

2022-2023 - Year 1 School Learning Plan

GENERAL SCHOOL STORY

Tyee is a Montessori school that fosters an engaging, supportive, and emotionally safe learning environment for students by promoting collaboration among staff, students, and parents. Our school has a District Choice Program with 185 students enrolled in 8 divisions, with multi-aged classrooms for Primary 1/2/3 and Intermediate 4/5/6. Kindergarten and Grade 7 have dedicated grades. Parents are actively involved in the school, supporting the Montessori program through fundraising, community-building events, parent education, and volunteering for hot lunch days, special events, and field trips.

Teachers at Tyee are committed to providing a rich learning environment based on Montessori principles and meeting the expectations of the Ministry of Education curriculum. They collaborate to ensure that the Montessori philosophy underlies educational decisions, supporting students' continuous progress towards personal goals and academic challenges. Students learn to work independently, in small groups, as a class member, and as a member of the school community. Resource, SSA, and other specialized support are available to students requiring academic, physical, and social-emotional support.

Personalized learning, individual project-based learning, and critical and creative thinking are the cornerstones of Tyee's learning philosophy. The staff enhances student learning through a variety of programs, including classes focused on sustainability, such as environmentally sustainable living, food production, and healthy lifestyles. Students also learn through building and maintaining a school garden and participating in outdoor learning opportunities like neighborhood walks, beach walks, nature park visits, growing salmon, and skating. Additionally, Grade 7 students recently visited the Sea to Sky Outdoor School on Gambier Island, and the school hosts programs and performances like Hoop Dancing, ultimate frisbee, Arts, writing and science lessons throughout the year.

WHAT DO WE KNOW ABOUT OUR COMMUNITY OF LEARNERS?

The school staff has been engaging in ongoing discussions about the challenges some of our students face when it comes to math.

Our observations from the classroom have shown that some students experience work avoidance, lack of practice and skill-building, difficulty working independently, anxiety, and a lack of perseverance when learning new concepts or problem-solving. To address these issues, we are focusing our efforts on improving our teaching practices and enhancing the learning experience for our students. Our plan is to provide targeted math instruction and ample opportunities for practice, both in the classroom and throughout the school. Additionally, we aim to explore various methods of teaching mathematical concepts and make connections between math and real-life situations to promote a deeper understanding of the subject. As a Montessori school, we understand the significance of Mathematics in our curriculum and are committed to fostering a strong mathematical foundation in our students.

WHAT EVIDENCE SUPPORTS WHAT WE KNOW ABOUT THE LEARNERS?

Our school's fall math assessments have highlighted some areas where our students are struggling, particularly in their number sense and problem-solving abilities. We have also gauged students' feelings about math through our daily interactions and by observing engagement and enjoyment levels while working on math tasks.

Based on our Foundational Skills Assessment Data from both 2021-2022 and 2022-2023, we see an increase in our students' math performance. We saw a jump from 0.04% of students exceeding expectations in math to 35%. This is a testament to the hard work and dedication of both our students and educators over this past year. We will continue to strive for the best outcomes in math and support our students in achieving their full potential.

Below are charts depicting the sentiments of our grade 4 and 6 students towards mathematics. The data collected indicates that at the end of this year a large proportion of our students agreed and strongly agreed that their math skills have improved.

Student voice = how do you feel about math?

Grade 4 Student Learning Survey

Unofficial Results

Printed on May 7, 2023

I feel I am getting better at math.	Count	Percent	Valid Percent
Strongly disagree	1	4%	4%
Disagree	1	4%	4%
Neither agree nor disagree	3	13%	13%
Agree	10	43%	43%
Strongly agree	7	30%	30%
Don't know	1	4%	4%
No Answer	0	0%	0%
Total	23	100%	100%

Grade 7 Student Learning Survey

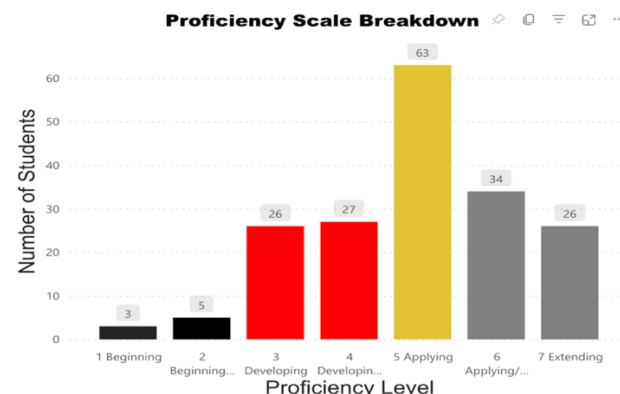
Unofficial Results

Printed on May 7, 2023

Tyee Elementary	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know	No Answer	Total	Population	Response Rate	Average Score
I continue to get better at math.	1	1	5	11	7	0	0	25	25	100%	
Percentages	4%	4%	20%	44%	28%	0%	0%	100%			
Valid Percentages	4%	4%	20%	44%	28%	0%	0%	100%			3.9

