FINAL REPORT

Review of Prince Edward Island's Provincial Common Assessment Program

Submitted to

The Government of Prince Edward Island and the Department of Education, Early Learning and Culture

Prepared by

Dr. Richard Jones Dr. Pierre Brochu Dr. Joanne Reid Sandy DiLena

On behalf of

RMJ ASSESSMENT

December 14, 2018

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Letter to Minister Brown

December 14, 2018

The Honourable Jordan K.M. Brown
Minister of Education, Early Learning and Culture
Government of Prince Edward Island
P.O. Box 2000
Charlottetown, PE C1A 7N8

Dear Minister Brown:

I am pleased to submit, on behalf of RMJ Assessment's review team members, our report from the Review of the Provincial Common Assessment Program.

Thank you for the opportunity to conduct this evidence-informed Review. We are grateful to everyone who contributed their voices, observations, and suggestions to inform our report to you. We wish also to acknowledge our appreciation to the management and staff of the Department of Education, Early Learning and Culture, who were so open and transparent about all aspects of the Assessment Program and provided invaluable assistance in the conduct of this Review. One sign of a successful organization is that it periodically reviews the effectiveness of its practices. The province's current assessment program has been in place for more than a decade, so this was an opportune time to take stock of it.

Student assessment, when done well, is a key support to student learning. Through both formative and summative assessment, teachers assess student learning continuously in the classroom. The role of the Provincial Common Assessment Program is to support all education stakeholders by providing students, parents/guardians, schools, school boards, and the overall education system with timely, comparable, valid, and reliable data on student achievement, in core subject areas, at the end of key stages of learning.

The overall objective of this Review was to examine key aspects of the Provincial Common Assessment Program and prepare a final report, including recommendations identifying best practices reflective of the overall needs of student learning. Consequently, this Review was to look at what is being assessed, who is being assessed, how the assessments are developed and carried out, and whether the communication of assessment results is effective in supporting the improvement of student learning. The Review relied on a variety of sources of data and information, including document analyses, interviews and focus groups with key stakeholders, jurisdictional scans, literature research, and online surveys.

The Provincial Common Assessment Program is functioning well; we value and want to build upon current good practices. This report acknowledges the accomplishments of the Program over the past several years and provides recommendations and suggestions for consideration as it moves forward. We are confident that when these recommendations are implemented, the result will be a much-enhanced Program that will even better meet the needs of all stakeholders, especially Island learners.

Sincerely,

Dr. Richard Jones

Proprietor, RMJ Assessment

On behalf of: Dr. Pierre Brochu, Dr. Joanne Reid, and Sandy DiLena

(RMJ Assessment Review Team)

Note of Appreciation

RMJ Assessment would like to acknowledge the contribution of the hundreds of students, parents, classroom teachers, principals, education stakeholders, and members of the public who shared their views on the Provincial Common Assessment Program through individual meetings, focus groups, responses to the online survey, and written submissions.

Thanks are also extended to the Council of Ministers of Education, Canada's (CMEC) provincial assessment contacts for reviewing and validating the jurisdictional scans of provincial assessment programs across Canada.

Summary of Recommendations¹

Literacy Assessments:

Recommendation 1: Readability levels should be systematically monitored at the time of passage selection. In addition, other selection criteria should be put in place in keeping with best practice (e.g., test length, paragraph numbering, number of questions per passage, etc.).

Recommendation 2: An external sensitivity/bias panel should be put in place for each assessment. This panel would review each assessment and assess the cultural sensitivity and absence of bias of the passages and test questions before administration.

Recommendation 3: Approximately half of test passages and their related questions should be released after every administration. This would allow for wider dissemination of assessment materials while maintaining the necessity to reuse passages over time for equating purposes.

Recommendation 4: Training of item writers is currently taking place when they begin their assignment. This training should be standardized across the assessments and include elements related to generic item writing skills and a thorough review of the curriculum elements to ensure a common understanding.

Recommendation 5: Before finalizing and assembling assessments and related materials, English and French editors, familiar with test construction, should carefully review all assessment items (questions). This would improve the overall quality of the test materials.

Recommendation 6: Marking rubrics should be revised and edited for clarity, consistency, and parallelism across all levels and between languages.

Recommendation 7: The practice of including teachers in all aspects of test development and marking should be maintained and enhanced with a goal to involve as many different teachers as possible across the province.

Recommendation 8: Marking guides should have a standardized structure and include annotated examples of acceptable and unacceptable responses with corresponding rationales.

Recommendation 9: The Administration Guides and the Teacher Information Guides can be streamlined by separating out information according to purpose and audience. The documents should be edited for formatting, accuracy, consistency, and conventions in both languages, and the overlap should be checked between website documents and the Teacher Information Guides regarding purpose and descriptions of the assessments. Quick checklists could be developed to assist teachers on test day.

¹ The recommendations in this report are founded upon research and best practices in large-scale assessment and are accompanied by suggestions for consideration within the body of the Report.

Mathematics Assessments:

Recommendation 10: Questions should be reviewed for language, mathematical precision, and large-scale assessment appropriateness.

Recommendation 11: French editing of the test booklets and accompanying materials (Administration Guides, Marking Manuals) should be done more thoroughly.

Recommendation 12: Student exemplars, when provided, should include more detail in rationales. This will assist classroom teachers and markers to gain a better understanding of the marking standards and apply them consistently.

Assessment-Related Issues:

Recommendation 13 (Subjects and Grades Assessed):

- Continue to administer provincial Literacy assessments to students in Grades 3 and 6.
- Continue to administer the Reading assessment at the Grade 3 level and the Reading and Writing assessments at the Grade 5 level for French Immersion students.
- Continue to administer provincial Mathematics assessments to students in Grades 3, 6, 9, and 11.
- Reintroduce a Language Arts assessment in Grade 9 or a Literacy assessment in Grade 10.

Recommendation 14 (Census versus Sample Assessments):

- Continue to administer census assessments for the Grades 3, 6, and 9 (or 10) assessments.
- Continue to administer the Grade 11 Mathematics assessments to all students enrolled in the given Grade 11 mathematics courses.

Recommendation 15 (Timing and Frequency of Assessments):

• Continue to administer Provincial Common Assessments to students on an annual basis toward the end of the school year (and each semester for semestered courses).

Recommendation 16 (Value and Use of Data):

• Develop a plan to assist all stakeholders to understand the intended purpose(s) of the Provincial Common Assessments, the intent of the various reports, how the reports can and should be interpreted, and what follow-up steps can be taken to ensure improvement is actioned.

Recommendation 17 (Adaptations and Exemptions):

- Establish firm guidelines for student exemptions on Provincial Common Assessments and monitor their implementation to ensure they are followed appropriately.
- Explore the feasibility of expanding available adaptations for students taking provincial assessments.
- Consult with educators to establish clear guidelines regarding what teaching aids may remain or be removed/hidden during provincial assessments.

Recommendation 18 (Statistical Procedures):

 Maintain the current three categories of performance: "Meeting Expectations," "Approaching Expectations," and "Experiencing Difficulty."

Recommendation 19 (Participation in National and International Assessments):

• Continue provincial participation in PCAP and PISA.

Recommendation 20 (Information and Communication):

- Document all assessment-related processes (e.g., item development, assessment construction, marking, data analysis, and reporting).
- Develop, provide in-servicing on, and publish (at least on the Department's website) a Framework document that includes information about
 - purpose(s) of the provincial assessments;
 - o differences between large-scale and classroom assessments and the complementary nature of assessment for learning, assessment as learning, and assessment of learning;
 - alignment with provincial curriculum and current research on assessment in the given subjects;
 - o definition of the curriculum content that will/will not be assessed;
 - o what accommodations and special provisions are/cannot be provided; and
 - o how the assessments are developed, administered, marked, and reported on.
- Develop a plan that provides for regular communication (and in a variety of ways, tailored to the audiences) with all stakeholders on assessment-related issues and topics.

Recommendation 21 (Human Resources):

- Review priorities regarding staffing needs of the Achievement and Accountability unit of the Department.
- Hire French Immersion staff to develop and manage the primary and elementary assessments.

1.0 Background

1.1 Introduction

In 2005, in recognition that the educational needs of 21st century learners were rapidly changing in a global context, the Government of Prince Edward Island (PEI) initiated a Task Force on Student Achievement to examine the education system and make recommendations to enhance and enrich the student educational experience. Unlike many other jurisdictions across Canada and abroad, PEI had not implemented a system of provincial student assessments. Following province-wide consultations, student assessment was among the 20 recommendations in the report *Excellence in Education A Challenge for Prince Edward Island: Final Report of the Task Force on Student Achievement* (2005). The goal of provincial, common student assessment, it was explained, was to improve teaching and learning. It would inform teachers, students, and parents/guardians about student learning progress. It would also provide valid, reliable, and consistent information about student learning to the Department of Education, school boards, and teachers to inform adjustments to curriculum and teacher professional development, as well as guide appropriate interventions for student learning. In addition, all stakeholders would benefit from having access to accurate information about the success of the education system. Specifically, the recommendation stated that:

"the province, in conjunction with stakeholders, administer common assessments to Island students at grades 3, 6, and 9, and for designated subjects at the senior high school level. These assessments must involve teachers at all levels and must

- reflect the various learning styles of students;
- not be used for the ranking or comparison of either students or schools;
- be tied to the provincial curriculum, which will be updated from time to time;
- guide professional development at all levels;
- be used to accurately inform parents, teachers, and staff;
- be used positively to improve teaching and learning; and
- be part of the school improvement plan. (p. 22)"

Following the *Final Report of the Task Force on Student Achievement*, implementation of the Provincial Common Assessment Program began in 2007. According to the Department of Education, Early Learning and Culture (2015), the current Program assesses students at key stages of learning as follows:

- Primary literacy and mathematics at the end of Grade 3
- Elementary literacy and mathematics at the end of Grade 6 (French Immersion Literacy at the end of Grade 5)
- Intermediate mathematics at the end of Grade 9
- Secondary mathematics at the end of Grade 11 (January and June semesters)

As additional context to this Assessment Program Review, it should be noted that in 2014, an Intermediate Literacy Assessment (ILA) was implemented in Grade 9. However, after three years the ILA

was discontinued in favour of a transition to a Grade 10 Secondary Literacy Assessment (SLA). The SLA was discontinued due to administration-related issues. It should also be mentioned that PEI participates in the Pan-Canadian Assessment Program (PCAP) that assesses Grade 8 students and in the Programme for International Student Assessment (PISA) that assesses 15-year-olds. Both assessments are administered on a three-year cycle; involve random samples of students at the particular age/grade level; and assess students in mathematics, reading, and science; and in the case of PISA in an additional developmental domain.

1.2 Rationale/Purposes for the Review

One sign of a successful organization is that it periodically reviews the effectiveness of its practices. The Provincial Common Assessment Program has been in place for more than 10 years, so the Ministry of Education, Early Learning and Culture believed it to be an opportune time for an external review to be conducted. Following a competitive procurement process, the Government of PEI selected RMJ Assessment to review the assessment program. The Review provides an opportunity to take note of the accomplishments of the past decade while examining the overall approach to student assessments in order to stay current with best practices and be reflective of the needs of Island learners. Following are the review's key components and deliverables as stated in the Request for Proposal (2018):

- Review the existing Provincial Assessment Program including the results of the assessments
- Review approaches to development, administration, scoring, data analysis and equating, and reporting
- Evaluate the timing, frequency of the assessments, and grade levels assessed
- Evaluate the effectiveness of responses to data to improve student achievement
- Evaluate the curriculum coverage with regard to a blueprint
- Evaluate students' and teachers' needs regarding provincial assessments
- Conduct an analysis to determine if there are any gaps in funding, human resources, and/or information
- Include stakeholders to gather feedback regarding the Provincial Common Assessment Program
- Prepare a final report including recommendations identifying best practices reflective of the overall needs of the learners (p. 27)

2.0 Methodology

2.1 Introduction

Data and information for RMJ Assessment's Review of the Provincial Common Assessment Program was derived from several sources, including interviews with Department of Education, Early Learning and Culture (Department) staff; data and document reviews; stakeholder interviews; focus-group discussions; an online survey; and written submissions. In determining and designing all data-collection sources, care was taken to gather information on those topics of interest to meet the specific needs of the Review.

2.2 Interviews with Department Staff

During the period September 5 to 7, 2018, RMJ Assessment's Dr. Richard Jones and Dr. Pierre Brochu visited the Department of Education, Early Learning and Culture to hold meetings with Department staff, including the Deputy Minister, Senior Communications Officer, Manager, Achievement and Accountability (who was also serving as Acting Director of Instructional Development and Achievement), Achievement Leaders, Statistical Analyst, Curriculum Leaders, Directors, Administrator Support Leaders, and Flexible Learning Support Leader. The meetings provided an opportunity to introduce the Review Team and provide information about the Review's purposes, information sources, and principles and standards of best practice (for the reviewers and for large-scale, standard assessments). Semi-structured interviews were used to gather information about assessment processes and products, as well as interviewees' perspectives on the strengths of the Provincial Common Assessment Program and where changes/improvements could be made.

On September 13, Dr. Jones and Dr. Brochu conducted a follow-up conference-call meeting with the Manager, Achievement and Accountability and the Department's contracted Psychometrician. The purpose of this meeting was to gather information about the scope, duration, and timing of his work; details of the procedures used for key tasks (such as equating and standard setting); and documentation of these procedures.

On October 15, during a week-long visit to PEI, Dr. Jones and Dr. Brochu met with the Department's newly appointed Executive Director and the Manager, Achievement and Accountability to discuss progress on the Review of the Provincial Common Assessment Program.

2.3 Data and Document Reviews

Approximately two weeks prior to the reviewers' visit to PEI in early September, RMJ Assessment requested the Department provide a wide range of documentation for review. These documents included recent student assessment booklets (and reading passages booklets in language arts/literacy); administration guides; training materials for test development and marking; assessment blueprints/specifications; sample student, school, and provincial reports; descriptions of process (for activities such as item and assessment development, administration, scoring, establishing cutscores/standard setting, data analysis, and equating); communication material for parents and teachers;

assessment results over time; and any key assessment-related documents and reports covering the period from the *Final Report of the Task Force on Student Achievement* (2005) to present. The meetings with Department staff, during September 5 to 7, provided RMJ Assessment an opportunity to confirm the receipt of key assessment materials and request additional documents where information gaps were identified. Department staff promptly provided supplementary documents in the days following the initial visit to PEI.

During the period September 10 to October 12, RMJ's large-scale assessment experts, including literacy and numeracy specialists, reviewed PEI documentation, guided by widely accepted standards and principles of best practice for large-scale assessments, such as *Principles for Fair Student Assessment Practices for Education in Canada* (1993)² and *Standards for Educational and Psychological Testing* (2014).

2.4 Stakeholder Interviews³

During their September 5 to 7 visit to PEI, RMJ Assessment's Dr. Richard Jones and Dr. Pierre Brochu, in collaboration with the Department's Deputy Minister and Senior Communications Officer, identified a list of key stakeholders to participate in hour-long, semi-structured interviews. (Refer to the Appendices for the *Stakeholder Interview Protocol*.) Representatives of the following organizations took part in face-to-face interviews with Drs. Jones and Brochu during their visit to PEI the week of October 15 to 19, (except where indicated).

- Prince Edward Island Teachers' Federation
- Holland College (Teleconference, October 10)
- University of Prince Edward Island
- Prince Edward Island Home and School Federation
- Greater Charlottetown Chamber of Commerce
- La Commission scolaire de langue française
- Lennox Island First Nation (Teleconference, October 24)
- Mi'kmag Confederacy (Teleconference, October 26)

2.5 Focus-Group Discussions

During their October 15 to 19 visit to PEI, Drs. Jones and Brochu conducted hour-long, focus-group meetings with students, parents, principals, English- and French-language teachers, as well as members of the Provincial Learning Partners Advisory Council. The Department had made arrangements for Grades 9 to 12 student representatives from three schools: Colonel Gray Senior High School, Queen Charlotte Junior High School, and École François-Buote (French School) in Charlottetown to attend the focus-group session over a lunch hour at Colonel Gray. Intermediate- and secondary-school students

² Although the Principles document was published in 1993, it continues to be the most valid reference for Canadian large-scale assessment programs.

³ Please note that the findings of stakeholder interviews and focus-group discussions have been combined in this Report. Summaries of individual stakeholder interviews are not provided in order to protect individuals' privacy and confidentiality.

were selected by the schools, because they had experience writing several provincial assessments, and the Review Team believed they could offer important perspectives on the assessment program.

Participants in the parent/guardian focus group were identified via the District Advisory Council contact information provided by the Department. The evening focus group was held at Stonepark Intermediate School in Charlottetown.

RMJ Assessment used a stratified random sampling approach to select principals from lists provided by the Department. The evening principal focus group was conducted at Central Queens Elementary School in Hunter River.

For the selection of teachers, RMJ Assessment was interested in hearing the perspectives of those who had participated on Department committees, such as item (question) writing and marking boards, and those who were non-committee members. The Department provided RMJ Assessment with lists of all English-language teachers and all French-language teachers, as well as those who took part on committees in each language group. The consultant employed a stratified random sampling method to select one-half of the teacher sample in each language group from committee and non-committee lists. Separate English- and French-language teacher focus groups were held at Central Queens Elementary School in Hunter River.

