Graduation Literacy Assessment: Specifications

English Language Version
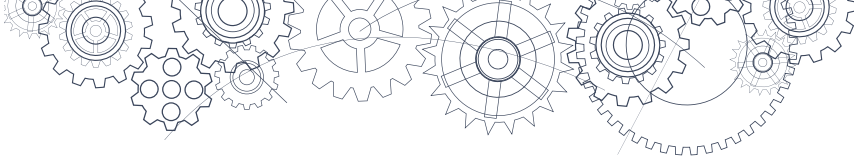
BRITISH COLUMBIA | Ministry of Education
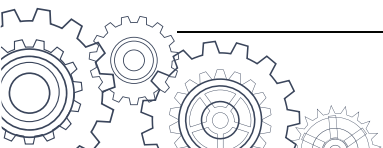
SPRING 2018

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1 Provincial graduation assessments

The provincial graduation assessments require students to apply their numeracy and literacy skills in realistic contexts. Standards and expectations are set with the educated citizen in mind – that is, we ask what we should expect a graduate to know, do, and understand in a variety of contexts that require the application of literacy and numeracy skills.

Rather than assess specific course curricula, the graduation assessments – like the Programme for International Student Assessment (PISA) – measure the application of numeracy and literacy skills to realistic situations, requiring students to employ the knowledge and skills considered to be essential for future success. The graduation assessments look at students' ability to apply their knowledge and skills and to analyze, reason, and communicate effectively as they examine, interpret, and solve problems. Like PISA, the graduation assessments also emphasize the importance of the context in which students should be able to use their skills (e.g., home, employment, society).

The provincial assessments of literacy and numeracy provide part of the information that supports the certification of graduation:

- Along with acquiring 80 course credits for graduation, students are required to write the provincial assessments.
- Students have opportunities to write the graduation assessments several times and to set goals for improving their proficiency levels.

Purpose of the graduation assessments

The purpose of the assessments is to measure the extent to which students are literate and numerate and to provide students with information about their proficiency.
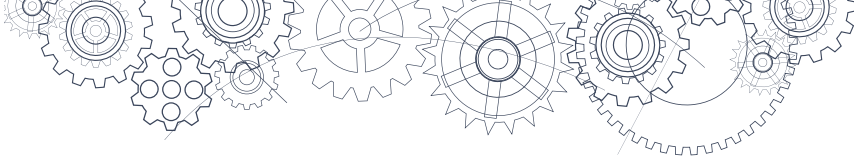
Use of information from the graduation assessments

The assessment instruments are not defined as formative or summative in nature; rather, information from the new graduation assessments can be used both summatively and formatively. Formative assessment (assessment *for* learning) and summative assessment (assessment *of* learning) can work together to improve student learning. For example, making formative use of summative assessment results involves using information drawn from a summative assessment to improve future student performance.

> The terms 'formative,' 'diagnostic,' 'summative' and 'evaluative' are generally used as if they describe kinds of assessments, but of course the outcomes of the same assessment might be used to serve more than one function. These terms are therefore not descriptions of kinds of assessment but rather of *the use to which information arising from the assessments is put*.
>
> (Wiliam, 2000, 2, citing Wiliam and Black, 1996)

The graduation assessment results:

⤷ can be used formatively to:

- support individual students by providing descriptive information for formative use and goal setting (i.e., using the information in the proficiency scale and the detailed student report to set new learning goals)
- provide additional information for educators, allowing them to identify areas of strength and weakness

⤷ can be used summatively to:

- provide schools, districts, and the Ministry of Education with system-level information regarding the extent to which students are proficient in literacy and numeracy
- provide students with evidence of their literacy and numeracy skills for use after graduation (i.e., to provide employers or post-secondary institutions with evidence of their proficiency level in literacy and numeracy)
- describe the proficiency levels of subgroups of a population (e.g., Aboriginal students) for use by schools, districts, Ministry of Education, and key stakeholder groups
- help inform decision making at all levels of the educational system regarding performance in literacy and numeracy
- provide information for schools, districts, and the Ministry of Education regarding trends in performance over time

2 The Graduation Literacy Assessment

The design and development of the Graduation Literacy Assessment have been guided by advice received from the Advisory Group on Provincial Assessment (AGPA); consultation with educators from across British Columbia, post-secondary colleagues, and First Nations educators; and research on best practices in teaching and learning and large-scale assessment. The development teams of educators designing and reviewing the assessment come from a range of disciplines and perspectives, thereby representing the various contexts in which literacy is developed.

