

Resumption of Learning- Fall 2020

This document is intended to assist teachers with the resumption of learning, following the suspension of in-class learning in March 2020. It is meant only to offer suggestions, not to direct instructional practices.

Every year teachers address the range of skills and abilities that students bring to the classroom, as they differentiate instruction and attend to the adaptive dimension. Due to the global pandemic, in-class instruction ended unexpectedly mid-March. Optional supplemental learning opportunities were provided for students for the remainder of the 2019-20 school year. Students chose to access these opportunities in different ways and to different extents. The 2020-21 school year will present unique challenges requiring a well-planned response.

Educators will continue to design instruction acknowledging the diversity of learning experiences and needs of the students in their class. As they do at the beginning of every year, teachers will use the knowledge of students and the curriculum to guide decisions about effective and efficient instruction, based on the needs of each student. All grades 1-12 grade-specific curricular outcomes and French Immersion K-2 critical learnings are to be addressed.

Initial Planning Suggestions:

- Connect with parents/caregivers early in the school year to discuss the student's at-home learning experience to facilitate planning for the continuation of learning. To help alleviate parent apprehension related to math, teachers may choose to share [Building Math Success parent pamphlets](#).
- Identify, when possible, the outcomes that were completed during the abbreviated 2019-20 in-class learning experience by reviewing each student's previous year's academic history (e.g., cum files, report cards, IIP or individual plans).
- Prioritize assessment *of and for* learning to establish trust and gain insight into students' current understanding in relation to curriculum outcomes.
 - Assess grade level in terms of prerequisite knowledge needed in order to move into the new outcome;
 - Plan for review, instruction, practice, assessment and extension or learning of prerequisite knowledge; and,
 - Assess student mastery of prerequisite knowledge prior to moving into new instruction.
- Outcomes need not be taught separately, consider using cross-curricular planning.
 - High school *Catholic Studies* teachers may find the section called *Connections with other Areas of Study* useful when using this approach.
- Connect themes, contexts or topics through well-formulated inquiry questions when integrating within one or more areas of study in K-9.
- Consider adaptations to help student achieve curriculum expectations (refer to these documents for further support: [The Adaptive Dimension for K-12 Students](#), [Supporting All Learners](#), [Actualizing a Needs Based Model](#)).

Instructional Suggestions:

- When planning, teachers start with curricula to understand the intent of the outcomes and accompanying indicators, after which the types of evidence that might demonstrate student achievement of these outcomes must be considered. Good planning aligns outcomes and indicators, assessment and learning tasks.
- All curriculum outcomes are required. Teachers can refer to prior grade outcomes to meet individual student needs. There are charts called [Summarized Outcomes Across Areas of Study for Kindergarten to Grade 5](#) and [Summarized Outcomes Across Areas of Study for Grades 6 -9](#) in the resource section on the curriculum website. French Immersion and Fransaskois curricula have charts showing outcomes for multiple years in a table.
 - French resources can be found by searching the term “Continuum” on the Curriculum website under "Matériels annexes" for all Immersion and Fransaskois math curriculum.
- Incorporate authentic assessment strategies to gauge student learning and need. This may include:
 - observing and recording what students say and do to identify gaps in learning or misconceptions; and,
 - analyzing student work samples to identify areas of strength and areas that may require re-teaching or support.
- Consider using a task analysis which consists of three steps: identify a specific goal; identify the essential component parts; and, determine at what point the skills sequence begins to support the learners in the class. Teachers break down complex tasks into teachable sub-components and then sequence the sub-components in an order that facilitates and supports student learning.
- Focus on large group instruction. Consider instructional strategies and approaches that are meaningful and engaging for all learners in the classroom. When planning, keep in mind the range of learners in the class and provide ways for all students to participate (see *Responsive instruction: Classroom level supports: [Module 1 - Multi-level instruction - Planning for student diversity](#)*).
- Use [tiered learning tasks](#) to meet the needs of targeted group or individual students.
- Choose instructional approaches where students can work at their independent level (e.g., individualized spelling, inquiry, writer’s workshop, etc.).
- For older students, [Flip the Classroom](#), record your lesson and have the students watch the recording at home. Students work on activities the next day, allowing the teacher to individually confer with students and provide 1-1 support.

