



BC LEARNING PATHWAYS: A Guide for Teachers



Ministry of
Education and
Child Care

Purpose

BC Learning Pathways is an ongoing series of resources that support teachers in developing student literacy and numeracy skills in all learning areas. The resources support teachers with planning, teaching, classroom assessment, and reporting of student learning.

BC Learning Pathways includes four teaching resources:

- **BC Learning Pathways: A Guide for Teachers** provides an overview of the resources, their intent, and how to incorporate them into teaching practices,
- **K-12 Learning Progressions** provide descriptions of proficient learning in literacy and numeracy,
- **Curricular Connections** show how to incorporate literacy and numeracy into all learning areas from Kindergarten through Grade 12,
- **Teaching and Learning Stories** showcase examples of teacher practice and proficient student learning.

BC Learning Pathways is a starting point for further resource development. The Ministry of Education and Child Care will continue to gather feedback from the field to better understand what students, teachers, and school leaders may need to further support literacy and numeracy learning.

BC Learning Pathways works to:

- define proficient learning in the context of literacy and numeracy,
- support student-centred descriptive feedback,
- provide examples of proficient student learning from K to Grade 12,
- demonstrate how to incorporate literacy and numeracy into all areas of learning from K to Grade 12,
- support teachers in their planning, teaching, assessment, and reporting of student learning aligned with the redesigned curriculum,
- provide a framework for future supports in the areas of literacy and numeracy.

Introduction

One of the goals of British Columbia's education system is to develop students who can demonstrate thinking and communication competencies to support their comprehension and expression of ideas. They can demonstrate their personal and social competencies by making healthy connections for themselves and with others, and they can enjoy, explore, and care for the world around them. They can also critically analyze, make reasoned decisions, and develop a lifelong appreciation of learning. A strong foundation in literacy and numeracy is essential to developing an educated citizenry.

Many of us, whether as students or as current BC teachers, remember when literacy learning happened in Language Arts class and when numeracy was only taught in Math class. With the redesign of BC's curriculum, our approach to learning has shifted and is more multifaceted than ever before. The redesigned curriculum still focuses on developing strong foundations in reading, writing, and math, but it also expands literacy and numeracy learning opportunities into all learning areas from K to Grade 12 (rather than isolating these critical skills to Language Arts and Math).

Literacy is the ability to understand, critically analyze, and create a variety of communication forms, including oral, written, visual, digital, and multimedia, to accomplish one's goals.

Numeracy is the ability to understand and apply mathematical concepts, processes, and skills to solve problems in a variety of contexts.

When the BC curriculum was redesigned, we moved from a focus primarily on content to a curriculum that balances learning important content with key concepts and competencies. Classroom assessment and reporting shifted to align with these changes. Teachers are no longer primarily focused on students' memorization of facts. They also plan for, teach, assess, and report student learning on the competencies (skills) they demonstrate during their learning, in relation to the provincial curriculum.

Reporting is fundamental to student learning. Most people who have been through the BC school system, as a student, parent/caregiver, or teacher, are familiar with letter grades and percentages. The way we report student learning is changing to better align with the redesigned curriculum. The Provincial Proficiency Scale was developed to communicate student learning. Beginning in the 2023/24 school year, all students in Grades K-9 will receive a mark on the proficiency scale to support them in achieving proficiency. Students in Grades 10-12 will continue to receive letter grades and percentages in addition to descriptive feedback to ensure that their transition to post-secondary institutes is not impacted.

Teachers and school leaders have identified the need for teaching and assessment resources that align with the redesigned curriculum. While the BC Performance Standards (2009) aligned with the previous curriculum and supported teachers' summative assessments of reading, writing, and math skills, they were not intended for a cross-curricular, conceptual approach to literacy and numeracy learning. The BC Performance Standards may continue to be a valuable resource to support the assessment of reading, writing, and math skill development. However, to support teachers with cross-curricular planning, teaching, assessment, and reporting of literacy and numeracy learning, the Ministry of Education and Child Care worked with BC teachers to develop BC Learning Pathways.

This ongoing series of resources connects literacy and numeracy with the entire curriculum, with all forms of assessment, and with student reporting. Collectively, the resources support teachers in developing students who can think critically about the world around them, communicate their ideas and information clearly and authentically, and demonstrate their personal and social competencies in a meaningful way.

