



## 1. GENERAL SCHOOL STORY:

Dr. R.E. McKechnie Elementary School enrolls a diverse student population of about 280 students from K-7. All students, including those with Special Needs and English Language Learners, are well integrated into a sound learning environment that reflects their individual and group needs.

Our students generally meet or exceed expectations in all academic areas. A noticeable change in student population is surfacing, with higher needs in social emotional learning and overall independence and responsibility. The revised school inquiry question, ***How does project or inquiry-based learning foster the development of independence and self-regulation and increase a student's resilience and ability to problem solve?***, addresses this shift.

When developing the school growth plan for 2019/2020, teachers identified that what really matters for students at McKechnie is emotional well-being, including a sense of belonging and connections between students and teachers, where kids and adults feel good about coming each day; student voice and choice, leading to interesting projects they create themselves and where they trust the community in which they learn, enough to take risks in their learning; and where everybody contributes to a happy, safe, inclusive learning environment. What really matters does make a difference as students will then want to come to school and be more engaged in many aspects of school life.

The 2019/2020 School Growth Plan was rolled over to 2020/2021 due to the COVID 19 global pandemic.

McKechnie staff worked on the School Growth Plan 2020/2021 and determined that based on the evidence collected and the circumstances of the response to COVID-19, that it would be valuable to continue to work on the school inquiry question, ***How does project or inquiry-based learning foster the development of independence and self-regulation and increase a student's resilience and ability to problem solve?*** for 2021/2022.

## 2. WHAT DID WE SEE?

The intent is for each teacher or group of teachers to use a rubric to measure an aspect of:

- Independence
- Self-regulation
- Resilience
- Ability to problem-solve

### **In 2019/2020**

Grade 7 class – “Space colonization” – integrated project-based learning unit, cross-curricular – Science, Math, Social Studies, ADST

Grade 7 class – “The Hobbit” – integrated project-based learning unit, cross-curricular – English Language Arts, Social Studies, Science

Grade 6 & 7 classes – “Chopped McKechnie” – cooking competition – project-based unit, 4 teachers, collaboratively planned, taught and judged, ADST

Grade 4/5 classes – “Human vs Animals” – project-based inquiry unit, 3 teachers, collaboratively planned & taught, Science

Grade 2/3 & 3 classes & RT – “Landforms” – project-based unit, 2 teachers, collaboratively planned and taught, Social Studies

Grade 1/2 class – “community” – inquiry-based unit, Social Studies

Grade 1/2 & 1 classes & TL – “Polar Bears and Penguins” – inquiry-based unit, 2 teachers, collaboratively planned and taught, Science

Kindergarten – exploring animals/mammals that hibernate and migrate – inquiry-based unit, Science

The 2019/2020 school year was a time to further develop inquiry-based projects and units, develop & refine rubrics used for assessment as well as implement and revise rubrics. Teachers worked in collaborative grade groups to create and implement project/inquiry-based project in classes. Teachers continued their professional learning by: reading *Inquiry Mindset* by Trevor MacKenzie and Rebecca Bathurst – Hunt and attending a full day session with Trevor MacKenzie on January 20<sup>th</sup>, 2021 along with 6 Vancouver schools. The COVID-19 global pandemic prevented teachers from gathering information from their students. Some teachers were not able to complete their units.

### In 2020/2021

Grade 6/7 – “Satellites in Space” project – student choice in identifying a satellite in space to research

Grade 6/7 – “A sacrifice to the Minotaur” – creative writing piece to place yourself in Ancient Greece as a sacrifice to the Minotaur

Grade 6/7 – create the Roman Forum arena – using project management framework, groups research and build accurate models of ancient Roman buildings near the Forum using Minecraft

Grade 6/7 – create a business brand, logo and identity – students used Adobe Illustrator and InDesign

Grade 6/7 – Deep Space – student choice in identifying a deep space phenomenon to research

Grade 6/7 – Greek Mythology – create myth, accompanying mask and dramatization of myth

Grade 4/5 – “a leg in action” – design and build a model to show how bones and muscles work together, use iMovie to create a stop motion movie

Grade 4/5 – Habitats & Adaptations Board game – design, develop and produce a board game for their peers while demonstrating their ability to communicate learning in this area

Grade 4/5 – “Matchbox Diaries” – immigration inquiry project highlighting artifacts that told the life story of an immigrant. Designed museum “tags” to explain how the artifact reflected their life experience

Grade 4/5 – Frindle board game – plan, design, test original board game, incorporating important elements of the novel

Grade 4/5 – “Dragon’s Den” – persuasive writing with product design, advertising and marketing a business idea of their own.

