LITERACY & NUMERACY RESPONSIVE FRAMEWORK

EARLY/MIDDLE YEARS
DRAFT NOVEMBER 2022

www.sd22learns.ca

Responsive Frameworks Rationale

> **"Responsive teaching and assessing means we are always teaching for understanding, continuously checking for understanding, and adjusting instruction as needed." (Read, Write, Lead, Routman 2014)**

This Responsive Framework is constructed using current research and pedagogy that support inclusive and equitable learning environments. It supports the notion that "*...effective teaching is not solely routine and technical work; it is complex, adaptive work demanding constant attunement and responsiveness.*"(Street Data, Safir and Dugan 2021)

A responsive framework is:

- **Student-centered,** built upon a personalized approach to learning that provides opportunity for student agency
- **Inclusive**, providing opportunities for all learners to participate while educators work within the tiers of intervention responding to individual strengths and needs
- **Intentional,** supported by systems, structures and routines that are equitable and flexible

Responsive Frameworks incorporate Indigenous Ways of Knowing and First People's Principles of Learning, inclusive with the design of the British Columbia curriculum that reinforces the view that strong foundations in literacy and numeracy are fundamental requirements for full social and economic participation in today's connected global world. Literacy and Numeracy skills are developed through applications in ALL curricular areas.

These curricular competencies and their connection to the development of global competency are highlighted in the graphic to the right.

CURRICULAR COMPETENCIES
DEVELOPING GLOBAL COMPETENCE

INVESTIGATE THE WORLD

Recognize/**Identify**/Examine
Observe/Research
Access/Investigate
Conceptualize/Verify

RECOGNIZE and RESPECT PERSPECTIVES

Evaluate/Assess
Analyze/Critique/Judge
Appreciate

COMMUNICATE IDEAS

Communicate/Respond
Express/Exchange Ideas/Explain
Describe/Respond/Share/Document
Defend/Justify/Present
Represent

TAKE ACTION

Plan/Apply
Select/Choose/Decide/**Extract**
Revise/Edit/Change
Transform/Innovate/Adapt/**Refine**
Create/Use/Develop
Generate/Construct/Formulate
Design/Implement
Solve/Reflect

Responsive Frameworks

Literacy

Literacy is the ability to understand, critically analyze and create a variety of forms of communication, including oral, written, digital and multimedia. It includes comprehending, making connections, critically analyzing, and creating and communicating (British Columbia Ministry of Education, 2022).