The Department provided RMJ Assessment contact information for the Co-Chair of the Provincial Learning Partners Advisory Council, who arranged for Drs. Jones and Brochu to have an hour on the agenda during the organization's regular meeting on Wednesday, October 17 at the Rural Action Centre in Montague. (Protocols for the semi-structured focus-group discussions and summaries of themes that emerged from each of the focus groups can be found in the Appendices.)

2.6 Online Survey

RMJ Assessment developed questions for an English-language online survey, based on the main project deliverables. The survey was shared with senior staff at the Department prior to being finalized. Once the English survey was finalized, it was translated into French, and then both English- and French-language surveys were mounted in SurveyMonkeyTM, an online survey development, cloud-based software solution. The English and French surveys were tested on RMJ Assessment's SurveyMonkey platform. Once the surveys were approved by the firm, links to the surveys were provided to the Department to comprise part of a public release regarding the Provincial Review of the Common Assessment Program. The surveys, which were available to all of the province's stakeholders (e.g., students, parents/guardians, teachers, education administrators, organizations, general public) were posted for the period October 16 to November 2. It should be noted that the survey did not collect any personal information on respondents. The qualitative responses, gathered via Questions 18 and 19, were analyzed using the NVivo software Version 12 (QSR International, 2018).

2.7 Written Submissions

In addition to all of the other data/information-gathering techniques, any/all stakeholders were encouraged to provide RMJ Assessment with written feedback on the Provincial Common Assessment

Program via electronic or paper mail. This information was also part of the Department's public release concerning the Provincial Assessment Review.

3.0 Findings and Recommendations

3.1 Introduction

This section presents the results of an in-depth analysis performed by the RMJ Assessment Review Team as part of this Program Review. The following elements of the program were analyzed: the actual provincial assessments administered by the Department of Education, Early Learning and Culture; a jurisdictional scan of large-scale assessment models in Canada and around the world; the achievement results from the PEI assessments from the perspectives of data use and value; the assessment model currently in place; and the adequacy of funding, human resources, and information provided.

3.2 Document Analysis: PEI Assessments

The following assessments were reviewed in terms of assessment content and quality:

- Literacy: Grade 3, Grade 5 (French Immersion), Grade 6, and Grade 9 (2015 version)
- Mathematics: Grade 3, Grade 6, Grade 9, and Grade 11

In each case, the Review Team obtained the following assessment materials from at least two administration years: the administration guides, the test blueprints and tables of specifications, the actual test booklets (and corresponding reading passages booklets in the case of the literacy assessments), the marking materials (including training documents, marking guides, student exemplars, and scoring rubrics), and available statistical analyses (item analysis, equating reports, cut-score reports).

Because the assessment materials are reused over time for trend reporting, confidentiality of all materials is maintained by the Department. As such, this report is not referencing any specific passage or test question to maintain confidentiality. Comments and recommendations on specific passages and questions have been provided to the Assessment and Accountability staff of the Department.

3.2.1 Literacy Assessments⁴

For the Reading component of the Literacy assessment the reading passages were reviewed to assess their alignment with the provincial curriculum; the topics and content of the passages; the length, vocabulary, and readability; and their visual characteristics. The test questions were also reviewed to analyze their alignment with the provincial curriculum, the wording of the questions, the item format and item type, item difficulty, and sequencing of the items in the various test forms. In addition, the marking materials and answer guides were reviewed. For the Writing component of the assessment at Grade 3, Grade 5 (French immersion), and Grade 6, the writing tasks were reviewed to analyze their alignment with the provincial curriculum, the wording and topics of writing tasks and prompts used, and the marking rubrics and related training materials. In Grades 3 and 6, the French assessments were reviewed separately. It should be noted that there were no direct comparisons between the English and French versions of the test, except in a few cases when the same passage was used across languages.

⁴ Unless otherwise indicated in text, the recommendations and suggestions for consideration apply to both English and French First Language assessments.

Finally, the related administration documents for the Literacy assessments were reviewed to assess their adequacy and usefulness (administration guides, parent brochures, teacher information guides, and resources available online).

Generally, the reading passages represent a variety of forms as required by curricular outcomes for Grades 3 and 6. The topics of most passages in the English and French assessments are appropriate. Using the same text in both languages provides an opportunity for comparison across languages. However, the translation/adaptation process presents the challenges of increased length and complexity for French readers. In English, expository passages are generally of the appropriate length, but some narrative texts are too long. Length and readability levels are serious issues for the French passages.

Recommendation 1: Readability levels should be systematically monitored at the time of passage selection. In addition, other selection criteria should be put in place in keeping with best practice (e.g., test length, paragraph numbering, number of questions per passage, etc.).⁵

Most reading passages are gender-neutral, and the overall gender balance of each form is relatively equitable. Some English passages contain sensitive content. It is our understanding that there is no formal process to review the literacy assessments for sensitivity or bias.

Recommendation 2: An external sensitivity/bias panel should be put in place for each assessment. This panel would review each assessment and assess the cultural sensitivity and absence of bias of the passages and test questions before administration (Popham, 2014).

Overall, the reviewers noted that the different forms of any given assessment were highly parallel year over year. This allows for strong comparability of results over time through test equating, as many passages and questions are reused from one year to the next. However, keeping all passages and test questions confidential limits the usefulness for teachers, as they cannot see examples of the assessment to guide their teaching.

Recommendation 3: Approximately half of test passages and their related questions should be released after every administration. This would allow for wider dissemination of assessment materials while maintaining the necessity to reuse passages over time for equating purposes.

The assessment forms reviewed cover all curriculum outcomes and represent the three cognitive levels (literal, inferential, and evaluative). The reviewers questioned the item classification in some cases. Item writers and reviewers need a clear and consistent understanding of the differences among the levels of comprehension, the interpretation of an outcome, and of the item construction to represent the outcome(s).

Recommendation 4: Training of item writers is currently taking place when they begin their assignment. This training should be standardized across the assessments and include elements related to generic item writing skills and a thorough review of the curriculum elements to ensure a common understanding.

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⁵ See Mullis et al. (2017) for an example of process and criteria used for passage selection.

While not numerous, there are places across all assessments in French and English where attention to editing is needed.

Recommendation 5: Before finalizing and assembling assessments and related materials, English and French editors, familiar with test construction, should carefully review all assessment items (questions). This would improve the overall quality of the test materials.

For the Writing component of the literacy assessments, the writing forms effectively meet the general and specific curriculum outcomes for writing. Both narrative and supported opinion (transactional) are familiar classroom tasks that can accommodate diverse ideas and offer relatively clear structures for reliable marking of Organization. The traits—Ideas, Organization, and Conventions—of the marking rubrics also align well with the curriculum outcomes. The selected topics are appropriate and universally accessible. The English and French writing rubrics are generally clear and aligned with the curriculum objectives. However, whenever applicable, the descriptors are not always consistent across languages. In addition, the descriptors in the French rubrics do not always differentiate effectively across performance levels, which may affect marker reliability.

Recommendation 6: Marking rubrics should be revised and edited for clarity, consistency, and parallelism across all levels and between languages. Specific recommendations and comments on the marking rubrics for Writing have been provided to Department staff.

All teachers with whom we spoke, as part of this review, commented that their participation in item writing teams or marking boards represented one of the best professional learning opportunities in their career. This is an important benefit of the Provincial Common Assessment Program.

Recommendation 7: The practice of including teachers in all aspects of test development and marking should be maintained and enhanced with a goal to involve as many different teachers as possible across the province.

Marking guides are important tools, not only to ensure consistency in the marking process, but also to provide clear marking criteria and examples of acceptable and unacceptable responses. In most cases, these marking guides are well-developed and enhance teachers' understanding of the achievement standards. However, some standardization in their format would improve their usefulness.

Recommendation 8: Marking guides should have a standardized structure and include annotated examples of acceptable and unacceptable responses with corresponding rationales.

The Administration Guides and Teacher Information Guides are important documents to ensure the consistency of test administration procedures across the province. These documents are comprehensive, but sometimes they provide redundant information.

Recommendation 9: The Administration Guides and the Teacher Information Guides can be streamlined by separating out information according to purpose and audience. The documents should be edited for formatting, accuracy, consistency, and conventions in both languages, and the overlap should be

checked between website documents and the Teacher Information Guides regarding purpose and descriptions of the assessments. Quick checklists could be developed to assist teachers on test day.

Literacy Assessments – Suggestions for Consideration:

- The context of provincial assessments may not be an appropriate situation to assess the specific curriculum outcome 6.1, especially at the Grade 3 level "Make personal connections to texts and describe, share, and discuss their reactions and emotions". The responses provided by Grade 3 students may be difficult to assess fairly and reliably in a large-scale assessment setting.
- The Teacher Information Guides, along with the posted sample reading passages, items, and writing samples give teachers and the public a fulsome picture of the literacy assessments. The Teacher Information Guides, while thorough, seem to have two purposes: 1) describing the assessments and establishing the connection between them and curriculum outcomes and 2) outlining administration procedures. Teachers do need both sets of information at different times, but it may be more efficient and effective to create a separate Framework document⁶ and a separate administration manual.
- The Parent Brochures provide basic but limited information. An important missing piece is something about adaptations. Alignment to curriculum, examples of past assessments, and a summary of past results could be provided as links or through a more comprehensive Framework document.
- Create a fulsome Technical Report after each administration year. This manual would provide
 the descriptive information of all aspects of the test development, weighting of items,
 administration, marking and equating procedures, and reporting of the assessments. Some
 sections would only need to be updated after each administration, while others would remain
 identical from one year to the next.⁷
- Given the size of the francophone population in Prince Edward Island, the development of distinct French Language Arts assessments is an expensive and resource-intensive undertaking. However, as is the case in the other Canadian jurisdictions with small francophone populations, different tests ought to be developed, since the curriculum outcomes differ across languages. Two measures may help in making the development of the French Language Arts assessments more efficient in Prince Edward Island: 1) In discussion with curriculum specialists in English and French Language Arts, establish a proportion of texts and questions that can be shared across languages (perhaps one-third). Carefully selected common texts and questions would have the double advantage of reducing development costs in both languages while allowing some comparability of results across languages. Recognizing that the English and French Language Arts curricula do have differences, a majority of unique texts and questions would still be required to address the differences in the outcomes. 2) Discuss with the francophone test development teams in the other Atlantic provinces, the possibility of sharing an item bank in French Language Arts. Each provincial curriculum is unique, but as demonstrated by the PCAP assessment, they share many similarities. This approach would provide an opportunity to share

⁶ See Education Quality and Accountability Office (2007) for an example of a Framework document.

⁷ See Education Quality and Accountability Office (2017a) for an example of a Technical Report.

resources, which would ultimately improve the quality of the assessments while preserving their provincial uniqueness.

3.2.2 Mathematics Assessments

The Mathematics assessments were reviewed with a particular focus on the Administration Guides, the format of the student booklets, the alignment of the test with the provincial curriculum, and the marking materials that were provided. Since the French version of the mathematics assessments is a direct translation of the English version, comments will only be provided on the quality of the translation, as applicable.

In each of the six assessment programs reviewed (Grade 3, Grade 6, Grade 9, Grade 11 Pre-Calculus, Grade 11 Foundations of Mathematics, and Grade 11 Apprenticeship and Workplace Mathematics) with few exceptions, questions match the outcome to which they are mapped. As well, cognitive levels stated for each question are indicative of the level of cognitive mathematical thinking described by the Cognitive Levels Math Complexity Document.

Across assessments, student booklets are friendly looking and inviting, with lots of space and no crowding of text.

There is concern regarding the formulaic makeup of all assessments. The same type of question mapped to the same outcome sits with the same question number across the assessments. This may lead to teaching to the assessment and not a fair indication of how students are performing on the curriculum.

While recognizing that developing assessments every year is resource intensive, there is a need to expand the bank of items for all numeracy assessments to avoid having assessments that are too similar from one year to the next.

In general, the wording of the questions is appropriate, but in some cases, question clarity could be improved by following a more systematic approach to item development and by implementing consistent editing rules.

Recommendation 10: Questions should be reviewed for language, mathematical precision, and large-scale assessment appropriateness (as noted previously, comments and recommendations on specific questions have been provided to the Assessment and Accountability staff of the Department).

The French versions of the assessment booklets and Administration Guides showed a number of small typographical errors that generally do not affect student performance.

Recommendation 11: French Editing of the test booklets and accompanying materials (Administration Guides, Marking Manuals) should be done more thoroughly.

For all assessments, sample questions are released for teachers to use in familiarizing students with the assessment format and content. These provide an excellent opportunity to communicate provincial standards of achievement to all teachers across the province. These sample questions should

systematically include sample student responses (student exemplars) providing examples of acceptable and unacceptable responses with accompanying rationales.

Recommendation 12: Student exemplars, when provided, should include more detail in rationales. This will assist classroom teachers and markers to gain a better understanding of the marking standards and apply them consistently.

At all grade levels, some learning outcomes are not covered by the Common Assessments, because they are not readily assessable through a paper-and-pencil large-scale assessment. Limiting the scope of an assessment is appropriate, and the tables of specifications can be used to inform teachers of what is covered and what is not covered by the assessments.

At the Grade 9 level, the Department has developed a Problem-Solving component to be locally scored. This is a worthwhile initiative to expand the coverage of the curriculum in the assessment. However, based on the document reviewed, the purpose of this component and its linkage with the curriculum are not clearly explained. Also, the tasks are not standardized across the forms, and the scoring materials are not complete and consistent across tasks.

Mathematics Assessments – Suggestions for Consideration:

- The Achievement Clusters and Bright Spots reports are very detailed, and the description of the
 items may be too granular. These descriptions can be misinterpreted and misused by teachers.
 Providing feedback to teachers is very important, but these reports could be reconfigured to
 focus on released items linked to the specific learning outcomes and their cognitive levels.
- If the Grade 9 Problem-Solving component continues to be implemented in the future, more development work is required to enhance its quality. Also, the Department should provide feedback to schools regarding the consistency of local marking based on the central remarking of a sample of student responses.
- As was mentioned for the Literacy Assessments, it would be advisable to create a Technical Report after each administration year to document all aspects of the test development, weighting of items, administration, marking and equating procedures, and reporting of the assessments. Some sections would only need to be updated after each administration, while others would remain identical from one year to the next.
- The model for developing the numeracy assessments needs to move from developing individual
 assessments to developing a bank of items from which assessments could be generated. This
 approach would facilitate the release of items post-administration while providing an
 opportunity to use different item formats to assess the same outcomes over time.
- The rationale for the use or non-use of calculators needs to be better articulated for
 assessments at the Grades 3 and 6 levels. There may be curriculum outcomes where using a
 calculator is appropriate or inappropriate, and this should be addressed by the assessment.
 Also, at the Grade 9 level, there should be clearer guidelines regarding the type of calculator
 that is acceptable or not acceptable for the assessment. At the Grade 11 level, the guidelines for
 determining acceptable calculators are better articulated in the Administration Guide.

3.3 Jurisdictional Review: Large-Scale Assessment Models in Canada and Around the World

3.3.1 Introduction

Jurisdictional scans of provincial/territorial assessment programs in Canada (Section 3.3.2), national and international large-scale assessment studies (3.3.3), and assessment regimes in notable countries around the world (3.3.4) offer important external perspectives for the review of PEI's Provincial Common Assessment Program.

3.3.2 Canadian Assessment Programs

Summary

Across Canada, apart from exit/diploma examinations, all jurisdictions (except Saskatchewan) administer provincial assessments in given grades and subject areas. All students are expected to participate (census assessment), unless they are exempted because they are unable to address the assessment in any meaningful way or if appropriate accommodations are unavailable.

With the exception of New Brunswick (where samples of students in Grades 2, 4, and 6 are drawn, so that each student only completes one-quarter of the full assessment), the only assessments that involve random sampling of schools and students are the national Pan-Canadian Assessment Program (PCAP) and international assessments such as the Programme for International Student Assessment (PISA), the Trends in International Mathematics and Science Study (TIMSS), and the Progress in International Reading Literacy Study (PIRLS).

For the most part, provincial assessments involve students in combinations of grades from Grade 2 to Grade 11. Generally, provinces assess in at least one grade at the primary level (Grades 2, 3, or 4), one grade at the elementary level (Grades 5 or 6), one grade at the intermediate level (Grades 7, 8, or 9), and one grade at the high-school level (Grades 10, 11, or 12). Reading, Writing, and Mathematics are the most commonly assessed subjects, although some jurisdictions (e.g., Alberta) assess students in other subjects such as Science and Social Studies.

Generally speaking, the provincial assessments are administered in the spring each year with some exceptions: British Columbia (B.C.), Manitoba, and Nova Scotia conduct some assessments in the fall, and students in semester courses are usually assessed in January or June.

Results of provincial assessments are usually reported at the provincial, school district, school, and individual levels. In New Brunswick, however, results of the Grades 2, 4, and 6 assessments are mainly used for decision making at the provincial and school district levels. Consequently, reports are only available at the school, school district, and provincial levels. Individual student results are not reported. Following are brief summaries of the assessment programs in each of Canada's provinces. (Summaries for the three Canadian territories are not reported separately here, because Yukon schools follow B.C.'s curriculum and graduation program, and Northwest Territories and Nunavut use Alberta's curriculum and assessment programs.)