Along with the Graduation Numeracy Assessment, the Graduation Literacy Assessment represents a fundamental shift in large-scale assessment, as it aligns with key changes taking place in the provincial education system, as shown in Table 1. This shift includes becoming more technology based, measuring new constructs, looking at deeper thinking and, attempting to improve learning by providing more effective reporting (Bennett, 2018).
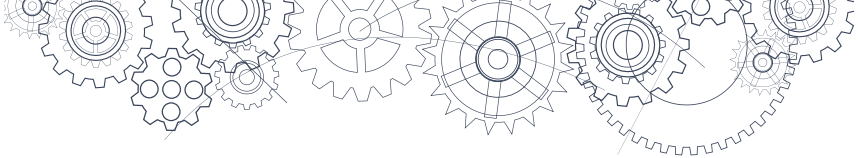
Table 1: Education directions

Education Direction	Implications for the Graduation Literacy Assessment
Core Competencies	The Core Competencies shape the design of and questions in the assessment, with particular emphasis on Communication, Creative Thinking, and Critical Thinking. The Personal and Social competencies are exemplified in questions requiring a written response and student self-reflection component of the assessment.
Personalization	The assessment offers students a choice of options for demonstrating their skills and abilities, thereby allowing them to better show what they know, understand, and are able to do, while maintaining rigorous provincial standards.
Deeper thinking	The assessment involves complex thinking and analysis skills. It looks at literacy skills through essential questions and asks students to comprehend and critically analyze a variety of reading materials, communicate their understanding, and make personal connections to these materials.
Student engagement	Assessment tasks, prompts, and stimuli are developed to be engaging and interactive in nature.
Cross-curricular skills	The assessment reflects the critical literacy skills acquired and applied across all areas of learning.
First Peoples	First Peoples content is contained in every assessment. The First Peoples Principles of Learning have helped shape the development of the assessment, and First Peoples texts are part of the assessment.
Collaboration	The assessment offers students an opportunity to interact with pre-assessment preparation materials and to collaborate with others.
Self-reflection	The assessment asks students to reflect on their performance on the assessment and to note particular aspects of their work.

The Graduation Literacy Assessment reflects these changes in the education system. It provides a technically sound and rigorous measure of foundational aspects of learning, in a manner that is inclusive and personalized, while providing detailed and relevant information for students, parents, and educators. Shaped by the Core Competencies and the First Peoples Principles of Learning, the Graduation Literacy Assessment measures the essential cross-curricular aspects of literacy – critically analyzing diverse texts and communicating with purpose and awareness – in an online interactive assessment.

There are three Graduation Literacy Assessments being developed: one for the English program, one for the Francophone program, and one for the French Immersion program. This document presents the Graduation Literacy Assessment for the English program.
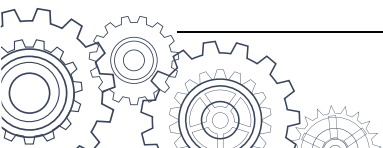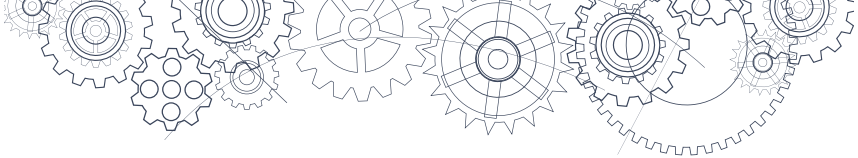
Defining literacy

Literacy is important in all areas of learning. In B.C., literacy is considered cross-curricular in nature, and it is applied in various contexts and situations. The curricular competencies from areas of learning such as Science, Social Studies, Mathematics, and Language Arts have informed the definition of literacy and shaped the structure and contents of the assessment. Educators with a broad range of teaching experience in the four areas of learning listed above designed and developed the Graduation Literacy Assessment to reflect its cross-curricular nature.

The following definition of literacy was used to focus the Graduation Literacy Assessment:

> **Literacy**
>
> Literacy is the ability and willingness to critically analyze and make meaning from diverse texts and to communicate and express oneself in a variety of modes and for a variety of purposes in relevant contexts.

Design

The Graduation Literacy Assessment uses an evidence-centred design (ECD). (For more detail on the design and structure of the graduation assessments, see the discussion paper *Graduation Assessments: Design Framework and Assessment Structure* at https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/pdf/graduation-assessments-design-framework.pdf) As shown in Figure 1, ECD focuses on:

- **making claims** about student learning (what we want students to know, do, and understand) based on the purpose of the assessment

- **determining the evidence** that needs to be demonstrated to provide support for the claims, and how this evidence will be analyzed and interpreted

- **writing task specifications** to create tasks that will allow students to demonstrate the depth of their learning
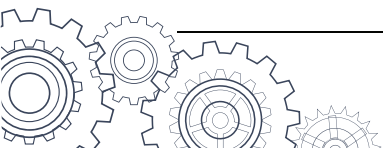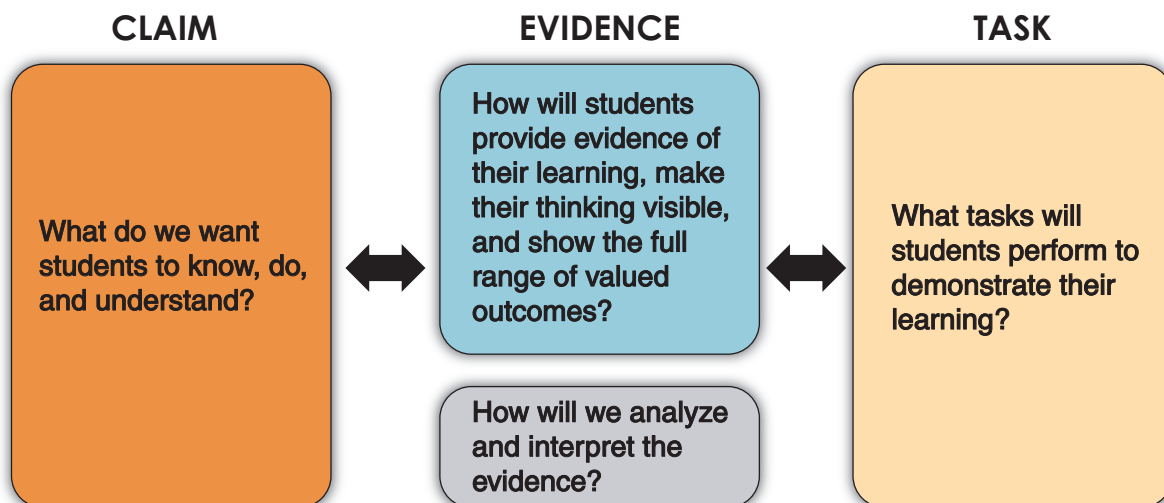
Figure 1: Evidence-centred design