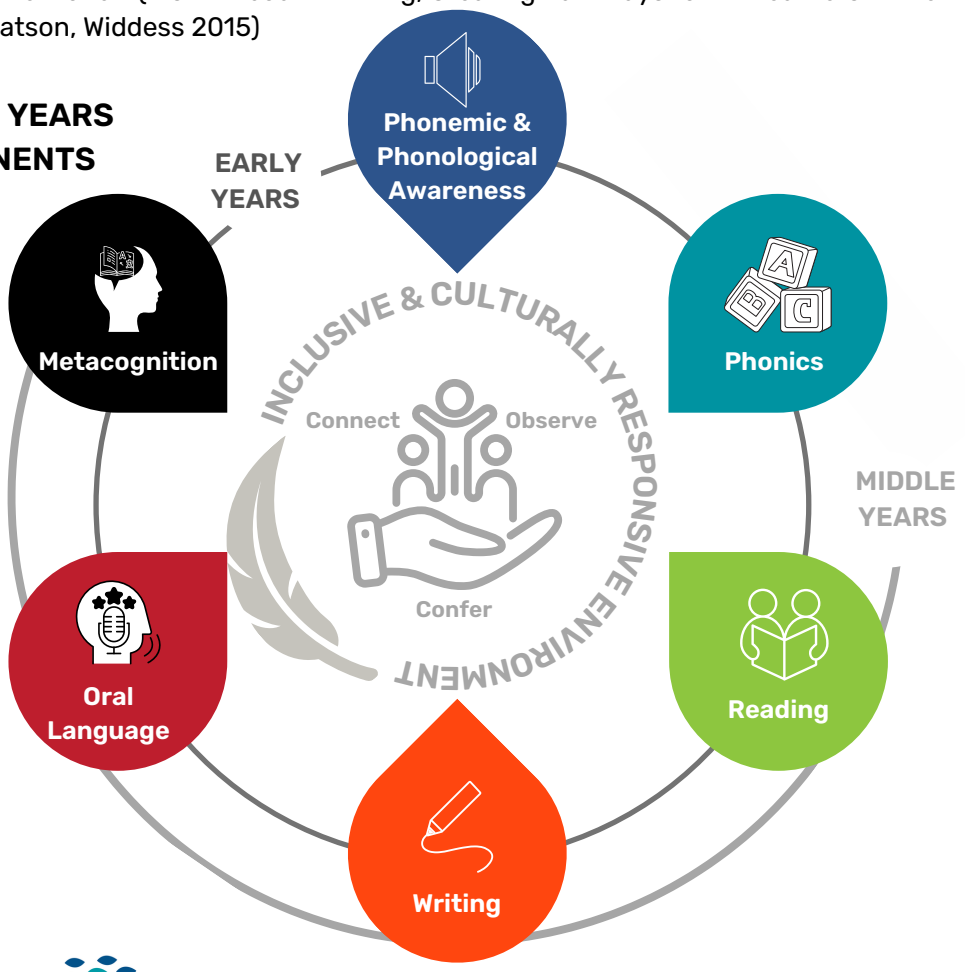
Early Years

Language and story are sources of creativity and joy for K-3 students. Literacy is developed through five critical components: phonological & phonemic awareness, phonics, reading, writing, and oral language. Students use stories and a variety of texts to learn about themselves, their families, and their communities through listening, speaking, reading and writing. "*Children bring other kinds of language and literacy knowledge with them to school that need to be recognize and valued (sociocultural, linguistic, and background knowledge and experiences). This is to disrupt the notion that some children are ready for Kindergarten, while others are not*" (Kozak, 2022).

Middle Years

In the middle years, literacy continues to develop through the learning environment that provides opportunities for collaboration and agency. Learning experiences are more powerful when they are personalized, relevant, interactive and provide opportunity for students to take action and build metacognition, "*Active, purposeful learning involves teachers helping students see the world in new ways, engage in investigation, and connect what they are learning from curriculum content to themselves and to the world.*" (It's All About Thinking, Creating Pathways for All Learners in the Middle Years Schnellert, Watson, Widdess 2015)

EARLY AND MIDDLE YEARS LITERACY COMPONENTS



Responsive Frameworks
Numeracy

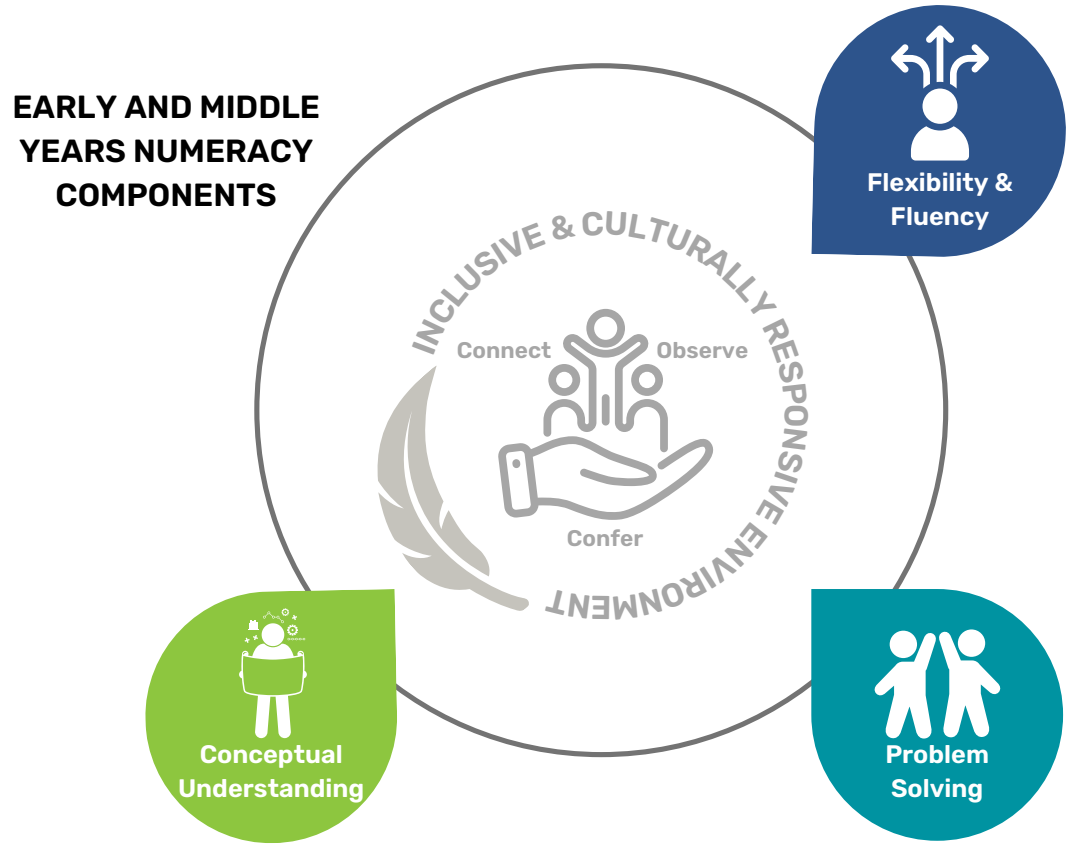
A responsive framework supports an inclusive approach and environment where thinking is made visible and the building blocks of Numeracy are developed as individual student needs and next steps are identified throughout the school year. It honors different worldviews and perspectives and recognizes that mathematics can be approached in different ways within different contexts.