What is BC Learning Pathways?

BC Learning Pathways is an ongoing series of teacher developed resources. They are designed to equip teachers with tools they can use to support their students in achieving proficiency through demonstrations of learning that are meaningful to them. BC Learning Pathways is designed to demonstrate that learning is not a linear path for most students, as they at progress at different rates and in a variety of ways. BC Learning Pathways were developed to help teachers support their students through all aspects of their learning journeys as they build proficiency in literacy and numeracy.

BC Learning Pathways includes:

- BC Learning Pathways: A Guide for Teachers,
- K-12 Learning Progressions in Literacy and Numeracy,
- Curricular Connections,
- Teaching and Learning Stories.

K-12 Learning Progressions in Literacy and Numeracy describe cross-curricular skills linked to the Core Competencies (thinking, communication, and personal social skills) found in all areas of learning. Like the BC Performance Standards (2009), they support assessment but also focus on planning, teaching, and assessing cross-curricular student **proficiency** in literacy and numeracy.

Curricular Connections is a collection of learning opportunities developed by teachers in various learning areas from K to Grade 12. They show how aspects of literacy and numeracy can be used to support deeper learning in all areas of the provincial curriculum, and how aspects of literacy and numeracy connect and support students' development of Curricular Competencies across areas of learning.

What is Proficient?

- The four-point Provincial Proficiency Scale (i.e., emerging, developing, proficient, extending) is used to communicate student learning in all areas of learning.
- "Proficient" is the goal for all students.

K-12 Learning Progressions

The K-12 Learning Progressions support teachers in all learning areas to assess competencies demonstrated throughout the learning process. They can support teachers with language that can be used when giving descriptive feedback to students or when communicating student learning to parents and caregivers.

The Teaching and Learning Stories were developed by teachers to share their personal experiences in using the K-12 Learning Progressions to support student growth in literacy and numeracy through their planning, teaching, and assessment. The Teaching and Learning Stories also include evidence of proficient student work, along with rationales for why the work is assessed as proficient. Teachers have also included additional self-reflection on the lesson or activity and/or how they used the resources to support their planning, teaching, and assessment.

While four resources are currently available, BC Learning Pathways provides a foundation for further resource development to support literacy and numeracy learning in BC.

Classroom planning, teaching, and assessment

How can BC Learning Pathways support teaching practices?

We know teachers are balancing planning, teaching, and classroom assessment among other daily activities. The time it takes to prepare learning opportunities that reflect the needs of all students, support competency-based learning, and incorporate cross-curricular literacy and numeracy learning opportunities in the classroom is significant. Fortunately, literacy and numeracy skill development is already taking place in classrooms.

Classroom teachers are designing learning opportunities that allow students to demonstrate key literacy and numeracy skills like critical thinking and analysis, problem solving, and different forms of communication, such as oral, written, visual, and digital, in diverse and meaningful ways. While skill development is already taking place in many classrooms, BC Learning Pathways can help teachers be more intentional with their planning, teaching, and assessment of these core literacy and numeracy skills. When developing a lesson or activity, teachers should intentionally plan assessment opportunities to provide students with beneficial feedback and support their ongoing learning and growth.

Planning

BC Learning Pathways is designed to support teacher fluency in identifying what student proficiency in literacy and numeracy can look like across grades and learning areas. The resources support teachers' planning processes with examples of how to design lessons, activities, and assessments to intentionally develop cross-curricular literacy and numeracy skills that support the learning standards found in the K-12 curriculum.

Through their work in describing the K-12 Learning Progressions of proficient critical thinking and communication competencies, the teacher development team understood that in order to assess these competencies more purposefully, teachers must first plan opportunities for students to develop, practise, and demonstrate these skills.

The K-12 Learning Progressions were developed by teachers from all learning areas and grades to ensure that they are cross-curricular. The progressions can be used to design a unit, lesson, or activity focusing on students' critical thinking and/or communication competencies while aligning with the curriculum. For example, teachers can select an aspect and corresponding sub-aspect(s) from the K-12 Learning Progressions (See example on page 10) and focus on developing that skill or those skills with their students. From there, they can review the Curricular Connections for examples of lessons or activities that align literacy and numeracy with the curriculum.

