

Pan-Canadian Assessment Program (PCAP)

Reading Assessment Framework



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Table of Contents

Introduction	1
What is PCAP?.....	1
Context for Developing a Reading Framework.....	1
Large-Scale Assessments and Classroom Assessments.....	2
A Definition of Reading	2
The Reader	2
The Text	3
The Reader’s Purpose	3
The Context.....	3
The Interaction.....	4
Subdomains of the Assessment	4
Comprehension.....	4
Interpretation	5
Response and Reflection	5
Text Types and Forms	5
Fiction.....	6
Non-Fiction.....	6
Characteristics of the Items	6
Selected-Response Characteristics	6
Constructed-Response Characteristics	6
An Extended Constructed-Response Item.....	7
Test Design and Tables of Specification	7
Test Booklets.....	8
Distribution of Items	8
Performance Descriptors	9
Sample Test Passages and Questions	11
Additional Considerations	11
PCAP as Research toward Understanding Education Performance, Policy, and Practice.....	11
References	13

Introduction

What is PCAP?

The Pan-Canadian Assessment Program (PCAP) is the continuation of CMEC's commitment to inform Canadians about how well their education systems are meeting the needs of students and society. The information gained from this pan-Canadian assessment provides ministers of education with a basis for examining the curriculum and other aspects of their school systems.

School-curriculum programs vary from jurisdiction to jurisdiction across the country, so comparing results from these varied programs is a complex task. However, young Canadians in different jurisdictions learn many similar skills in mathematics, reading, and science. PCAP has been designed to determine whether students across Canada reach similar levels of performance in these core disciplines at about the same age, and to complement existing assessments in each jurisdiction so they have comparative Canada-wide data on the achievement levels attained by Grade 8 students across the country.

PCAP, which replaces an earlier assessment called the Student Achievement Indicators Program (SAIP), is coordinated by CMEC.

Context for Developing a Reading Framework

This document delineates the conceptual framework of the reading component of the Pan-Canadian Assessment Program. It is informed by the curriculum objectives, goals, and outcomes of the participating jurisdictions.¹ As well, it reflects current research findings and best practices in the field of literacy development and the learning of reading. It also includes information gathered from questionnaires (student, teacher, and school) to capture contextual data.

In Canada, all curricula seek to develop student literacy in the broadest sense of the word. These curricula recognize that reading is a cross-curricular skill necessary in all school subjects and also a life skill with applications beyond the classroom. This particular PCAP framework design was shaped by careful attention to the Canadian curriculum guidelines for those classes and grades that serve Grade 8 students. Consequently, it reflects provincial and territorial language-arts curricula, of which literacy is an integral component.

The framework lays out a theoretical foundation based on sound research and practice. It establishes a practical blueprint for the test and defines and explains the integrated act of reading and its elements. It describes the domains of this reading assessment and identifies the types of texts and the characteristics of the items. The test design, including tables of specification, is provided, along with rationales for the various elements and descriptions of performance levels. Recommendations for research initiatives linking contextual data with performance data are also included.

¹ For updated reading curricula, please visit official jurisdictional Web sites.

Large-Scale Assessments and Classroom Assessments

Large-scale assessments cannot and should not attempt to duplicate or imitate classroom assessments as if they were identical processes. According to curricula across Canada, classroom assessments should be largely a formative process, aimed more at helping students take the next steps in learning than at judging the end points of achievement. Multiple modes of assessment, including observation and interviewing, are needed to provide a complete picture of the reader's reading competency. In contrast, large-scale assessments are mainly one-time paper-and-pencil measures. The content and the administration procedures are standardized to ensure that the results mean the same thing in different contexts. The difference between classroom assessment and large-scale assessment is based on the need for quite different information: immediate and contextualized data for the former as opposed to rigorously comparable results for the latter. However, both types of assessment are useful and can be used formatively at different levels of the education system. Assessments external to schools can have a valuable impact on teaching practices and function as a pedagogical resource, provided the education community uses the results in the ways for which they were designed.

A Definition of Reading

According to Canadian curricula, reading is a dynamic, interactive process whereby the reader constructs meaning from text. The process of reading effectively involves the interaction of reader, text, purpose, and context before, during, and after reading.

The Reader

In order to make meaning of a text, readers must make a connection between what is in the text and what they know or bring to the text. Readers' personal experiences, real and vicarious, allow a greater or lesser access to the content and forms of what they read.

Students have varying degrees of:

- knowledge *of* and *about* language and texts;
- facility with language strategies;
- knowledge of the way language works in print.