Early Years

In the early years, numeracy learners develop their capacity, confidence and disposition to use math in daily life. Young learners gain new mathematical understandings by engaging in problem-solving and playing. The mathematical ideas with which early learners interact must be relevant and meaningful in the context of their current lives.

Middle Years

In the middle years, learners more actively explore the world and begin to develop connections and explanations for observed phenomena. They also develop their capacity to reflect on their own thinking processes, approaches to learning and using mathematics in their everyday lives. In these middle years, learners need to learn math in multiple contexts and in all areas of learning and be supported to confidently take risks and engage with increasingly complex tasks and information. "*When mathematics is taught as a connected, inquiry-based subject, inequities disappear and achievement is increased overall.*" (Mathematical Mindsets, Boaler, 2016)



Responsive Frameworks

How to Approach Literacy & Numeracy Responsively

> **"Responsive teaching is not clinical; it is based on careful attention and deep listening – both to ourselves and to our students… …Being willing to adjust our plan is as important as the plan itself." (It's All About Thinking, Schnellert, Watson, Widdess, 2009)**

Building Respect, Trust, Leadership & Culture

- Who are my students as learners? What are their strengths and interests?
- Who are my Indigenous students?
- Who are my students on IEPs?
- What other vulnerable/marginalized students are in my classroom?
- What types of data will I consider?
- How can I personalize learning for my students?
- What might I notice about my students during learning?
- What goals or next steps will I need to support?
- How can I include and amplify student voice?
- How will I ensure opportunities for self-determination?

Planning and Instruction

- How will I use the data I have to personalize instruction and guide next steps?
- What areas of literacy and numeracy require focus?
- How will I plan for Big Ideas and curricular and core competencies?
- Where can student agency/co-creation be built into instruction and assessment?
- What questions can I ask to uncover thinking?
- What provocations might spark interest?
- Where is the inquiry, exploration, and play in my planning?
- How is what I'm planning relevant to my students?
- How can I build in time to confer and uncover student interests, passions, and strengths?

Responsive Frameworks

How to Approach Literacy & Numeracy Responsively

Learning Environment

- What structures, systems, routines, visuals, manipulatives, tools need to be in place for all learners to be successful?
- How do we make this a safe space for all learners and work towards equity?
- How will I use open-ended tasks and ensure multiple entry points?
- What opportunities will my students have to collaborate?
- How do we decentralize and create heterogenous groupings?
- How am I fostering a growth mindset culture and celebrating success and perseverance?
- How will diversity and varying voices and perspectives be honored as an important part of learning?
- Have I offered opportunities for students to explore their biases and identity?

Assessment

- How will I know if what I am doing is working?
- How will I confer with students and what prompting questions will I ask them?
- How do I include students in the assessment process (self and peer and demonstrating learning?)
- What observations, conversations and products will I consider as valid assessment tools/practice?
- Where are my students on the literacy and numeracy progressions of learning?
- Have I provided multiple and varied opportunities for students to demonstrate their learning?
- Is student thinking evident and visible in my classroom?
- When will my students reflect, set goals for next steps and monitor progress?
- How will I determine what are the measures of success?

Reflection and Goal Setting for Learning

- What's next? What critical questions about student learning and my own learning do I have?
- How have I reflected on the process? What worked well? What was successful?
- What do I need to support my own professional learning?
- How does my teaching identity shape my classroom?
- How have I reflected on my own biases?
- What critical questions about student learning and my own learning do I have?
- What opportunities do I have to share my experiences and celebrate successes and challenges?
- How has the learning environment along wit planning, instructions, and assessment practices maintained high expectations for all learners?