Considerations

- Choose a literacy and/or numeracy aspect(s) that you would like to focus on.
- Choose a Curricular Competency that can be supported by a literacy or numeracy aspect.
- View the Teaching and Learning Stories. Some incorporate one aspect to support a Curricular Competency; others include all aspects of thinking and communication in support of Curricular Competencies.
- View the Curricular Connections, which include connections between literacy and numeracy aspects and Curricular Competencies in various learning areas, accompanied by a learning opportunity in which students can develop, practise, or demonstrate these competencies.

Purposefully focusing on planning for the development of key literacy and numeracy skills, (highlighted in the aspects and sub-aspects) is important. It allows students to develop and practise cross-curricular thinking and communication competencies throughout the learning process and demonstrate their proficiency in the final product.

Teaching

All teachers in all learning areas can support students to develop key literacy and numeracy thinking and communication skills while making connections with the personal and social competencies.

Students use critical thinking and communication skills when:

- interpreting a problem, task, or text,
- connecting ideas and information,
- communicating ideas and information,
- analyzing a strategy or thinking process.

These skills are reflected in the K-12 Learning Progressions and can be developed in all learning areas from K to Grade 12.

Teachers can develop learning experiences that emphasize literacy and numeracy skills through learning opportunities that allow students to demonstrate a deeper understanding of the Curricular Competencies and how they are interconnected and transferable across all learning areas.



Classroom assessment

Understanding whether a student has learned what they need to before moving forward is one of the many challenging parts of teaching. BC Learning Pathways helps teachers identify what proficiency looks like in a variety of contexts and supports formative assessment practices to ensure ongoing student learning. Descriptive feedback helps students know where they are at in their learning and informs parents and caregivers about how students are doing and where they are going next in their learning.

The K-12 Learning Progressions can be used to support teachers' use of descriptive feedback when the progressions have been included in the planning process and used at the forefront of developing a learning activity or lesson. If a learning activity or lesson has been intentionally focused on the literacy and/or numeracy grade-appropriate aspect(s) and sub-aspect(s), teachers will be able to assess these skills in connection with the learning standards (Curricular Competencies and Content). The K-12 Learning Progressions will also help provide a common language for student feedback, describing what a critical or creative thinking skill looks like in alignment with the BC curriculum.

The Teaching and Learning Stories provide examples of learning activities, teachers assessment language, and student work samples that demonstrate what proficiency could look like. They also include the teacher's rationale for why the sample is proficient, which will help support other teachers to identify what proficient looks like in their students while they are developing their literacy and numeracy fluency.

How does BC Learning Pathways help communicate student learning?

The way student learning is communicated is changing. In a given school year, students, parents, and caregivers will receive five learning updates, including three written (report cards) and two informal learning updates (e.g., teacher conferences, emails), to summarize student learning. Students will receive marks on the Provincial Proficiency Scale for Grades K-9 and letter grades and percentages for Grades 10-12.

Written report cards will include:

- information on how students are doing in each area of learning,
- descriptive feedback (written comments) on students' strengths and areas to work on, which may include their behaviour and work habits.

BC Learning Pathways can be used to support teachers with their student reporting under the new K-12 Student Reporting Policy. The language in the K-12 Learning Progressions and the Teaching and Learning Stories provides helpful feedback for teachers in describing proficient student learning. In addition, the Teaching and Learning Stories include examples of proficient student learning, with explanations from teachers as to why the example is considered proficient, which will help other teachers identify proficient learning in their students.

For more information on the Student Reporting Policy visit: <https://curriculum.gov.bc.ca/reporting>

How does BC Learning Pathways support an understanding of student proficiency?

Focus on proficiency

The K-12 Learning Progressions in literacy and numeracy describe proficiency for students in critical thinking and communication from K to Grade 12. The descriptions of proficiency in the learning progressions are based on observations by and discussions with teachers from across BC.

The Teaching and Learning Stories include samples of proficient student learning to help teachers identify demonstrations of proficient student learning.

What is Proficient?

- The four-point Provincial Proficiency Scale (i.e., emerging, developing, proficient, extending) is used to communicate student learning in all areas of learning.
- “Proficient” is the goal for all students.

