REPORT TO THE BOARD OF EDUCATION OF SCHOOL DISTRICT NO.46 (SUNSHINE COAST)

STRATEGIC PLAN REPORT: NUMERACY

Submitted by Superintendent Patrick Bocking March 10th, 2021



Our students will be **numerate**. They will have the skills and tenacity to interpret and apply mathematical understandings in flexible, functional, and creative ways.

"It's fine to work on any problem, so long as it generates interesting mathematics along the way - even if you don't solve it at the end of the day."

- Andrew Wiles

Background:

Numeracy is one of the key skills sets that young people need when they complete their formal education with us. The Ministry of Education defines Numeracy as, "the ability, willingness and perseverance to interpret and apply mathematical understanding to solve problems in contextualized situations, and to analyze and communicate these solutions in ways relevant to the given context."

Accordingly, the district created a numeracy committee to develop teacher and student confidence and competence in mathematics. The committee has four key goals:

- Attitudes Foster creative & flexible thinking, positive engagement & growth mindsets in numeracy.
- Assessment Improve our ability to understand, support, enhance and communicate student numeracy skills using effective assessment strategies.
- Continue to build a professional culture intensely focused on improving numeracy results for all children
- Explore ways to extend mathematical opportunities in the home & broader community.

Discussion:

The district numeracy committee is supporting numeracy improvement through:

- supporting intermediate teachers to engage in a year-long inquiry exploration of the on-line MathUP resource. The MathUP tool supports embedded & ongoing professional development for teachers, and has been rolled out through monthly facilitated learning sessions.
- facilitated professional learning opportunities with the Math CAMP series, held for Primary, Intermediate and Secondary Teachers in the district. These sessions have

- been responsive to the current context, and have focused on teaching prioritized mathematics standards and teaching math outdoors.
- providing opportunities for teachers to explore numeracy assessment tools and connect with other districts regarding assessment tools and strategies.
- supporting primary teachers to collaboratively develop proficiency assessment scales focused on Number.
- supporting partnerships with our Public Libraries. Both the Sechelt and Gibsons public libraries have created STEAM Kits (Science, Technology, Engineering, Art & Math) that can be borrowed by teachers, students and families. Professional development with the public libraries has been held for teachers this year.
- providing teachers with collaboration time to work with teachers across grades and schools to explore and reflect on new instructional and assessment strategies.
- enhancing experiential and place-based learning and infusing more Indigenous culture into Mathematics. Professional development for school district staff was provided by our district Indigenous team this year. Sessions focused on the role natural elements play in supporting science, technology and math in Indigenous cultures.

Parents are encouraged to:

- Talk to their children and their children's teachers about their math experiences at school.
- Develop routines for playing math games together at home.
- Access community resources, such as the STEAM kits in the public libraries, to support their children's interests in math.
- Access the parent resources posted on our district website that help parents support their children numeracy learning at home.
- Support the functional use of numeracy, through highlighting 'numeracy in the news.'
- Highlight how we use numeracy to make sense of, and function in, our current context.

Next Steps:

- Promote the JOY of numeracy, and encourage parents and students to develop positive personal mathematician identities.
- Develop resources that support Indigenous ways of knowing in numeracy.
- Support students in deepening their understandings of financial literacy.
- Create a culture of collaboration and 'communities of practice' focused on exploring, reflecting and sharing innovative numeracy practices in the district.
- Use data to drive and inform the focus of professional learning in the district.
- Explore the shifts towards proficiency-based assessment, and its influence on responsive instruction and on-going assessment for learning.