Grade 2 & 3 – Canadian Animals project & diorama – students chose, researched and produced a diorama, filmed an oral presentation and created a written report on an animal of their choosing

Grade 2 & 3 – Canadian Provinces research and travel brochure

Grade 2/3 using cardboard to create homes for humans, animals – domestic & wild

Grade 2/3 – Student Choice – “passion projects” focused on exploring our world and expressing ourselves which included puppet shows, readers’ theatre, written scripts and short plays

Grade 2/3 – Bunnica novel study – students choose what to highlight and how to present the material visually

Grade 2 – ADST Building challenge – working with a partner to plan, design, gather materials and build either a sled or raft. Reflection after testing finished product

Grade 1/2 & Kindergarten – Growing Plants – based on the essential question “How do Plants grow?”

Grade 1 – Mars – what would it be like to live on Mars? Guess and check research

Grade 1 – Leprechaun trap – “humanly” & humanely trap and hold a leprechaun – design, collect materials, build and “test”

Kindergarten – the Gingerbread Man living in the classroom mystery adventure “What are the needs and wants of the Gingerbread Man?” – students wrote notes back and forth with the Gingerbread Man to learn more about him, designed and built a home, created furniture and decorations and thought of his social emotional well-being, seeking him a friend

Kindergarten – Owl inquiry project – using fiction and non-fiction books, researching owls, where they live, what they eat, how their physical characteristics help them to adapt.

Music – what sounds make a good space soundscape? – explore making a soundscape using an iPad app

### 3. WERE WE SUCCESSFUL?

Teachers observed and recorded a very promising improvement in each of the areas of:

- Independence
- Self-regulation
- Resilience
- Ability to problem-solve

For example:

#### Independence

- Being responsible for self, their part in group work and being accountable
- Identifying, using and changing strategies to manage research
- Ability to break down the steps to complete project and manage timeline
- Students able to identify different approaches to the same inquiry; acting on their own decisions, purpose and motivation
- Taking increased ownership of learning; staying on task
- Motivated by subject and asked for help independently to be successful

#### Self-Regulation

- Demonstrate patience while planting their chosen seed and waiting for them to sprout
- Focused and engaged on learning and outcome
- Discuss and allocate roles to group members; worked together towards a common goal
- Attentive, calm, focused and able to sustain on-task behaviour during construction of the project

#### Resilience

- Dealing with disappointment due to the lack of growth, delayed sprouting of plant in comparison to peers' seeds, unexpected no-sprouting
- Dealing with "surprise" size, timelines, etc. (sprouting of plants, size of plants, glitches in technology, unexpected issues with access to apps, internet, etc.)
- Demonstrated pride in finished product; demonstrated "working hard"
- Understanding that finding suitable resources required time, trial and error
- Able to figure things out when sifting through information, distinguishing between useful/pertinent info versus irrelevant information
- Finding and implementing an alternate plan rather than asking immediately for help or getting frustrated

#### Ability to Problem Solve

- Working in groups to determine how to build or construct homes, leprechaun traps, structure for climbing plants, troubleshooting computer applications
- Students learned, supported and helped each other during the project (using Adobe or Minecraft)
- Talking through problems related to design and execution of project with their peers
- Dealing with disappointment or "redesign" issues; lack of materials or different materials; ability to adapt and adjust accordingly
- Progress in decision making skills both individually and within a group
- Reflecting on what went well, what went not as planned, what would be better done differently and how to improve is a demonstration of improved problem solving skills
- Listened to classmates' ideas and opinions; helped each other with technology

One teacher remarked: Inquiry projects, working in partners helps them in general to be more resilient and encourages collective problem solving.

Another highlighted: The time and authentic passion for their project went beyond my previous conception of their capabilities.

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## 4. HOW HAVE WE SHARED?

One class produced a SWAY presentation for parents. The same class shared with two other divisions, not only their work but with an oral presentation.

Projects (in progress and finished product) uploaded to myBluePrint student digital portfolio

School Website featured story

Posted on “Celebration of Learning” channel in Microsoft Teams Classrooms

Student Led Conferences

Newsletter article about the school plan and moving forward

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## 5. WHAT ARE OUR NEXT STEPS?

Starting with a revisit of which stage we were at in the School Goal at the September 2020 Pro D day, the staff has been focused on continuing using inquiry-based learning in their classes. There was only one new addition to the teaching staff so the continuity helped with carrying on the work started last year. The staff explored teacher collective efficacy and aspects of working towards a common goal at the October and November staff meetings, with a commitment to asking 4 key questions for learners:

- What are you learning and why is it important?
- How is it going with your learning and how do you know?
- What are your next steps?

This is a start to teacher collective efficacy, where teachers are working towards a common goal, share their strategies with each other and know what happens in each other’s classrooms. December’s staff revisited the commitment to inquiry-based learning, the provision of at least one student experience this year, with the common language of the 4 key questions for learners.