| CLAIM | EVIDENCE | TASK |

What do we want students to know, do, and understand?

How will students provide evidence of their learning, make their thinking visible, and show the full range of valued outcomes?

How will we analyze and interpret the evidence?

What tasks will students perform to demonstrate their learning?

(Adapted from Pellegrino, DiBello, & Brophy, 2014)

ECD strengthens the validity of assessments by:

- supporting the inclusion of tasks that elicit higher levels of cognitive processing
- enhancing score interpretation through the increasing comparability of assessment scores across multiple assessment forms (Lane & Iwatani, 2016; Riconscente, Mislevy & Corrigan, 2016)

Key features

Respecting the cross-curricular nature of literacy

All curriculum is designed to support the development of educated citizens, which includes developing literacy skills. These skills may include such diverse tasks as analyzing graphs or data typically found in Social Studies or Science contexts, interpreting statistics presented in an infographic, or responding critically to texts**.** To respect the cross-curricular nature of literacy, the following areas of learning serve as sources for the selection of types of texts and development of assessment tasks in the Graduation Literacy Assessment:

Social Studies

Science

Graduation Literacy Assessment

Language Arts

Mathematics
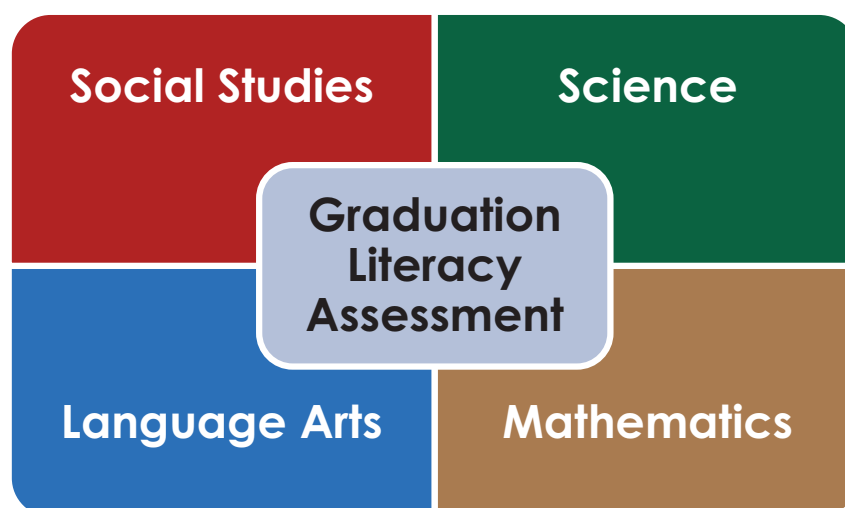
Essential question

In the Graduation Literacy Assessment, an essential question provides a realistic context within which students apply their literacy skills. Examples of essential questions are:

- What role does diversity play in today's society?
- How can an individual make a difference in the world?

The essential question activates student thinking and links to the passages while mirroring good classroom practice.

The essential question will focus on **societal, scientific, or personal topics**. The topic of the essential question, along with other factors, guides the developers in the selection of texts included in the assessment.

Types of texts

By the time they graduate, students should be prepared to read and analyze many of the types of written, visual, and digital texts they will encounter after graduation. To that end, the texts selected for use in the Graduation Literacy Assessment will range in complexity, as they do in school and in life. Texts selected for assessments will include newspaper and magazine articles, online opinion blogs, social media feeds, anecdotal testimonials, instructions, websites, brochures, maps, charts, graphs, tables, and infographics. Texts will be of both continuous and non-continuous nature and will include literary and informational texts.

As noted above, the essential question also influences the selection of texts. To respect the cross-curricular nature of literacy, the texts reflect broad areas of learning, such as Language Arts, Science, Social Studies, and Mathematics. Teachers from across the province representing different subject areas select texts according to pre-established guidelines. Each year's assessment will include texts written by and about First Peoples. Texts are screened by experts who analyze them for bias and other social considerations.