Students' knowledge and skills determine their degree of access to particular types and forms of texts. Knowledge of language refers to vocabulary, syntax, punctuation, text structures, and rhetorical devices. Facility with language strategies includes those used before, during, and after reading, such as accessing prior knowledge of content and form or type of text, making predictions, making connections, asking questions during reading and building mental images, determining key ideas and noting important supporting details, using "fix-up" strategies when meaning fails, making inferences, synthesizing, assessing the validity of content, making comparisons with other sources of information, summarizing, and the like. Knowledge of the

way language works in print may include the ways in which the linear or non-linear print, the formatting practices, the visual additions, and the structuring of print on the page in general affect the construction of meaning in the text. These elements have become more significant in contemporary Web-site and promotional texts in particular.

The Text

Writers produce texts for a variety of purposes and use a variety of forms. Currently, many of the traditional genres have been combined or used in novel ways. For example, combinations of fiction and non-fiction have produced the non-fiction novel and the docudrama.

Students must read a variety of texts, such as those generally considered fiction (for example, short stories, poetry, novels, plays) and those considered non-fiction (for example, government pamphlets, medicine prescriptions, magazine articles, editorials). Within that range, texts have differing degrees of complexity in structure, vocabulary, syntax, organization, ideas, rhetorical devices, and subject matter. In addition, the form or type of a text plays a part in determining students' success in accessing a particular text. For example, when students enter middle and secondary school, their interaction with non-fiction or expository texts often increases. To read these forms or types successfully, they need to recognize how these forms or types of text function in different situations.

The Reader's Purpose

The purpose of the reading activity affects the reader's construction of meaning. Students read texts for a variety of purposes, ranging from the pleasure they get from the text's content and style to the practical information or point of view they acquire from engaging with it. The student's purpose for reading a particular text also influences the strategies and stance he or she takes. Texts of any type may be read for many different purposes. Whereas particular forms or types of text are often considered aesthetic or pragmatic in intention, the reader's purpose may differ from that intent. For example, students of social studies may be required to read a novel to develop knowledge of a particular culture, era, or event.

The Context

Context is important in any reading act because it affects the stance the reader takes toward the printed word. Context refers specifically to the physical, emotional, social, and institutional environment at the time of reading. It includes where, when, and why the student is reading. One of the challenges of large-scale assessment, for example, is that it is inescapably a testing situation, which, in turn, influences the state of mind brought to the reading act. Pre-reading prompts in this test offer some sense of context beyond the testing situation.

As well, context refers more broadly to the *Weltbild* (world view) of the reader. Any meaning constructed by a reader is a reflection of the social and cultural environment in which the reader lives and reads (Bruffée, 1986; Emerson, 1983; Gee, 1996; Heath, 1983.). Peers, family,

and community values affect the stance readers take as they engage with text. This interrelationship is described by Johnston and Costello (2005):

Although we often think of literacy as a set of all-purpose skills and strategies to be learned, it is more complex, more local, more personal, and more social than that. Becoming literate involves developing identities, relationships, dispositions, and values as much as acquiring strategies for working with print. (p. 256)

The Interaction

Contemporary concepts of reading recognize that the process of reading involves the interaction of reader, text, purpose, and context before, during, and after reading. There is also recognition that reading is not a finite set of discrete skills, knowledge, and concepts. Rather, it is a process of continuous growth in which readers constantly expand the boundaries of their reading comprehension, interpretation, response, and reflection. In doing so, they refine the fluency of their integrated reading processes (Paris, 2005).

Subdomains of the Assessment

In light of the interactive process of reader, text, purpose, and context, this assessment of reading considers the reader's engagement with text and response to it. Reading is an integrated act. Curricula across Canada identify *comprehension*, *interpretation*, and *response and reflection* as major organizing aspects of reading literacy.

In this assessment, three components of the integrated process of reading are assessed:

- comprehension;
- interpretation;
- response to text (includes response and reflection).

This assessment is designed to report on these three subdomains. Reporting this level of specificity will support jurisdictions in developing, adopting, and adapting education policies and programs so as to focus on continuous improvement. As cited in Crocker, 2005, "It will also enable provinces and territories to improve their own assessments and to validate their results by comparing them to both national and international results" (p. 1).

Comprehension

Readers construct meaning using information provided explicitly and implicitly by the text. The distinction between explicit and implicit comprehension is not a dichotomous one; rather, it moves incrementally from comprehension of directly stated information to comprehension gleaned both directly and indirectly through an increasing appreciation of nuance and inference. Readers identify both explicit and implicit aspects of text, using both concrete and

abstract vocabulary, stated conclusions, principal ideas, important details, and/or some aspects of style.