Responsive Frameworks

Early Years Literacy Components and Approaches to Support Development

Oral Language

Instructional Approaches

Whole/Small Group
Thinking Partners
Talking Circles
Conferring
Critical Literacy

Oral language lays the foundation for all literacy skills and it is through listening and speaking that we connect with others and share our world.

Considerations:

- Strong oral language development allows students to articulate their thinking and communicate with others
- Students need time to engage in conversation with peers and adults
- Active learning is rarely silent
- Differing perspectives and ideas develop personal awareness and social responsibility

Phonemic & Phonological Awareness

Instructional Approaches

Whole Group
Small Group
Personalized Literacy Centers

Explicit teaching of Phonemic Awareness (the ability to understand that words are made up of individual sounds called phonemes) and Phonological Awareness (the ability to blend, segment and manipulate these sounds) focusing only on spoken sounds, not written letters or words, is essential as it is one of the best predictors of early reading success.

Considerations:

- Consistency is more important than quantity - instruction should be daily for a few minutes at a time and be informed by assessment
- Skill development is not completely linear

Phonics

Instructional Approaches

Whole Group
Small Group

The explicit teaching of Phonics (the relationship between spoken language (phonemes) and written language (graphemes)) is essential in developing the brain's orthographic processing.

Considerations:

- Follow a scope and sequence
- Teach letters in an order that lets you build words quickly
- Use formative assessment to inform teaching
- Use student writing to help assess mastery and personalize instruction

Writing

Instructional Approaches

Whole/Small Group
Conferring
Mini Lessons
Strategy Lessons
Interactive/Shared Writing

Early writers need opportunities to write daily in authentic and meaningful ways.

Considerations:

- Early writing and reading develop in relationship to each other
- Students move back and forth along the writing continuum as they write for different purposes (expressing identity and individuality) and audiences
- Students need opportunities to explore a variety of genres
- Teaching printing and conventions should not be the focus of writing instruction

Reading

Instructional Approaches

Whole/Small Group
Conferring
Mini lessons
Guided Reading
Strategy Lessons
Interactive Read Aloud
Shared Reading
Book Clubs

When students read, they use a combination of visual and comprehension strategies to process and construct meaning as they think within, about, and beyond the text, using decoding, fluency, and comprehension strategies.

Considerations:

- Books have levels, readers do not
- Readers need time to be immersed in just-right books
- Teach to "sound it out" before other strategies to improve orthographic mapping and increase fluency and comprehension
- Teaching students to reread is part of developing comprehension
- Consider audience

Responsive Frameworks

Middle Years Literacy Components and Approaches to Support Development

Reading

Instructional Approaches

Interactive Read Alouds
Shared Reading
Guided Reading
Independent Reading
Conferring
Comprehension Strategies

Comprehension strategies are used to process and construct meaning when thinking within, about, and beyond text. Readers build different paths as they generate their own processing systems - as they progress these processes change from learning to read to reading to learn. Personalization is needed to teach fluency, decoding, and comprehension.

Considerations:

- Have students read at varying difficulties and genres
- Cross curricular and context reading help students interpret, make connections, analyze, and evaluate
- Build background knowledge and vocabulary
- Build a classroom library

Writing

Instructional Approaches

Modelled Writing
Interactive Writing
Guided Writing
Independent Writing with Choice
Conferring
Personalized Writing Process Instruction

Writing has many facets and develops critical and creative thinking as well as communication and collaboration skills. Learners express ideas and opinions in different forms and genres for different audiences and purposes as they hone their skills and develop a foundation of the writing process.

Considerations:

- Value the process of generating ideas – not just the product
- Make connections and use representations and graphic organizers
- Use cross-curricular opportunities to build language and vocabulary
- Write for pleasure and expression, less in formats
- Consider audience

Oral Language

Instructional Approaches

Collaborative Learning Environment
Circle Discussions
Partner Talk
Think, Pair, Share
Sharing Whole/Small Group
Targeted Instruction with Goal Setting
Critical Literacy

Oral language is an important part of communication and is used to express knowledge, experiences, ideas and feelings with meaning, vocabulary, structure and sound as well as being critical, identifying and evaluating information. Developing oral language has a strong relationship to reading comprehension and to writing.