Assessment tasks

Students demonstrate their learning through two key tasks on the Graduation Literacy Assessment: Analyzing and Making Meaning from Texts (Comprehend) and Communicating Understanding of Texts/Making Personal Connections (Communicate). For example, in Part A, after responding to a number of texts related to the essential question, students will respond to a writing prompt, such as, "To what extent do people have the power to make their community a better place in which to live?" Students will be asked to communicate their depth of insight into, or understanding of, the topic. They will support their argument with reference to the texts in the section and may also draw upon their own experiences and knowledge.
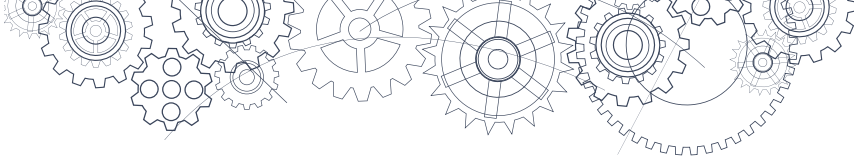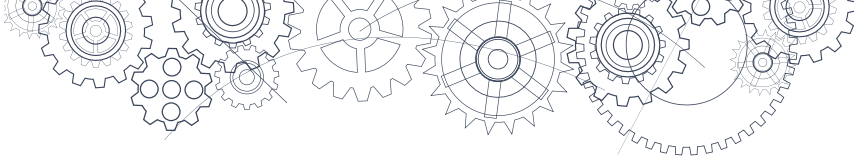
Types of questions

The assessment tasks will include a variety of selected- and constructed-response question types. Selected-response questions provide answer choices and are machine scored. Constructed-response questions require written communication and are marked by teachers using holistic scoring rubrics.

Table 2: Types of questions

Types of Questions	Description
Selected-response*	**… in which students:**
Hot spot	select the desired spot on the screen
Labelling	drag and drop the correct labels to graphs, maps, or graphics
Sequencing	arrange ideas in logical sequence by dragging them into place
Multiple-choice	select radio buttons, from several choices, for either single or multiple correct responses
Images	select the appropriate picture or illustration
Matching	drag and drop elements into a desired position, such as into a table
Drop-down menu	select responses from drop-down menus
Constructed-response	**… in which students:**
Graphic organizer	communicate their understanding of the texts through a graphic organizer that extends across the texts and requires that they critically analyze and synthesize the presented materials
Extended writing about texts	communicate in writing their critical reading and understanding of the texts as they relate to a specific facet of the essential question with defined purpose and in a relevant context
Extended writing to make personal connections	incorporate a personal connection, bringing their own knowledge, experiences, and creative notions to a piece of written communication that addresses an aspect of the essential question within the part of the assessment the student has selected

The selected-response question types are examples only; additional question types may be included in the Graduation Literacy Assessment.
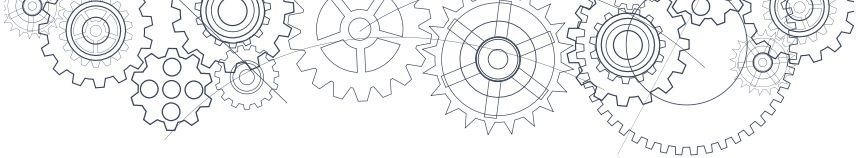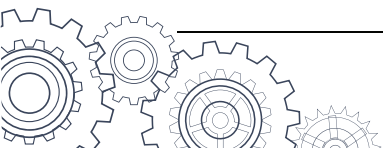
Depth of Knowledge

The cognitive rigour of each of the questions on the Graduation Literacy Assessment is described using Webb's Depth of Knowledge (DOK). Webb's DOK categorizes tasks into four levels, based on the complexity of thinking required. The assessment includes questions written to and classified across the first three DOK levels. (Level 4 is not used in the assessment, as it cannot be measured in the assessment's limited time frame.)

The questions on Analyzing and Making Meaning from Texts (Comprehend) range from DOK levels 1 to 3; questions on Communicating and Understanding of Texts/Making Personal Connections (Communicate) are at DOK level 3. Table 3 illustrates the types of questions found on the assessment across the three DOK levels.

DOK LEVEL	
1	**Analyzing and Making Meaning from Texts (Comprehend)**
2	**Communicating Understanding of Texts/Making Personal Connections (Communicate)**
3	
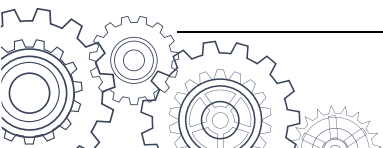
Table 3: Types of questions across three DOK levels

|	Level 1 — The student is able to locate or retrieve information from the texts and record facts and ideas. (Student responses require literal understanding of text.)	Level 2 — The student shows initial comprehension, understands important concepts, begins to connect ideas using an organizational structure, and has some sense of purpose and context.	Level 3 — The student applies knowledge to go beyond the text to explain, generalize, and connect ideas to support thinking and make interpretations. Ideas are complex and demonstrate synthesis and analysis.
Texts ⇩ Critically Analyzing/Making Meaning ⇩ Communicating	• recall, recognize, or locate basic facts that are explicit in the texts • define terms • select appropriate words when intended meaning is clearly evident • describe/explain who, what, when, where, how • locate information in a graph • identify specific information contained in graphic representation or text features • order a sequence of events • match instructional steps to a given diagram • brainstorm ideas, concepts, problems, or perspectives related to a topic • select appropriate words when intended meaning is evident	• make basic inferences and predictions • summarize results, concepts, ideas • specify, explain, show relationships (e.g., why, cause-effect) • identify main ideas • make accurate generalizations of texts • interpret information from text features • distinguish relevant/irrelevant information, fact/opinion • apply organizational structures • categorize elements of a plan • make a recommendation based on the texts • predict an outcome based on the texts • organize, order, or interpret information from a simple graph	• explain, generalize, connect ideas using supporting evidence • make inferences about explicit or implicit themes • apply a concept in a new context • justify or critique conclusions • analyze interrelationships among concepts, issues, problems • use reason, planning, evidence to support inferences • cite evidence; develop logical argument for conjectures • integrate ideas and information to show understanding • describe, compare, contrast solution • synthesize information • verify reasonableness of results; develop an alternative solution