Subject-Specific Suggestions:

Following are some tools available in both French and English to assist teachers in the areas of writing, mathematics and science.

Math

There are math concepts that are prerequisites to concepts taught in the following grade. It may be helpful to review the previous year’s outcomes and to develop a pre-assessment in order to gauge student level of comprehension.

The [Kindergarten-Grade 9 Summarized Mathematics Outcomes](#) provide teachers with:

- a quick overview of all outcomes at a glance;
- a progression of learning for planning individually, as a team, or at a school level;
- a flow of knowledge, skills and understandings which inform instructional choices; and,
- a resource for multi-grade level planning.

For example, the summarized outcomes could assist a Grade 5 teacher in planning for fractions by showing the outcome in the previous and future year.

Grade 4	Grade 5	Grade 6
– Understand fractions less than or equal to one.	– Understand equivalent fractions and compare fractions with like and unlike denominators.	– Fractions to improper fractions and to mixed numbers.

The summarized outcomes provide teachers with an overview of the flow of content. More detail to further assist in planning can be found with a complete set of outcomes and indicators on the curriculum website at www.curriculum.gov.sk.ca.

Resources:

[Sample Math Outcome Questions \(SMOQ\)](#)

- Questions that can be used for learning, sample responses and rubrics.
- Teachers may consider using the previous year’s SMOQ to develop a pre-assessment to determine student knowledge relative to the current year outcomes.
- Consider having students play math games such as [Aski’s Pond](#) to determine student’s level of understanding.

Math Continua/expected learnings:

- The math outcomes continuum for Grades K-12 français and Grades 3-12 immersion are available for teachers. The continuums for Grades K-9 are organized by strands (Shape and Space, Number, Patterns and Relations, Statistics and Probability) and by pathways for Grades 10 to 12 (Foundations of Mathematics, Precalculus and Workplaces and Apprenticeship).
- These continuums can be used as outcomes at glance to allow teachers to see the progression of learning when planning individually or as a team at the school level.
- These resources can be found by searching the term "Continuum" on the Curriculum website under "Matériels annexes" for all Immersion and Français math curriculum.

Language Arts

Like math, there are developmental concepts that are prerequisites to reading and writing, specifically in the early years. It may be helpful to review the previous year's outcomes and to develop a pre-assessment in order to gauge student level of comprehension.

Language arts skills and concepts are important in all grades and areas of study. An effective program in this area helps develop students' facility with language and provides students with opportunities to:

- learn to use language in a variety of meaningful ways, considering and determining their audience, purpose, and situation;
- learn about language as a necessary tool for thinking and communicating effectively, considering the cues and conventions of language; and,
- learn through language by applying their knowledge of language in their viewing, listening, reading, representing, speaking, and writing experiences.

With this in mind, teachers can consider how to create cross-curricular opportunities in other subjects such as discussing language used in math or reviewing a math problem and discussing ways to solve it. In addition, English Language Arts curricula have sections within them that can help in assessment or for planning. For example, in the middle years' documents, there are sample rubrics and ELA 10 includes a sample reporting form which lists the goals, outcomes and strands in a useful chart.

Resources:

[Writing at Grade Level Documents](#)

- Writing Continuum:
 - an overview of the writing skills, text forms, and strategies for each grade/course; and,
 - can be used as a quick check of previous year's curricular ideas.
- Writing Rubrics, Prompts, Student Samples:
 - grades 1-12 holistic rubrics and writing prompts connected to curricular outcomes and contexts or units;
 - grades 4, 7 and 9 student writing samples; and,
 - can be used as a pre-assessment tool early in the school year.