Considerations:

- Use conversations to exchange ideas and build understanding - create opportunity to express supported opinions and respectful disagreement
- When speaking and listening consider verbal and non-verbal expression - look at the use of emotion, inflection, and emphasis, paraphrase and ask questions
- Use Indigenous storytelling - share from memory, create original stories
- Discuss opposite perspectives and review sources

Metacognitive Strategies

Instructional Approaches

Activating Prior Knowledge
Explicit Strategy Instruction & Modelling
Guided Practice
Independent Practice
Structured Reflection & Goal Setting
Conversational & Collaborative Thinking
Critical Literacy

Individual styles, interests, and needs are developed as students reflect on processes and progress. By applying critical and metacognitive thinking to learning experiences students ways to improve, adapt, assess, and act on feedback. By reflecting, identifying and evaluating information and it's impact, students can discover and challenge text and thinking.

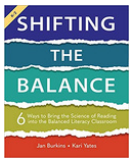
Considerations:

- Value reflection and goal setting as equal learning experiences to academia
- Gather info and evaluate successes/challenges - use to adjust approaches
- Talk about thinking and learning
- Use observation and conversation to offer constructive feedback
- Discuss multiple perspectives and hidden perspectives
- Discuss the impact of choices on the environment or culture

Responsive Frameworks
Literacy Resources

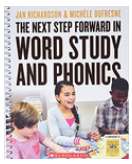
Phonemic & Phonological Awareness

Heggerty Phonemic and Phonological Awareness



Shifting the Balance by Burkins & Yates

Phonics

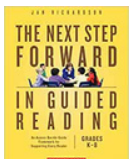


The Next Step Forward in Word Study and Phonics by Richardson & Dufresne

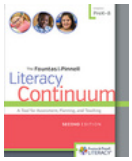
Words that Sing by Fountas and Pinnell


Rime Magic by Zinke

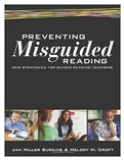
Reading



The Next Step Forward in Guided Reading by Richardson

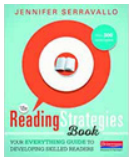


Literacy Continuum, by Fountas & Pinnell



Preventing Misguided Reading by Burkins & Croft

Reading Conferences by Serravallo

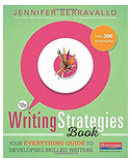


The Reading Strategies Book by Serravallo

Reading Power by Gear

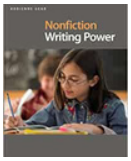
Intervention Reinvention by Harvey, Ward, Hoddinott & Carroll

Writing



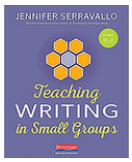
The Writing Strategies Book by Serravallo

Powerful Writing Structures by Gear

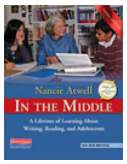


Nonfiction Writing Power by Gear


Units of Study by Calkins & TCRWP

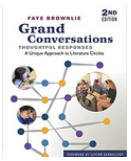


Teaching Writing in Small Groups by Serravallo



In the Middle by Atwell

Oral Language

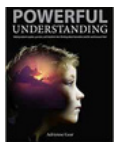


Grand Conversations by Brownlee


Interactive Read Aloud Kits by Fountas & Pinnell

Critical Literacy Across the K-6 Curriculum by Vivian Vasquez

Metacognitive Strategies



Powerful Understanding by Gear

Empower by Spencer & Juliani

Upstanders by Harvey "Smokey" Daniels & Sara Ahmed

It's All About Thinking by Schnellert, Watson & Widdess

Responsive Frameworks

Early Years Numeracy Components and Approaches to Support Development

Flexibility & Fluency

Instructional Approaches

Instructional Routines (Number of the Day, Dot Number Talks, Splat!)
Objects to Think and Model (Ten Frames, Rekenreks, Multi-Links, Cuisinaire Rods)

When students are flexible and fluent they use what they know to figure out what they don't know. Fluent and flexible thinking develops when students have opportunities to experience a variety of strategies and perspectives and to communicate and apply their approaches with others.

Considerations:

- When we think 'Students need the basics!' - what are the basics?
- Consider using technology to perform calculations
- Support students to make connections between models and symbols
- Check for understanding of the action/meaning of symbols in equations
- Students should engage with situations where a part is unknown
- Students who are flexible with numbers usually have a strong understanding of place value

Problem Solving

Instructional Approaches

Instructional Routines
Reggio-inspired Loose Parts and Math Story Workshop
Three Part Lesson

Students need on-going opportunities to engage in contextualized situations that require problem-solving using numeracy processes (interpret, apply, solve, analyze, communicate) in order to develop numerate thinking skills. 'Problems Worth Solving' are open (low-floor, high-ceiling), foster curiosity, connection-making, challenge, creativity, and collaboration.

