

# A culturally responsive Yukon numeracy strategy and plan: Growing student success

For Yukon Education-operated schools



#### **Overview**

Numeracy involves more than just "doing the math" – it is the willingness and ability to interpret and apply mathematical understanding to solve problems in complex situations, and the perseverance to analyze and communicate these solutions in ways that are relevant to the given context.

The Department of Education acknowledges that acquiring and improving numeracy skills throughout life is essential to a person's right to an education. The Department of Education recognizes that a disparity in foundational numeracy skills exists, and the need for a comprehensive strategy to address the long-standing gaps in student performance and improve student outcomes.

Gaps in foundational numeracy skills prevent students from becoming functionally numerate. These gaps extend beyond working with numbers and affect students' use of mathematical knowledge and competencies to make sense of the world around them.

## Yukon Education's Numeracy Strategy

Teaching numeracy is complex as there is no single approach that works for all students. At Yukon Education, our numeracy strategy is to support educators to develop their knowledge on a wide range of strategies and approaches. Taking a multi-faceted, holistic, and student-centred approach to numeracy learning matches the diversity that exists within each classroom.

Transitioning towards different approaches is not easy and cannot happen overnight. This change requires investments in capacity-building for educators and significant supports as they develop additional knowledge and skills while increasing their instructional 'toolkits'.

In the past, the Department of Education supported several initiatives to support numeracy growth, and further acknowledges that a more concerted and comprehensive numeracy strategy is needed. Therefore, a working group was tasked with creating recommendations for a Yukon Education numeracy strategy. The working group includes:

- Curriculum and Assessment (Education Consultants)
- Yukon First Nations Education Directorate (YFNED)
- Teachers (rural, urban, learning assistant teacher)
- School administrators (rural and urban)
- Student Support Services (Education consultant)

The group's work resulted in 10 recommendations that underpin the Culturally Responsive Yukon Numeracy Strategy and Plan, rooted in a common vision.

### **Vision**

Yukon educators can purposefully integrate numeracy strategies throughout all subject areas across the curriculum using a variety of evidence-based tools, materials, resources, and strategies. Critical to the Yukon context is the meaningful integration of Yukon First Nations ways of knowing, doing and being, which will contribute to a more holistic experiential understanding of numeracy to benefit all learners.

#### Areas of focus

- Educator capacity
- Supports and resources
- Diverse needs and targeted supports for students
- Partnerships and collaboration
- Culturally responsive and reflective
- Alignment with BC/Yukon curriculum
- Continued research and development

## **Implementation**

#### **Key deliverables**

- Increasing learning opportunities for educators and implementing numeracy support teachers in schools to provide consistent support to educators, guided by a numeracy consultant.
- Ensuring culturally inclusive materials and approaches.
- Continue the implementation of various numeracy resources to increase teachers' "toolkits".
- Using timely and effective screening tools and assessments to identify students in need of targeted support.
- Open and honest communication and consultation with partners, communities, and families, along with frequent review and quality assurance processes.

Priority activities for the key deliverables will begin in the 2023-24 school year and will continue to full implementation by 2025-26. Annual review and quality assurance processes will take place. The plan will be implemented in Yukon Education schools with open communication and collaboration with partners.

## Partners and stakeholders

- School boards
- First Nation governments
- Elders and Knowledge Keepers
- Community organizations
- Education partners
- Subject-matter experts
- Yukon educators and administrators

Recommendation	Timeline	Focus Areas
Implement Department of Education numeracy coach and Yukon Education school-based numeracy support teachers to support the use of evidence-based and curriculum-linked numeracy practices.	Numeracy support teachers in place in every K-7 school by school year (SY)24/25.  Numeracy Consultant in place by SY24/25.	Educator capacity
Provide training for educators, around classroom-based assessments and how to use data to make relevant and effective classroom instructional decisions for learner success.  Provide relevant information to administrators and inform Educational Assistants (EA) around such assessments.	Ongoing through SY25/26.	Educator capacity  Supports and resources  Alignment with BC/Yukon curriculum
Localize curriculum to ensure Yukon First Nations (YFN) ways of knowing, doing and being are at the forefront of numeracy instruction.	Collaborate with partners in SY23/24.  Piloting materials in SY24/25.  To be completed by SY25/26.	Supports and resources  Culturally responsive and reflective
Implement numeracy camps (such as summer) as an experiential way for holistic numeracy instruction.	Explore the development of numeracy camps in SY23/24  Pilot in summer 2024. Evaluate and expand to more schools in 2025.	Supports and resources
Implement culturally responsive numeracy intervention strategies for students in grades 4-7.	Research on numeracy interventions in SY23/24. Pilot intervention(s) in SY24/25.  Training and full implementation by SY25/26.	Culturally responsive and reflective  Diverse needs and targeted supports for students

Recommendation	Timeline	Focus Areas
Create a Yukon numeracy screener designed to identify students' areas of strengths and areas where support is needed.	Select and pilot screener(s) in SY24/25.  Evaluate efficacy, select screener(s), train and implement fully in SY25/26.	Diverse needs and targeted supports for students
Adopt a coordinated scope and sequence across Yukon Education schools, supported by comprehensive material(s), that is grounded in scientific and other evidence-based numeracy research.	Continue exploring approaches and resources in partnership with School Boards and Yukon First Nations in SY23/24.  Develop proposals in SY24/25.  Trial implementation in SY25/26.	Supports and resources  Partnerships and collaboration  Align with BC/Yukon curriculum
Deliver tiered supports (timely and specialized, targeted, and/ or intensive) that align with and focus on specific areas of educator training needs across grade levels and numeracy across the curriculum.	Aligning with Reimagining Inclusive and Special Education (RISE) initiative, increase awareness and inventory school-based interventions by numeracy consultant in SY23/24.  Provide training for numeracy support teachers in SY24/25 in schools.  Implement training for classroom teachers in SY25/26 by numeracy support teachers.	Diverse needs and targeted supports for students  Align with BC/Yukon curriculum
Create action groups to continue the necessary numeracy work in order to follow through and implement the recommendations in a focused manner with specific timelines/ deadlines.	Phased approach as required to complete deliverables starting in SY23/24 and maintained as long as required.	Continued research and development

Recommendation	Timeline	Focus Areas
Continue to develop and incorporate culturally responsive ways of teaching and learning numeracy, in ongoing consultation and/or collaboration with Yukon First Nation's Elders and/or Knowledge Keepers.	Working group is facilitated by someone with a strong background in Yukon First Nations cultural and pedagogical practices.  SY23/24 to invite and engage with Knowledge Keepers in hopes of contracting a facilitator.  Working group continues if strategy is active (within the three-year span).	Continued research and development  Culturally responsive and reflective