(Adapted from Hess, 2009, and Webb, 2002)

Specifications

The Graduation Literacy Assessment requires students to demonstrate their abilities through two key literacy tasks: analyzing and making meaning from texts (Comprehend), and communicating their understanding of texts and making personal connections (Communicate). Table 4 identifies the proportion of these two task types.

Table 4: Key tasks

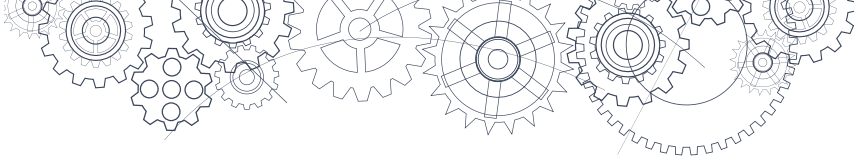|	
Comprehend: Analyzing and Making Meaning from Texts (_assessed with a diversity of online machine-scored selected-response questions_)	50%
Communicate: Understanding of Texts/Making Personal Connections (_assessed with teacher-scored online constructed-response questions_)	50%
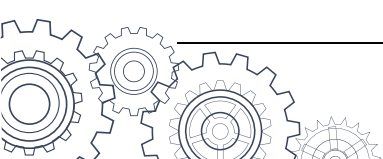
Table 5 provides more detail on how the key aspects of literacy are reflected across the parts of the assessment and in relation to question types and DOK levels. It shows the two different parts of the assessment on which student performance is scored. All students are required to complete Part A. They analyze various texts and respond to two constructed-response questions, communicating their understanding of the texts. Part B invites students to select from one of two choices, based on their personal preference. Both choices in Part B provide unique texts related to the essential question and require students to respond in various ways to the texts. Students are then asked to communicate their own ideas, making personal connections with a topic directly linked to the essential question.

The specifications identify the number of points and percentages for each part of the assessment. Selected-response questions (which include a large variety of online machine-scored questions designed to be engaging) are used to assess the literacy skills of analyzing and making meaning from the texts. Constructed-response questions (online, teacher-marked, written-response questions) measure communication. The number of points in each section is shown across three Depth of Knowledge (DOK) levels, with the constructed-response questions at DOK 3.

The structure of the Graduation Literacy Assessment, described in the next section, provides additional detail on aspects of the assessment, the recommended time allocated for each part, and how the parts fit together.