British Columbia

In British Columbia, provincial student assessment involves a Foundation Skills Assessment (FSA) and graduation assessments. The FSA assesses all students in Grades 4 and 7 in Reading, Writing, and Numeracy. The assessments, which are administered in the fall over a six-week period, are conducted mainly on computer but include a paper component.

Over the past three decades, the province administered Grade 12 provincial and scholarship examinations in a variety of examinable subjects. Individual students' results on the provincial tests were blended with classroom-teacher-awarded marks. This provincial, course-based exam program is being phased out in favour of cross-curricular literacy and numeracy assessments students must pass in order to meet secondary school graduation requirements. The Graduation Numeracy Assessment was implemented in the 2017-2018 school year, and the Graduation Literacy Assessment is scheduled for implementation in 2019-2020 (British Columbia Ministry of Education, 2018).

Alberta

Alberta's provincial assessment program involves achievement testing at given subjects and grades, as well as diploma examinations for graduation. In May and June, the province administers annual Provincial Achievement Tests (PATs) to all Grades 6 and 9 students in English and Français/French Language Arts, Mathematics, Science, and Social Studies. (Grade 9 students on a semester system write the tests in January.) Grade 9 achievement tests, based on the Knowledge and Employability programs of study in English Language Arts, Mathematics, Science, and Social Studies, are also administered (Alberta Education, 2018a).

In 2014, Alberta replaced its PAT for Grade 3 with more flexible Student Learning Assessments (SLAs). This is a voluntary program, designed for the beginning of Grade 3 and available throughout the school year, which teachers can use at their discretion. The program includes assessments with machine-scored and interactive items in digital and paper formats, as well as performance tasks marked locally by teachers (Alberta Education, 2018b).

Graduation/Diploma Examinations are administered for courses in Biology, Chemistry, English Language Arts, Français, French Language Arts, Mathematics, Physics, Science, and Social Studies (Alberta Education, 2018c).

Saskatchewan

Saskatchewan does not administer provincial student assessments in primary, elementary, or intermediate years. Grade 12 Departmental Examinations are offered eight times annually (November, December, January, March, April, May, June, and end of August) in English and French in examinable subjects: English Language Arts, Biology, Chemistry, Physics, Workplace and Apprenticeship Mathematics, Foundations of Mathematics, and Pre-Calculus. Departmental Exams are written by students whose teachers are either not accredited or do not practice their accreditation. Accredited

teachers have met the requirements to be granted the responsibility of determining students' final marks/standing on examinable Grade 12 courses (Saskatchewan Ministry of Education, 2018).

Manitoba

In Manitoba, provincial assessments are administered to all students in Grade 3, Middle Years (Grades 7/8) and Grade 12. The Grade 3 assessment of Reading (and the Grade 4 French Immersion Reading assessment) is not a standardized test. Instead, through observations and conversations with students, teachers assemble evidence of student achievement during the ongoing teaching-learning process. Judgements about student learning are made with reference to criteria provided by the Department, which are based on curricular, grade-level learning outcomes. The assessments are conducted in the fall, so that information can be used formatively to support student learning. By the end of November, schools report to parents and the Department on each student's performance.

The Middle Years assessments in Mathematics, Reading Comprehension, Expository Writing, and Student Engagement follow the same general approach as the Primary assessments. During the last two weeks of January (French Immersion schools with a late Immersion program can assess Grade 7 students in Mathématiques in the first two weeks of March), teachers prepare reports on students' performance on key competencies, with reference to mid-year criteria (based on curricular and grade-level learning outcomes) provided by the Department.

Grade 12 tests are administered in January and May-June in examinable subjects: Language Arts, French First Language, French Second Language (Immersion), Applied Mathematics, Essential Mathematics, and Pre-Calculus (Manitoba Education and Training, 2018).

Ontario

The Education Quality and Accountability Office (EQAO), an independent, arms-length agency of the Provincial Government, is responsible for Ontario's provincial assessment program. All students are assessed in Reading, Writing, and Mathematics at key stages of their learning. The primary division (Grades 1-3) and junior division (grades 4-6) assessments measure Reading, Writing, and Mathematics knowledge and skills students are expected to have acquired by the end of Grade 3 and Grade 6, respectively. Both assessments are administered over a two-week window in May-June each year.

The Grade 9 Mathematics Assessment tests mathematics knowledge and skills students are expected to have acquired by the end of Grade 9. Since there are two Grade 9 mathematics courses, applied and academic, different versions of the test are developed for each of the courses in English and in French. All students who are registered for Grade 9 Mathematics, and expected to earn a course credit, are expected to write the assessment. The Grade 9 test is administered during two-week windows, in January and June, to accommodate students in semester and full-year courses.

The Grade 10 Ontario Secondary School Literacy Test (OSSLT) gauges whether or not students have met cross-curricular, minimum competency standards in literacy (Reading and Writing). Successful completion of the OSSLT is one of 32 graduation requirements. The test, developed separately for

English and French, is written on one day in March/April each year (Education Quality and Accountability Office, 2017b).

Quebec

Following a public consultation process in 2016, the education system in Quebec is in a state of revisioning and transformation (Government of Quebec, 2017). In Quebec, there are two types of Ministry examinations in elementary and intermediate school years (high school's first three years): "compulsory" examinations taken in the 4th and 6th year of elementary school and in 2nd year of high school and "uniform" examinations. The compulsory examinations are used to monitor learning in subjects that are not required for certification. The Ministry prepares these assessments, and schools administer them, under standard testing conditions, in January and June sessions. Schools are responsible for marking the examinations. Students' results on compulsory examinations are not transmitted to the Ministry; however, the results count for 20% of a student's final course mark. Until new policies are established, students are required to pass five Ministry "Uniform" certification examinations in order to graduate from high school. Uniform examinations are used to evaluate learning progress in subjects that are compulsory for certification. The Ministry prepares the examinations for January, June, and August sessions, and schools are responsible for administering them under standard testing conditions. History, Mathematics, and Science exams are administered at the end of Grade 10; English and French tests are taken at the end of Grade 11. The students' final marks in these courses are a combination of 50% from the result of the test and 50% from the school-awarded mark. Results of these examinations are transmitted to the Ministry (Government of Quebec, 2015; Government of Quebec, 2017; Government of Quebec, 2018).

New Brunswick (Anglophone)

All New Brunswick students in the anglophone system participate in provincial assessments at Grades 2, 4, 6, 9, and 10. Results of Grades 2, 4, and 6 assessments are mainly used for decision making at the school district and provincial levels; consequently, reports are available at the school, school division, and provincial levels. No individual student results are reported.

A Grade 2 English Literacy (Reading Comprehension) assessment is administered in May-June each year. This multiple-choice assessment takes about 90 minutes to complete and is delivered in shorter, flexible sessions. In May-June each year, students in Grade 4 are assessed in Reading, Mathematics, and Science. During a 30- to 60-minute period, each student completes one of four booklets from the full assessment in each subject area. Since each student only completes one-quarter of the full assessment, there are no individual student results. Grade 6 students are assessed in four subjects: Reading Comprehension (English and French language), Mathematics, and Scientific Literacy. Each component of the assessment takes 30-45 minutes to complete. The assessments are administered in May-June annually. Like Grade 4, because each student completes just one of four booklets in each subject, no individual student results are reported. School, school division, and provincial results are reported in the fall each year.

Students registered in Grade 9 are required to successfully complete an English Language Proficiency (Reading Comprehension) assessment as a graduation requirement. In addition, students are expected

to meet provincial writing standards, which are monitored by the classroom teacher. The Reading Comprehension Assessment is administered in January during a 90-minute period. An English language proficiency reassessment is written by Grades 11 and 12 students who have not previously met the provincial standard in the Reading component. The Grade 10 provincial assessment measures student performance in three Grade 10 subjects: Reading, Mathematics, and Science. Each year in May-June, students complete each subject assessment in one to two hours. Each student writes one of four booklets from the full assessment in each subject area; therefore, results, reported in the fall, are available by school district and province. No individual results are reported (Government of New Brunswick, 2018a).

New Brunswick (Francophone)

There are marked differences in the assessment program between the anglophone and the francophone school sectors in New Brunswick, and the francophone sector is completing the introduction of significant changes to the assessment regime. Provincial assessments are administered to all students in Reading (Grades 2, 3, and 7), in Mathematics (Grades 3, 6, and 8), Writing (Grades 4 and 7), and in Science and Technology (Grade 8). In addition, provincial examinations are administered in Mathematics (Grade 10) and in Reading and Writing (Grade 11).

For all assessments, students receive detailed individual reports approximately two weeks after the administration date. In the summer, teachers also receive detailed data for every curriculum outcome. Professional learning communities use this information to identify weaknesses and exchange on best practices (Government of New Brunswick, 2018b).

Nova Scotia

Nova Scotia students write provincial assessments in Grades 3, 6, and 8. Prior to 2016-2017, a Grade 3 Reading and Writing and a Grade 4 Mathematics assessment were administered to the province's students. These assessments were discontinued in 2017-2018. Beginning in school year 2018-2019, the province has replaced the assessments with a Literacy and Mathematics assessment in Grade 3. The assessment is administered over a four-day period in May and includes Reading, Writing, and Mathematics questions and tasks that reflect curriculum learning expectations to the end of Grade 3. French Immersion students write only the Mathematics component, because formal instruction in English Language Arts begins in Grade 3.

The province's Grade 6 students write a Reading, Writing, and Mathematics assessment over four mornings in October (90 minutes each morning for Reading and Writing and 60 minutes each morning for Mathematics). In each subject area, the assessment questions and tasks reflect curriculum learning expectations to the end of Grade 5. Results are available at the individual student, school, school board, and provincial levels.

The Grade 8 Nova Scotia Assessment of Reading, Writing, and Mathematics is administered over four days in May-June. The assessment questions and tasks reflect the curriculum learning expectations to

the end of Grade 8. French Immersion students write the Mathematics portion of the assessment in French.

Nova Scotia Examinations are administered to Grade 10 students in English and Mathematics. English is written in January and June, and Mathematics is administered in June each year. The students' assessment results count for 20% of their final course marks. The francophone and anglophone assessment programs are parallel (Nova Scotia Department of Education and Early Childhood Development, 2018).

Prince Edward Island

Students in Prince Edward Island write provincial assessments at Grades 3, 6, 9, and 11 at key stages of learning. Primary Literacy (Reading Comprehension and Writing Skills) and Mathematics assessments are administered in May-June at the end of Grade 3. Five sessions are conducted over a two-week period. In Literacy, there is one 40-to-60-minute session for Writing and four Reading Comprehension sessions of about an hour each. Primary Mathematics is administered over two days (60 to 90 minutes each day).

Elementary Literacy and Mathematics are administered in May-June at the end of Grade 6. (French Immersion Literacy is assessed at the end of Grade 5.) Elementary Literacy is administered the same as Primary Literacy—over a two-week period—except that only four sessions are required.

Intermediate Mathematics is administered in June at the end of Grade 9. The test comprises mostly multiple-choice items and some short written responses. The administration takes about two hours and counts for 10% of a student's report card mark.

Secondary mathematics is conducted at the end of the Grade 11 semesters in January and June. There are assessments for three Grade 11 courses. Students have 2.5 hours to write an assessment, plus an additional 30 minutes if required. The Secondary Mathematics assessments count for 20-25% of a student's final mark. For all assessments, individual student, school board, and provincial results are reported (Prince Edward Island Department of Education, Early Learning and Culture, 2018).

Newfoundland and Labrador

Beginning in the fall of 2019, Grades 4, 7, and 10 students in Newfoundland and Labrador will write provincial assessments in Reading and Mathematics. Public/Diploma examinations are written in specified courses toward the end of June each year (Newfoundland and Labrador Department of Education and Early Childhood Development, 2018).

3.3.3 National and International Large-Scale Assessment Studies

In addition to the provincial assessments, all of Canada's jurisdictions participate in the Pan-Canadian Assessment Program (PCAP), as well as one or more of the major international assessment studies.

Because the purpose is to provide information for education system policy making and improvement, random sampling of schools and students is used for national and international assessments. Following are brief overviews of the major national and international studies.

The Pan-Canadian Assessment Program (PCAP) is an initiative of the Council of Ministers of Education, Canada (CMEC). The assessment is administered every three years to samples of Grade 8 students in three learning domains: Reading, Mathematics, and Science. Each assessment focuses on a major domain with a minor emphasis on the other two domains. The major domain rotates on a three-year cycle. For instance, in 2019, the major domain will be Mathematics; Reading and Science will be minor domains. To enhance interpretation of student achievement data, PCAP also uses student, teacher, and principal questionnaires to collect a wide range of contextual information, including demographics, socioeconomic factors, and school learning conditions. All three domains are reported on, but because there are more questions related to the major domain, it is reported in greater detail than the minor domains. Reporting is at the national and jurisdictional levels only; there are no district, school, or individual student results reported (Council of Ministers of Education, Canada, 2018a).

The Programme for International Student Assessment (PISA) is an international study, administered under the auspices of the Organisation for Economic Co-operation and Development (OECD). CMEC coordinates the assessment within Canada, with funding provided by Employment and Social Development Canada (ESDC). Since Canada is an OECD country, and because education is an exclusive provincial/territorial jurisdiction, all 10 provinces participate. The assessment measures the knowledge and skills of random samples of 15-year-old students in three domains: Reading Literacy, Mathematical Literacy, and Scientific Literacy. Like PCAP, the PISA assessment is conducted every three years and focuses on a major subject and two minor subjects in a given year. For example, in 2018, Reading was the major focus, and Mathematics and Science were minor domains. Other domains have also been assessed (e.g., Financial Literacy in 2015 and Global Competencies in 2018). Like PCAP, background questionnaires are administered to students and principals to obtain contextual information. In recent studies, PISA has moved to computer-based assessments with interactive questions (Council of Ministers of Education, Canada, 2018b).

The Programme for the International Assessment of Adult Competencies (PIAAC) is an OECD international study that measures adults' (between the ages of 16 and 65) proficiency in key information-processing skills: Literacy, Numeracy, and Problem Solving in a Technology-Rich Environment (PS-TRE), and gathers information about how they use these important skills for life at home, work, and within the broader community. PIAAC is administered within Canada through a partnership between CMEC, ESDC, and Statistics Canada and was conducted in 2011 (Council of Ministers of Education, Canada, 2018c). A second cycle of PIAAC is scheduled for 2021.

PIRLS (the Progress in International Reading Literacy Study) is an international assessment administered under the aegis of the International Association for the Evaluation of Educational Achievement (IEA). This study, which is conducted on a five-year cycle, measures the trends in Reading Literacy performance among random samples of Grade 4 students in participating jurisdictions. PIRLS focuses on three Reading skills: the process of comprehension, the purposes of reading, and behaviours and

attitudes toward reading. PIRLS was first administered in 2001, and PIRLS 2016 was the fourth in the series of Reading Literacy studies. Eight Canadian jurisdictions, together with 60 education systems worldwide, participated in the 2016 administration of PIRLS. The next cycle of PIRLS is scheduled for 2021, and CMEC will coordinate the Canadian participation in the project on behalf of participating provinces (Council of Ministers of Education, Canada, 2018d).

The International Computer and Information Literacy Study (ICILS) is a relatively new international, computer-based assessment that is administered under the auspices of the IEA. The study measures international differences in Grade 8 students' Computer and Information Literacy (CIL) and is meant to shed light on how well prepared students are to use computers to investigate, create, and communicate for study, work, and life in a 21st century, digital age. ICILS, like the other national and international assessments, relies on random samples of participating schools and students. In addition to the student assessment data, contextual/background information is also gathered via student, teacher, school, and school ICT coordinator online questionnaires. ICILS was first administered in 2013; the second administration was in 2018. Canada did not participate in this second cycle (Council of Ministers of Education, 2018e).

The Trends in International Mathematics and Science Study (TIMSS) is another study administered under the auspices of the IEA. The program assesses the Mathematics and Science knowledge and skills of random samples of students in Grades 4 and 8. First administered in 1995, TIMSS has been conducted on a four-year cycle ever since. In addition to gathering student performance data, contextual information is obtained through a series of surveys. Students complete a questionnaire about their characteristics and attitudes toward learning; parents/guardians of the participating Grade 4 students respond to a questionnaire about home contexts; teachers answer questions about the Mathematics and Science classroom environments; and principals complete a survey about student demographics, availability of resources, types of programs, and learning environment in the school (Council of Ministers of Education, Canada, 2018f). Provincial participation has varied across the TIMSS cycles; in 2015, five provinces participated.

The province of Prince Edward Island has participated in every cycle of PCAP since its inception in 2003. It has also participated in all cycles of PISA since 2000 and in the 2011 cycle of PIAAC. However, it has not participated in any of the other above-mentioned assessment projects (PIRLS, ICILS, or TIMSS).

3.3.4 Assessment Programs in Notable Countries

Summary

While the amount of testing varies widely across international jurisdictions, all of the countries examined for this report have some form of national student assessment program. For the most part, the jurisdictions administer assessments to all students in (what are for them) key subject areas and stages of learning. Most of the countries also administer sample-based assessments to monitor student progress over time and obtain information to support educational/instructional improvement. Following are brief summaries of the assessment programs in notable countries worldwide.