At staff meetings throughout the year, we had a discussion about the school goal, specifically around next steps. Due to this school goal being “interrupted” by COVID, the staff really felt it was a continuation from the previous year, with information gathering and indicators of success as the last step. The staff landed on keeping the School Goal for one additional year. ***How does project or inquiry-based learning foster the development of independence and self-regulation and increase a student’s resilience and ability to problem solve?*** The rationale being that over 40% of students started out as Learners at Home, with a remaining 15% continuing to Learn from Home until June 2021. Teachers and staff felt that this goal is gaining traction and would like to be able to continue for next year 2021/2022.



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

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## **1. WHAT DO WE KNOW ABOUT THE INDIGENOUS LEARNERS IN OUR SCHOOL?**

There are 2 students (siblings).

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

### School Wide

- Indigenous Acknowledgement by students at assemblies, by principal at staff meetings & PAC functions (virtual for 2020/2021)
- Orange Shirt Day display in the display cabinet in the front hallway, activities in classes, discussions around reconciliation
- Announcements on National Indigenous Veterans' day
- National Indigenous History Month highlighted in newsletter
- National Indigenous Day celebrated the week of June 17 – 21 with Indigenous music & artists on the morning announcements

### For Staff

- Highlight of Indigenous peoples and individuals, accomplishments, historical events, in the Daily Bulletin

### Library resources

- Purchase of 2 book series, both with a focus on SEL & Indigenous beliefs
- Author visit – Janet Wilson – book Our Actions, with young activists, including Indigenous youth

### Classroom based

- Creating a podcast about an Indigenous artifact of their choice, making connections to the artifact
- indigenous weaving
- Exploring Indigenous artifacts through the MOA online collections (virtual field trip)
- Using Minecraft Education to simulate/explore the fur trading forts and learn the life of a voyageur
- Indigenous Laws & Customs comparison with Canadian Laws
- Historical/prehistory timeline of Indigenous cultures/peoples in N. America
- Biomes/environment of Indigenous habitats
- First People's principles of learning worked into the general fabric of the class – discussions about Indigenous issues, concerns, rights – current and historical; brainstorm what these Principles mean; Social Studies – Residential Schools, Haida culture, Indigenous perspectives (abundance vs wealth, societal structure & governance, justice), Seasonal – different Indigenous moons
- Connectedness, relational sense of belonging to place and each other – classroom climate
- Art project using Indigenous artifacts, spirit animals
- Integrated Indigenous stories when studying literature
- Indigenous wisdom re: protecting & saving our planet; Indigenous plant use
- Communities unit – how First Peoples are connected to their environment & how communities formed
- Indigenous artists featured on Music Listening program during week in June
- Land acknowledgement – what this really means (stolen land) discussion
- Oral Histories & the importance of oral story telling
- Study of plants native to BC
- Art – shapes and forms found in Haida art
- Use of Sharing Circles for class meetings and for morning circle
- Weekly "Walking Wednesday" nature walks integrate study of place, nature, life cycle

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### 3. WHAT WILL WE CONTINUE TO DO IN THIS AREA?

The list in the previous section will continue to be activities and opportunities provided for the students. It is our hope that when COVID 19 restrictions lift, that there will be an opportunity to invite Musqueam elders to our school to share their story and for field trips to take place to the Musqueam Cultural Centre and Squamish Lil'wat Cultural Centre (virtual field trip through guest in the classroom).

A virtual cedar bark weaving is also an opportunity to be brought into the school next year. The artist, Todd DeVries was fully booked for the Spring 2021. Staff is considering booking for the 2021/2022 school year.

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

The Student Learning Survey continues to show that students are “unaware” of specific activities related to Indigenous history, accomplishments, traditions, culture and continued contributions. In my opinion, that is a reflection of the integration of Indigenous content into the everyday curriculum. The number of resources both for staff and student use is plentiful. Indigenous content and authored books are both integrated and highlighted in the Library collection. There are Indigenous content and authored books in classrooms at all levels. Each year, the school makes a conscientious decision to have a performance with Indigenous content or is performed by Indigenous members of the community.

The Outdoor classroom space was well received! With the Outdoor Classroom, Indigenous ways of knowing are integrated into Place Based learning, actively promoted by a teacher leader. This teacher leader has shared the space, resources and plans/lesson with teachers in the district.

The First Peoples Principles of Learning is posted in each classroom and reference by classroom teachers during instruction. Students also know to and expect a land acknowledgement at the start of all assemblies and performances. Staff integrate Indigenous teachings and ways of knowing into units of study. Indigenous perspectives and stories are presented alongside “mainstream” content. The idea of “mainstream” is falling to the wayside as Indigenous perspectives are woven into the presentation of all content.