Descriptive feedback

The K-12 Learning Progressions can be used as a starting point for descriptive feedback when communicating student learning to students, parents, and caregivers. Using common language can help students, parents, and caregivers understand how literate and numerate critical thinking and communication skills (as well as their personal and social skills) are transferrable across all learning areas of the curriculum. The Teaching and Learning Stories include teachers’ rationales as to why their students were demonstrating proficient student learning.

Student self-reflection and goal setting

The K-12 Learning Progressions support teachers with language for classroom assessment of the entire learning process, including their demonstrations of learning. Teachers can use competency-based language to give students regular feedback about their learning. Teachers can also assist students in turning the proficiency descriptors into “I can” statements, to support student self-assessment, goal setting, and greater ownership of their own learning.

Applications for planning, teaching, and classroom assessment

BC Learning Pathways will support teachers to develop students’ proficiency in a variety of ways. Using purposeful planning, teaching, and assessment strategies will help focus student learning on achieving proficiency.



- **planning and teaching** by:
 - assisting teachers in planning and teaching competency-based learning opportunities and assessments,
 - promoting inclusive, personalized learning,
 - highlighting cross-curricular literacy and numeracy thinking and communication competencies,
 - emphasizing the importance of local contexts,
 - providing opportunities to incorporate Indigenous knowledge and the First Peoples Principles of Learning,
 - focusing on the entire learning process.
- **classroom assessment** by:
 - describing and giving examples of proficient student learning based on the Provincial Proficiency Scale,
 - assisting teachers in using descriptive feedback to communicate student learning,
 - assisting teachers in assessing evidence of students' critical thinking and communication competencies throughout the learning process,
 - assisting teachers with common language about competency-based learning when communicating student learning to parents and caregivers,
 - using strength-based language.

How do I incorporate literacy and numeracy into my classroom?



Literacy is the ability to understand, critically analyze, and create a variety of communication forms, including oral, written, visual, digital, and multimedia, to accomplish one's goals.

Literate students can make meaning from text and express themselves in a variety of modes; they are able to comprehend, make connections, and critically analyze as well as create texts and communicate for a variety of purposes.

It is important to note that the word "text" refers to all forms of oral, visual, digital, and written communication.

Examples of literate critical thinking and communication:

- Summarizing a story told by a family member,
- Connecting information from a journal article, a textbook, and an in-class discussion,
- Examining prototypes and creating a design brief.



Numeracy is the ability to interpret and apply mathematical understanding to solve problems in a variety of contexts and to analyze and communicate these solutions in ways relevant to the given context.

Numerate students can interpret information within a given situation through the application of mathematical understanding to solve an identified problem, and then analyze and communicate a solution.