Interpretation

Readers examine the text to develop an understanding of the relationships of discrete elements to the whole. Readers use symbols, patterns, text features, and other elements to analyze the story in narrative texts, the general idea in information texts, and the arguments in persuasive text. They synthesize this information to draw conclusions about the broader meaning and intent of the text, that is, they consider relationships among elements and ideas in the text to construct deeper meaning and discern more significant implications.

Response and Reflection

In responding to texts, readers engage with the text in a number of possible ways, including:

- making personal connections between aspects of the text and their own real, vicarious, or prior experiences, knowledge, values, and/or points of view;
- responding emotionally to central ideas or aspects of the text;
- taking an evaluative stance about the quality or value of the text, possibly in relation to other texts and/or social or cultural factors.

Canadian curricula in reading generally distinguish between personal and critical responses.

In personal responses, readers reflect on their own experiences in light of the text and/or identify themselves with aspects of the text. They elaborate personal connections and reactions to the text by providing some extended explanations, examples, and supporting arguments from their own experience and knowledge. They state personal points of view and justify them. They find evidence in the text to support personal claims and viewpoints about issues, themes, characters, and situations (see, for example, *Atlantic English Language Arts Curriculum*).

In critical responses, readers stand apart from the text, considering the text as an artifact, evaluating its quality and/or appropriateness to the world at large. Readers evaluate content, elements of style, or the author's stance. They reflect on the choice of content, sources, quality, currency, or relevance of information, relationships, and ideas. Readers support their responses by providing specific, appropriate details and evidence from the text and other sources about issues, themes, characterization, and elements of style.

Text Types and Forms

This assessment includes a range and variety of text types and forms of varying levels of difficulty. These are broadly identified as fiction or non-fiction, recognizing that texts frequently mix forms or types for a variety of purposes. The texts selected are consistent with a broad range of student reading experiences, particularly those in the language-arts classroom.

Fiction

Fiction texts usually have a strong narrative aspect, including elements such as character, setting, conflict, plot, theme, and style. Most frequently, students are expected to engage with fiction texts primarily for literary and aesthetic purposes.

Non-Fiction

Non-fiction texts, such as expository material (textbooks, essays, lab reports, newspaper articles), generally have a different structure from fiction. For example, expository texts explain information, ideas, or a perspective through definition, sequence, categorization, comparison, contrast, enumeration, process, problem/solution, description, or cause/effect. Some non-fiction texts, however, do include narrative elements.

Non-fiction texts also include a wide variety of informational texts. These texts may include a variety of forms or types, both continuous and non-continuous, which students read for practical or pragmatic purposes. For example, students may read information texts for learning, for interest or recreational purposes, or to accomplish a particular task. These texts may include articles, instructions, Web sites, and other media texts with graphics and other visuals.

Non-fiction texts also include those written to argue a particular perspective or point of view and those written to persuade the reader to take some particular stand or action (persuasion/argument). These texts may include advertisements, editorials, letters to the editor, and speeches. Frequently, they also include visual components.

Characteristics of the Items

In measuring any complex and integrated set of skills, it is usually best to include a variety of item types both to allow all students to respond in the manner that best demonstrates their skill attainment and to measure a greater range of the complex skills involved.

Selected-Response Characteristics

The traditional multiple-choice format comprises a stem statement and four choices, one of which is correct, while the other three function as distractors. This is the format most familiar to teachers and students. Each item focuses on a single subdomain.

Constructed-Response Characteristics

Constructed response refers to any item requiring the student to write one or more words. The expectations can range from a single word or phrase to two or three sentences (two to five lines) to an extended, full-page response (20 to 30 lines). The constructed-response items in this assessment involve two to six lines, and each focuses on a particular subdomain.

An Extended Constructed-Response Item

A key assumption of reading curricula across Canada is that students will learn to apply reading skills and effective strategies whenever they read a text. Therefore, this test includes an integrated task calling for an extended response. This extended constructed response requires students to demonstrate the full reading process, involving integrated use of comprehension, interpretation, and personal and critical response.

This measures student performance on problem definition as well as problem resolution. Much as in science and mathematics problem solving, students must structure the problem for themselves in order to solve it. Here, students must, through comprehension, offer an interpretation, select a stance (personal, critical, or some combination), and define for themselves the depth to which they *choose* to go, as well as that to which they *can* go (DePascale, 2003; Herman, 1997).