Science

- Science at all grades include the Scientific Literacy Framework and have a chart explaining the fundamental ideas that all students should know by the end of Grade 12. Science teachers may re-read this section and consider these fundamental ideas when planning.
- *Science 10* is the pre-requisite for all other high school science courses. Science teachers may wish to review these outcomes and pre-assess or review for the level 20 courses.
- The Secondary Science Implementation Support (SSIS) organization houses materials developed to support teachers' implementation of secondary science courses. The Support Materials section contains materials that have been developed and refined by each of the course-specific Secondary Implementation Support teams. Teachers are free to use these materials as they wish. Approximately 550 support materials have been developed in English and French for *Science 10*, *Health Science 20*, *Environmental Science 20*, *Physical Science 20*, *Chemistry 30*, *Physics 30*, *Biology 30*, *Earth Science 30*, *Computer Science 20* and *Computer Science 30* have been posted.
 - Teacher-developed supports for the 10 secondary science courses are posted in Blackboard and available to any Blackboard user by enrolling in the SSIS organization.
 - Contact Network Services (NetworkServices@gov.sk.ca) for assistance with Blackboard.

Appendix A: Additional Ministry Supports

- [*Instructional Supports for Diverse Writers-Grades 4-9*](#)
 - provides teachers with support for the diverse range of students in their classrooms; and,
 - focuses on instructional considerations, practices and strategies for students who are challenged with developing and/or improving their writing skills.

- Responsive instruction modules are housed on the ministry’s Blackboard site [“Supporting All Learners”](#)
 - [*Reading Instruction: Critical Elements*](#)
 - discusses the critical elements of reading instruction.
 - [*Targeting Reading Instruction: Knowing Our Learners*](#)
 - focuses on the underlying processes and skills involved in learning to read. The understanding of these processes will enable teachers to target instruction to support student need.
 - [*Instruction in Mathematics: Effective Instructional Practices*](#)
 - provides suggestions for instructional approaches that support the learning needs of students and enhance mathematical thinking.
 - [*Targeting Mathematics Instruction: Knowing Our Learners*](#)
 - focuses on fostering a positive mathematics environment to support the needs of individual learners.
 - [*Written Expression Instruction: Effective Instructional Practices*](#)
 - provides suggestions for effective classroom-wide instructional practices that support the development of written expression skills and processes.
 - [*Targeting Written Expression Instruction: Knowing Our Learners*](#)
 - focuses on the skill areas associated with written expression and provides targeted/group instructional approaches and strategies to support student learning.

Kindergarten to Grade 9 Summarized Mathematics Outcomes

K-12 Goals: Logical thinking, number sense, spatial sense, and mathematics as a human endeavour.	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Number Strand	<ul style="list-style-type: none"> State whole number sequence by 1s starting anywhere from 0 to 10 and from 10 to 0. Recognize and name familiar arrangements of 1 to 5. Relate a numeral, 0 to 10, to its respective quantity. Represent the partitioning of whole numbers (1 to 10). Compare quantities, 0 to 10, using one-to-one correspondence. 	<ul style="list-style-type: none"> State number sequence, 0 to 100. Recognize arrangements of 1 to 10. Demonstrate an understanding of counting. Understand whole numbers to 20. Compare sets containing up to 20 elements to solve problems. Estimate quantities to 20. Understand whole numbers represented by a variety of equal groupings with and without singles. Identify the number, up to 20, that is one more, two more, one less, and two less than a given number. Understand addition of numbers with answers to 20 and the corresponding subtraction facts. Use mental mathematics strategies for addition facts to 18 and related subtraction facts. 	<ul style="list-style-type: none"> Understand whole numbers to 100. Understand addition (limited to 1 and 2-digit numerals) with answers to 100 and the corresponding subtraction. 	<ul style="list-style-type: none"> Understand whole numbers to 1,000. Understand addition of whole numbers with answers to 1,000 and their corresponding subtractions. Understand multiplication to 5×5 and the corresponding division statements. Understand fractions. 	<ul style="list-style-type: none"> Understand whole numbers to 10,000. Understand addition of whole numbers with answers to 10,000 and their corresponding subtractions. Understand multiplication of whole numbers (limited to numbers less than or equal to 10). Understand multiplication (2- or 3-digit by 1-digit). Understand division (1-digit divisor and up to 2-digit dividend) to solve problems. Understand fractions less than or equal to one. Understand decimal numbers in tenths and hundredths. Understand addition and subtraction of decimals limited to hundredths. 	<ul style="list-style-type: none"> Represent, compare, and describe whole numbers to 1,000,000 within the contexts of place value and the base ten system, and quantity. Develop strategies for multiplication of whole numbers. Understand division (3-digit by 1-digit) and interpret remainders to solve problems. Apply strategies for estimation and computation. Understand equivalent fractions and compare fractions with like and unlike denominators. Understand decimals to thousandths. Understand addition and subtraction of decimals (limited to thousandths).