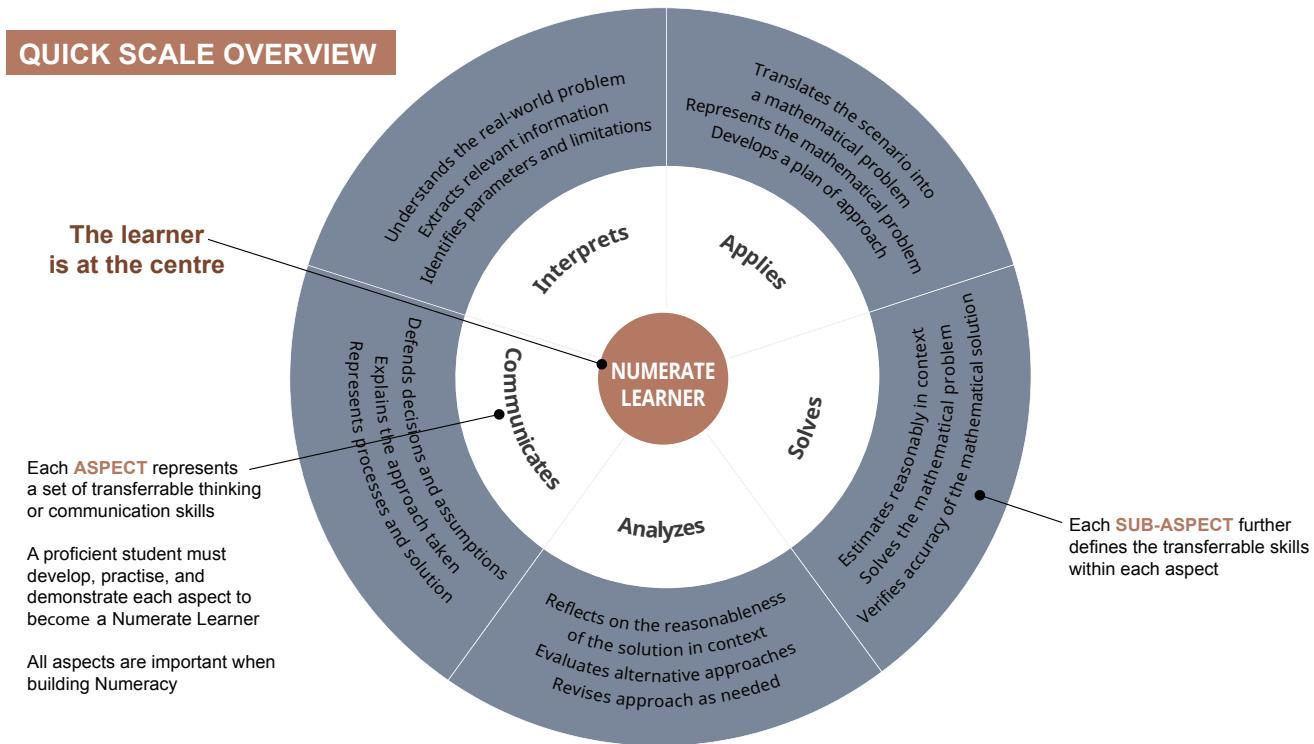
Examples of numerate critical thinking and communication:

- Creating a scale model of a classroom to rearrange the furniture,
- Comparing weather data from different areas of the province to recommend clothing choices,
- Counting the number of different trees on a nature walk and presenting the information,
- Determining the optimal price for a product.

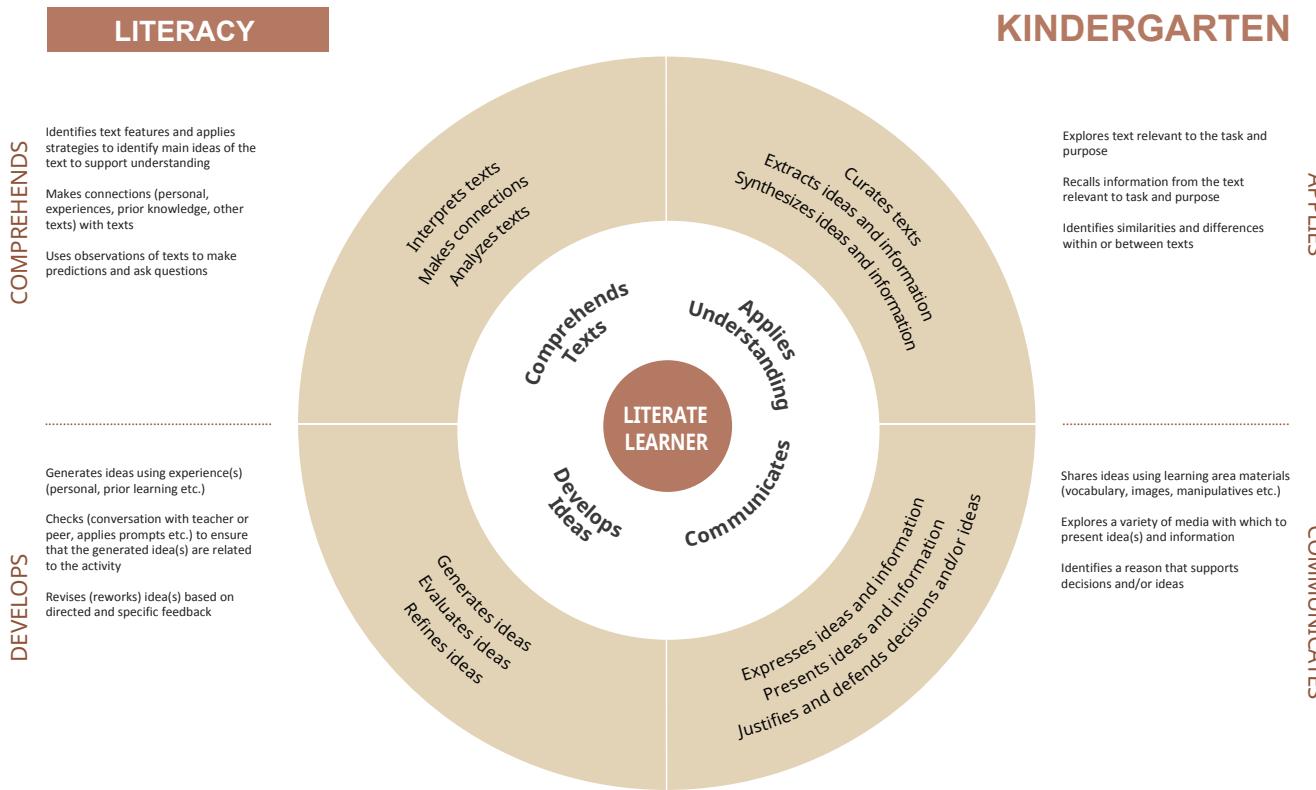
Literacy and numeracy K-12 Learning Progressions

