

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

STRATEGIC PLAN REPORT: NUMERACY

Submitted by District Principal, Kirsten Deasey
March 9, 2022

*Goal 1.e: Our students will be **numerate**. They will have the skills and tenacity to interpret and apply mathematical understandings in flexible, functional, and creative ways.*

OVERVIEW:

Numeracy is recognized as foundational to the development of the educated citizen. It is the ability to understand and apply mathematical concepts, processes, and skills to solve problems in a variety of contexts. While numeracy is commonly associated with mathematics, it can be applied in all areas of learning. Numeracy is the interpretation or application of mathematical ideas to solve problems and understand a range of contexts and disciplines. Being numerate goes beyond working with numbers but encompasses the vast range of mathematical ideas and competencies that can be used to understand the world around us.

SYNOPSIS OF THIS YEAR'S INITIATIVES:

The Numeracy Committee meets regularly to support our district in meeting the Numeracy Goal articulated in the Strategic Plan.

The Numeracy committee has developed Action Plans in the following four areas:

- 1. Assessment & Communicating Student Learning**
Improve our ability to understand, support and communicate student numeracy skills using assessment.
- 2. Professional Culture to Improve Numeracy Results**
Continue to build a professional culture focused on improving numeracy for all children
- 3. Numeracy Applications & Community Connections**
Explore ways to extend and apply numeracy in the home & broader community.
- 4. Joy in Numeracy**
Foster joyful, creative & flexible thinking, positive engagement & growth mindsets in numeracy for teachers and students.

Actions include:

- **Assessment & Communicating Student Learning**
A district-wide in-service series has been designed for K – 9 teachers to support their understanding of the Draft K – 12 Reporting Policy. Two of the provinces most influential educational leaders in numeracy: Marc Garneau & Janice Novakowski are

leading these in-services, in collaboration with the chair of our SD46 Numeracy Committee, and a Planning Team of elementary and secondary principals. These in-services gather elementary and secondary teachers together in separate sessions, in order to tailor the learning to the needs of each specific group. Throughout the series, teachers deepen their understanding of the curriculum, standards-based learning and proficiency through this focus on assessment and reporting. Mathematical examples are woven into each session, in order to surface the math that lives in all subject areas, and to help support teachers to assess and communicate student learning.

A 'Working Group' designed to strengthen and support the district-wide in-services have been formed. Collaborative teams from each school have been formed to support the implementation of the New Reporting Order and the Communication of student learning in SD46. This series of 5 sessions and the in-services described above are being led by the provincial mathematical thought leaders: Janice Novakowski and Marc Garneau, the SD46 Numeracy Committee chair and a Planning Team of elementary and secondary principals.

Numeracy Committee Members are participating in the Ministry of Education's 'Performance Standards Benchmarking Trials.' These teachers are joining teachers across the province to provide feedback and create clear examples of how literacy & numeracy are embedded in all learning areas, and to establish a consistent, common language and approach for numeracy that is aligned province-wide, across grades and assessments.

- **Professional Culture to Improve Numeracy Results**

The foundational role that numeracy plays in activating the curricular competencies when using standards-based assessment is highlighted and explored throughout the in-services and working group series described above.

This year, teachers from Kindergarten to Grade 12 throughout the district have been invited to work with Peter Liljedahl in a four-session series focused on 'Building Thinking Classrooms in Mathematics.' In these sessions, teachers are questioning institutional norms and practices and exploring research into how teachers can transform their classrooms to encourage student engagement and mathematical thinking.

- **Numeracy Applications & Community Connections**

Financial Literacy is embedded throughout the curriculum and has been a focus of the Numeracy Committee. Investigations reveal that financial literacy is a core component of mathematics curriculum and classroom applications. As in all areas of the curriculum, the complexity of the content and competencies develop and expand over time. While younger students learn about the basics of handling money, the secondary focus is very in-depth with a focus on budgets, taxes, discounts, and mortgages.

The strong focus this year on providing in-services for all K – 9 teachers and developing working groups from every school is designed to support Communicating Student Learning with students and families. Supporting teachers in developing assessment practices that drive learning is foundational to continued growth. Numeracy, in particular, has been the focus of our assessment work this year.

- **Joy in Numeracy**
All of our initiatives recognize the importance of supporting students to experience joy and fulfillment through numeracy. The 'Building Thinking Classrooms' inquiry series with Peter Liljedahl is especially focused on strategies designed to leverage student engagement in order to encourage deep numerate thinking.

