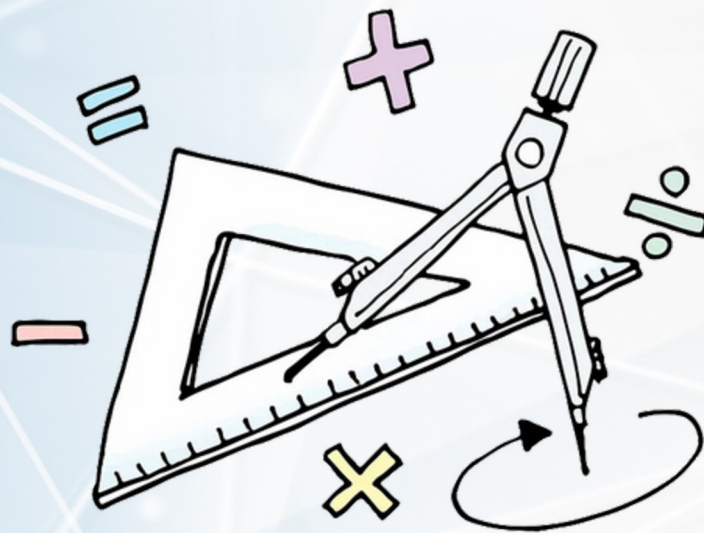




Peace River School Division

Learning Together - Success for All

Numeracy Framework



Revised: August 2024

Contents

01	<u>Framework</u>	3
	<u>Instruction and Assessment Schedules</u>	4
	Divisional Assessments	
	<u>Screeners</u>	5
	<u>Progress Monitor</u>	6
	<u>Collaborative Response</u>	7
	<u>Timeline</u>	8
02	<u>What is Numeracy?</u>	9
03	<u>Teaching Practices</u>	10
04	<u>Assessment Practices</u>	12
05	<u>References</u>	14

Framework

Rationale

The Numeracy Framework outlines how instruction and assessment in the Peace River School Division are designed to foster high-quality teaching practices and to leverage assessment data to inform instruction leading to the success of all learners.

This framework supports the key outcome of the PRSD’s Education Plan: 2024-2029, All students are performing at or above grade level in numeracy or meeting their individualized program goals: (p. 3).

The details share in this framework are aligned with “research-informed best practices” and compliment the collaborative response approach ensuring data-informed intervention supports that give our students the very best opportunities to be successful.

Our Priorities



Instruction and Assessment Schedules (IAS)

The Peace River School Division has adopted a common instruction sequence to support students changing schools within PRSD, to support the universal use of pedagogically sound learning progressions, to foster effective collaboration between teachers and schools, to help ensure timely PD, to align content for supporting instruction in multi-grade classrooms, to support new teachers, and to support NCAT implementation.

Learning outcomes are organized to inform instructional planning, pacing, and assessment. Using assessment information, start where students are and move them forward in their journey.

The essential outcomes are from the number and patterns (algebra) units. Long-range plans are designed to ensure coverage of the essential outcomes.

Instruction and formative assessment prioritize students' attainment of the essential outcomes.

A link to the Instruction and Assessment documents folder can be found on the Numeracy Website under "[Planning](#)"

Assessment

Screeners

Student achievement data from assessments inform the Collaborative Response process at the classroom, school, and division levels. The use of Screeners in September is to find out what students/classes know and understand, based on the previous year's curriculum. After completing the screener, teachers should analyze the results to inform planning instruction and determine which students require extra or targeted support.

The benchmark/screening tools are used again in the winter / spring to determine growth in student understanding, to assess the effectiveness of interventions, and to report to our stakeholders. These assessments and reporting are requirements of Alberta Education. Therefore, all schools must ensure the completion of the assessment and input the data in compliance with the schedule.

The two different screeners used in the Peace River School Division are the:

Provincial Numeracy Screener (PNSA)

Kindergarten to grade 4

These are found on [NewLearnAlberta](#) website

A link to the assessment can be found on the Numeracy Website under "[EICS Math](#)"

EICS Math

Elk Island Math Assessment
grades 5-10

Assessment

Progress Monitors

Progress Monitoring tools assess key grade-level concepts from the number, patterns and algebra strands. The Peace River School Division uses an internally created Numeracy Common Assessment Tool (NCAT).

