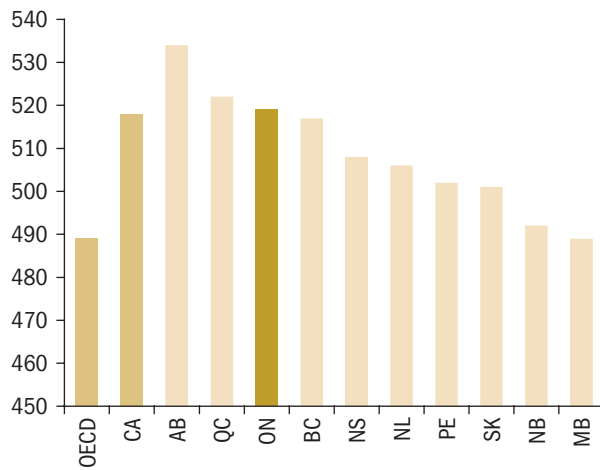
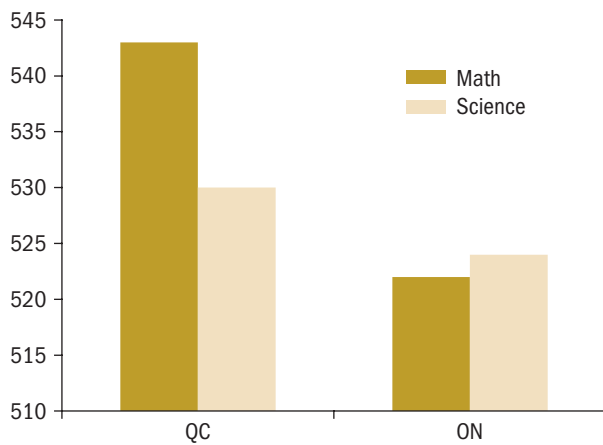
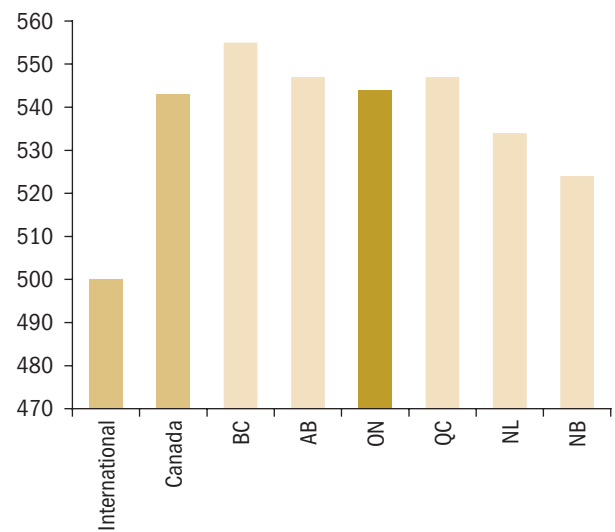