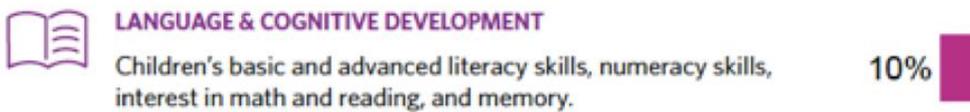
DATA ANALYSIS AND REVIEW:

Early Development Instrument ('EDI')

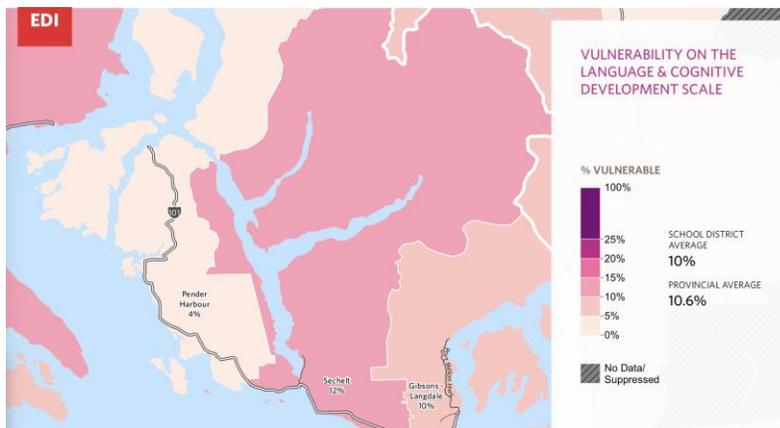
2019-2020 Results



2020-21 Results



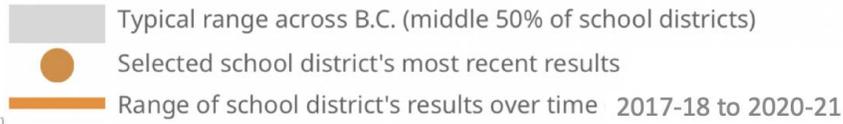
Wave 7 EDI (2016-2019)



EDI results remain stable in the domain that captures numeracy skills: 'Language & Cognitive Development'

This continues to be an area where Sunshine Coast children do very well.

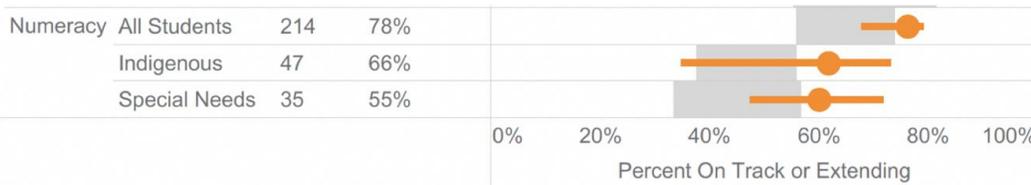
Foundation Skills Assessment (FSA)



Grade 4



Grade 7



Current FSA results reveal that Sunshine Coast Students score significantly better than provincial averages in Numeracy in both grades 4 & 7.

Graduation Assessment

Graduation Assessment – Numeracy 10 (Portion of Grade 10 resident writers ‘Proficient’ or ‘Extending’) Graduation Assessment - Numeracy 10 results indicate that Sunshine Coast students are now at provincial average.

