



Vancouver School District

School Plan for Graham Bruce Elementary

Year 2 of 3 Year Plan, 2019 – 2020

Due to the Covid-19 pandemic, current school plans have been carried forward to the 2021/22 school year.

1. GENERAL SCHOOL STORY:

Due to the Covid-19 pandemic and the suspension of all in-class instruction on March 13, 2020, current school plans have been carried forward to the 2020/21 school year.

Graham Bruce is located in a vibrant multicultural community. It now has 243 students in 11 Divisions. The student population has remained stable from last year to this year. There are 26 first languages represented among the population. We are an Enhanced Services Level 3 School. This means that we have additional funds and staff (e.g., Youth and Family Worker) to support vulnerable students. Graham Bruce has a strong multi-layered literacy program which includes Reading Recovery. Reading Recovery is a program that provides intensive one-to-one instruction for students in Grade 1 who are struggling with learning to read. The school has a large number of community sports, recreation, and arts programs for students provided by staff and the Windermere Community Schools Team (e.g. cooking, sports, arts and crafts, science – through Science World). Staff is united in developing and working collaboratively on the school goals. Grade 7 students who participated in the MDI in 2018 reported weak connection with adults and a lack of participation in organized after school activities. Grade 4 students who participated in the MDI in 2019 reported good connection with adults at school, but relatively poor home assets (sleep, and meals with family).

2A. WHAT DID WE SEE?

- School numeracy data for May 2019 (see below)

Multiple choice problem solving Grade 3-7		
Not yet meeting	23	13.53%
Approaching	15	8.82%
Meeting	38	22.35%
Fully Meeting	53	31.18%
Exceeding	41	24.12%
Total	170	
Written answer problem solving Grade 3-7		
Not yet meeting	47	27.49%
Approaching	44	25.73%
Meeting	49	28.65%
Fully Meeting	26	15.20%
Exceeding	5	2.92%
Total	171	
General Math knowledge K-Grade 2		
Not yet meeting	6	7.59%
Approaching	10	12.66%
Meeting	21	26.58%
Fully Meeting	38	48.10%
Exceeding	4	5.06%
Total	79	

- Classroom assessments, observations and discussions with students. (e.g. discussions with Grade 7 students about using keywords and key concepts for word problems)

Staff discussions during Professional Development Days about how well students are prepared to deal with new Math content and competencies. Knowledge of number facts and the ability to understand word problems and key words were frequently cited as major issues in these discussions. After feedback from Janice Novakowski, who is an expert in Math instruction, we decided that a more general focus on reading comprehension of Math problems would be more effective.

2B. WHAT DO WE NEED TO RE-ADJUST?

We realized that using an assessment that is composed mostly of multiple-choice questions to collect data for problem solving does not give a clear idea of where the issues are and what we can do to improve. Therefore, we are changing our assessment to include more written answers so that we can assess students' thinking and process in solving word problems. Our current instructional practices appear to be giving students an ability to answer simple multiple-choice questions (where answers are provided). However, our students continue to have difficulties when they are asked to work through a process and generate their own answers. This is particularly true if the problems are complex or open-ended (i.e. many possible answers). We have narrowed our focus for problem solving and have modified our plan accordingly.

3. INQUIRY QUESTION (previously known as "Goal")

We have refined our problem-solving goal to make it more precise. Our question for problem-solving is now: ***How can we improve problem-solving skills by introducing a standard problem-solving process and by teaching reading comprehension skills for problem solving?***

The focus for Kindergarten to Grade 2 is on basic Math knowledge.

4. WHAT IS YOUR NEW PLAN?

Staff are presently working on developing and teaching a process for students to use when doing problem solving (this will be tiered for different grade levels – K-2, 3-5, and 6/7). Staff are currently working on reading comprehension skills for different grade levels and sample questions for each grade level. We are continuing to work on a process for solving problems that will include the reading comprehension elements that we identify.

5. WHAT SUPPORTS WILL WE NEED?

Resources on mathematical problem solving (examples below).