Australia

The Australian National Assessment Program – Literacy and Numeracy (NAPLAN) is an annual assessment (offered in online or paper-based formats) that is administered in May to all students nationwide in Years 3, 5, 7, and 9. NAPLAN comprises assessments in four domains: Reading, Writing, Language Conventions (spelling, grammar, and punctuation), and Numeracy. Results are reported at the national, state, city, school, and individual student levels (Australian Curriculum, Assessment and Reporting Authority, 2016a).

Australia also administers sample assessments to students in Years 6 and 10 in three subjects: Science Literacy, Civics and Citizenship, and Information and Communication Technology (ICT) Literacy. The assessments are conducted on a rolling three-year schedule in October/November each year (Australia's spring). For example, sample assessments began with Science Literacy in 2003, followed by Civics and Citizenship in 2004, then ICT Literacy in 2005. Schools are randomly selected to ensure samples are sufficient to provide representative data for each state and territory. Following each sample assessment, all schools receive release materials (assessment booklets, administration guides, and scoring guides) that allow teachers to administer the assessments to their own students to gauge their proficiency (Australian Curriculum Assessment and Reporting Authority, 2016b).

Denmark

Denmark administers six mandatory assessments to all students in particular years/form levels as follows:

- Danish, focusing on reading (form levels 2, 4, 6, and 8)
- English (form level 7)
- Mathematics (form levels 3 and 6)
- Geography (form level 8)
- Biology (form level 8)
- Physics/Chemistry (form level 8)

The assessments are computer-based and adaptive, which means that the assessment questions are continuously adapted to the individual student. For example, if a student answers a given question incorrectly, the next question he/she is given will be easier; if the student answers correctly, the next question will be more difficult. In this way, each student receives a different assessment. National results are reported as an accountability measure, but results for individual students, classes, schools, regions, etc. are kept confidential. Individual student results are used for formative purposes only. A written plan, containing information about the student's performance on any given assessment and an action plan for improvement, is required at least annually for each student. Student-teacher consultations, shortly after the results of an assessment are released, are a vehicle for updating the student plans, which are to be provided to the parents (Denmark Ministry of Education, 2017).

England

National Curriculum Assessments are administered to students at the end of key stages of learning. Key Stage 1 consists of students in Years 1 and 2 (equivalent to Grades 1 and 2); Key Stage 2 includes students in Years 3 to 6. At both Key Stages, student performance is measured by a combination of external, standardized assessments and teacher judgements based on classroom assessments. External assessments in Reading, Writing, Mathematics, and Science are administered in May of Year 2. At Key Stage 1, the external assessment results are used to support the teacher's assessment judgement, which is recorded as the official outcome for the student. Student performance in Reading, Writing, and Mathematics is described by the following categories:

- Working at Greater Depth within the Expected Standard
- Working at the Expected Standard
- Working Towards the Expected Standard
- Foundation for the Expected Standard
- Below the Standard of the Pre-Key Stage

In Science, the only performance category is "Working at the Expected Standard." If this is not the case, the teacher indicates that the student has not yet met the standard for his/her age or grade.

In May of Year 6 (the last year of Key Stage 2), students take National Curriculum Assessments (or SATs) in Reading; Grammar, Punctuation, and Spelling; and Mathematics. Writing is assessed solely by the teacher with reference to a centrally provided assessment framework. Science assessments are administered every two years to random samples of students to monitor national performance. Reports are not provided to individual students or schools. In addition to the aforementioned assessments, like in Key Stage 1, teachers are required to provide teacher assessments (teacher judgements) in the core subjects of Reading, Writing, Mathematics, and Science.

Apart from the National Curriculum Assessments in Years 2 and 6, students take centrally administered General Certificate of Secondary Education (GCSE) examinations which are usually taken in Grade 11, or A-level examinations, written in upper secondary, which are main admission requirements for university entrance in the UK (Government of UK, 2018).

Finland

There are no compulsory standardized assessments in Finland, apart from a national Matriculation Examination to qualify for university entrance, which is administered at the end of students' senior year in high school (Salaky, 2018). Students are primarily assessed by multiple teacher-developed assessments that differ from school to school. Sample assessments, however, are centrally administered.

"At the national level sample-based student assessments similar to the (American) National Assessment of Educational Progress that have no stakes for students, teachers, or schools are the main means to inform policy-makers and the public on how Finland's school system is performing. Teachers and principals...have a strong sense of professional responsibility to teach

their children well but also to judge how well children have learned what they are supposed to learn according to curriculum designed by teachers" (Strauss, 2014).

Japan

In Japan, teachers at all levels continuously assess their students through the use of teacher-developed tests and other forms of assessment. In many instances, elementary and secondary teachers become very involved with their students' both in and out of school. Often, homeroom teachers spend many years with the same group of students and are involved with their lives outside of school. This makes the student assessment process more consistent, more accurate, and more accessible to parents.

The country administers national, full-census assessments, meaning that all students participate. The National Assessment of Academic Ability (NAAA) assesses students in Grades 6 and 9 in Mathematics, Japanese, and Science. All students take Identical assessments simultaneously, and once they have been administered, the assessments are released. The results of the NAAA are meant for public accountability and improvement purposes. Each year, NAAA results for each region are published, and municipal boards of education and schools use them to identify areas for teaching and learning improvement.

The first major gateway in Japanese education comes at the end of junior high school. Following three years of junior high school (age 15), students take entrance examinations for senior high school. In addition to the entrance exams, students' academic record, behaviour, attitude, and participation in the community are also considered. The senior high school entrance process is extremely competitive, because entry to a reputable senior high school is viewed as critically important to access elite universities and eventually secure a successful career.

University entrance for Japanese students is based on their National Center Test for University Admission (known as the "Centre Test") results and their performance on university entrance examinations. The Center Test assesses students in Japanese Language, Foreign Language, Mathematics, Science, and Social Studies (Center on International Education Benchmarking, 2018).

New Zealand

New Zealand provides an assessment program that is designed exclusively for formative purposes (assessment for learning). The online Assessment Tools for Teaching and Learning (e-asTTle) offer bilingual (English and Maori) assessments, which were developed to assess learning progress in Reading, Writing, and Mathematics primarily for students in Years 5 to 10 (Grades 5 to 10). "The purpose of every e-asTTle assessment should be to determine what the student now knows and what they might learn next" (New Zealand Ministry of Education, 2018a). Because the items are mapped to curriculum levels for Years 2 to 6, they can be used with students in a wide range of years, providing teachers with flexibility in the items' application. Writing material has been developed for students in Years 1 to 10. Thousands of test items (questions) are housed in an item bank, which teachers can use to create assessments whenever and for whomever they choose. Supporting resources, such as instructions, scoring rubrics, and exemplars are available to teachers.

"e-asTTle provides teachers and school leaders with information that can be used to inform learning programmes and to apply teaching practice that maximizes individual student learning. Schools using asTTle have found it to be a great tool for planning purposes, for helping students to understand their progress, and for involving parents in discussions about how well their children are doing" (New Zealand Ministry of Education, 2018b).

In addition to the e-asTTle program, New Zealand monitors the achievement of elementary school students, for system accountability, through the National Monitoring Study of Student Achievement (NMSSA), a collaboration between the Educational Assessment Research Unit at the University of Otago and the New Zealand Council for Educational Research. The NMSSA is a sample-based assessment of the achievement of Year 4 and Year 8 students. Each year, 100 schools at Year 4 and 100 schools at Year 8 are randomly selected to participate. Schools that take part provide lists of all students in the given year; 27 students in each participating school are randomly selected to take the assessment. NMSSA operates on a five-year cycle to cover all learning areas. Following is the assessment schedule for the period 2012 to 2018:

- English Writing & Science: 2012
- Mathematics & Health and Physical Education: 2013
- English Reading & Social Studies: 2014
- English Listening, English Viewing & The Arts: 2015
- Learning Languages & Technology: 2016
- Health and Physical Education & Science: 2017
- Mathematics and Statistics & Social Studies: 2018 (Educational Assessment Research Unit, University of Otago, 2018)

A variety of assessment approaches is used, including one-on-one interviews, group activities, paper-and-pencil tests, and hands-on activities. Contextual information is also gathered from teachers and principals about various aspects of the schools' learning programs (Darr, 2017).

United States

In the United States, assessments administered by state and national education departments have been longstanding foundations of education systems. For instance, for many years, the National Assessment of Educational Progress (NAEP), administered by the National Center for Educational Statistics, has assessed random samples of Grades 4, 8, and 12 students most commonly in Mathematics, Reading, Science, and Writing. Periodic assessments in The Arts, Civics, Economics, Geography, Technology, and Engineering Literacy are also conducted. In addition to the assessments, NAEP surveys students, teachers, and school administrators to gather contextual information to accompany assessment results. At the national level, NAEP reports student performance data for the country overall and for certain demographic groups (e.g., race/ethnicity and gender). NAEP state- and district-level results are available for some subjects at Grades 4 and 8. The data are used by educators, policymakers, and researchers to monitor student progress and develop strategies to improve education (National Center for Education Statistics, 2018).

Standardized assessment varies across the different U.S. states. However, the *Every Student Succeeds Act* (2015) requires that States administer to all students, including those with disabilities and English language learners, assessments in Reading/Language Arts and Mathematics in Grades 3 to 8 and once in high school. Additionally, Science assessments are to be administered to all students once in each grade span (elementary, middle years, high school), and English-language proficiency assessments are required for all English language learners in Grades K-12 (U.S. Department of Education, 2015).

In addition to these assessments, U.S. students can choose to take AP (Advance Placement) examinations for college credits, SATs (formerly known as the Scholastic Assessment Test), and ACT (American College Testing) tests for college entrance. Students' high school grade point averages (GPA) may also be considered for college entrance.

3.3.5 Findings Related to Prince Edward Island

PEI's Provincial Common Assessment Program is consistent with the assessment models adopted by most Canadian jurisdictions and notable countries internationally. Like PEI, the jurisdictions generally administer assessments to all students in core/important subject areas and at key stages of learning, although most countries also administer sample-based assessments to monitor student progress over time and obtain information to support system-wide educational/instructional improvement.

3.4 Interviews and Focus Groups

3.4.1 Achievement Results (Value and Use of Data)

The overwhelming message from virtually all interviews and focus groups was support for the Provincial Common Assessment Program, provided it serves the intended purposes, and the information derived from the assessments is actionable and used to support student learning. As one interviewee stated, "If we don't do large-scale assessment, we won't know who needs help and with what." Another put it this way,

"Prior to the Provincial Common Assessment Program, there was no way of knowing how students were doing in terms of achievement, and there was no information about how much or what parts of the curriculum were being covered. There were complaints or concerns that students were not prepared for post-secondary education or work.... (Because of the provincial assessment program) We now have information about what's working and not working; students are more prepared for college and work; standards have increased and student performance has improved; curriculum coverage has increased; and teacher performance has improved."

The majority of participants indicated that student-, school-, and provincial-level results identify areas of strength and weakness in student learning, and most educators use this information to assist students with their learning and develop school success plans and set goals. It was also suggested that having

comparative information for each school can be helpful, as it has the potential to start the conversation about what is happening in successful schools, which may lead to improvements in schools that are having more limited success. Some participants, however, expressed the opinion that the provincial results generally provide validation of what educators already know about individual student performance, and that teachers know students and their needs best; consequently, provincial assessments are not needed. Others believed that results are not well understood by parents and educators, and so the use of information for improvement purposes is diminished.

3.4.2 Assessment Model

Overall, interview and focus-group participants expressed support for the current assessment model, including assessing all students (a census), as opposed to involving random samples of students; gauging students' performance in the "core" subjects of literacy and numeracy; and administering spring assessments annually at key stages of learning at Grades 3, 6, 9, and at the end of each semester in Grade 11. There were, however, some alternate points of view (e.g., one focus group advocated for the administration of provincial assessments about every three years). Virtually all participants expressed the opinion that a literacy assessment is needed at the intermediate and/or high-school level, but an assessment at Grade 9 would provide more time for remediation when needed.

There was a general view that the Provincial Common Assessment Program should focus on the aforementioned assessments, rather that adding additional ones. As one participant said it, "Don't do too much! Do what we're doing well."

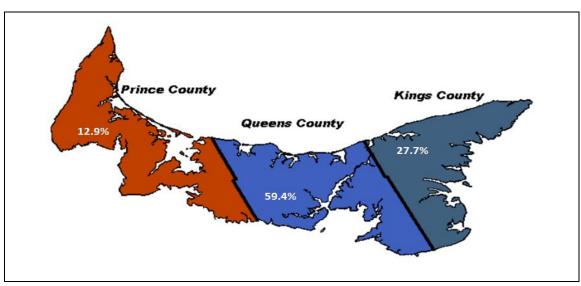
3.5 Online Survey

n=1426 (English = 1358 French = 68)

1. First of all, please indicate below the primary perspective from which you are filling in this survey. (Please choose **one** only)

Answer Choices	Total	%
	(English and French combined)	
Parent/Guardian	648	45.4
Elementary Teacher	311	21.8
Intermediate Teacher	97	6.8
High School Teacher	114	8.0
School/School Board	64	4.5
Administrator		
Government	50	3.5
General Public	50	3.5
Other (including Student,	92	6.5
Teachers' Federation, Home and		
School Federation and Post-		
Secondary Institution)		
Total	1272	100.0

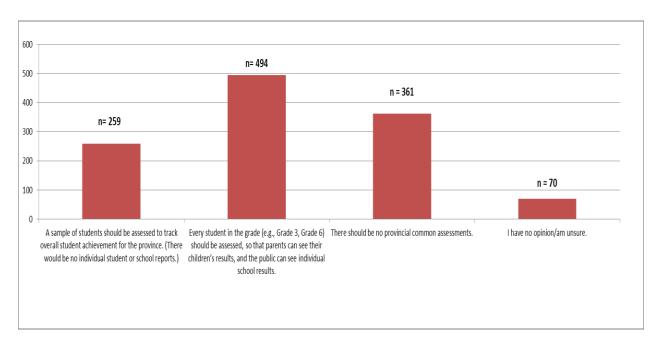
2. In which county do you live?



Notes:

• These proportions are within 3% of the actual population in each county based on Statistics Canada Census data from 2016.

3. Which of the following is closest to your view about **the students who should participate** in the Provincial Common Assessments?



- 22 % of respondents said that a sample of students should be assessed to track overall student achievement for the province, 42 % said that every student in the grade should be assessed, and 30 % said that there should be no Provincial Common Assessments.
- Over 50% of parents selected that every student in the grade should be assessed.
- Almost 50% of elementary teachers selected that there should be no Provincial Common Assessments.

4. Which of the following is closest to your view about **the timing** of the K-9 Provincial Common Assessments?

Answer Choices	Total	%
	(English and French combined)	
The assessments should be administered in the fall of each year (e.g., Grade 4, Grade 7) to provide information for improvement during the year.	174	14.5%
The assessments should be administered in May-June of each year (e.g., Grade 3, Grade 6) to demonstrate achievement at the end of key learning stages.	503	42.0%
The assessments should be administered in both the fall and spring of each year to provide information for improvement and to demonstrate improvement over the year.	290	24.2%
I have no opinion/am unsure.	230	19.2%
Total	1197	100%

- Almost one in five respondents has no opinion on the timing of the K-9 Provincial Common Assessments. Among those who have an opinion, a majority would prefer that assessments continue to be administered in May-June of each year.
- About one-third of parents would prefer that assessments continue to be administered in May-June of each year, and another third would prefer that the assessments be administered in both the fall and spring of each year.
- Among teachers at all levels and school/school board administrators who have an opinion, a majority would prefer that assessments continue to be administered in May-June of each year.

5. Which of the following is closest to your view about **the frequency** of the Provincial Common Assessments?

Answer Choices	Total (English and French combined)	%
The assessments should be administered every year in given grades, so that every student has the opportunity to demonstrate his/her achievement.	364	30.7%
The assessments should be administered on a cycle, so that (for example) each year one subject (i.e., reading, writing or math) is assessed; other subject(s) are assessed in following years.	589	49.7%
I have no opinion/am unsure.	231	19.5%
Total	1184	100%

- Overall, half of respondents said that the assessments should be administered on a cycle and one in five had no opinion.
- Over 40% of parents also said that the assessments should be administered on a cycle, and almost one-quarter had no opinion on the subject.
- A majority of elementary and high-school teachers, as well as school/school board administrators, also said that the assessments should be administered on a cycle.
- At the intermediate level, an almost equal proportion of teachers said that the assessments should be administered every year in given grades or that the assessments should be administered on a cycle.

6. Which of the following is closest to your view about **the grade levels** at which the Provincial Common Assessments should occur in the primary and elementary years? (Select **all** that apply)

Answer Choices	Total (Combined English and French)	%
The assessments should be administered in Grade 2.	54	3.2%
The assessments should be administered in Grade 3 (end of key learning stage).	429	25.7%
The assessments should be administered in Grade 4.	86	5.2%
The assessments should be administered in Grade 5.	54	3.2%
The assessments should be administered in Grade 6 (end of key learning stage).	561	33.7%
The assessments should be administered in all Grades 2 to 6.	207	12.4%
I have no opinion/am unsure.	276	16.6%
Number of Respondents: 1184	Number of Responses : 1667	100.0%

- Recognizing that they could select more than one grade level for this question, more respondents indicated that the Provincial Common Assessments should occur at Grades 3 and 6 than at the other grade levels.
- Among parents, teachers at any grade, and school/school board administrators,
 Grade 6 was selected most often as the grade at which the Provincial Common
 Assessments should take place at the elementary level, followed by Grade 3.