The literacy and numeracy K-12 Learning Progressions are made up of **aspects** and **sub-aspects**. Each aspect has three corresponding sub-aspects. The aspects are the overarching skills being developed, and the sub-aspects are the skills that support the development of the aspect. Each sub-aspect has descriptions of Proficient that define what the skills look like from K to Grade 12.

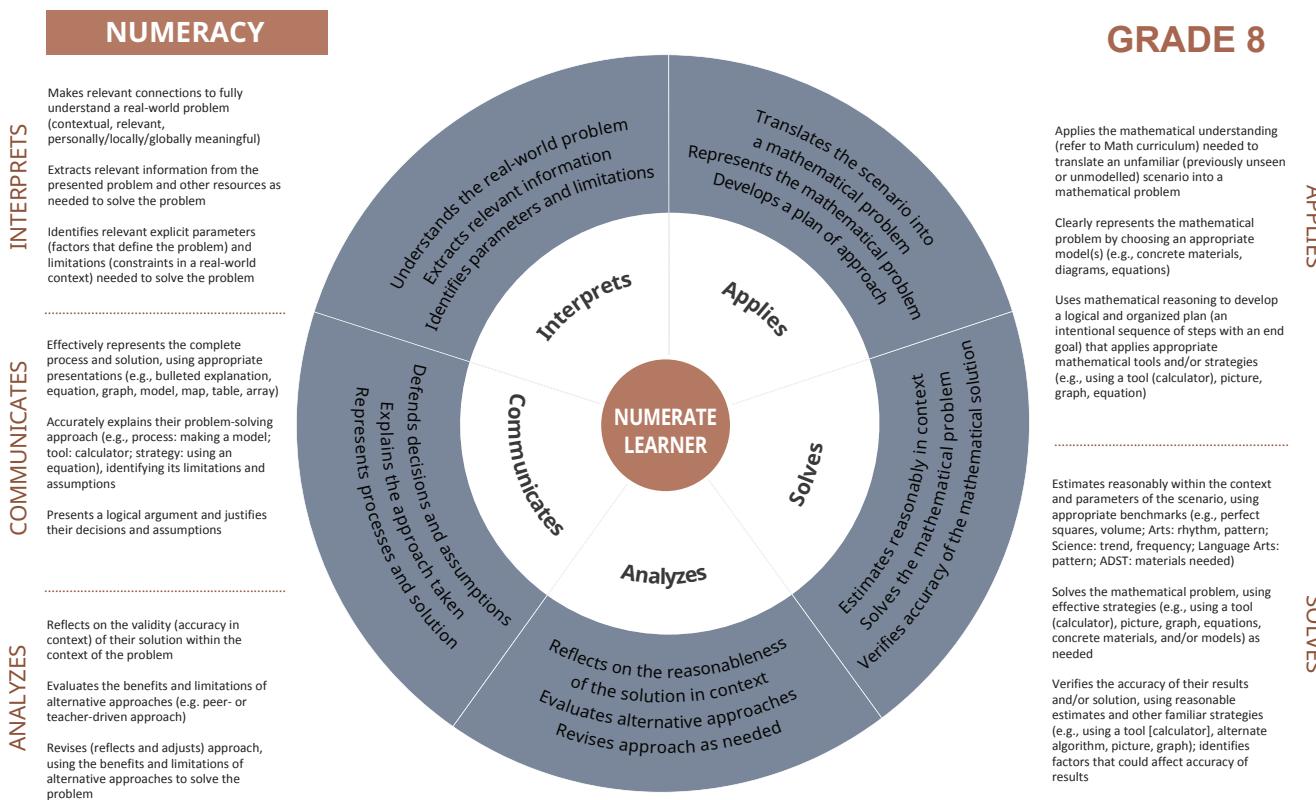
Structural overview



Literacy



Numeracy



Incorporating literacy into the classroom

Literacy begins with reading and writing and connects with the learning happening in every classroom. As defined by the provincial curriculum, literacy also describes critical thinking skills, including analysis, synthesis, and communication and creation for a variety of purposes and audiences. As educated citizens, students demonstrate their literacy by using learning area-specific competencies and reading and writing skills to support critical thinking and communication.

Literacy competencies might be used to make meaning through finding the significance in a story told by a family member, or to develop ideas, such as when brainstorming and discussing with peers a list of strategies and justifying the best choice.

Many teachers find that students are already developing, practising, and demonstrating aspects of literacy implicitly in their learning opportunities. Teachers can further integrate literacy into learning opportunities by making these embedded aspects of literacy explicit in lesson planning, teaching, and classroom assessment.



Literacy in the classroom

Literacy learning opportunities are embedded in the classroom, are contextualized, and allow students to apply their reading, writing, oral communication, and other strategies. These skills are needed to extract information and make meaning from text, synthesize, develop ideas, and communicate understanding.

Sample applications of literacy across the curriculum:

- Comparing two sources recounting the same event, analyzing similarities and differences, and figuring out why people perceive the same event differently,
- Interpreting the reasoning behind the rise and fall of water levels in a local river basin across the year based on different sources of information,
- Exploring the relationship between humans and the physical environment through tableaux, monologues, or choreographed movement routines,
- Demonstrating understanding that some words have different, learning area-specific meanings
 - for example, rational and irrational.

Where do reading and writing foundations fit in?