1. *But Why Does It Work? Mathematical Argument in the Elementary Classroom*. By Susan Jo Russell, Deborah Schifter, Virginia Bastable, Tracy Higgins, Reva Kasman
2. *Teaching Mathematical Argument: Strategies for Supporting Everyday Instruction*, by Despina Stylianou and Maria Blanton

3. *Teaching Mathematical Thinking: Tasks and Questions to Strengthen Practices and Processes*, by Marian Small

Professional development on Mathematical Argument and Problem Solving (for 2019-20 and 2020-21)

6. HOW WILL WE KNOW WE'RE SUCCESSFUL?

- Pre and post testing in computation skills with the goal of having close to 100% of students able to do computation at grade level.
- Formative and summative assessment in problem-solving skills and ability to provide mathematical arguments.
- Student assessment in using the problem-solving process.
- Teacher feedback on how well students are prepared to learn new concepts and skills.
- Feedback from high school on math skills of Bruce students entering Grade 8.

7. HOW WILL WE SHARE

- School plan to be posted on the website.
- Information on progress with the school plan shared at PAC meetings.
- Reinforcing the school's commitment to our Math goal when communicating with students, parents, and our high school (Windermere).
- Staff meetings and continuing discussion during Pro-D Days in 2019-2020.



District-wide Indigenous Goal: To increase knowledge, acceptance, empathy, awareness and appreciation of Indigenous histories, traditions, cultures and contributions among all students.

8. WHAT DO WE KNOW ABOUT THE INDIGENOUS LEARNERS IN OUR SCHOOL?

Graham Bruce Elementary has 16 Indigenous students from a variety of cultural backgrounds. The students are in kindergarten to grade 6.

9. WHAT HAVE WE DONE AT OUR SCHOOL TO SUPPORT ALL LEARNERS IN REGARDS TO THIS GOAL?

- Teaching of Indigenous traditions such as the Seven Sacred Teachings in all classes by our Indigenous Education Worker.
- Displays on Indigenous themes in the front hallway.
- Professional development focusing on leadership in reconciliation and support for Indigenous learners with Chas Dejarlais, Principal, VSB Indigenous Education.
- Purchase of several copies of the new book *All Creation Represented: A Child's Guide to the Medicine Wheel* by Joyce Perrault (our former Indigenous Education Worker).
- Purchase and classroom use of Indigenous Plant Knowledge Cards
- We have a large and expanding collection of books on Indigenous themes, such as:
 - *Raven Tales* series
 - *Strong Stories* series
 - *From the Mountains to the Sea* series
 - *When I was Eight* by Christy Jordan-Fenton and Margaret Pokiak-Fenton

- Some class activities on Indigenous topics and themes are listed below:
 - Colonization and first contact
 - Indigenous timeline
 - Orange shirt day
 - Residential Schools
 - Indian Act
 - Reserve System
 - Potlatch Ban
 - Environmental sustainability from an Indigenous Perspective
 - Amanda White (knowledge keeper) came to several classes and discussed the importance of cedar in Haida culture and matriarchal vs. patriarchal systems
 - Blanket Exercise
 - Reconciliation Similes
 - Project of Heart
 - Haisla Northwest Coast Art shape and form
 - 13 moons on a turtle's back- Saanich calendar activity showing interconnectedness with nature/integrated with Science
 - Teaching about the traditional life of the Coast Salish peoples

10. WHAT WILL WE CONTINUE TO DO IN THIS AREA?

- Indigenous Focus Week: Organize in the fall for next school year
- Continue class lessons by Indigenous Education Worker (e.g. *Seven Sacred Teachings*)
- Book readings and discussions by Indigenous Education Worker
- School involvement in Orange Shirt Day – a day to promote reconciliation and to consider the legacy of residential schools.
- Continuing to expand our Indigenous content in different curricular areas (e.g. Language Arts – First People’s Stories)
- Development of Indigenous food plant and pollinator garden in 2019-2020

11. HOW DO WE KNOW THAT WE ARE BEING SUCCESSFUL IN THIS AREA?

- Student learning survey data – response by students that indicates that they are aware of participating in activities about First Peoples
- Staff discussions about student understanding and attitudes.
- Feedback from