Considerations:

- Problem solving should be cross-curricular
- Heterogeneous groupings allow for different perspectives and strategies to be shared
- Problem-solving can be unstructured to gives students opportunities to make sense and develop strategies to solve
- Tools should be available for students to use to mathematize the situation or problem
- Consolidation highlights important concepts and creative or efficient approaches and connections between concrete and symbolic representations

Conceptual Understanding

Instructional Approaches

Choral Counting and Counting Collections
Instructional Routines
Mini-Lessons
Whole/Small Group Conferring
Building Thinking Classrooms
Reggio-inspired Loose Parts and Math Story Workshop

There are crucial mathematical insights that students must make if they are to find meaning within the math that they are learning. Teaching conceptually involves students engaging in playful numeracy experiences while teachers intentionally observe and confer with students to uncover thinking and misconceptions that may be present in their understanding in order to plan for next steps in learning.

Considerations:

- Facilitating whole-class conversations around a provocation is a powerful way for strategies and thinking to be shared
- Numeracy is underpinned by spatial reasoning and is connected to Literacy
- Math language is often a barrier to Numeracy development as most math language is only encountered within the math classroom
- Numeracy experiences that are connected to land, culture, people and place allow for all students to see meaning in the purpose of math and themselves in the problem-solving process
- All students benefit from seeing the foundations of more sophisticated concepts and how they build upon one another

Responsive Frameworks

Middle Years Numeracy Components and Approaches to Support Development

Flexibility & Fluency

Instructional Approaches

Instructional Routines (Fraction Talks, Cube Conversations, Splat!)
Choral Counting and Counting Collections
Games

Flexibility and fluency is different than automaticity and memorization of basic facts. Students should be flexible and fluent across the landscape of mathematics learning. This develops from playing with mathematics regularly in different ways, within varied contexts. When students play with and approach mathematics in their own way, through their own sense-making, they develop confidence and growth-mindset as mathematicians.

Considerations:

- Use calculators
- When we think 'Students need the basics!' - what are the basics?
- "We are spending approximately 80% of class time having students practice calculating by hand – the one thing that computers can do for us..." Conrad Wolfram
- Students need to spend more time thinking flexibly

Problem Solving

Instructional Approaches

Instructional Routines
Building Thinking Classrooms
Conjectures and Counterexamples
Open Questions

A problem-solving approach to developing numeracy is inquiry-based, promoting investigation and curiosity, conjecture and defense – skills required in our everyday lives. A rich problem-solving experience involves an open question that is contextual and low-floor, high-ceiling with more than one possible answer or approach to the situation.

Considerations:

- Consider cross-curricular opportunities for problem-solving
- Problem-solving does not need to be structured or guided - students make sense of a problem, and the strategies for solving unfold while working through the problem
- Tools should be available for students to use if needed to mathematize the situation or problem
- Consolidation is a powerful tool to bring students together and highlight important concepts and creative or efficient approaches and connections between concrete and symbolic representations

Conceptual Understanding

Instructional Approaches

Instructional Routines
Whole /Small Group Conferring
Building Thinking Classrooms
Visual approaches (eg manipulatives)
Desmos, Geogebra

The mathematical understanding required to be a numerate citizen involves foundational concepts that build upon one another. This learning goes beyond memorizing isolated formulas or particular approaches to calculating, but through regular, varied opportunities to investigate, develop and apply personal ideas and strategies that are constructed through their own sense-making and connections to other concepts and contexts. Teaching conceptually involves using prompting questions that allow for valuable dialogue and observations that will help with planning next steps in learning.