Table 5: Graduation Literacy Assessment Table of Specifications

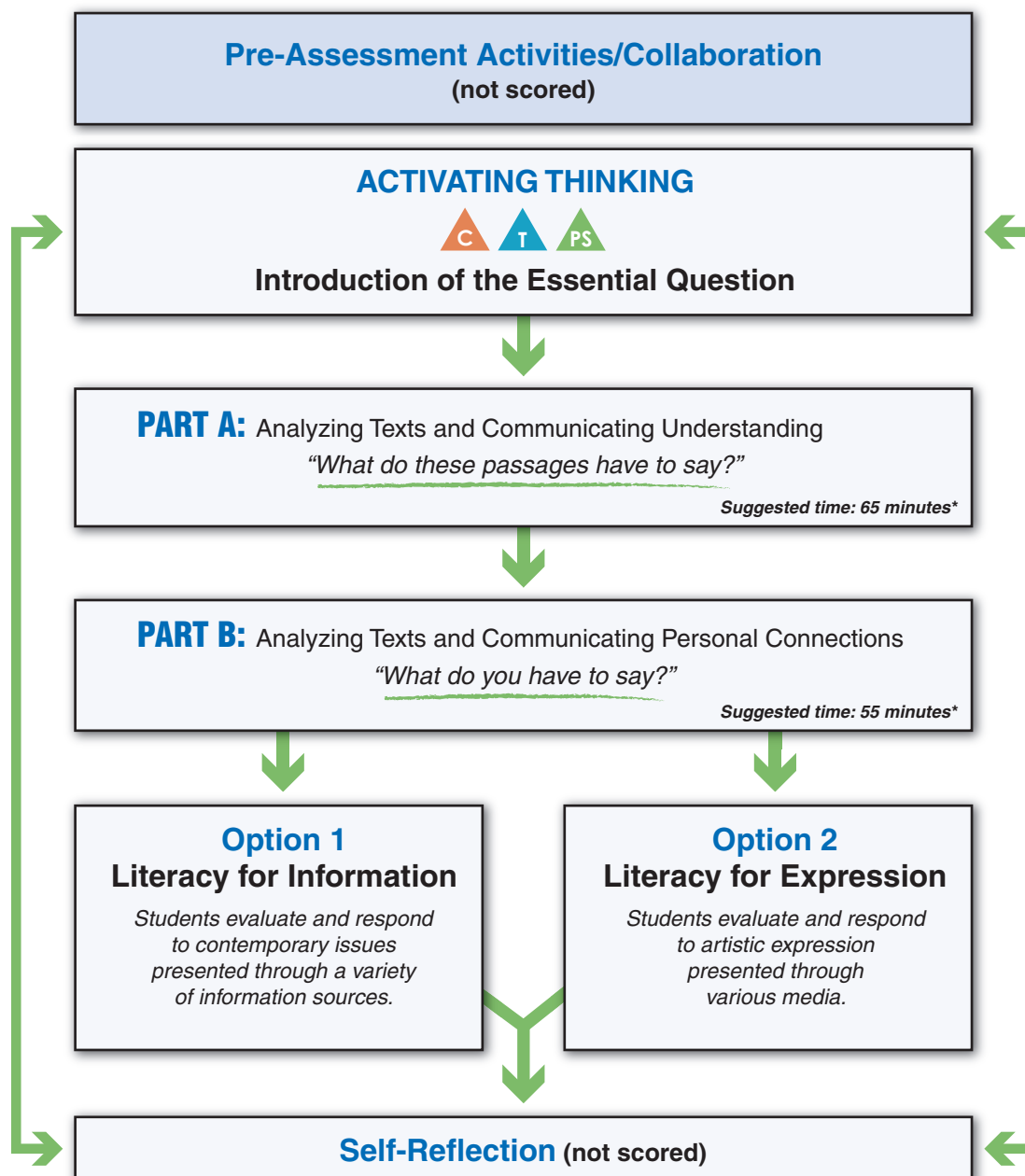|		Depth of Knowledge 1	Depth of Knowledge 2	Depth of Knowledge 3	Value
PART A (*All students complete this part*)	***Analyzing and Making Meaning***	Selected response 5 points	Selected response 5 points	Selected response 5 points	**25%**
	Communicating Understanding of Texts			Constructed response (graphic organizer) 4 points	**10%**
				Constructed response (written response) 12 points	**20%**
PART B (*Students choose from two options*)	***Analyzing and Making Meaning***	Selected response 5 points	Selected response 5 points	Selected response 5 points	**25%**
	Communicating Personal Connections			Constructed response (written response) 12 points	**20%**
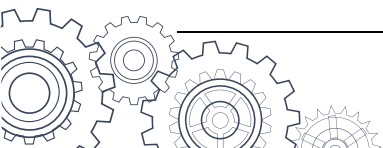
Structure

The structure of the Graduation Literacy Assessment includes preparation activities, an essential question, a common component, a choice component, and a student self-reflection section. The structure is designed to mirror effective practices in learning, whereby students may prepare collaboratively, activate their thinking, exercise choice, and reflect on their learning.

As noted in Figure 2, the Graduation Literacy Assessment is designed to be completed in two hours, although some students may require additional time. Descriptions of each assessment component are provided after the figure.

Figure 2: Graduation Literacy Assessment structure

Pre-Assessment Activities/Collaboration
(not scored)

ACTIVATING THINKING

C   T   PS

Introduction of the Essential Question

PART A: Analyzing Texts and Communicating Understanding
"What do these passages have to say?"

Suggested time: 65 minutes*

PART B: Analyzing Texts and Communicating Personal Connections
"What do you have to say?"

Suggested time: 55 minutes*

Option 1
Literacy for Information

*Students evaluate and respond
to contemporary issues
presented through a variety
of information sources.*

Option 2
Literacy for Expression

*Students evaluate and respond
to artistic expression
presented through
various media.*

Self-Reflection (not scored)

* Students may be given up to 1 hour of additional time to complete the assessment.
Students may move back and forth through the entire assessment at any time, but only through their chosen pathway.

Components

Pre-assessment activities

Purpose: The pre-assessment activities provide opportunities for students to collaborate or to work individually in preparing for the Graduation Literacy Assessment.

Description: Activities include sample assessments, student exemplars, and instructional videos, designed to provide clarity of purpose and understanding of expectations.

Benefit: Familiarizes students with the structure of the assessment and the types of responses required.

Essential question – Activating thinking

Purpose: The essential question provides the context for the entire assessment and engages students' thinking as they proceed through Parts A and B.

Description: Students activate their thinking, guided by prompts and opportunities to consider the essential question, ideas related to it, and what it means to them.

Benefit: Activates students' prior knowledge and prepares them to think deeply and broadly as they begin the assessment.

Part A – Analyzing Texts and Communicating Understanding

Purpose: Part A assesses students' ability to analyze and demonstrate their understanding of texts.