Reading and writing are important foundations of learning and development for students. In the English and French Language Arts curricula, Content learning standards support the development of foundational language features, structures, and conventions, including concepts of print, letter and word recognition, phonemic and phonological awareness, word patterns, and sentence structure. The Content and Curricular Competency learning standards outline foundational skills that students learn to make sense of print, decode, read with comfortable fluency, and understand a variety of vocabulary. This takes place while discovering that reading is enjoyable, unlocks the imagination, and builds knowledge about the world.

Literacy begins with reading and writing foundations and is extended to describe critical thinking skills, including analysis, synthesis, and communication and creation for a variety of purposes and audiences. Reading and writing are essential skills that are described in the Language Arts Content learning standards. Teachers use their professional judgment to teach reading and writing strategies that are most effective and personalized for the students in their class. The K-12 Learning Progressions build on the foundational skills developed in Language Arts. They focus on the critical thinking and communication skills that are embedded in the Curricular Competencies across all learning areas. All teachers can help students develop literacy.

Incorporating numeracy into the classroom

All teachers in all learning areas can support students' development of numerate critical thinking skills, such as interpreting data in context, evaluating the efficiency of different strategies, and communicating their process or solution to different audiences.

Students can develop, practise, and demonstrate different aspects of numeracy in each course or learning area. These experiences together will help students grow their numeracy skills as educated citizens. One suggested strategy is to work with a colleague through a learning opportunity that you have already developed, or one of the sample numeracy learning opportunities, then reflect together and identify the numeracy processes required for students to work through the activity. You might compare the numeracy aspects of your Curricular Competencies, searching for overlap in how these skills are developed, practised, and demonstrated by your students.

As you begin to uncover where numeracy is embedded in your existing learning opportunities, or perhaps intentionally plan to integrate numeracy with your classroom activities, remember that not every task needs to include every numeracy aspect, every day. You might consider starting your numeracy journey by focusing on how one or two aspects of numeracy support students in the learning area, before building to a learning opportunity that incorporates all numeracy aspects.