7. Which of the following is closest to your view about **the grade levels** at which the Provincial Common Assessment in **mathematics** should occur in the intermediate years?

Answer Choices	Total (Combined English and French)	%
The assessments should be administered in Grade 7.	100	8.4%
The assessments should be administered in Grade 8.	74	6.3%
The assessments should be administered in Grade 9.	396	33.4%
The assessments should be administered in all Grades 7 to 9.	320	27.0%
I have no opinion/am unsure.	294	24.8%
Total	1184	100.0%

Notes:

 Among all respondents who had an opinion, over 40% indicated that the Provincial Common Assessments should occur at Grade 9 in the intermediate years. A further 36% responded that these should take place in all grades 7 to 9. This view was most prevalent among parents/guardians; whereas more teachers at all levels and school/school board administrators indicated Grade 9 as their preferred option. 8. Which of the following is closest to your view about **the grade levels** at which the Provincial Common Assessments in **mathematics** should occur in the high school years?

Answer Choices	Total (Combined English and French)	%
The assessments should be administered in Grade 10.	138	11.7%
The assessments should be administered in Grade 11.	211	17.8%
The assessments should be administered in Grade 12.	166	14.0%
The assessments should be administered in all Grades 10 to 12.	325	27.4%
I have no opinion/am unsure.	344	29.1%
Total	1184	100.0%

- Among all respondents who expressed an opinion on the matter, almost 40% said that the Provincial Common Assessments in mathematics should occur in all grades 10 to 12 in the high school years. This view was more prevalent among parents/guardians with half of them who expressed this opinion on the matter.
- High school teachers were divided almost equally between those preferring that the mathematics assessment take place at Grade 11 in the high school years and those who expressed no opinion.

9. In your opinion, should there be a **literacy** assessment in the intermediate and/or high school years?

Answer Choices	Total	%
	(Combined English and French)	
Yes	877	74.1%
No	230	19.4%
I have no opinion/am unsure.	77	6.5%
Total	1184	100.0%

10. If you answered "Yes" to question #9, which of the following is closest to your view about **the grade levels** at which the Provincial Common Assessments in literacy should occur in the intermediate and/or high school years?

Answer Choices	Total	%
	(Combined English and French)	
The assessment should be administered in		
Grade 7.	133	16.5%
The assessment should be administered in		
Grade 8.	68	8.4%
The assessment should be administered in		
Grade 9.	232	28.8%
The assessment should be administered in		
Grade 10.	123	15.3%
The assessment should be administered in		
Grade 11.	95	11.8%
The assessment should be administered in		
Grade 12.	119	14.8%
The assessment should be administered in all		
Grades 7 to 12.	276	34.2%
Number of Respondents: 806	Number of Responses : 1046	100%

- Based on Question 9, three-quarters of respondents indicated that there should be an assessment of literacy in the high school years.
- Among these respondents, more indicated that the assessment should be administered in all Grades 7 to 12 followed by Grade 9.

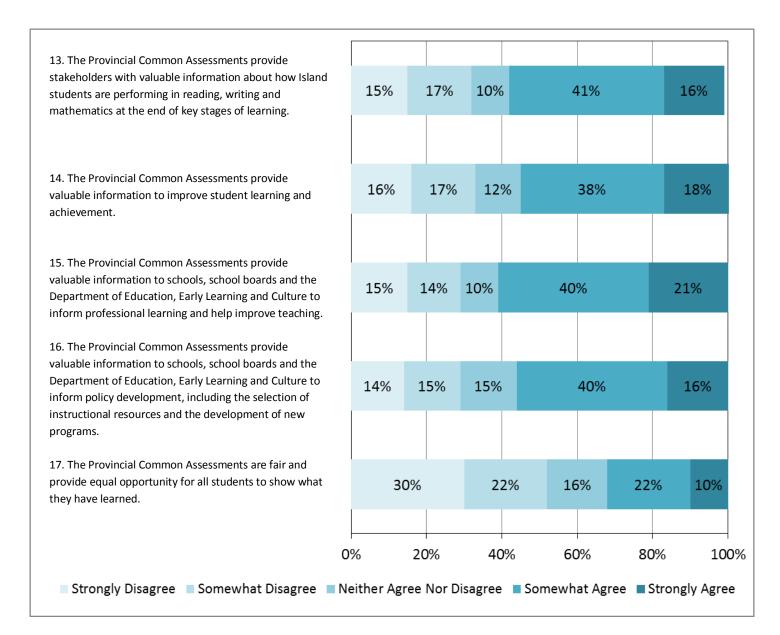
11. Which of the following is closest to your view about **the subject areas assessed** in the Provincial Common Assessment Program?

Answer Choices	Total	%
	(Combined English and French)	
The current Provincial Common Assessments in reading, writing and math are sufficient.	779	67.5%
Other subject areas should be assessed as part of the Program.	154	13.3%
I have no opinion/am unsure.	221	19.2%
Total	1154	100.0%

12. If you selected "Other subject areas should be assessed as part of the Program," which subjects would you choose? (Select **all** that apply)

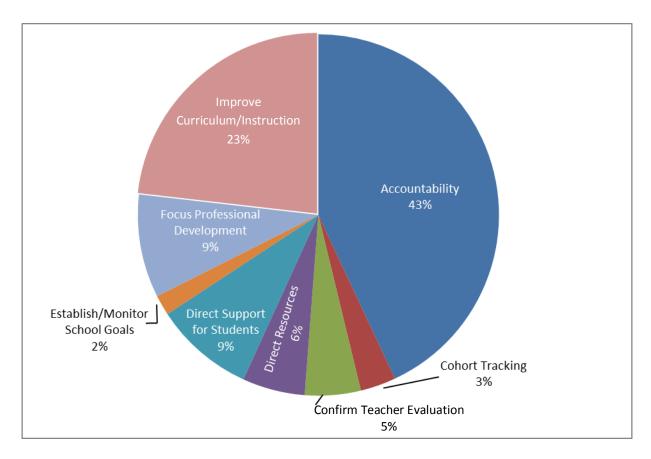
Answer Choices	Total	%
	(Combined English and French)	
Science	107	19.6%
Social Sciences and Humanities	75	13.8%
Social Studies	59	10.8%
Computer Literacy	70	12.8%
Financial Literacy	79	14.5%
Problem Solving	101	18.5%
Arts (Dramatic, Visual, Music)	33	6.1%
Other (please specify)	21	3.9%
Number of Respondents: 153	Number of Responses : 545	100.0%

- Based on Question 11, over two-thirds of respondents said that the current Provincial Common Assessments in reading, writing, and mathematics are sufficient; whereas 13% said that other subject areas should be assessed as part of the Program.
- Among those respondents who said that other subject areas should be assessed, assessments in science and in problem solving were the most frequent choices.



- Between 56% and 61% of all respondents agreed or strongly agreed with these four statements:
- The Provincial Common Assessments provide stakeholders with valuable information about how Island students are performing in reading, writing and mathematics at the end of key stages of learning.
- The Provincial Common Assessments provide valuable information to improve student learning and achievement.

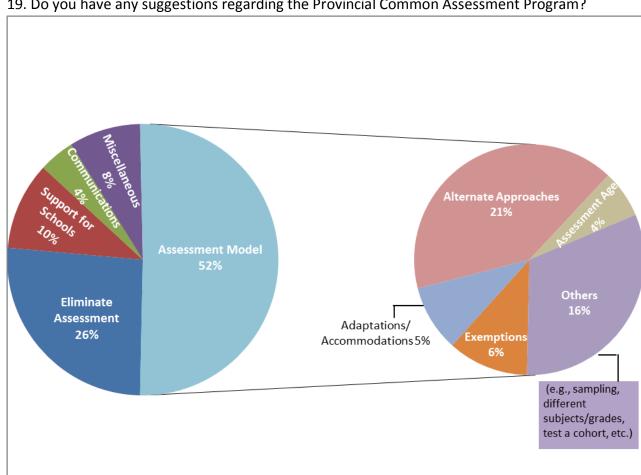
- The Provincial Common Assessments provide valuable information to schools, school boards and the Department of Education, Early Learning and Culture to inform professional learning and help improve teaching.
- The Provincial Common Assessments provide valuable information to schools, school boards and the Department of Education, Early Learning and Culture to inform policy development, including the selection of instructional resources and the development of new programs.
- Only 32% of all respondents agreed or strongly agreed that the Provincial Common Assessments are fair and provide equal opportunity for all students to show what they have learned. This proportion was similar across all respondents' categories.



- Of the 906 responses, 193 were coded in a distinct category, because the response indicated that
 nothing was valuable or the response provided a negative comment unrelated to the question
 (e.g., "Eliminate the test", "I don't agree with these tests", "Current data is invalid because of high
 exemption rates".
- A further 93 responses were classified as "Others" being too general to fit in the classification scheme such as in these examples: "Inspiring and interesting", "Timing", or "Students see what they are".
- The remaining 660 responses were coded based on eight emerging themes.
- The theme of "Accountability" was by far the most prevalent theme with 43% of responses. Under this theme, these types of responses could be found: "It provides a quantifiable assessment of the education system provided all students participate.", "help parents and teachers know how students are doing, and hold educators accountable to teach the curriculum and reach expected standards", or "The assessment program provides reliable quantitative data upon which all students can be assessed".

- The second emerging theme was "Improve Curriculum or Instruction" with 23% of responses. Responses such as these were coded under this second theme: "It helps educators guide their teaching and focus on areas that need improvement.", "They provide insight into where adjustments have to be made broadly (in curricula, for example)", or "As a teacher, the assessment results help me pinpoint areas that need more review or instructional time (for future classes as testing is done at end of course)".
- The other six themes were far less mentioned with less than 10% each. Theme Three related to providing an opportunity to "Focus on Professional Development" with 9% of responses. Responses such as these were coded under this theme: "The resources/opportunities for professional development for teachers due to these assessments. The Math Project was fantastic, and the Learn Website provides great resources for teachers.", "Where it becomes valuable is when a school invites in someone from the department to dig deeper into the results with samples from the assessment.", or "Properly used, this information can guide professional development, which will guide teaching, which, hopefully, will improve student performance."
- Theme Four pertained to "Directing Support for Students," also with 9% of responses. Some examples of responses coded under this theme follow: "It helps gov't allocate funds and resources to educators/schools in areas that require extra support. It is unfortunate that all schools do not receive the same support and in a timely manner. Waiting until near the end or end of year to resource a grade in writing or reading for a new program is not, in my opinion, helpful to either the student or teacher. Beginning of year support so that students and teachers both benefit from the knowledge that coaches, new resources, and training provide, is key to moving forward to improve student learning.", "It's not enough to identify weaknesses. Island students require early and strong intervention.", or "the common assessments provided a province-wide snapshot of these issues and have informed the department on subsequent needs and supports for the system (school-embedded coaches, teaching resources, focused PD, etc.)."
- Under Theme Five, the related topic of "Direct Resources" included 6% of responses such as these: "The results should be used for budgeting and planning purposes for key areas of weakness.", "It is helpful that school boards learn which schools need more resources. Often the schools that perform poorly have families that may not have read to their children at a young age. Students arrive at school at different levels. The provincial assessment should be used to support those schools.", or "Provides data/information to schools/boards/department as to where additional emphasis/resources are needed to support learners."
- Theme Six covered 5% of responses regarding "Confirm a Teacher Evaluation" with responses such
 as "Provincial assessments remove any potential grading bias that could occur.", "It provides data
 and aids in the triangulation of data.", or "Most teachers know which students are meeting
 expectations and the Provincial Common Assessments results often confirm their professional
 judgement."

- Theme Seven related to the tracking of results over time or "Cohort Tracking" with 3% of responses such as these: "Comparison of the same students at grade 3 and 6.", "They provide a benchmark in terms of how students are achieving and this can be measured over time when those same students are in grade 6, 9 and so on.", or "As a teacher, I like seeing the provincial assessments for students over multiple years. For example, I can see how "Johnny" scored in grade 3/6/9 so I am able to design a program for him."
- Finally, the last theme pertained to "Establish or Monitor School Goals" with 2% of responses as in these examples: "Being in a K-6 school, the data helps determine our school goals. In saying this, it is important to have standard assessments. If we don't then there is too much "Grey" area in which to really determine where students are.", "Data to support schools in making changes to how learning opportunities are provided.", or "I think it is a great tool for the teachers of each school to see where their students are failing or succeeding, which would guide their teaching practices and areas of focus for the entire school."



19. Do you have any suggestions regarding the Provincial Common Assessment Program?

- A total of 729 individuals provided a response to this question (English and French responses were combined for coding purposes). A classification scheme emerged from an analysis of all responses. Whenever respondents provided an answer that included more than one category of response, multiple categories were applied to the responses. Responses of "No Comment", "No", "Not Sure", "N/A" were removed from the analysis.
- Five categories emerged from coding the responses: "Assessment Model", "Eliminate Assessment", "Support for Schools", "Miscellaneous", and "Communications." "Assessment Model" was the most prevalent category accounting for just over one-half (52%) of responses and comprised themes related to "Alternative Approaches" (21%), "Exemptions" (6%), "Adaptations/Accommodations" (5%), "Assessment Age" (4%), and "Others" (16%).
- The following types of comments pertaining to "Assessment Model" were made under the theme of "Alternative Approaches": "Assess more subjects and more kids, more often",

"Create a rotation for these assessments: math one year, writing the next, reading the following year", and "I think it should be used as frequently and extensively as feasible to ensure the desired outcomes are being achieved." The following types of responses were coded under the theme of "Exemptions": "Clarify which students who participate in Resource programs and do not write. It is valuable information if schools share the number of students who do not write because of students who have different needs", "There should not be exemptions...what is the point if we exempt kids that struggle. If they struggle and do poorly, it reflects on the mark. But it is a true representative number as it is what is really happening", and "There should be more exceptions for students especially students who are way below grade level but are made to write anyway." Under the theme of "Adaptations/Accommodations" the following types of comments were made: "Adaptations HAVE to be looked at. We CANNOT expect students who use adaptations all year long with success to not have them for the assessment and still be successful....", "I believe for all students to demonstrate their learning of outcomes, we need to allow adaptations for these assessments! They DO NOT allow all children to show their learning", and "Allow for more adaptations and use of technology for students that require these." These kinds of comments were made regarding "Assessment Age": "I don't feel that grade 3 is an appropriate grade for assessments as students are not developmentally ready for such a task", "It should be taken out of grade three and put into grade 4 as many students in primary are not developmentally ready to write an assessment....", and "Just test every grade so no student gets left behind thinking they know something one year but struggle another year." A wide range of comments were made under the theme of "Others." Following are a few examples: "Students need preparation to do these tests", "Ensure the assessments are set up so that teachers don't feel pressure to (teach to the test)", and "Not to spend as much class time specifically on preparing for the tests."

- Just over one-quarter of respondents (26%) commented that the Provincial Common
 Assessments should be eliminated. The following responses were typical: "Cancel them",
 "Stop wasting precious money and resources on them. Stop encouraging kids to gauge their
 self-worth and success academically on test scores", and "Get rid of them. Not everyone
 learns at the same rate or in the same way."
- Suggestions under the category of "Support for Schools" were made by 10% of respondents. The types of comments made are as follows: "Do away with the (assessment) program and spend the money on supporting teachers in the classroom", "Provide more teachers and more supports within the school system. School Administrative Assistants working full time days would provide valuable support to school staff and administration to have more teaching time to students", and "There are not enough resources to support children who do poorly in grade 3 and also do poorly in grade 6 as there is not enough time and interventions to help students improve."

- Eight percent of respondents provided "Miscellaneous" suggestions/comments. Following are some examples of the types of feedback provided: "Use the information that is acquired as only one tool to determine overall health of the system", "If you test literacy/numeracy and areas are lacking then deal with it one on one and do not push students through the system on a no fail...track. Kids know when they are behind, feel bad, act up, never catch up....", and "I feel progress monitoring was moving education in PEI in the right direction and this initiative seems to have lost some of its drive...PM also gives teachers and parents a common language to talk about the child's learning...PM seemed to me to be a positive response to previous assessment data. I'm not sure why it is not in all schools or being talked about/promoted/supported as it once was."
- Four percent of respondents provided suggestions/comments related to "Communications."
 Following are some examples: "Do not release the individual school results to the public,
 which results in unfair comparison between schools", "The benefits of this program should be
 better communicated to the public (including educators). Negative opinions are often
 adopted in the absence of facts", and "Results given to parents are insufficient. Meeting
 expectations tells me nothing really except that my child isn't experiencing difficulty."