Considerations:

- Plan for explicit instruction of the math and numeracy terms that may be encountered in various areas of learning
- Numeracy experiences that are connected to land, culture, people and place allow for all students to see meaning in the purpose of mathematics and themselves in the problem-solving process
- Students may be at different places conceptually, but all students benefit from the opportunity to see/experience the foundations of more sophisticated concepts and how they build upon one another

Responsive Frameworks
Numeracy Resources

Flexibility & Fluency

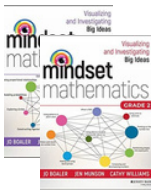
Steve Wyborney Blog

Power of Ten by Caulkins

Mathematical Thinking by Fullerton

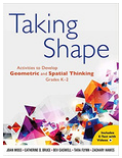
Box Cars & One-Eyed Jacks

Problem Solving

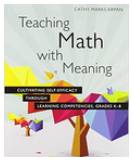


Mindset Mathematics by Boaler

YouCubed by Stanford Education

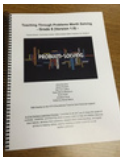


Taking Shape by Bruce



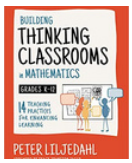
Teaching Math with Meaning by Krpan

Math For Love Website



Teaching Through Problems Worth Solving Website

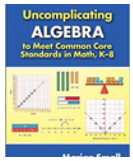
Numberless Word Problems Website



Building Thinking Classrooms by Liljedahl

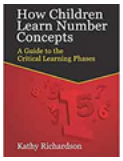
Slow Reveal Graphs Website

Conceptual Understanding



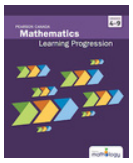
Uncomplicating Algebra by Small

Open Questions by Small

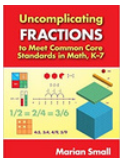


How Children Learn Number Concepts by Richardson

Learning Trajectories Website



Mathematics Learning Progressions



Uncomplicating Fractions by Small

Mathology Curriculum

Edugains Website

First Steps in Math

Responsive Frameworks

Supporting My Professional Growth

www.sd22learns.ca

Collaborate with a Colleague

Connect with a member of the Learning Department

Participate in a Residency

Participate in a Community of Practice

Participate in a Professional Learning Session

Join a PSA (Provincial Specialist Association) or PLC (Professional Learning Community)

Connect with a mentor or the Mentorship program

Inquire about a VTA or PSA grant

Responsive Frameworks
What You Might Notice

Learning Environment

Learning opportunities reflect student learning styles, identities, culture and interests

- Classroom libraries are diverse, robust, differentiated, and intentionally organized (eg. by genre, author, or interest rather than reading level)
- Charts, visual cues and supports are displayed around the classroom and are co-created using student work to intentionally highlight current learning
- A variety of manipulatives and materials are available for students to support their own understanding and demonstrate their learning (eg. blocks, counters, dice, puppets, playing cards)
- Documentation technology for digital portfolios is accessible and used by students

Opportunity for collaboration, choice and agency

- Groupings are varied (eg. a group working on comprehension strategies in literacy, a group collaborating on a shared interest project, random groupings)
- Classroom environment is selected based on learning intention (eg. alternative seating, accessibility to outdoor spaces, place and community learning opportunities)
- Students are learning and creating collaboratively (eg. productive noise is noticeable, think-pair-shares are incorporated into daily routines, students lead the creative design process)

Building Respect, Trust, Leadership & Culture

Equitable opportunities for learning

- Know who your Indigenous students, students on IEPs, ELL students, and vulnerable students are
- All students have opportunity to share ideas and their thinking with peers and the larger class
- There are high expectations of growth and progress over time for **all** learners
- The teacher confers regularly with all students to provide strengths-based feedback
- Students are in heterogeneous groupings and individuals requiring additional supports receive this within the classroom

A collaborative classroom culture with compassion, respect and integrity

- Students engage in talking circles, number talks and book clubs, where they are talking and listening to each other
- Individual perspectives are honored and valued (eg. after a shared read aloud, students respectfully discuss character motivation in peer groups)
- Students facilitate class meetings to co-create shared values, routines and agreements for personal awareness and social responsibility. The discussion is documented and displayed.
- During a math class, the teacher poses an open-ended task and students work collaboratively in teams to generate solutions. The teacher facilitates learning by prompting with questions.

Students personalizing their own learning

- Students explore interests, culture, community and identity through inquiries
  - A student chooses a big idea to explore, self-selects and reads a text, then makes connections between the main character and their own personal experience. The student then shares these connections with their book club and engages in a discussion with peers.