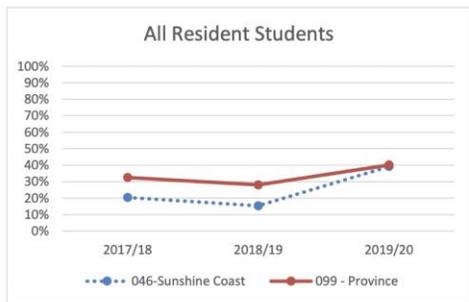
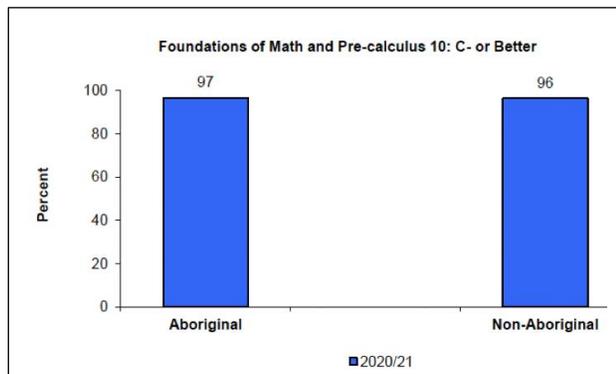
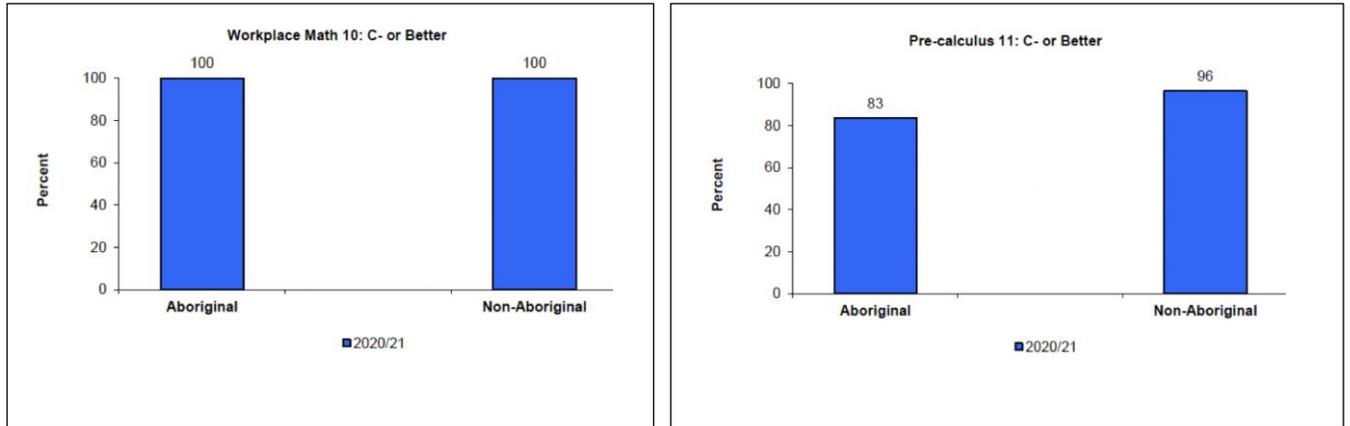


Figure 25: Graduation Assessment Grade 10 Numeracy - All Resident Students



Data from Math Courses indicate that the majority of Sunshine Coast students are succeeding.



RESOURCES/BUDGET:

Communicating Student Learning In-Services (5 Sessions)

- Hiring the presenters (Marc Garneau, Janice Novakowski, SD46 Committee Members)
- Release for the participation of all teachers K – 9 in the in-services held 3:45 – 5:15 pm

Communicating Student Learning Working Group (5 Sessions)

- Hiring the presenters (Marc Garneau, Janice Novakowski, SD46 Committee Members)
- Release for the participation of teacher-leaders from each school to attend the in-services held 3:45 – 5:15 pm

Performance Standards Benchmarking Project (3 – 4 sessions each for elementary & secondary)

- Release for the participation of teacher-leaders from each school to attend the collaborative learning sessions held 3:45 – 5:15 pm

Peter Liljedahl's Building Thinking Classrooms in Mathematics Series (4 Sessions)

- Hiring the presenter (Peter Liljedahl)
- Resources for participating teachers
- Support for committee members to collaborate to support implementation.

Release for teachers to participate in District Numeracy Committees.

EMERGING AREAS OF NEED:

- Supporting our teachers to become familiar with numeracy Assessment & Communicating Student Learning practices outlined in the K – 12 Draft Reporting Policy in anticipation of implementation in 2023-24.
- Supporting students to continue their numeracy learning journeys through the backdrop of the global pandemic will require numeracy supports that are relevant and designed to help students make meaning of today's modern society.

- Strengthening support for Numeracy Curriculum, Assessment & Reporting across the district.
- The indigenization of the work we do in schools and the role numeracy plays in the 94 Calls to Action in moving us forward in Truth & Reconciliation.

ADAPTATIONS/NEXT STEPS:

- A continued focus on aligning Curriculum & Assessment will support teachers across our district to use current best practices in numeracy assessment and communication of student learning.
- Continued support for teachers to learn and implement evidence-based practices that enhance student engagement in mathematical thinking.
- A continued focus on Joy, engagement and making meaning will be especially important as we educate numerate citizens within the context of a global pandemic.
- Direct links to numeracy practices and Indigenous Ways of Knowing and Being, as a fundamental braid woven into the district-wide Ensouling Our Schools series.