K-12 Goals:	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Patterns and Relations Strand	<ul style="list-style-type: none"> Understand repeating patterns (2 or 3 elements). Use direct comparison to compare two objects based on a single attribute. Sort 3-D objects using a single attribute. Build and describe 3-D objects. 	<ul style="list-style-type: none"> Understand repeating patterns (2-4 elements). Translate repeating patterns from one form to another. Describe equality as a balance and inequality as an imbalance. Record equalities using the equal symbol. 	<ul style="list-style-type: none"> Understand repeating patterns (3-5 elements). Understand increasing patterns. Understand equality and inequality. 	<ul style="list-style-type: none"> Understand increasing and decreasing patterns. Understand equality by solving one-step addition and subtraction equations involving symbols representing an unknown quantity. 	<ul style="list-style-type: none"> Understand patterns and relations. Understand equations involving symbols to represent an unknown value. 	<ul style="list-style-type: none"> Apply patterns using mathematical language and notation. Write, solve, and verify single-variable, one-step equations with whole number coefficients and whole number solutions.
Shape and Space Strand		<ul style="list-style-type: none"> Understand measurement as a process of comparing. Sort 3-D objects and 2-D shapes using one attribute. Replicate composite 2-D shapes and 3-D objects. Compare 2-D shapes to parts of 3-D objects in the environment. 	<ul style="list-style-type: none"> Understand non-standard units for linear measurement. Understand non-standard units for measurement of mass. Describe, compare, and construct 3-D objects. Describe, compare, and construct 2-D shapes. Understand the relationship between 2-D shapes and 3-D objects. 	<ul style="list-style-type: none"> Understand passage of time. Understand measuring mass in g and kg. Understand linear measurement (cm and m). Understand 3-D objects by analyzing characteristics. Understand 2-D shapes (regular and irregular). 	<ul style="list-style-type: none"> Understand time. Understand area of regular and irregular 2-D shapes. Understand rectangular and triangular prisms. Understand line symmetry. 	<ul style="list-style-type: none"> Construct rectangles given either perimeter, area or both. Understand measuring length and the relationship between mm, cm and m units. Understand volume for cm^3 or m^3 units. Understand capacity between mL and L. Provide examples of edges and faces of 3-D objects, and sides of 2-D shapes. Identify and sort quadrilaterals. Analyze single transformations of 2-D shapes.