2016 PCAP—Math



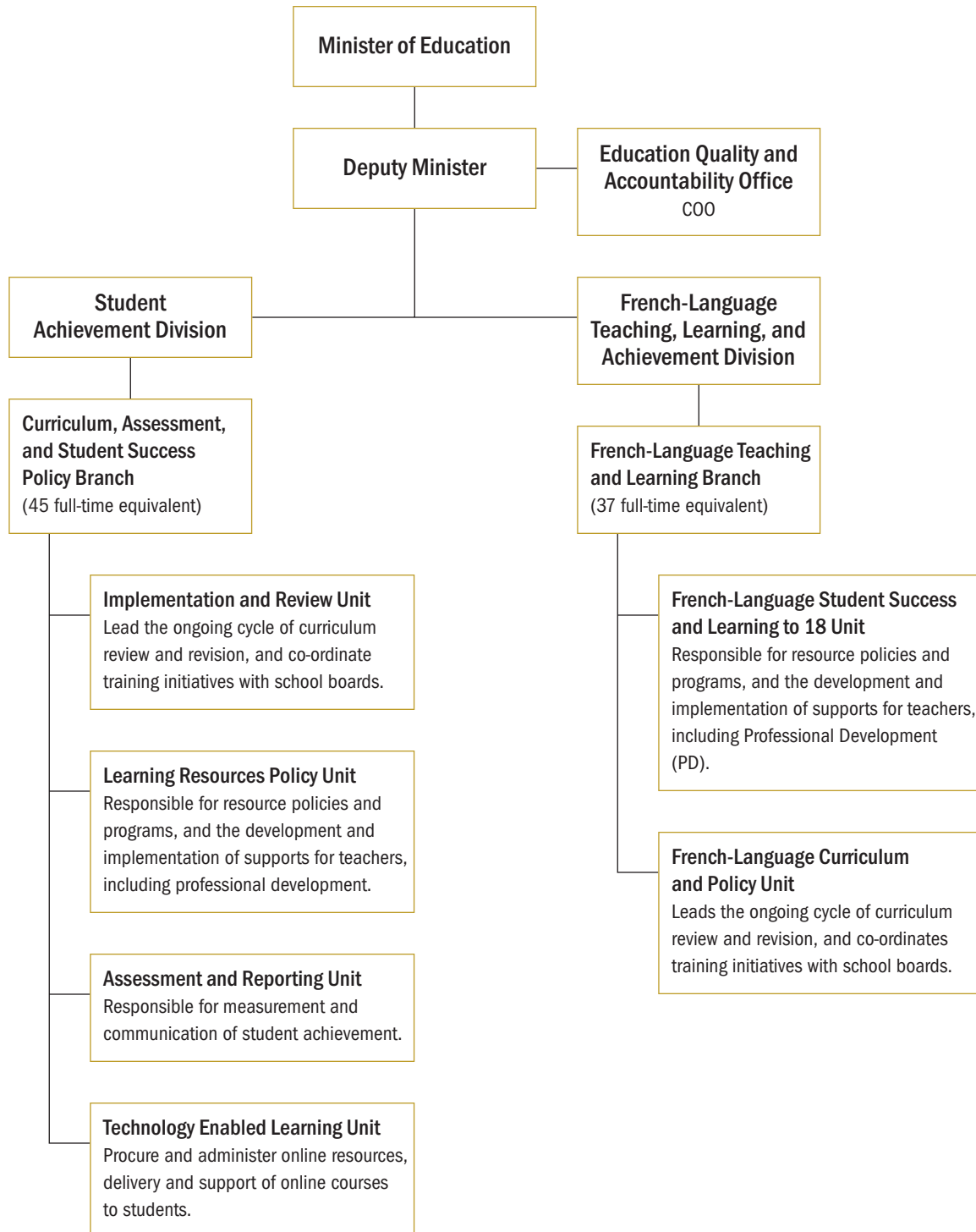
2016 PCAP—Science



2018 PISA—Reading**2018 PISA—Math****2018 PISA—Science****2015 TIMSS—Grade 8****2016 PIRLS—Literacy**

Appendix 4: Organizational Structure of Ministry of Education Divisions Responsible for Curriculum Development and Implementation

Source of data: Ministry of Education



Appendix 5: Audit Criteria

Prepared by the Office of the Auditor General of Ontario

1. The Ministry has ongoing processes in place to assess the continued effectiveness of the curriculum for each subject in meeting the Province's objectives for the education system.
2. The Ministry has an effective process in place to revise curricula that takes into consideration input from impacted stakeholders and experts, research into best practices, future economic trends, and results of student assessments to ensure the curricula are accurate, current, relevant, and developmentally appropriate.
3. The Ministry and school boards provide teachers with the information, training, resources and other supports necessary to implement the curricula on a consistent and ongoing basis.
4. The Ministry and school boards have processes in place to ensure teachers are teaching the expectations outlined in the curricula.
5. Students are being consistently evaluated at all school boards across the province against curricula expectations, including through testing by the Education Quality and Accountability Office (EQAO).



Office of the Auditor General of Ontario

20 Dundas Street West, Suite 1530
Toronto, Ontario
M5G 2C2
www.auditor.on.ca