Below is a summary of Tyee's academic achievement in Math from January 2023 taken from our CSL Report Card Tool. This information will serve as a baseline to monitor and track our progress in the subject over the upcoming years.

Please note that this summary provides an overview and is not an exhaustive representation of all areas covered in the Math curriculum. We will continue to focus on individual student growth and provide targeted support to ensure that every student achieves their full potential in mathematics.



WHAT IS THE FOCUS FOR OUR COMMUNITY OF LEARNERS BASED ON THE EVIDENCE?

To focus our efforts on math instruction, we will be targeting learners who are struggling with numeracy skills in both primary and intermediate levels. Our focus areas will include learning basic facts, problem-solving, and critical thinking. We will also prioritize equity and inclusion in our efforts to ensure that all learners have access to quality math instruction. Our focus on improving numeracy and critical thinking skills in math aligns with the Education Plan goals of encouraging students to reach beyond previous boundaries in knowledge and experience, improving school environments to ensure they are safe, caring, welcoming, and inclusive places for students and families, and increasing deep, critical, and creative thinking.

Furthermore, this focus aligns with the Aboriginal Education Enhancement Agreement (AEEA) goal of "improving educational outcomes for Aboriginal students." By prioritizing numeracy and critical thinking skills, we hope to create a more equitable and inclusive learning environment for all students, including Indigenous learners.

Our focus on math instruction will also interconnect with the curriculum, including the big ideas, core competencies, and curricular competencies. For example, our focus on problem-solving and critical thinking aligns with the core competency of thinking. We will also emphasize the big idea that mathematics is a way of reasoning that can be used to solve problems in everyday life. By connecting our focus on math instruction to the curriculum, we hope to create a more integrated and meaningful learning experience for our students.

INQUIRY QUESTION

Inquiry Question: "How can we help our students better connect, be critical thinkers, and demonstrate more engagement when doing math?"

As a staff, we are questioning what true conceptual understanding of math looks like in our classrooms and exploring instructional strategies that could help our students develop greater fluency in their math thinking and apply higher-order thinking skills in a variety of contexts. We want to move beyond rote learning of isolated facts and methods towards open math tasks and number talks that encourage multiple paths and solutions.

Our goal is to gain a better understanding of effective instructional strategies that can build math understanding for all students, particularly those who are struggling. We believe that conceptual understanding is the foundation needed to weave relationships between mathematical ideas, patterns, and procedures. By examining and determining the key characteristics and elements of effective math instruction at all levels of the RTI model, we aim to create engaging math classrooms that foster deep understanding and transferability across the various math strands.

WHAT IS OUR PLAN?

Understanding mathematical concepts is a fundamental building block for students to establish connections between ideas, patterns, and procedures. This enables them to integrate new knowledge and confidently tackle unfamiliar problems. Our objective is to identify the essential components of effective math instruction throughout all levels of the RTI model, particularly for students facing challenges in math. By studying and incorporating best practices in math education, we aim to create classrooms that foster engagement and actively involve students in their math learning experiences.

To enhance mathematical learning experiences, we propose implementing the following leadership actions as part of our 3-year plan:

1. Develop a shared understanding of the inquiry question and its purpose among all stakeholders, including students, teachers, parents, and community members.

2. Create a collaborative and inclusive culture that values and supports students' mathematical thinking and problem-solving skills.
3. Provide ongoing professional development opportunities for teachers that focus on effective instructional strategies for promoting mathematical thinking, problem-solving, and engagement.
4. Foster a student-centered learning environment that encourages curiosity, creativity, and a growth mindset toward mathematics.
5. Cultivate strong partnerships with families and community organizations to support students' mathematical learning and engagement.
6. Implement a comprehensive assessment system that includes multiple measures of student learning and growth in mathematical thinking, problem-solving, and engagement.