K-12 Goals: logical thinking, number sense, spatial sense, and mathematics as a human endeavour.	Grade 6	Grade 7	Grade 8	Grade 9
Number Strand	<ul style="list-style-type: none"> Place value for numbers greater than 1 million and less than one thousandth. Factors and multiples of numbers less than 100, relating factors and multiples to multiplication and division, and determining and relating to prime and composite numbers. Order of operations on whole numbers (excluding exponents). Multiplication and division to decimals (1-digit whole number multipliers and 1-digit natural number divisors). Percent limited to whole numbers to 100. Integers. Fractions to improper fractions and to mixed numbers. Ratios. First Nations and Métis peoples envision, represent and use quantity in their lifestyles and worldviews. 	<ul style="list-style-type: none"> Division through the development and application of divisibility strategies for 2, 3, 4, 5, 6, 8, 9, and 10, and involving zero. Addition, subtraction, multiplication and division of decimals to greater numbers of places, and the order of operations. Relationships between positive decimals, positive fractions (including mixed numbers, proper fractions, and improper fractions), and whole numbers. Percent including fractional percents between 1% and 100%. Adding and subtracting positive fractions and mixed numbers, with like and unlike denominators. Addition and subtraction of integers. 	<ul style="list-style-type: none"> Square and principle square root of whole numbers. Percents greater than or equal to 0% (including fractional and decimal percents). Rates, ratios and proportional reasoning. Multiplying and dividing positive fractions and mixed numbers. Multiplication and division of integers. 	<ul style="list-style-type: none"> Powers with integral bases (excluding base 0) and whole number exponents. Rational numbers including comparing and ordering, relating to other types of numbers, and solving situational questions. Square root including positive rational numbers.
Patterns and Relations Strand	<ul style="list-style-type: none"> Relationship in tables of values and graphs. Preservation of equality. Expressions and equations involving variables. 	<ul style="list-style-type: none"> Relationships between oral and written patterns, graphs and linear relations. Equations and expressions. One-and two-step linear equations. Linear equations by modeling problems as a linear equation and solving the problems. 	<ul style="list-style-type: none"> Linear relations. Model and solve problems using linear equations. 	<ul style="list-style-type: none"> Linear relations including graphing, analyzing, interpolating and extrapolating, and solving situational questions. Model and solve situational problems using linear equations. Single variable linear inequalities with rational coefficients. Polynomials which are limited to polynomials of degree less than or equal to 2.

K-12 Goals: logical thinking, number sense, spatial sense, and mathematics as a human endeavour.	Grade 6	Grade 7	Grade 8	Grade 9
Shape and Space Strand	<ul style="list-style-type: none"> Angles which include identifying examples, classifying angles, estimating measurement, angle measures in degrees, drawing angles, and angle relationships in triangles and quadrilaterals. Perimeter of polygons, area of rectangles, and volume of right rectangular prisms. Regular and irregular polygons. First quadrant of the Cartesian plane and ordered pairs with whole number coordinates. Single and combinations of transformations of 2-D shapes. 	<ul style="list-style-type: none"> Circles including circumference and central angles. Develop and apply formulas for determining the area of triangles, parallelograms and circles. 2-D relationships involving lines and angles. Cartesian plane and ordered pairs with integral coordinates. Transformations (translations, rotations, and reflections) of 2-D shapes in all four quadrants of the Cartesian plane. 	<ul style="list-style-type: none"> Pythagorean Theorem. Surface area of 3-D objects limited to right prisms and cylinders. Volume limited to prisms and cylinders. Tessellation. 	<ul style="list-style-type: none"> Circle properties. Area to surface area of right rectangular prisms, right cylinders, right triangular prisms, and composite 3-D objects. Similarity of 2-D objects. Line and rotation symmetry.
Statistics and Probability Strand	<ul style="list-style-type: none"> Data analysis which includes line graphs, graphs of discrete data, data collection, and interpolation and extrapolation. Probability that includes sample space, and experimental and theoretical probability. 	<ul style="list-style-type: none"> Measures of central tendency and range for sets of data. Circle graphs. Theoretical and experimental probabilities for two independent events where the combined sample space has 36 or fewer elements. 	<ul style="list-style-type: none"> Modes of displaying data and the reasonableness of conclusions. Probability of independent events. 	<ul style="list-style-type: none"> Factors affecting data collection such as bias, use of language, ethics, cost, time and timing, privacy, cultural sensitivity, and population or sample. Collection, display, and analysis of data. Role of probability in society. First Nations and Métis peoples envision, represent and make use of probability and statistics.