3.6 Assessment-Related Issues

Recommendation 13: Subjects and Grades Assessed

Overall, the interview and focus-group participants expressed support for the current model in which students are assessed in Literacy and Mathematics at key stages of learning at Grades 3, 6, 9, and 11; when asked "Which of the following is closest to your view about the grade levels at which the Provincial Common Assessments should occur in the primary and elementary years," more respondents to the online survey indicated the assessments in primary and elementary should occur at Grade 3 and 6 than any other grade levels. Among respondents who had an opinion, more than 40% indicated support for an Intermediate Mathematics assessment at Grade 9 (although a further 36% indicated math assessments should be administered in all grades from 7 to 9). Among survey respondents who had an opinion on the topic, almost 40% said that in high school, the Provincial Common Assessment in Mathematics should be administered in all grades 10 to 12; approximately one-quarter supported math assessments in Grade 11 (about 16-20% indicated support for Grade 10 and Grade 12, respectively). Nearly three-quarters of survey respondents indicated support for a Literacy assessment in intermediate and/or high school years as is currently not the case in the province. Approximately 30% selected Grade 9, over one-third selected all grades between 7 and 12, and about 17% suggested Grade 7. More than two-thirds of respondents to the online survey indicated they believe the current assessments are sufficient (although additional subjects such as Science and Problem Solving were mentioned by approximately 9% of respondents). It should be noted that for those respondents who provided a comment on the online survey, just over one-quarter expressed the opinion that the Provincial Common Assessment Program should be eliminated. This position was supported more strongly among teachers than among school and school board administrators and parents.

One of the many documents, provided to RMJ Assessment by the Department, summarizes school administrators' responses to questions regarding the Provincial Common Assessment Program during a Principal Advisory Council meeting (November 28, 2017). Among the responses was an indication of support for the return to a Grade 9 Language Arts assessment as opposed to a Literacy assessment at Grade 10. Regardless of whether an assessment is administered in Grade 9 or 10, a distinction should be made between a Language Arts assessment that focuses primarily on reading and writing skills, based on the provincial curriculum at the target grade level, and a Literacy assessment that has the potential for the assessment of a broader range of literacy skills beyond just reading and writing.

With reference to the jurisdictional scans, PEI's Provincial Common Assessment Program is consistent with assessment models adopted by most Canadian jurisdictions and notable countries internationally. Generally, jurisdictions administer student assessments in what they consider to be core subject areas and at key stages of learning. A relatively small percentage of online survey respondents indicated Grade 3 is too early for students to be provincially assessed. It should be noted that although in some jurisdictions assessments begin at Grade 4, assessments at Grade 3 (and even earlier) are common.

Returning to the origins of the current provincial assessment program, the Prince Edward Island Task Force on Student Achievement (2005) recommended that student assessments be conducted "...at

grades 3, 6, and 9, and for designated subjects at the senior high school level" (p. 22). It was considered important that assessment in the early years would be instrumental in identifying students requiring support.⁸

As is the case in Prince Edward Island, Canadian jurisdictions assess French Immersion students using tests that are adapted to the curriculum outcomes that are specific to this population. The Grade 3 French Immersion Reading assessment is tailored to the learning outcomes of the French Immersion program, while these students are assessed in Writing at the Grade 5 level to allow them more time to gain additional exposure to their second language in Writing before being assessed on the curricular outcomes for the grade.

Many other Canadian jurisdictions have some form of common provincial assessments/examinations, including exit/diploma exams, at the high-school level. Apart from the strong support for a Literacy assessment at the intermediate and/or high-school level, expressed via the interviews, focus groups, and online survey, there was very little support for additional assessments beyond the current Grades 3, 6, 9, and 11 model. Decisions about assessments/examinations at the high-school level are provincial policy matters, often determined by graduation requirements; there is no standard of best practice that one can refer to as a reference in this regard. Consequently, the Review Team provides no recommendations beyond those identified below.

In consideration of this research evidence, it is recommended that the Province

- continue to administer provincial Literacy assessments to students in Grades 3 and 6.
- continue to administer the Reading assessment at the Grade 3 level and the Reading and Writing assessments at the Grade 5 level for French Immersion students.
- continue to administer provincial Mathematics assessments to students in Grades 3, 6, 9, and 11.
- reintroduce a Language Arts assessment in Grade 9 or a Literacy assessment in Grade 10.

Suggestions for Consideration:

- Consider exploring alternate approaches to assessing students in Grade 3 (e.g., assessments as instructional units, portfolio assessments, etc.), for the following reasons:
- It addresses the concerns about the readiness of Grade 3 students to take a provincial assessment in a formal testing situation.
- It provides information that supports student learning in accordance with the assessment program's goals.
- Consider offering the Literacy assessment at Grade 10, rather than a Language Arts Assessment at Grade 9, for the following reasons:
- It spreads the responsibility for common assessments among several grades (Grades 9, 10, and 11).
- It addresses the fact that there is no assessment of Literacy in the senior years.

⁸ The underlying rationale/purposes of the Provincial Common Assessment Program remain unchanged since its implementation; therefore, the conclusions of the Task Force continue to be valid.

- It provides an opportunity for interventions in Literacy before students graduate.
- It provides the potential for an assessment of a broader range of cross-curricular literacy skills beyond just reading and writing and not necessarily tied to the curriculum outcomes at a specific grade level.

Recommendation 14: Census versus Sample Assessments

Overall, the interview and focus-group participants expressed support for the current assessment model, including assessing all students (a census), as opposed to involving a random sample of schools and students. When asked on the online survey "Which of the following is closest to your view about the students who should participate in the Provincial Common Assessments?" approximately 42% indicated every student should participate and about 22% advocated for a sample assessment. (Approximately 30% indicated there should be no assessments.)

Without exception, the jurisdictional scans of Canadian and international jurisdictions indicate that whether or not all students (a census assessment) or a random sample of students participate depends on the assessment's purpose(s). According to *Standards for Educational and Psychological Testing* (2014), "The process of developing educational and psychological tests should begin with a statement of the purpose(s) of the test, the intended users and uses...." (p.76) Again, going back to purposes, the original goal of assessment (according to the Task Force on Student Achievement [2005]) was

"...to improve teaching and learning. As a tool, common assessments can be used to inform students, parents, guardians, and teachers about student progress. As such, it should help to guide professional development and appropriate intervention for student learning at all levels, and it should be applied consistently to students across the province." (p. 22)

Clearly, the original purpose of the assessments speaks to having information to support individual students' learning; the Task Force also identified the need to inform parents about their children's learning progress. If random sampling were used, only school system reports would be available; it would not be possible to provide individual student or school-level reports for improvement purposes.

From a practical perspective, since the student population of PEI is relatively small (particularly in French), a sizeable number of schools and students would be required to obtain a representative sample of the province. In addition, with random sampling, the cost of the assessment program would not be significantly lower than with census assessment. The cost of test development would remain the same; there would be some savings realized from marking of a somewhat smaller number of students' work. Other practical considerations relate to school disruption and measurement error. If random sampling were to be applied, this would most likely result in more disruption to schools, as classrooms would have to be split, sometimes for several periods, between those students who are selected to take the assessment and those who are not. Furthermore, relying on a limited sample of students, as opposed to a census, can create statistical challenges for a small population like PEI, because resulting large standard errors of measurement can make the interpretation of results difficult.

In consideration of the research evidence, standards of best practice, and practical considerations, it is recommended that the Province

- continue to administer census assessments for the Grades 3, 6, and 9 (or 10) assessments.
- continue to administer the Grade 11 Mathematics assessments to all students enrolled in the given Grade 11 mathematics courses.

Recommendation 15: Timing and Frequency of Assessments

Overall, interview and focus-group participants expressed support for the current provincial assessment model, including the administration of assessments on an annual basis in the spring of the year for primary, junior, and intermediate assessments and at the end of each semester at the secondary level. When asked, on the online survey, "Which of the following is closest to your view about the timing of the K-9 Provincial Common Assessments?" among those who expressed an opinion, a majority preferred that assessments continue to be administered in May-June. This included a majority of teachers at all levels, as well as school and school board administrators. About one-third of parents also supported this position, although another third expressed a preference for assessments to be administered in both spring and fall. Overall, one-half of respondents to the online survey were of the opinion that assessments should be administered on a cycle, so that (for example) each year one subject (i.e., Literacy or Mathematics) is assessed; other subject(s) being assessed in subsequent years. Among respondents, a majority of elementary and high-school teachers, as well as school/school board administrators supported this opinion, while parents' opinions were more divided on this topic. At the intermediate level, almost equal proportions of teachers said the assessments should be administered every year in given grades or they should be administered on a cycle.

With regard to the jurisdictional scans, apart from national and international assessment studies that are administered on three- to five-year cycles, most Canadian jurisdictions and notable countries examined as part of this review administer student assessments on an annual basis. For the most part, assessments are conducted toward the end of the school year to gauge student performance at the end of key stages of learning; however, a few jurisdictions administer assessments in the fall (northern hemisphere). There are some instances where tests are administered in the fall based on the previous year's outcomes. The biggest advantage of this approach is that the actual classroom teacher of the student is administering the assessment, which may facilitate the interpretation of results; there would be no reason for him/her to go back to the previous year's teacher to get information on the student. However, there would be two major disadvantages in moving to a fall assessment period. The first is logistical and organizational, where teachers would need to be away from the classroom at a critical time in the school year to mark the assessment. The second pertains to the effects of summer vacation on assessment results and the challenges teachers would face in interpreting this "summer learning loss" (Alexander et al., 2016). It is our opinion that fall assessments could be beneficial if strong programs were put in place to minimize the "detrimental effects" (Cooper et al., 1996) of summer vacation on learning and achievement.

Regarding the frequency of assessments, the original purpose(s) of the provincial assessments (which are unchanged) should be our guide. The Prince Edward Island Task Force on Student Achievement (2005) states that "As a tool, common assessments can be used to inform students, parents, guardians, and teachers about student progress." This means that provincial assessments help identify students for whom interventions and/or resources are needed. If Provincial Common Assessments are offered on an annual basis, all students have the opportunity to demonstrate what they know and can do, and where required, appropriate supports can be delivered. Should the provincial assessments be offered on a cycle, there is greater likelihood that students requiring assistance may fall through the cracks.

In consideration of this research evidence, it is recommended that the Province

• continue to administer Provincial Common Assessments to students on an annual basis toward the end of the school year (and each semester for semestered courses).

Suggestion for Consideration:

 Should the Province decide to initiate theme-based assessments (e.g., Problem Solving; Information, Communication, and Technological Literacy; Scientific Literacy; Financial Literacy) to gain an understanding of system-wide student performance, consideration could be given to administering the assessments on a cycle.

Recommendation 16: Value and Use of Data

In response to the online survey, a majority of respondents (between 56% and 61%) agreed or strongly agreed that the Provincial Common Assessments provide valuable information to improve student learning and achievement and provide valuable information to schools, school boards, and the Department of Education, Early Learning and Culture to inform professional learning, help improve teaching, and inform policy development, including the selection of instructional resources and the development of new programs.

The participants of interviews and focus groups generally indicated that student-, school-, and provincial-level assessment results help to identify areas of strength and areas for improvement in student learning, and many educators use this information to support their learning and develop school success plans and set school goals. It was also suggested that having comparative information for each school can be helpful, as it has the potential to start the conversation about what is happening in successful schools, which could lead to improvements in schools that are realizing more limited success. Some participants (primarily teachers and principals), however, expressed the opinion that the results generally provide validation of what educators already know about individual student achievement, and that teachers know their students and their needs best. Others believed that student results are not well understood by parents and educators; hence the use of information for improvement purposes is diminished. Some participants, for instance, commented that they do not support the Provincial Common Assessments Program because the Individual Student Report (ISR) describes student level of achievement using categories such as "Meets Expectations", "Approaching Expectations", and

"Experiencing Difficulty", and these don't give parents and educators much to go on in terms of serving student needs. They would like to see ISRs that would provide more information on individual student's strengths and weaknesses.

In our opinion, this is NOT the purpose of the ISR. The ISR is intended to inform parents and the next-grade teacher at the beginning of a new school year that a child met or did not meet the provincial expectations for the grade towards the end of the previous school year. For children that did not meet the expectations, it is an opportune time for the new teacher, through their regular classroom assessments, to confirm the areas where the child may be experiencing difficulties and to discuss support with parents.

When staff at the Department of Education, Early Learning and Culture analyze results at the school and provincial levels, they provide more detailed data on the overall performance of students in the different areas (topics/strands/sub-domains) covered by the assessment. They also provide sample items, along with their scoring guides and examples of student responses to illustrate the provincial standards. This is intended to help teachers focus their individual and group remediation strategies in those areas where students in their school tend to have more difficulties based on the previous year's curriculum. The analysis of student performance at the provincial level also provides valuable information to assist with curriculum review (are there areas of the curriculum requiring more or less emphasis?), resource allocation (is there a need to provide additional specific support to schools/teachers to address performance issues?), or professional development of teachers (are there specific areas where teachers would benefit from additional professional development?)

The *Principles for Fair Student Assessment Practices for Education in Canada* (1993) state that for mandated assessment programs, all persons with a stake in the assessment (administrators, teachers, students, parents/guardians) should be informed of the purpose(s) of the assessment, how the results will be used, and who has access to them. Furthermore, any results and explanations of results should be consistent with the assessment's purposes and the intended use(s) of results, and must be readily understood by the intended audiences. If necessary, reports for different audiences should be employed.

In consideration of this research evidence and standards of best practice, it is recommended that the Province

 develop a plan to assist all stakeholders to understand the intended purpose(s) of the Provincial Common Assessments, the intent of the various reports, how the reports can and should be interpreted, and what follow-up steps can be taken to ensure improvement is actioned.

Suggestions for Consideration:

- Explore ways to enhance the interpretation and reporting of assessment results at all levels: individual student, school, and province.
- Explore ways to respond to the needs of small schools, including the francophone school system.

Recommendation 17: Adaptations and Exemptions

Many participants in the interviews and focus groups expressed concerns about, what they perceived to be, high student exemption rates on provincial assessments, and there was a view that reasons for exemptions varied from school to school. Consequently, there was a belief that results among schools could vary due to the schools' exemption practices. Furthermore, many participants were concerned that students who were regularly receiving adaptations (referred to as accommodations in some jurisdictions) in the classroom were not receiving them for taking the Provincial Common Assessments. As a result, they believed that many students are at a disadvantage and are set up for failure, because they are unable to demonstrate what they know and can do on the assessments. This concern appears to be reflected in the responses to the online survey's Question #17 in which only 32% of all respondents agreed or strongly agreed that the Provincial Common Assessments are fair and provide equal opportunity for all students to show what they have learned. Although in a small number of cases, respondents to the online survey expressed the opinion that there should be more exemptions (e.g., for students who are known to be below grade level and are made to take the assessments regardless), most respondents commenting on this issue believed that there should be no (or fewer) exemptions, so that the province would have a truer picture of student performance across the province. Following are some typical comments regarding exemptions and adaptations: "There should not be exemptions...what is the point if we exempt kids that struggle? If they struggle and do poorly, it reflects on the mark. But it is a true representative number as it is what is really happening." and "Adaptations Have to be looked at. We CANNOT expect students who use adaptations all year long with success to not have them for the assessment and still be successful...."

Large-scale national and international assessment studies have limits on the proportion of students who can be exempted, so that comparative interpretations can be valid and reliable. And typically these types of assessments do not offer much in the way of adaptations, again, so that the assessments are delivered in a standard way. Within Canada, many jurisdictions (e.g., Manitoba, New Brunswick, Ontario, Nova Scotia) provide a broad array of adaptations for their provincial assessments. While PEI provides adaptations, the range offered is more limited. Adaptations are supports/methods that enable students to participate as independently as possible on provincial assessments without jeopardizing the integrity of the assessment. They give students an equal opportunity to demonstrate what they know and can do on an assessment. Examples of adaptations are as follows:

- Reading instructions aloud
- Extra time
- Large print, coloured paper
- Braille
- Speech-to-text and text-to-speech software
- Scribing
- Signing/interpreting
- Computer, word processor

It should be mentioned that some adaptations can be acceptable for a given assessment but may not be acceptable for another (e.g., providing reading instructions aloud may be acceptable on a mathematics assessment, but it could jeopardize the integrity of the assessment if it were provided in reading). The *Standards for Educational and Psychological Testing* (2014) states that "Test developers and/or test users are responsible for developing and providing test accommodations, when appropriate and feasible, to remove construct-irrelevant barriers that otherwise would interfere with examinees' ability to demonstrate their standing on the target constructs" (p. 67). Similarly, the *Principles for Fair Student Assessment Practices for Education in Canada* (1993) states that

"Developers of assessment methods should strive to make them as fair as possible for use with students who have different backgrounds or special needs. Developers should provide the information users need to select methods appropriate to their assessment needs" (p. 13) and

"When feasible, make available appropriately modified forms of assessment methods for students with special needs or whose proficiency in the original language of administration is inadequate to respond in the anticipated manner" (p.16)

We believe the province is doing a good job explaining and documenting acceptable adaptations and criteria for exemptions in the administration guides. However, although schools are asked to provide documentation for all students being exempted or receiving adaptations, we found no evidence in the documentation that was provided to us that data on these were recorded and made public. It may help tighten the exemption rate if the Department were to publish the proportion of students being exempted or receiving adaptations by school along with their test results.

Regarding exemptions, our analysis of the latest data from PCAP 2016 (5% exemption at Grade 8) and PISA 2015 (14% exemption for 15-year-olds) confirms comments received during our focus groups and the online survey that PEI educators may be applying exemption criteria more liberally than in other jurisdictions. We recognize that the school personnel, including the classroom teacher in collaboration with parents/guardians, are best positioned to determine which student should receive adaptations and which student should be exempted. However, it should also be recognized that students on a modified program, an individual education plan, or in an English-as-an-additional-language program should NOT automatically be exempted. Ultimately, the criteria for exemption is whether the student was following the provincial curriculum in a given subject for the grade, as this is what is measured by the common assessments.