Here are key learning strategies that we will focus on:

1. Inquiry-based learning: Use an inquiry-based approach to teaching math, which encourages students to explore and discover mathematical concepts on their own. This approach fosters critical thinking skills and allows students to take ownership of their learning.
2. Collaborative learning: Encourage students to work together on math problems, discuss their strategies, and explain their thinking to one another. This helps students develop their communication and reasoning skills and creates a more engaging learning environment.
3. Technology integration: Use technology tools, such as whiteboards, online math games, math apps, and various Montessori materials to help students visualize math concepts and engage with math in a more interactive and hands-on way.
4. Positive mindset: Foster a positive mindset towards math by emphasizing effort and growth over natural ability, celebrating mistakes as opportunities for learning, and providing regular feedback and encouragement to students.
5. Number Talks: This strategy involves students engaging in discussions about various mental math strategies, such as decomposing numbers, using friendly numbers, and working with patterns. It allows students to build fluency and flexibility in their thinking, as well as expand their problem-solving strategies.
6. Visual Representations: Using visual representations, such as manipulatives, diagrams, and graphs, can help students better understand mathematical concepts and develop problem-solving strategies.
7. Differentiated Instruction: This strategy involves adapting instruction to meet the diverse needs of all students, including those with different learning styles and abilities. Providing multiple ways for students to approach mathematical problems can deepen their understanding and encourage engagement.
8. Scaffolded Instruction: This strategy involves breaking down complex mathematical concepts into smaller, more manageable steps, gradually building students' understanding and confidence.

WHAT SUPPORTS WILL WE NEED?

Teachers will source a range of resources to support the development of mathematical competencies and core competencies, such as books like "Teaching Mathematical Thinking: Tasks and Questions to Strengthen Practices and Processes" by Marian Small and "Mathematical Mindsets –Unleashing Students' Potential" by Jo Boaler.

Staff will dedicate time to collaborate and connect with one another, discussing progress, sharing new ideas, and determining the next steps in supporting students' math learning.

Additionally, teachers will engage in ongoing professional development opportunities for topics such as Mathematical Argument and Problem Solving. Teachers have committed to working with math consultants Carole Fullerton and Janice Novakowski.

HOW WILL WE KNOW WE'RE ON TRACK?

To establish baseline data in mathematical performance, it is important that we gather information about students' current levels of math skills and knowledge. This will include reviewing student work, observing students engaging in mathematical tasks, administering and reviewing assessments, and conducting surveys of student attitudes and perceptions of math. Ongoing data collection and tracking will be necessary to measure progress and identify areas where further improvements are needed.

If there are no changes or unanticipated changes in mathematical performance, it may be necessary for us to reevaluate the effectiveness of the strategies and actions being implemented. It will be helpful to gather additional feedback from students and teachers, and to consider making adjustments to the plan based on this feedback. This may involve revisiting the initial inquiry question and revising the plan accordingly. We will also seek out additional resources or support to address any challenges or obstacles that arise.

HOW WILL WE SHARE THIS INFORMATION?

To make parents/guardians, students, staff, and other members of the community aware and involved with our mathematical teaching and learning, we will:

1. Hold parent-teacher conferences/student-I- conferences: This is an opportunity for teachers to share the progress of their students and discuss ways that parents can support their children's mathematical learning at home.
2. Use newsletters and websites: Teachers can use newsletters and websites to communicate about the mathematics curriculum and share ideas for supporting students' mathematical learning at home.
3. Host family math night: Organizing a family math night will be a fun and interactive way to engage families in mathematical learning. This event can include math games, puzzles, and challenges for families to participate in together.
4. Showcase student work: Teachers can showcase student work in mathematics through displays in the classroom or hallway. This can include photographs of student work, student-made videos explaining mathematical concepts, or presentations during school assemblies.
5. Engage with community organizations: We can work with local community organizations such as libraries, after-school programs, and the community school team to provide opportunities for students to learn and practice math skills outside of school.

By involving parents/guardians, students, staff, and community members in our mathematical teaching and learning, we can create a shared understanding and appreciation of the importance of mathematics in our lives. This can lead to increased engagement and success for our students in mathematics.



District-wide Indigenous Focus (worldviews): To increase knowledge, acceptance, empathy, awareness and appreciation of Indigenous histories, traditions, cultures and contributions among all learners.

WHAT LEARNING HAVE WE DONE AT OUR SCHOOL TO SUPPORT AND ENHANCE OUR UNDERSTANDING OF INDIGENOUS WORLDVIEWS AND KNOWLEDGE?