The integrated task in this assessment requires students to respond to a short, accessible text that has a depth of implied meaning. The task takes approximately 20 minutes. It assesses whether students, when asked to respond to a text, apply the range of strategies that their classroom programs and curricula set as expectations. The task examines the degree to which students move beyond denotation to connotation, beyond explicit to inferred meaning, beyond concrete references and illustrations to abstraction and application.

The design of this type of item is what Wiggins (1993) would call a “loosely structured” challenge, which, according to cognitive science, better offers students the opportunity to demonstrate the practices they have been taught through application. Loosely structured tasks allow students to assign criteria and develop solutions that demonstrate both critical and creative thinking. At the same time, these tasks reflect both life and schooling activities, which are also often loosely structured and, as such, model authentic assessment (Bennett, 1993).

Test Design and Tables of Specification

In general, the assessment uses texts that are complete in themselves, that are short enough to allow a range of text types currently read by the age group both in and out of class, and that allow for a range of reading demands in a one-hour time period. A balance of constructed-response and selected-response items allows for an efficient use of student testing time while making it possible to gather both personal and critical responses in an open-ended way. Overall, the PCAP Reading Assessment will gather a relatively wide range of specific information about student reading habits and skills.

The tables of specification provide the blueprint of the test.

Table 1: Text length, item types, and time allocated (estimated numbers)

Section	Text length	Item types	Time allocated
Section A	200 words	Extended constructed response	20 minutes
Section B	1,000 words	Constructed response, Selected response	20 minutes
Section C	1,400 words	Constructed response, Selected response	20 minutes
Section D	400–600 words	Selected response	10 minutes
Section E	400–600 words	Selected response	10 minutes
Section F	400–600 words	Selected response	10 minutes

Test Booklets

In PCAP 2007, in which reading was the primary domain, there were two test booklets to ensure adequate content coverage so as to allow valid generalizations about student performance in each subdomain (Childs & Jaciw, 2003). There was also a third booklet for the two minor domains (mathematics and science). The following is a description of the design of the reading assessment booklets :

- Each booklet contained six passages.
- Each booklet included an extended-constructed-response task.
- Each contained two passages requiring five constructed responses and six selected responses.
- The remaining three passages each required eight or nine selected responses.
- Each booklet included some graphic and visual elements and items related to those elements.

Starting in PCAP 2010, the booklet design was modified to include all three domains (reading, mathematics and science) in each booklet.

Distribution of Items

- The ratio of selected responses to constructed responses is approximately 3:1, or 75 per cent to 25 per cent.
- The constructed-response items, overall, are weighted equivalently to the selected-response items.

Table 2 presents weighting for the three subdomains in reading, as assessed by PCAP.

Table 2: Weighting by subdomain

Subdomain	Weighting (%)
Comprehension	25–35
Interpretation	25–35
Response to Text	25–35

Performance Descriptors

In addition to the analysis of specific reading skills and strategies, descriptions of performance can be used to demonstrate achievement in reading. While the coding scheme provides raw scores, performance-level descriptions describe ranges of achievement in each of the three subdomains. Performance descriptions follow. See the following table for the operationalization of the descriptors for coding purposes.

Performance descriptors for scores at each level with a description of sample items can be found in *PCAP-13 2007: Report on the Assessment of 13-Year-Olds in Reading, Mathematics, and Science* (p. 12) (CMEC, 2008). Retrieved from <http://www.cmec.ca/Publications/Lists/Publications/Attachments/124/PCAP2007-Report.en.pdf>