We recognize that PEI may have budgetary constraints if they wanted to expand adaptations, as some of these are costly to implement and would only apply to a few students in such a small jurisdiction.

Another related issue surfaced via the interviews, focus groups, and online survey, is the requirement to remove teaching aides (e.g., wall posters) from the classroom walls before administration of the common assessments. Several teachers argued that these should remain on the walls, because this is what is available to students during their classwork, while others argue that because this is a standardized assessment standardized conditions need to be applied. The bottom line is that any/all

teaching aids that may help students answer questions should be removed or hidden during provincial assessments.

In consideration of this research evidence and standards of best practice, it is recommended that the Province

- establish firm guidelines for student exemptions on Provincial Common Assessments and monitor their implementation to ensure they are followed appropriately.
- explore the feasibility of expanding available adaptations for students taking provincial assessments.
- consult with educators to establish clear guidelines regarding what teaching aids may remain or be removed/hidden during provincial assessments.

Suggestions for Consideration:

- Consideration could be given to instituting an online system for reporting adaptations and exemptions. (The current system is quite paper heavy.)
- The Department should consider publishing the proportion of students being exempted or
 receiving adaptations by school along with their test results. Also, the proportion of students
 receiving adaptations should be published at the provincial level by type of adaptations so that
 changes to curriculum, teaching practices, or the application of adaptation criteria can be
 considered for the future.
- Consideration could be given to developing one parallel form for each special format, where this is feasible (e.g., large print, Braille, coloured paper, text to speech), and reusing this form every year until significant changes are made to the assessment. (Developing alternate assessment formats is costly and services only a small number of students every year. The suggested approach may result in more inclusiveness and fewer exemptions.)
- Consideration should be given to moving to online assessment administration. Among its many advantages, online assessment allows for the expansion of the types of adaptations that can be offered on-demand and generally at a lower cost than on paper, and it also has the potential to permit the assessment of skills that cannot be measured via paper-and-pencil assessments.

Recommendation 18: Statistical Procedures

As we mentioned in Section 3.2 "Document Analysis: PEI Assessments" of the Report, each of the Provincial Common Assessments is directly linked to the curriculum for the given grade and program. The province is reporting student achievement using the student's raw score on the assessment transformed into percentages. Other jurisdictions as well as international assessments use scale scores rather than raw scores, which makes score interpretation less intuitive.

For the primary and elementary assessments, student performance is described by three categories: "Meeting Expectations," "Approaching Expectations," and "Experiencing Difficulty." The standard for

each achievement category is determined by a panel of PEI educators (who are familiar with the given curriculum and student capabilities) as well as non-educators who are trained in standard-setting procedures.

The province has determined at the onset not to have an "Exceeding expectations" category. Some jurisdictions do report on this category, and we have heard from some parents, through the Focus Groups and the Online Survey, that they would like to see high achievement be recognized by such a category. However, having another category of performance would require another cut-score which would increase the risk of misclassification. Based on our analysis of the school reports, a high achievement category would only apply to a very small number of students in the province, because the assessments are meant to measure grade level expectations. It should also be noted that we question the use of the category "Strong Performance – At the Grade Level" in the marking of Writing in Grades 3 and 6. The assessment of Writing is generally recognized as the most challenging to mark reliably, and using an additional category to describe student performance increases the chances of misclassifications, reduces the reliability of marking, and slows down the marking process.

Original training for standard setting was provided by the province's contracted Psychometrician; more recently, the Department's Achievement and Accountability unit staff has conducted standard-setting sessions. It must be stated, however, that setting standards is fraught with challenges, mainly due to the subjective nature of the activity. For instance, there are numerous standard-setting methods, which may derive different results, and the number and background of panelists can vary, which may have an effect on the outcome. The Modified-Angoff and Bookmark Methods are the most commonly used standard-setting approaches in North American state/provincial assessment programs; PEI has experience with both methods. The Department may wish to conduct additional research to study how the choice of the method as well as the panel composition may impact standard setting in the province.

It is critically important that students' performance be accurately and consistently classified. To ensure standards are kept constant and the results can be compared from year to year, new assessment forms are equated with the previous year's forms. A qualified Psychometrician conducts the equating procedures. The equating procedures (e.g., Item Response Theory (IRT) equating, linear equating, or equipercentile equating) are determined by the Psychometrician based on the specific requirements of each assessment. Our review suggests that PEI's standard-setting and equating procedures are psychometrically sound and in accordance with best practices.

In terms of fairness of the assessments, RMJ Assessment's review of assessment items and forms, as well as statistical reports, did not reveal any significant issues regarding potential effects on assessment reliability, validity, or misclassification of student performance. Consequently, we did not believe it necessary to conduct our own statistical analyses to test for reliability and fairness of the assessments.

The *Principles for Fair Student Assessment Practices for Education in Canada* (1993) recommends that test developers need to "explain how passing or cut-off scores were set and discuss the appropriateness of these scores in terms of rates of misclassification." (p. 19).

In consideration of this research evidence and standards of best practice, it is recommended that the Province

• maintain the current three categories of performance: "Meeting Expectations," "Approaching Expectations," and "Experiencing Difficulty."

Suggestions for Consideration:

- Consider examining the effects of different standard-setting approaches and review/revise current approaches as required.
- Conduct and document additional statistical analyses such as test internal consistency, parallel forms reliability, marking reliability, item piloting, and differential item functioning.

Recommendation 19: Participation in National and International Assessments

As mentioned previously, Grade 8 students from Prince Edward Island have participated in the Pan-Canadian Assessment Program (PCAP) since its inception, along with all other Canadian provinces. PEI 15-year-old students have also participated in the Programme for International Student Assessment (PISA) since 2000. Both assessments are administered on a three-year cycle and are sample-based. There are currently no provincial assessments at Grade 8 or Grade 10 (the modal grade for PISA students), which means there are no scheduling conflicts or increases in the testing burden for participating students. The assessment cycles for these projects are coordinated such that the Grade 8 cohort participating in PCAP in a given cycle is also participating in PISA two years later in the same major and minor domains enhancing the interpretation potential of results.

Participation in these assessment projects is important for the Province for a number of reasons. First, it allows validating provincial standards through triangulation with external data sources. The recent increase in mathematics achievement, noted at the provincial level, was confirmed by the recent results in PISA 2015 (Day, 2016) and PCAP 2016 (Day, 2018). Based on this type of external evidence, it can be reasonably argued that the increase in achievement is likely not due to a lowering of the provincial standards which is an important consideration.

Based on our meetings with Department staff and the focus groups, participation in these projects also represents an invaluable source of professional development for teachers and assessment experts in terms of test development, standard setting, and scoring. It also enables Department staff to validate their assessment practices based on their national and international experiences.

Another area where participating in these assessments may prove valuable is in validating other practices and data sources. For example, as explained in the section of this report pertaining to Adaptations and Exemptions, Island educators may need to reconsider their criteria for exempting students on provincial assessments. Based on the most recent PISA participation rates in PEI, the proportion of students being excluded (14%) is significantly above the international threshold of 5%. In PISA, countries exceeding this international threshold are required to carry out a non-bias analysis on their results (see Appendix A in O'Grady et al., 2016).

There is one area where an additional source of external data is available and would be beneficial for Prince Edward Island. The Progress in International Reading Literacy Study (PIRLS) was previously described under Section 3.3.3. Eight of the other provinces, along with 60 education systems, participated in the last cycle of PIRLS at the Grade 4 level in 2016, and the assessment will be repeated in 2021. It represents an excellent opportunity to validate reading standards at the primary level using a state-of-the-art assessment. PIRLS also includes background questionnaires from students, teachers, school principals, and parents. Gaining insights into the home context can be extremely valuable from a policy perspective, especially in the case of reading in the early years (see for instance CMEC, 2013). In the next cycle of PIRLS, education systems may also elect to participate in the optional e-PIRLS, an assessment of electronic reading, and compare student performance in electronic reading with paper-based reading.

In consideration of this research evidence, it is recommended that the Province

• continue provincial participation in PCAP and PISA.

Suggestion for Consideration:

Consider participating in the next cycle of PIRLS in 2021.

Recommendation 20: Information and Communication

Several interview and focus-group participants expressed the concern that many stakeholders are confused about the purpose(s) of the Provincial Common Assessments; do not have an understanding of how the assessments are developed, scored, analyzed, and reported on; and there is little information from the Department about what the results mean, including what practices appear to be working and not working across the province. In short, they felt communication about the assessments needs to be improved. Many believed that student results are not well understood by parents and educators. With regard to the online survey, four percent of respondents provided suggestions/comments related to the category of "Communications"; following are some example comments/suggestions: "There should be clear communication to all stakeholders about why they (provincial assessments) are happening and how they will be used"; "There should be clear direction to teachers about how they should be presented to students" (i.e., purposes of the assessments); and "The Department of Education should better communicate to parents/guardians how teachers use the information from the common assessments to improve their teaching practices...."

RMJ Assessment's review of Department documents and interviews with Department staff revealed that although most approaches related to assessment development appear to be appropriate and psychometrically sound, documentation/description of many assessment processes is lacking. Within the Assessment unit, binders of training and other materials for processes such as item (question) development and marking exist, but for the most part there is no information about how the materials are used. Documenting processes is important, because vital information will be available in the event of staffing changes, and through the documentation of processes, inconsistencies in approaches across

⁹ See https://www.iea.nl/pirls-next-cycle for further information on PIRLS 2021.

assessments can be identified. It should be noted, however, that appropriate documentation, provided by the Department's contracted Psychometrician, is provided for standard-setting, cut-score, and equating procedures.

An important principle, identified in *Standards for Educational and Psychological Testing* (2014), is that "Information relating to tests should be clearly documented so that those who use tests can make informed decisions regarding which test to use for a specific purpose, how to administer the chosen test, and how to interpret test scores" (p. 125). The document *Principles for Fair Student Assessment Practices for Education in Canada* (1993) makes several statements regarding the communication of assessment information, as follows:

"Developers should provide information to help users administer an assessment method correctly and interpret assessment results accurately" (p. 16).

"Provide score reports or procedures for generating score reports that describe assessment results clearly and accurately. Identify and explain possible misinterpretations of the scores yielded by the scoring system (grade-equivalents, percentile ranks, standard scores) used" (p. 16).

"Describe how passing and cut-off scores, where used, were set and provide evidence regarding rates of misclassification" (p. 17).

"Inform all persons with a stake in the assessment (administrators, teachers, students, parents/guardians) of the purpose(s) of the assessment, the uses to be made of the results, and who has access to the results" (p. 19).

"Ensure reports and explanations of results are consistent with the purpose(s) of the assessment, the intended uses of the results and the planned access to the results" (p. 19).

"Provide reports and explanations of results that can be readily understood by the intended audience(s). If necessary, employ multiple reports designed for different audiences" (p. 19).

In consideration of this research evidence and standards of best practice, it is recommended that the Province

- document all assessment-related processes (e.g., item development, assessment construction, marking, data analysis, and reporting).
- develop, provide in-servicing on, and publish (at least on the Department's website) a
 Framework document that includes information about
 - purpose(s) of the provincial assessments;

- differences between large-scale and classroom assessments and the complementary nature of assessment for learning, assessment as learning, and assessment of learning;
- alignment with provincial curriculum and current research on assessment in the given subjects;
- definition of the curriculum content that will/will not be assessed;
- o what accommodations and special provisions are/cannot be provided; and
- o how the assessments are developed, administered, marked, and reported on. 10
- develop a plan that provides for regular communication (and in a variety of ways, tailored to the audiences) with all stakeholders on assessment-related issues and topics.

Suggestions for Consideration:

- Explore ways to enhance the interpretation and reporting of assessment results at all levels: individual student, school, and province.
- Develop a Technical Report after each administration year. This report would provide the
 descriptive information of all aspects of the test development, weighting of items,
 administration, scoring, equating procedures, and reporting of the assessments.¹¹

Recommendation 21: Human Resources

Through the interviews, focus-groups, and online surveys, several themes emerged related to human resources. There was a general view that teachers require more and better professional development (PD) on a variety of topics. For instance, there was a widespread opinion that many teachers, particularly in elementary grades, don't have the confidence and competence in mathematics and consequently are uncomfortable teaching the subject. There was a call for more numeracy coaches to support math teachers, as well as PD regarding intervention/instructional strategies for them.

Many educators sung the praises of the Math Project, in which markers, under the supervision of Department consultants, noted the strengths and weaknesses in what they were seeing in student responses, and then these observations/findings were shared with teachers more broadly as in-service on instruction. This was viewed as an extremely helpful initiative, which many would like to see reinstated and even expanded to Literacy. Time and again we have heard that this initiative was instrumental in significantly improving student results in mathematics in PCAP 2016, PISA 2015, and on the Provincial Common Assessments. The need for PD support was not restricted to Mathematics. Many participants expressed the opinion that literacy coaches, in sufficient numbers to service the entire province, were also needed. Literacy and numeracy coaches, if available in sufficient numbers, would also assist schools across the province with using their provincial assessment results to develop school goals and school success plans. The development of teacher efficacy across grade levels to use

¹⁰ See Education Quality and Accountability Office (2007) and Government of Ontario (2010) for examples of such Framework documents.

¹¹ See Education Quality and Accountability Office (2017a) for an example of a Technical Report.

assessment results to improve instruction would be extremely valuable. It would be useful, therefore, to consider a professional learning model that expands instructional practices that have been or are recognized as highly effective in improving student achievement.

Another educator PD need that emerged from the interviews, focus groups, and online surveys was for information on the provincial assessments and how they fit within the education system. Many expressed the opinion that teachers lack assessment literacy and need to understand the assessments better (e.g., their purposes; how they are developed, scored, and analyzed; what the results mean; comparability of assessments over time), and they need to appreciate the linkages (referred to as the triangle) among the curriculum, classroom instruction and assessment (formative and summative), and provincial, large-scale assessments. The perception was that these important topics were part of educator PD in the early years of Provincial Common Assessment Program implementation (and to some extent, this also applied to parents' understanding of assessments), but they have been stressed to a lesser degree in more recent years.

Having an in-depth understanding of assessment is fundamental to help schools do their work. Unfortunately, at the present time, there are insufficient staff resources to offer this type of PD. All schools would benefit from working with knowledgeable Department staff with expertise, and a proactive systematic response to all schools is required. Coherence among curriculum, assessment, and instruction (the learning triangle) must be intentional and clearly defined as a responsibility of coaches. Coaches need to possess a thorough understanding of curriculum outcomes, the know-how to interpret and respond to school-level data, and expertise in a wide array of effective teaching strategies. Embedded PD, provided by coaches, can guide teaching and improve student performance. In addition, given the need to enhance assessment literacy in the field, RMJ Assessment believes it would be useful to have an Achievement and Accountability unit staff member, with deep understanding of large-scale assessment processes and knowledge of how to interpret results, liaise with the Leadership and Learning unit to work hand-in-hand with coaches to provide ongoing training and support.

During our review of the Provincial Common Assessment Program, we also identified the need, in the Achievement and Accountability unit, for human resource support in the areas of psychometrics, data analysis, research, policy, and French Immersion. Currently, the unit has a Data Analyst but relies on the services of a contracted Psychometrician, on an hourly basis, for conducting assessment equating and cut-score setting. Having greater access to psychometric expertise would enhance all aspects of assessment. Furthermore, the English- and French-language literacy and numeracy leaders conduct research on their own initiative but only when time permits. Consequently, there is no planned research agenda for the unit, which would enhance the Achievement and Accountability Team's professional development in the assessment field. Similarly, there is no dedicated policy support for Achievement and Accountability. Even in terms of assessment development, considering the number of assessments that need to be developed and the current staffing levels in the unit, there is not enough staff to perform all tasks. There is a general consensus (and we have been able to confirm this) that staff in the Achievement and Accountability unit is knowledgeable, professional, and very dedicated. However, we believe that this shortage affects the quality of the assessments to some extent. An example related to

the staffing shortage is in the area of French Immersion. The Provincial Common Assessment Program is meant to assess all students at key stages of learning, including primary (Grade 3) and elementary (Grade 5) students in English Language Arts – French Immersion (FI). According to the PEI Home and School Federation (2016), approximately one-quarter of the province's students are enrolled in the French Immersion Program; however, they have been underserved on the provincial assessments in recent years. For instance, for the past two years (2017 and 2018) the province has administered the same test forms (reduced from Reading and Mathematics to only Reading for Grade 3 and reduced from Reading and Writing at Grade 5 to only Writing). There has been no assessment development work in French Immersion for the past two years (the absence of test development jeopardizes the integrity of the assessment). The main reason for not fully implementing FI assessments during the past two years appears to be a lack of FI Assessment staff.

When considering additional staff positions within the Achievement and Accountability unit, questions arise concerning whether personnel should be acquired on a permanent or secondment basis. There are pros and cons related to each approach. Developing solid assessment expertise takes time. If personnel are acquired on a secondment basis and return to the school system after a few years in the Department, that expertise is lost, and the Department must constantly provide training to new recruits. On the other hand, secondees can bring an important perspective about what is happening in the classroom. Keeping the provincial assessment program grounded in the needs of teachers and learners is critically important. Acquiring permanent staff offers the Department an opportunity to establish solid large-scale assessment expertise that is not lost and may continually grow. There is no single answer to the question of whether to second or permanently hire staff. A hybrid approach may be the better course of action, as it can provide the benefits of both approaches. Should secondees be acquired, it is important to recruit and release them on a staggered basis, so that they do not all leave at the same time.