Description: Students answer a series of selected-response questions related to the texts, respond to a graphic organizer question, and produce a piece of writing in response to the texts. The texts and questions relate to the essential question.
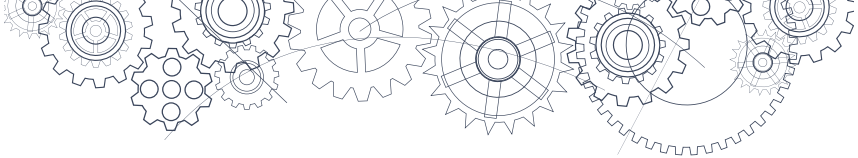
Benefit: Engages students in critically analyzing and communicating their understanding of texts.

Part B – Analyzing Texts and Communicating Personal Connections

Purpose: Part B assesses students' ability to analyze and respond personally to texts.

Description: Students are offered a choice of texts to analyze and respond to. Each option is composed of comparable reading and communicating tasks, is equal in rigour, and relates to the essential question. Students are presented with specific descriptions of the required tasks in each option before they are asked to make their choice. In both options, students answer a series of selected-response questions to the texts before producing a piece of writing in which they make personal connections. Option 1 focuses on Literacy for Information and includes a variety of information-based texts. Option 2 focuses on Literacy for Expression

and includes a variety of texts emphasizing various forms of artistic expression. While these options afford students choice in the types of texts presented, both are equal in expectations and levels of difficulty and are scored with the same scoring rubric.

Benefit: Students can choose the texts that appeal to their interests.

➜ *Self-reflection*

Purpose: Self-reflection encourages students to think about their work within the assessment.

Description: Constructed-response questions guide students to reflect on:

- their strengths
- the processes they used to prepare for and complete the assessment
- the accuracy and comprehensiveness of their responses

Benefit: Students reflect on their work on the assessment and provide feedback to the assessment developers.
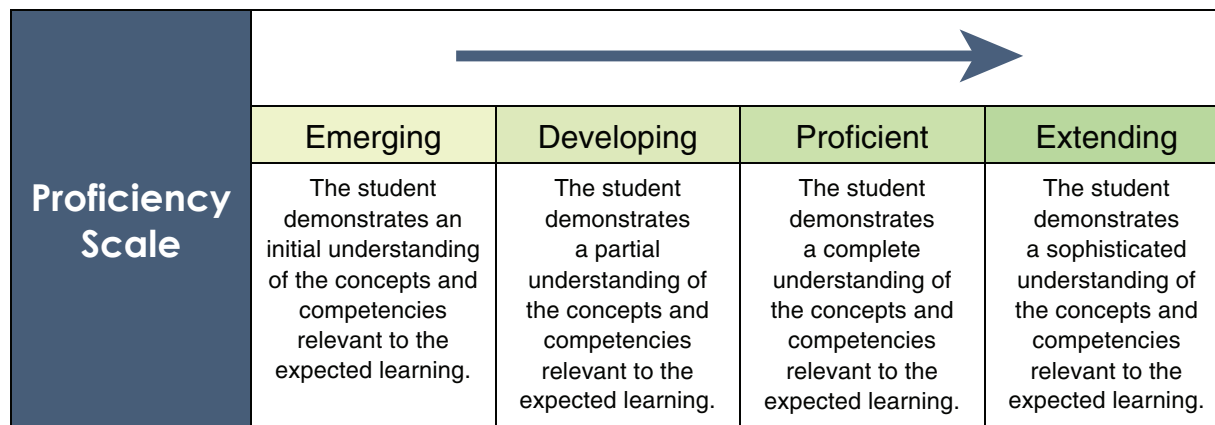
3 Reporting results

The provincial graduation assessments focus on students' applications of literacy and numeracy – two highly valued skills and abilities – and provide system-level information in those areas. As well, the assessments serve as a common graduation requirement for all students, providing them with evidence of their proficiency in literacy and numeracy for use after graduation.

The provincial Foundation Skills Assessment and the Graduation Literacy and Numeracy Assessments will use a proficiency-based approach to results reporting. Proficiency-level reporting will be strength-based, descriptive, and focused on what students can do at each level. Provincial graduation assessments will use a four-level proficiency scale. Once fully developed, it will include descriptions of what students can do at each level. Each level will include descriptive information of what students can do when they are "emerging," "developing," "proficient," or "extending," including characteristics of their performance and the types of tasks they can perform.

Students will receive an overall score based on their responses to closed and open questions. Results from the total population are analyzed by a standard-setting panel and students are then placed in one of the four levels based on their performance. Through the proficiency scale, students will receive feedback that focuses on their potential, not on their deficits. Students will see where they have progressed to in their learning and receive guidance about where they are expected to go next.
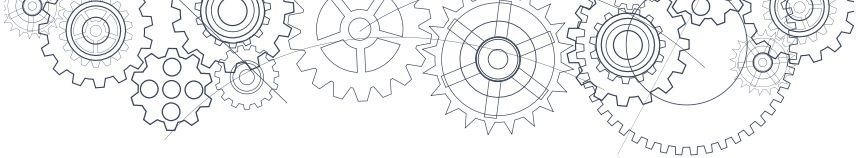
The standards for the proficiency scale will be established with the professional judgment of educators. Figure 3 will be further elaborated with descriptive detail following the first assessment administration and standard-setting session.