Sample applications of numeracy across the curriculum:

- Using maximum heart rate to formulate exercise training intensities or target heart rates,
- Mapping the area needed for a school mural project,
- Finding the density of an unknown substance to determine what it is made from,
- Describing the calculation of the cost of materials for footings and wall forms,
- Experimenting with rhythm and meter in poetry.

What is the difference between math and numeracy?

While closely connected, math and numeracy are not exactly the same thing.

In math, students build strategies needed to solve problems, such as determining patterns, measuring an angle, or adding and subtracting fractions; they also build skills like reasoning with evidence and analyzing their process or answer. Students might learn how to use tools such as calculators, counters, or graphing programs. The skills and strategies built in math class are like tools in a toolbox.

A numerate learner knows how to use mathematical tools effectively to build a deeper, real-world understanding that in turn can help them build deeper understanding in other learning areas. Students can build and practise numeracy in any learning area, using the mathematical skills and strategies currently in their toolbox.

For example:

- A student might still be developing their math ability to add two-digit numbers by hand but may demonstrate proficient numerate thinking by creatively determining the length of fencing needed around a garden plot by drawing a diagram (selecting a strategy that makes sense).
- A student might be proficient in their math ability to multiply a decimal and a whole number and demonstrate proficient numerate thinking when predicting and estimating the total profit at a concession stand (understanding the context of the situation).
- A student might be developing their ability to calculate the slope of a graph but be able to understand and communicate from a graph of the world population that it is increasing at a rate faster than ever before (using their numerate thinking to defend their ideas).

Numeracy thinking builds on acquired math skills and allows students to use their math tools in a real-world context that encourages critical thinking.



Numeracy in the classroom

Numeracy activities don't need to use all five aspects. Some students may not be ready to complete a task that requires them to utilize all of the numeracy skills at once. Teachers can select certain aspects that they want to work on and scaffold their students' learning as needed to allow them to develop and demonstrate numeracy thinking and communication skills. Once they develop these skills, teachers may begin to develop learning opportunities that require students to demonstrate all five numeracy aspects.

Field review of BC Learning Pathways

Beginning in June 2023 and continuing until January 2024, BC Learning Pathways will be available for teachers across the province to use in their classrooms and provide feedback. Once the feedback is collected, the teacher development team will review it and then edit and add to the materials to ensure that they are meeting the needs of teachers before the final release.

We encourage you to use BC Learning Pathways in your planning, teaching, and classroom assessment before sharing feedback.

The following are some questions to consider when sharing your feedback. Please answer any or all of the questions below on your experience using BC Learning Pathways to plan, teach, assess, and report in your classroom.

1. How did BC Learning Pathways support your planning, teaching, and assessment within the redesigned curriculum?
2. How did BC Learning pathways help your students develop and practise cross-curricular literacy and numeracy skills?
3. How did BC Learning Pathways support your assessment and communication of student learning in alignment with the new K-12 Student Reporting Policy?
4. Would you use additional BC Learning Pathways resources that would support the development of key reading, writing, and math skills (e.g., explicit early literacy learning supports focused on language features, structures, and conventions, word recognition, and phonemic and phonological awareness)? Why or why not?
5. The current BC Learning Pathways materials provide definitions and examples of Proficient student learning in literacy and numeracy. Would BC Learning Pathways materials with definitions and examples for other indicators on the Provincial Proficiency Scale (i.e., Emerging, Developing, and Extending) support your planning, teaching, assessment, and reporting?
6. What additional feedback would you like to share regarding BC Learning Pathways?

BC Learning Pathways Summary

- BC Learning Pathways has been designed by teachers for teachers.
- The series of resources is intended to support teachers through the entire teaching cycle.
- BC Learning Pathways builds on past work that supported teachers in evaluating and assessing student learning, like the BC Performance Standards.
- BC Learning Pathways is not just a summative assessment tool but a series of resources that support teachers to incorporate literacy and numeracy into the classroom, implement the redesigned curriculum, and identify evidence of proficient student learning for classroom assessment and reporting.

Feedback can be submitted at learningpathways@gov.bc.ca. Thank you for your feedback.