In consideration of this research evidence and standards of best practice, it is recommended that the Province

- review its priorities regarding staffing needs of the Achievement and Accountability unit of the Department.
- hire French Immersion staff to develop and manage the primary and elementary assessments.

Suggestions for Consideration:

- Consider the possibility of providing sufficient Literacy and Numeracy coaches to serve the province adequately and in a sustainable manner.
- Consider implementing practices similar to those within the Math Project to support the development of teachers' skills in assessment and instruction, which will be effective in improving student achievement.
- Consider providing regular, ongoing educator PD to all schools (as an expectation), rather than on a request/invitation basis.

- Consider allocating a position (with expertise in large-scale assessment and interpreting of achievement results) to the Achievement and Accountability unit to collaborate with the Leadership and Learning unit.
- Consider employing a dedicated Psychometrician or finding alternative ways to access greater psychometric support (e.g., sharing psychometric services or sharing item development activities with other provinces).
- Consider hiring staff to cover research- and policy-related responsibilities.
- Consider a hybrid approach to acquiring staff for the Achievement and Accountability unit by allocating approximately one-half of personnel to permanent positions and about one-half to secondments.
- Consider providing staff of the Achievement and Accountability unit additional training/professional development in assessment development and related topics.

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5.0 Appendices

5.1 Interview and Focus-Group Protocols

- 5.1.1 Stakeholder Interviews Protocol
 - Does the Provincial Common Assessment Program provide stakeholders with valuable information about how Island students are performing in literacy and math?
 - Does the Provincial Assessment Program provide valuable information to improve student learning and achievement?
 - Does your organization find value in the Provincial Assessment Program? (please explain)
 - Does the Assessment Program provide valuable information to schools, school boards, and the Department to inform professional learning and improve teaching/instruction?
 - Does the Assessment Program provide valuable information to schools, school boards, and the
 Department to inform policy development, including the selection of instructional resources and
 development of new programs?
 - Are the Assessments fair and provide equal opportunity for all students to show what they have learned?
 - What, in your opinion, is most valuable about the Provincial Assessment Program?
 - Do you have any suggestions regarding the Provincial Assessment Program?
- 5.1.2 Focus-Group Discussion (Parents/Guardians)
 - Has/have your child(ren) written provincial common assessments in literacy and math? (If so, which ones?)
 - Does the Provincial Common Assessment Program provide parents with valuable information about how Island students are performing in literacy and math?
 - Are the Assessments fair and provide equal opportunity for all students to show what they have learned?
 - What, in your opinion, is most valuable about the Provincial Assessment Program?
 - Do you have any suggestions regarding the Provincial Assessment Program?

5.1.3 Focus-Group Discussion (Students)

- What provincial assessments have you written?
- Did the provincial assessments you wrote provide you with valuable information about your achievement in literacy and/or math?
- Did the reports you received after the literacy and/or math assessments provide you with valuable information to improve your learning and achievement?
- Were the assessments in literacy and/or math fair and provided you with an opportunity to show what you have learned?
- What, in your opinion, is most valuable about the Provincial Assessment Program?
- Do you have any suggestions regarding the Provincial Assessment Program?

5.1.4 Focus-Group Discussion (Principals)

- Does the Provincial Common Assessment Program provide school principals with valuable information about how Island students are performing in literacy and math?
- Does the Provincial Assessment Program provide valuable information to improve student learning and achievement?
- Does the Assessment Program provide valuable information to schools, school boards, and the Department to inform professional learning and improve teaching/instruction?
- Does the Assessment Program provide valuable information to schools, school boards, and the Department to inform policy development, including the selection of instructional resources and development of new programs?
- Are the Assessments fair and provide equal opportunity for all students to show what they have learned?
- What, in your opinion, is most valuable about the Provincial Assessment Program?
- Do you have any suggestions regarding the Provincial Assessment Program?

5.1.5 Focus-Group Discussions (teachers)

- Does the Provincial Common Assessment Program provide teachers with valuable information about how Island students are performing in literacy and math?
- Does the Provincial Assessment Program provide valuable information to improve student learning and achievement?
- Does the Assessment Program provide valuable information to schools, school boards, and the Department to inform professional learning and improve teaching/instruction?
- Does the Assessment Program provide valuable information to schools, school boards, and the Department to inform policy development, including the selection of instructional resources and development of new programs?
- Are the Assessments fair and provide equal opportunity for all students to show what they have learned?
- What, in your opinion, is most valuable about the Provincial Assessment Program?
- Do you have any suggestions regarding the Provincial Assessment Program?
- 5.1.6 Focus-Group Discussion (Provincial Learning Partners Advisory Council)
 - Does the Provincial Common Assessment Program provide stakeholders with valuable information about how Island students are performing in literacy and math?
 - Does the Provincial Assessment Program provide valuable information to improve student learning and achievement?
 - Does the Assessment Program provide valuable information to schools, school boards, and the Department to inform professional learning and improve teaching/instruction?
 - Does the Assessment Program provide valuable information to schools, school boards, and the Department to inform policy development, including the selection of instructional resources and development of new programs?
 - Are the Assessments fair and provide equal opportunity for all students to show what they have learned?
 - What, in your opinion, is most valuable about the Provincial Assessment Program?
 - Do you have any suggestions regarding the Provincial Assessment Program?

5.2 Focus-Group Themes

Following are general themes that emerged from each of the focus-group discussions.

Parent Focus Group:

- There was support for Provincial Common Assessments provided the results are used for improvement purposes.
- The group's view was that if provincial assessments continue, the current subjects and grade levels are reasonable; however, they indicated there is a need for a Literacy assessment at the intermediate and/or high-school level.
- The group was not clear about the purpose/goal of the provincial assessments; there needs to be more and better communication on this.
- Parents indicated they didn't understand what the expectations of the provincial assessments are and what they mean.
- There was concern about the timing of reporting of results; they would like to have results reported before the end of the school year.
- There were questions about how the Department uses data/results from the provincial assessments.
- More budget/resources should be provided to school that have lower results.
- There was concern about the high exemption rates and the perceived inconsistency in how exemption rules are applied from school to school across the province.
- Parents believed some students don't test well because they are anxious about assessment, particularly at Grade 3.
- There was a view that too much time is spent on preparation for the provincial assessments.
- It was mentioned that for high achievers, "Meeting Provincial Expectations" may not capture their true level of skills and knowledge.

Student Focus Group:

- The students were of the opinion that provincial assessments are valuable, as students and teachers need to know how students are performing, and parents and the general public need information about school-system performance.
- Concerns were expressed about the differences between the format of teacher/classroom
 assessments and the format of provincial assessments (e.g., more multiple-choice questions on
 provincial assessments).
- Students were critical of the quality of feedback from provincial assessments. They believed that providing percentages would be more useful that descriptors such as "Meeting Expectations" or "Experiencing Difficulty."
- The group believed that students need incentives to take provincial assessments and offered some suggestions, such as getting "bonus marks."
- They reported that many students are unable to deal with pressure related to taking provincial assessments and consequently are disadvantaged.

• The students believed that a Literacy assessment is required at the intermediate and/or highschool level.

Principal Focus Group:

- The principals indicated they are not opposed to provincial assessments, but they have concerns about the way they are implemented.
- They believe assessments are not required every year and instead advocated for assessments to be administered to a cohort of students about every three years (possibly one year in Literacy, one year in Math, and one year off).
- Principals indicated the provincial assessment results generally provide validation of what teachers/schools already know about individual student performance.
- They believed the purposes/goals of the provincial assessment program are not well communicated.
- When individual students' results on the provincial assessment do not align with performance as reported by the teacher, this can cause confusion, especially for parents.
- Small schools (including French schools) derive less value from provincial assessments, because they don't receive school reports but still have to participate in the assessments.
- There was a belief that Grade 3 students are too young to participate in provincial assessments.
- Too many days are devoted to provincial assessments and also considering the province's participation in national and international assessments.
- Some students with special education needs are not receiving the appropriate adaptations on provincial assessments; this results in higher exemption rates.
- There is a lack of understanding in the field about the statistics: how cut-scores are derived, what they represent, and how comparability of assessments is maintained year over year.
- In the early years of assessment implementation the assessments were accompanied by helpful professional development (PD) for educators; however, in recent years, PD by the Department has declined. In addition to assessment literacy, PD is needed on instructional strategies and the triangle of instruction tied to curriculum, formative and summative assessment in the classroom, and linkages with large-scale provincial assessment.
- Principals expressed support for a Literacy assessment at the high-school level, perhaps at Grade 10.

Teacher Focus Group:

- The group indicated they are not opposed to provincial assessments, but they must support the work teachers are doing in the classroom.
- Teachers who participated in item development committees or scoring boards expressed the
 view that these activities were the best professional development (PD) they could receive.
 However, they believed that teachers in other grades (e.g., Grades 4 and 5) are not receiving the
 PD they need. In general, teachers need more PD about the assessments and interpreting the

- results, and to assist them in planning instructional strategies to help students improve. Teachers who are not confident and competent in math, at the lower grades, require support.
- When student results are provided to teachers in the fall following the assessments, some teachers use the results to plan their teaching, but some do not; it is very teacher dependent.
- For new teachers, provincial assessments are useful, because they provide examples of what good assessment looks like.
- Individual student reports do not provide parents with sufficient information on areas of strength and areas of weakness/difficulty. Descriptors on the reports need to be written in parent-friendly language and must be understandable.
- Grade 11 Math teachers indicated it would be helpful to see the provincial assessment questions alongside the students' results.
- It would be helpful to track cohorts of students across Grades 3, 6, 9, and 11.
- Booklet reviews, conducted by the Department on request, are extremely helpful, as they identify areas of strength and weakness in students' responses.
- Teachers and students experience stress as a result of provincial assessments.
- Teachers were concerned about students not receiving many of the adaptations on provincial assessments that they receive regularly in class. This puts some students at a disadvantage.
- Lower-achieving schools require more resources and supports.

Provincial Learning Partners Advisory Council Focus Group:

- An overall message from the group was that they are not opposed to provincial assessments
 provided they serve the intended purposes, the information is used to support student learning,
 and stakeholders (particularly parents) understand the results.
- More needs to be done in terms of improving communication about the purpose(s)/end goal(s)
 of the assessments and the results to assist parents and students in their understanding of the
 meaning of the results. Information on effective instructional strategies would also be helpful.
- There was a concern about a lack of funding and support for schools. Reference was made to the implementation of Literacy coaches and the Math Project, which were perceived as very helpful. There was a perception these types supports have declined over time but are still needed.
- Exemption rates were seen as being relatively high, due to large numbers of students with special education needs, and exemption decisions can vary from school to school.
- Anxiety was identified as an issue when (for example) students' provincial assessment results in Grades 9 and 11 count toward their final report card marks.
- Teacher anxiety was also identified as an issue.



Introduction

RMJ Assessment has been selected by PEI's Department of Education, Early Learning and Culture to conduct a review of the Provincial Common Assessment Program. The Program assesses students at key stages of learning as follows:

- Primary literacy and mathematics at the end of Grade 3
- Elementary literacy and mathematics at the end of Grade 6 (French Immersion Literacy at the end of Grade 5)
- Intermediate mathematics at the end of Grade 9
- Secondary mathematics at the end of Grade 11 (January and June semesters)

The stated purposes of PEI's Provincial Common Assessment Program are to

- provide information to students, parents/guardians, educators, the Department and other stakeholders, including the general public, about how the province's students are performing in reading, writing and mathematics at the end of key stages of learning and
- provide schools, school boards and the Department with information to help improve teaching, select resources, direct professional learning and develop new programs.

The overall objective of the Program review is to ensure the student assessments reflect best practices in large-scale assessment and meet the needs of Island learners and stakeholders. One of many sources of data/information for the review is this online survey, which should take no more than 20 minutes to complete. Please note that all information will be kept confidential, and data will be used in aggregate form only. Thank you in advance for participating in the survey.

. First of all, please indicate be	elow the primary perspective from which you ar
illing in this survey.	
Please choose one only)	
Parent/Guardian	Teachers' Federation
Student	Home and School Federation
Elementary Teacher	Post-Secondary Institution
Intermediate Teacher	Government
High School Teacher	General Public
School/School Board Administrato	or
Other (please specify)	
. In which county do you live? Kings County Queens County	Prince County
Kings County	



participate in the I	rovincial Common Assessments?
track overall stude province.	There should be no provincial common assessments. I have no opinion/am unsure.
6) should be assest their children's res	
and the public can results.	see Individual school
results. 4. Which of the fol	owing is closest to your view about the timing of the K-9
results. 4. Which of the fol Provincial Commo	owing is closest to your view about the timing of the K-9 Assessments? ould be administered in the fall of each year (e.g., Grade 4, Grade 7) to provi
results. 4. Which of the fole of the provincial Commo The assessments so information for improvement during the assessments so demonstrate	owing is closest to your view about the timing of the K-9 Assessments? ould be administered in the fall of each year (e.g., Grade 4, Grade 7) to provi

	Which of the following is closest to yo	our view about the frequency of the
Pro	ovincial Common Assessments?	
	The assessments should be administered every year in given grades, so that every student has the opportunity to demonstrate his/her achievement.	-
	The assessments should be administered on a cycle, so that (for example) each year one subject (i.e., reading, writing or math) is assessed; other subject(s) are assessed in following years.	
* 6. '	Which of the following is closest to yo	our view about the grade levels at which
the	e Provincial Common Assessments sh	ould occur in the primary and elementary
ye	ars? (<i>Select all that apply</i>)	
	The assessments should be administered in Grade 2.	The assessments should be administered in Grade 6 (end of key learning stage).
	The assessments should be administered in Grade 3 (end of key learning stage).	The assessments should be administered in a Grades 2 to 6.
	The assessments should be administered in Grade 4.	I have no opinion/am unsure.
	The assessments should be administered in Grade 5.	
^k 7.	Which of the following is closest to yo	our view about the grade levels at which
the	e Provincial Common Assessment in r	nathematics should occur in the
int	termediate years?	
	The assessments should be administered in Grade 7.	The assessments should be administered in a Grades 7 to 9.
	The assessments should be administered in	I have no opinion/am unsure.
	Grade 8.	

* 8. Which of the following is closest to yo	our view about the grade levels at which
the Provincial Common Assessments in	mathematics should occur in the high
school years?	
The assessments should be administered in Grade 10.	The assessments should be administered in all Grades 10 to 12.
The assessments should be administered in Grade 11.	I have no opinion/am unsure.
The assessments should be administered in Grade 12.	
* 9. In your opinion, should there be a lite	racy assessment in the intermediate
and/or high school years?	
Yes	I have no opinion/am unsure.
No	



O. If you answered "Yes" to guestion #	9, which of the following is closest to you
view about the grade levels at which the	
iteracy should occur in the intermediat	e and/or high school years?
The assessment should be administered in Grade 7.	The assessment should be administered in Grade 11.
The assessment should be administered in Grade 8.	The assessment should be administered in Grade 12.
The assessment should be administered in Grade 9.	The assessment should be administered in a Grades 7 to 12.
The assessment should be administered in Grade 10.	



The sales of the s
* 11. Which of the following is closest to your view about the subject areas assessed in the Provincial Common Assessment Program?
The current Provincial Common Assessments I have no opinion/am unsure. in reading, writing and math are sufficient.
Other subject areas should be assessed as part of the Program.



* 12. If you selected "Other subject area	s should be assessed as part of the
Program," which subjects would you c	
Science	Financial Literacy
Social Sciences and Humanities	Problem Solving
Social Studies	Arts (Dramatic, Visual, Music)
Computer Literacy	
Other (please specify)	



To what extent do you agree or disagree with the following statements?

* 13. The Provincial Common Assessments provide stakeholders with valuable information about how Island students are performing in reading, writing and mathematics at the end of key stages of learning.

		Neither Agree Nor		
Strongly Agree	Somewhat Agree	Disagree	Somewhat Disagree	Strongly Disagree

* 14. The Provincial Common Assessments provide valuable information to improve student learning and achievement.

Strongly Agree	Somewhat Agree	Disagree	Somewhat Disagree	Strongly Disagree

* 15. The Provincial Common Assessments provide valuable information to schools, school boards and the Department of Education, Early Learning and Culture to inform professional learning and help improve teaching.

		Neither Agree Nor	•		
Strongly Agree	Somewhat Agree	Disagree	Somewhat Disagree	Strongly Disagree	

***** 16. The Provincial Common Assessments provide valuable information to schools, school boards and the Department of Education, Early Learning and Culture to inform policy development, including the selection of instructional resources and the development of new programs.

		Neither Agree Nor			
Strongly Agree	Somewhat Agree	Disagree	Somewhat Disagree	Strongly Disagree	

Strongly Agree	Somewhat Agree	Neither Agree Nor Disagree	Somewhat Disagree	Strongly Disagree
	0		0	
18. What. in you	r opinion, is mos t	t valuable about	t the Provincial Co	ommon
Assessment Pro	-			
19. Do you have	any suggestions	regarding the P	rovincial Commor	n Assessment
Program?				
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