Figure 3: Proficiency scale

Proficiency Scale	Emerging	Developing	Proficient	Extending
	The student demonstrates an initial understanding of the concepts and competencies relevant to the expected learning.	The student demonstrates a partial understanding of the concepts and competencies relevant to the expected learning.	The student demonstrates a complete understanding of the concepts and competencies relevant to the expected learning.	The student demonstrates a sophisticated understanding of the concepts and competencies relevant to the expected learning.

As with the Graduation Numeracy Assessment, the Graduation Literacy Assessment results will be reported on students' transcripts, available through the student transcript service. Schools will access results through the School Secure Web.

References

Bennett, R. (April 2018). *Educational assessment: What to watch in a rapidly changing world.* Session presented at the annual meeting of the National Council on Measurement in Education, New York.

Darling-Hammond, L., Herman, J., Pellegrino, J., Abedi, J., Aber, L., Baker, E., … Steele, C. M. (2013). *Criteria for higher-quality assessment.* Stanford Center for Opportunity Policy in Education, Stanford University; Center for Research on Student Standards and Testing, University of California at Los Angeles; and Learning Sciences Research Institute, University of Illinois at Chicago. Retrieved from https://www.hewlett.org/wp-content/uploads/2016/08/Criteria_for_High_Quality_Assessment_June_2013.pdf

Duncan, J., & O'Connor, M. (n.d.). *Reading critically.* Scarborough, ON: Writing Centre, University of Toronto Scarborough. Retrieved from https://www.utsc.utoronto.ca/twc/sites/utsc.utoronto.ca.twc/files/resource-files/CriticalReading.pdf

Hess, K. K. (2009). Hess' Cognitive rigor matrix and curricular examples: Applying Webb's depth-of-knowledge levels to Bloom's cognitive process dimensions. Retrieved from http://static.pdesas.org/content/documents/M1-Slide_22_DOK_Hess_Cognitive_Rigor.pdf

Lane, S., & Iwatani, E. (2016). Design of performance assessments in education. In S. Lane, M. R. Raymond, & T. M. Haladyna (Eds.), *Handbook of test development* (2nd ed.) (pp. 274–293). New York, NY: Routledge.

Lee, C. D., & Spratley, A. (2010). *Reading in the disciplines: The challenges of adolescent literacy.* New York, NY: Carnegie Corporation of New York. Retrieved from https://www.carnegie.org/media/filer_public/88/05/880559fd-afb1-49ad-af0e-e10c8a94d366/ccny_report_2010_tta_lee.pdf

Magnusson, K., & Frank, B. (2015). *The Advisory Group on Provincial Assessment: The graduation learning years – Final report.* Retrieved from https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/pdf/agpa-final-report.pdf

Pellegrino, J. W., DiBello, L. V., & Brophy, S. P. (2014). The science and design of assessment in engineering education. In A. Johri and B. M. Olds (Eds.), *Cambridge handbook of engineering education research* (ch. 29). Cambridge, UK: Cambridge University Press.
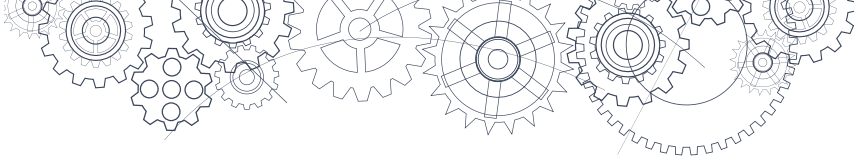
PIAAC Literacy Expert Group. (2009) PIAAC literacy: A conceptual framework (OECD Education Working Papers, No. 34). Paris: OECD Publishing. http://dx.doi.org/10.1787/220348414075

Programme for International Student Assessment. (2016). PISA 2018 – Draft Reading Literacy Framework. In *PISA 2018 – Draft analytical frameworks.* Paris: OECD Publishing. Retrieved from https://www.oecd.org/pisa/data/PISA-2018-draft-frameworks.pdf

Riconscente, M. M., Mislevy, R. J., & Corrigan, S. (2016). Evidence-centered design. In S. Lane, M. R. Raymond, & T. M. Haladyna (Eds.), *Handbook of test development* (2nd ed.) (pp. 40–63). New York, NY: Routledge.

Snow, C. (2002). *Reading for understanding: Toward an R & D program in reading comprehension.* Santa Monica, CA: RAND. Retrieved from https://www.rand.org/content/dam/rand/pubs/monograph_reports/2005/MR1465.pdf
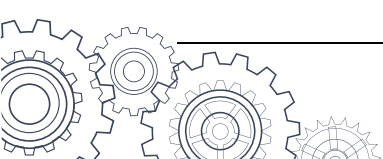
Webb, N. L. (2002). *Depth-of-knowledge for four content areas*. Retrieved from
http://www.hed.state.nm.us/uploads/files/ABE/Policies/depth_of_knowledge_guide_for_all_subject
_areas.pdf

Wiliam, D. (2000). *Integrating formative and summative functions of assessment*. Paper
presented to Working Group 10 of the International Congress on Mathematics Education, Tokyo,
August 2000.

Wiliam, D., & Black, P. (1996). Meanings and consequences: A basis for distinguishing formative
and summative functions of assessment? *British Educational Research Journal*, 22, 537–548.