The NCATs are given post-instruction to monitor students' grasp of concepts crucial to success throughout the mathematics curriculum as well as subsequent grades.

A link to the assessment can be found on the Numeracy Website under "[NCATs](#)"

Final Exams

A common final exam has been developed for grades 7 & 8 in collaboration with divisional teachers to align with the Alberta Curriculum. They are similar in style and level of difficulty to the Provincial Achievement tests.

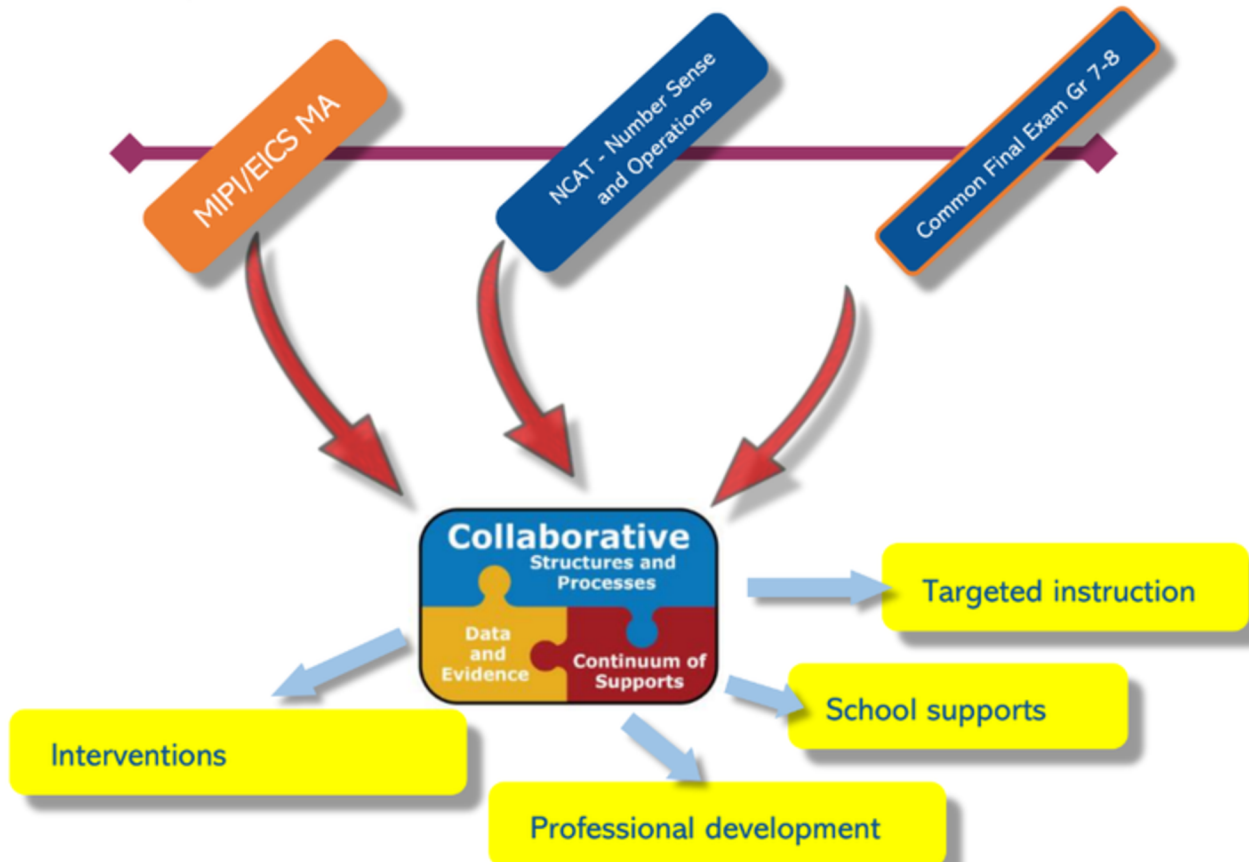
A link to the assessment can be found on the Numeracy Website under "[Final Exams](#)"

Collaborative Response

Collaborative Response

Student achievement data from the MIPI/EICS MA and NCATs inform the Collaborative Response process at the classroom, school, and division levels.