Tyee Elementary School has made a strong commitment to integrating Indigenous teachings and traditions into its curriculum. Last year, the school organized and attended a Drum Awakening Ceremony and a Pole ceremony, which were attended by Elders from the Musqueam, Squamish, and Tsleil-Waututh nations, along with Tyee and District staff. These ceremonies had a profound impact on all who participated. This year, Tyee has continued to incorporate drumming into special events, such as in assemblies, and participation in the district's drum across the world event. At every assembly, students lead a heartfelt acknowledgement of the traditional territories of the xʷməθkʷəy̓əm | Musqueam, Skwxwú7mesh | Squamish & səliłwətał | Tsleil-Waututh Nations, which helps us all develop a deep appreciation for its importance and meaning. In classrooms, students read and compare First Nations legends with myths, connect Science units on ocean life to the importance of sea life to Indigenous people, and even raise salmonoids in the classroom to study the life cycle and significance of salmon to Indigenous people. The school library houses an extensive collection of First Nations books, published by First Nations publishing houses, written by Indigenous authors, or with permission to tell the story. Throughout the year, Tyee's classrooms incorporate Indigenous teachings and cultural practices, such as animal research on native species or planting Indigenous plants in the school garden. The school's music listening program also focuses on Indigenous music during Indigenous week in June.

Professional development is another area where Tyee demonstrates its commitment to First Nations education. Staff members attend Indigenous Pro-D sessions, read professional books, and learn from First Nations people. By fostering a deep appreciation for Indigenous teachings and traditions, Tyee is nurturing well-rounded, empathetic, and informed students who will contribute to building a more equitable and just society.

WHAT EVIDENCE OF UNDERSTANDING OF INDIGENOUS WORLDVIEWS AND KNOWLEDGE HAVE BEEN FOSTERED WITHIN YOUR SCHOOL COMMUNITY?

To foster understanding of Indigenous worldviews and knowledge, we strive to include Indigenous perspectives, cultures, and histories throughout the curriculum. We do this by integrating Indigenous knowledge into all subject areas, including language arts, social studies, science, and math. For example, incorporating Indigenous literature, history, and cultural practices can help students develop an understanding and appreciation of Indigenous worldviews.

Living artifacts, such as artwork, crafts, and storytelling, are used to teach about Indigenous knowledge and worldviews. In addition, we invite Indigenous Elders, Knowledge Keepers, and community members into our classrooms to provide students with first-hand experiences and knowledge.

Embedding Indigenous knowledge and worldviews throughout the curriculum and school community requires a comprehensive and ongoing effort that involves collaboration and consultation with Indigenous community members and stakeholders. We look forward to sharing out more of how we embed Indigenous education in our curriculum throughout the school over the next three years of our school plan.

HOW WILL WE SUSTAIN AND ENHANCE OUR UNDERSTANDING OF INDIGENOUS PERSPECTIVE AND KNOWLEDGE?

At Tyee, we are committed to maintaining and building on the strong culture and long tradition of valuing Indigenous teachings. Many of the activities we have implemented over the years have become part of our annual activities, and we plan to continue them. We will also continue to weave Indigenous education into the curriculum and implement the First People's Principles of Learning in teaching and planning. Our goal is to continue to deepen our understanding of Indigenous cultures and histories, and to integrate this knowledge into all aspects of our school community. We believe that by doing so, we can create a more inclusive and respectful learning environment for all students.

Continuing Learning Opportunities:

- Incorporating Indigenous perspectives and content into our daily instruction across all subjects
- Providing access to a wide range of Indigenous resources and materials, including books, videos, and artifacts
- Inviting Indigenous community members to come and speak with our classes about their culture, traditions, and experiences
- Continuing to acknowledge and learn about the traditional territories of the local Indigenous communities
- Participating in Orange Shirt Day and National Indigenous Peoples Day activities and events
- Incorporating Indigenous teachings into our classroom and community building practices

New Learning Opportunities:

- Inviting an Indigenous artist to come and work with our classes on a traditional art project
- Planning a field trip to a local Indigenous community to learn about their culture and traditions first-hand
- Bringing in an Indigenous language teacher to introduce students to basic language skills and vocabulary
- Building on our Indigenous Garden/outdoor learning space and explore the importance of traditional plants and medicines
- Holding a school-wide Indigenous culture day to celebrate and share learning