Performance-Level Descriptors

	Level 1	Level 2	Level 3
<p>Comprehension Students understand the explicit and implicit information provided by the text. In particular, they understand the vocabulary, parts, elements, and events of the text.</p>	<p>The reader demonstrates limited understanding:</p> <ul style="list-style-type: none"> identifying partial and/or simple aspects of the text; recognizing direct vocabulary, concrete details, and directly stated ideas. 	<p>The reader demonstrates clear understanding:</p> <ul style="list-style-type: none"> identifying both explicit and implicit aspects of the text; recognizing some abstract language, details, and implied ideas in the text. 	<p>The reader demonstrates thorough understanding:</p> <ul style="list-style-type: none"> identifying principal ideas and important details; recognizing aspects of style, specific selections of detail, organization, and/or complexity in the text.
<p>Interpretation Students make meaning by analyzing and synthesizing the parts/elements/events to develop a broader perspective and/or meaning for the text. They may identify a theme/thesis and support that with references to details, events, symbols, patterns, and/or text features.</p>	<p>The reader demonstrates limited interpretation of the text:</p> <ul style="list-style-type: none"> providing a simplified and/or general perspective of aspects of the text; relying on stated conclusions from the text to inform meaning and/or connect aspects of the text to one another. 	<p>The reader demonstrates reasonable interpretation of the text:</p> <ul style="list-style-type: none"> noting relationships and integrating elements to develop a reasonable perspective; relying on explicit and inferred support. 	<p>The reader demonstrates thoughtful or insightful interpretation of the text:</p> <ul style="list-style-type: none"> synthesizing several elements of the text; expressing thoughtful analysis of a significant element of the text; relying on subtle relationships among elements and ideas to develop a thoughtful or insightful perspective.
<p>Response to text In responding to the text, students engage with the text in a number of possible ways, such as: making personal connections between aspects of the text and their own real/vicarious/prior experiences, knowledge, values, or point of view; responding emotionally to central ideas or aspects of the text; and taking evaluative stances about the quality or value of the text, possibly in relation to other texts and/or social or cultural factors.</p>	<p>The reader demonstrates a limited, tangential, and/or simplistic response to the text.</p> <p>The reader may:</p> <ul style="list-style-type: none"> express common or vague generalities about content or form; make connections/evaluations that are valid but simplistic, with little or no specific, textual, or personal references; provide connections to minor details or comment on minor aspects; provide little support beyond repetition or personal authority. 	<p>The reader demonstrates an appropriate and supported response to the text.</p> <p>The reader may:</p> <ul style="list-style-type: none"> express personal connections or evaluative commentary linked to key elements, ideas, events, or themes in the text; comment on the text, with reference to some social, cultural, or literary awareness; support the response with examples, general explanations, or statements that are direct or clearly implied from the text, or from personal knowledge, or other sources. 	<p>The reader demonstrates a significant and elaborated response to the text.</p> <p>The reader may:</p> <ul style="list-style-type: none"> express personal implications and insights; evaluate elements of the text and their relationships, based on social, cultural, and/or literary knowledge; evaluate the quality, sources, currency, or relevance of text issues, themes, and/or elements of style; support the response with specific details, examples, explanations, or thoughtful justifications; support reflection with reference to voice, style, stance of the writer, and/or organization and structure.

Sample Test Passages and Questions

Sample test passages and questions can be found in *PCAP-13 2007: Report on the Assessment of 13-year-olds in Reading, Mathematics, and Science* (pp. 13–7) (CMEC, 2008). Retrieved from <http://www.cmec.ca/Publications/Lists/Publications/Attachments/124/PCAP2007-Report.en.pdf>

Additional Considerations

PCAP as Research toward Understanding Education Performance, Policy, and Practice

The PCAP Reading Assessment cannot replace other assessment mechanisms at classroom, school, school division, or jurisdictional levels. It provides added value to these assessments by way of its uniformity across Canada and its support of Canadian curricula. Each jurisdiction and, indeed, each school-division administrator, principal, and teacher, must evaluate its results, relevance, and information for refining instruction and opportunities for students. The associated questionnaires provide data on relevant attitudes, strategies, and other variables that contextualize the performance of any particular group of students. Research initiatives made possible by the assessment design include the following:

- Strategy use: Which reading strategies do students use when confronted with different text forms and increasing levels of difficulty? How are these influenced by context variables such as teacher instruction and family-background experiences?
- Meta-cognition: To what extent do students practise meta-cognitive habits of mind when reading? Are they really aware of their own reading practices and strategies? What do they understand as the reading process?
- Specific language and reading knowledge in refining reading performance: Do students at this age benefit from specific lessons and content on reading strategies and language structures to improve reading comprehension and interpretation? Is “language in use” or “reflective reading” a more effective approach?
- Classroom reading environment: To what extent do learning environments encourage different views of the reading process and generate responses in the three strands? To what extent do learning environments encourage meta-cognitive practices in reading, as described in curricula across Canada?
- Evaluative instruments in school reading/learning environments: Are portfolios, rubrics, and reading records actually used in reading classrooms by students? Do teachers and students find them useful in refining reading practices? What instruments are in use to encourage a self-aware reader, a critical reader?
- Gender differences in reading activity and performance: Is it an issue in actual classrooms? Can research move beyond acknowledging the issue to finding sources and

solutions? What aspects of classroom environments or family backgrounds affect gender differences?

- Interest and practice: What role do interest and choice play in encouraging reading practice and improved achievement?
- School factors: What school factors are associated with increased student achievement in reading?

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