All assessments are entered into the Dossier platform which has many data analysis tools to help inform the collaborative response process.



Timeline

Windows for Implementing the Screeners and Progress Monitoring Assessments

Assessment Timeline Overview												
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.		
KG												
Gr. 1	P N S A				P N S A				P N S A			
Gr. 2												
Gr. 3												
Gr. 4												
Gr. 5	EICS Math				NCATs		EICS Math (students at risk)		NCATs			
Gr. 6												
Gr. 7											NCATs	Final Exam
Gr. 8												
Gr. 9									NCATs			
Gr. 10												

What is Numeracy?

Alberta Education (2017) defines numeracy as the ability, confidence and willingness to engage with quantitative and spatial information to make informed decisions in all aspects of daily living.

Quantitative information can be measured and expressed as an amount. It includes numbers, patterns, statistics, and probability.

(Alberta Education, 2017)

A numerate individual has the confidence and awareness to know when and how to apply quantitative and spatial understandings at home, at school, at work, or in the community.

(Alberta Education, 2017)

Spatial information is the physical location of objects or people or the relationship between objects or people. It includes measurements, location, direction, shape, and space.

(Alberta Education, 2017)



Teaching Practices

Effective teaching is the non-negotiable core of any mathematics program. As mathematics educators, we continually strive to improve our teaching so that every child develops the mathematical proficiency needed to be prepared for his or her future.

Hattie et. al. (2017, p. xxi) in *Visible Learning for Mathematics*

Professionalism

In an excellent mathematics program, educators hold themselves and their colleagues accountable for the mathematical success of every student and for personal and collective growth towards effective teaching and learning of mathematics

(NCTM, *Principles to Action Executive Summary*)

The PRSD numeracy framework and supporting documents (Classroom Look-Fors) focus on the instruction and assessment regime to support the high-leverage teaching practices detailed on the next page.



High - Leverage Teaching Practices

High-quality instruction involves implementing the 8 high-leverage effective teaching practices outlined by the National Council of Teachers of Mathematics (NCTM) (2014, p. 10):

- Establishing mathematics goals to focus learning;
- Implementing tasks that promote reasoning and problem-solving;
- Using and connecting mathematics representations;
- Facilitating meaningful mathematical discourse;
- Posing purposeful questions;
- Building procedural fluency from conceptual understanding;
- Supporting productive struggle in learning mathematics; and
- Eliciting and using evidence of student learning.

Dimensions of Assessment

To provide more clarity on the assessment practices, the Alberta Assessment Consortium (AAC) has outlined the 10 dimensions of sound classroom practices. These assessment practices integrate well with the high-leverage teaching practices. Together with the PRSD Numeracy Framework, these practices guide our work in developing the mathematics experiences to support success for all students.

Planning with the end in mind

A teacher who is an effective assessor plans with the end in mind

Dimension 1: Clarifying the Learning Destination

Dimension 2: Planning for Assessment and Instruction

Dimension 3: Considering the Needs of the Learners

Formative Assessment

A teacher who is an effective assessor understands the purpose for assessment and balances formative and summative assessment experiences

Dimension 4: Engaging Students in the Assessment Process

Dimension 6: Time to Reflect

Dimension 5: The Critical Role of Practice and Feedback

Dimension 7: Formative Assessment to Inform Instructional Practice

Dimensions of Assessment

Summative Assessment

A teacher who is an effective assessor is able to use sound professional judgement when interpreting results of summative assessments

Dimension 8: An Accurate Picture of Student Performance

Dimension 9: Combining Evidence in a Meaningful Way

Dimension 10: Communicating Student Learning

Refer to the [attached document](#) for more details, and the [AAC website](#)



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