Responsive Frameworks
What You Might Notice

Planning and Instruction

The teacher as facilitator

- Open-ended questions are used to prompt students' use of personal strategies and reasoning (eg. where in your life do you encounter *half*? *quarter*?)
- New concepts are introduced through provocations, explorations, critical thinking and inquiry (eg. a graph of clean water access in BC is projected and the teacher poses the question "what do you notice? What do you wonder?")
- During a number talk, students are given the opportunity to individually think and talk with others before sharing with the larger group

First People's Principles are embedded into instructional practices

- There is opportunity for students to share stories and personal experiences connected to the learning
- Students make connections to land and the way that our environment shapes our experiences (eg. students read about the Sockeye salmon run and make connections to current water temperature changes in the Okanagan)
- Students see their learning as on-going beyond the constraints of a particular school year (eg. students revisit their goal of communication while problem solving in groups regularly over time)

All students have entry points to learning

- The teacher uses whole group instruction, small group instruction, and 1:1 conferring to provide scaffolding as students practice synthesizing ideas from a variety of sources
- A new student with emerging English makes use of visuals, translations and technology to support and further their learning
- As a differentiated entry point, a student learns about the attributes of a square while other students learn about perfect squares and cubes

Connections to curricular and core competencies

- In Art Education, students *interpret and justify* (literacy) whether or not the Mona Lisa is smiling
- In Physical and Health Education, after a hike up hill, the students take their pulse as a way of gathering information, evaluate their exertion levels and based on the information, choose to increase or decrease their activity levels and set a personal goal

Student Voice and Choice

- Students are given choice in: content, instruction, activity, process, and assessment
    - When exploring the big idea that *people from diverse cultures and societies share some common experiences and aspects of life,*
        - one student chooses to interview his neighbor, who has recently immigrated to Canada
        - a second student gathers and synthesizes information from local news clips about various events that happened in town over the weekend
        - a third student chooses to read about cultural celebrations from three different countries. Each student chooses to share their findings differently, via blog posts, vlogs, podcasts and memes

Responsive Frameworks
What You Might Notice

Assessment

Formative Assessment

Value is put on growth and strengths

- Student strengths are identified as a starting point and feedback is provided for growth (eg. 2 Stars and a Wish, conferring with students)
- Students reflect and highlight in their work or digital portfolio what they want noticed or where they felt successful
- Students collect writing samples throughout the year and revisit and celebrate growth over time (eg. writing analog or digital portfolio, journals, binder)

Ongoing observations and conversations to supporting targeted instruction

- Students use a single point rubric to describe strengths and stretches connecting curricular competencies to learning experiences and set goals for growth
- Students document conversations and feedback in SeeSaw or Spaces and set goals for growth and progress
- While students are engage in a vertical surfaces open-ended task, the teacher circulates with a spreadsheet or clipboard or digital tool listening and observing to document pre-determined competency strengths and feedback

Multiple opportunities for students to refine and their ideas and representations

- Students apply feedback to a piece of writing and apply feedback to refine their writing
- Students rerecord a video on Seesaw to describe their thinking and justify their ideas and refinements
- Tests and quizzes are used to discover areas of growth for students to further develop their learning.

Student involvement in assessment

- Students are included in the process and co-creation of assessment criteria and rubrics
- While conferring with the teacher prior to a report, students reflect on their proficiencies while justifying how they connected learning experiences to competencies and set goals for further growth
- Students decide what to post in their digital portfolio and describe and justify why they are posting the artifact and make connections to the competencies
- While conferring during writing, the student selects a piece of work that they want to share and names their strengths within the text. The teacher builds on the strength through feedback and next steps.

Responsive Frameworks
What You Might Notice

Assessment

Summative Assessment

A variety of ways to demonstrate learning that is accessible and meaningful

- A student decides to share their learning through a video blog whereas a peer prefers to *reflect* on learning through a journal entry
- A student chooses to represent and justify their ideas using emojis
- A student demonstrates their understanding of subtraction in a discussion with the teacher using a material or manipulative that helps their explanation and thinking.

Student ownership of assessment

- After writing and a series of texts, the students decide which piece they would like have summatively assessed
- After reflecting on reading goals, a student chooses to upload a video of their best read aloud into their digital portfolio
- In an egg drop challenge, a student generated a podcast to justify the changes they made to their container and ultimately decided to revise their original plan. Instead of the podcast, they choose to record a video to defend their ideas and resubmit after the due date.

Reflection and Goal Setting for Learning

Documentation of learning that shows growth and progress over time

- Students capture and highlight their examples of learning and success (SeeSaw, Spaces, analog portfolios, core competency reflections, journals)
- Teacher draws upon student work and thinking to move learning forward for everyone (eg. student work displayed on anchor charts or continuums, consolidation at vertical surfaces, gallery walks)

Student self-reflection and goal-setting

- Time is allocated and built into daily routines
- Student work guides conferring and goal-setting
- Verbal and written feedback is provided to help students revisit and refine their learning