# New Hazelton Elementary School


## Resource Room Upgrade


# Meet our Amazing Students

- We are a K-7 school of 110 students
- Located near the confluence of the Skeena and Bulkley Rivers in New Hazelton, British Columbia
- Primarily students from the Gitxsan nation, but also Wet'suwet'en, Haisla, and Tsimshian nations
- We love to garden, paint, build, cook, code, build wood projects, create movies about our cultural history, and travel through virtual reality

# Role of the Resource Room

1. Support students with diverse needs to access learning and express their understanding in interesting and personalized ways
2. Support language and culture integration, develop students' feelings of pride in their history, family, and community
3. Build students' confidence in academic skills by providing supports such as speech-to-text and iPad apps
4. Engage students and build skills through woodwork, art, robotics, Virtual Reality, 360-degree filming, Green Screen technology, and 3D printing
5. Encourage critical thinking and creativity through technology

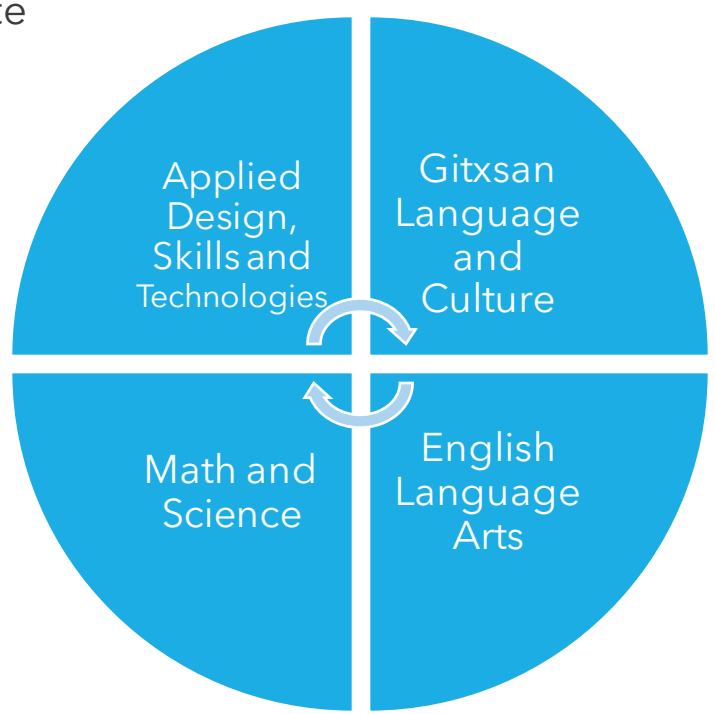
**Make learning exciting, accessible, engaging, and collaborative!**

# Curricular Goals Supported by the Resource Room

Build on students' natural curiosity, inventiveness, and desire to create and work in practical ways.

Explore identity through language, connect with ways of knowing, explore local culture, share information suit to students' diverse abilities.

Invite local elders and knowledge keepers to share their knowledge.




Communicate understanding of math concepts with technology, develop a sense of how math and science help us understand ourselves and the world around us.

Build students' ability to think critically, solve problems, and make ethical decisions.

Individually and collaboratively access digital texts, engage to develop understanding of self, identity, and community.

Share understanding in multiple formats.

# Research Driving Resource Room Development

## Overcome lack of resources

Sant (2004) noted lack of resources creates barriers, while Reed (2003) identified "access" (p. 96) to infrastructure as an obstacle to successful technology integration.

## Collaborate

The "heavy lifting", Peters (2003) notes, "of making the investment in technology work cannot be completed by teachers situated in traditional work roles who are isolated from each other, as well as from technical and intellectual support" (pp. 141-142). We must also include parents and families as collaborators in their child's learning.

## Provide training and support to teachers while working with students

Providing "contextual in-service" (Tai & Vernon Wilson, 2003, p. 8) in "authentic" environments (Koc & Bakir, 2010, p. 20) where teachers work with their own students are key to useful integration. These opportunities allow teachers to identify and address context-specific challenges, as well as tailor technology use to their particular students.

## Support various innovations and innovators

Hall (2010) outlines multiple forms of innovation and use in classrooms (p. 241), and suggests the possibility of multiple forms of successful use by multiple innovators acting as leaders within a school.

# Meet our Hardworking Teaching Team


**Melanie Millar**

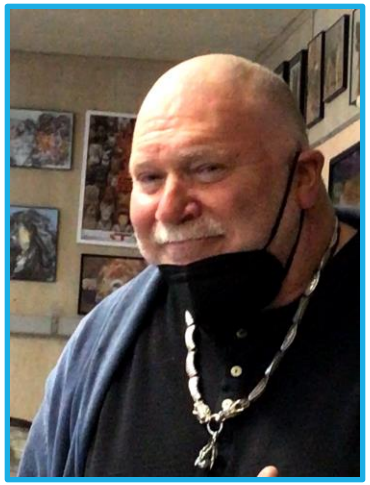
Resource Teacher

Introduces technology solutions and integration supports for diverse learners and their parents

**Angie Olson**

Language & Culture Teacher

Uses technology to celebrate and preserve Gitxsan language and cultural practices



**Glenn Barr**

Intermediate Teacher

Supports students in studying coding, robotics and other technologies


**Melissa McCreery**

Primary Teacher

Supports integrating iPad use for academic tasks

Working on developing culturally-relevant Virtual Reality content

Run Parents as Literacy Supporters (PALS) program together, integrating language, culture, and technology

# Meet our Awesome Support Team

**Iona Bolger**

Education Assistant

Supports intermediate students with iPad technology

**William Gogag**

Woodwork & Technology Teacher

Volunteers to support after-school woodwork and art program

**Deb Henderson**

Education Assistant

Supports primary students in using iPads for learning

**Jan Thorburn**

Principal

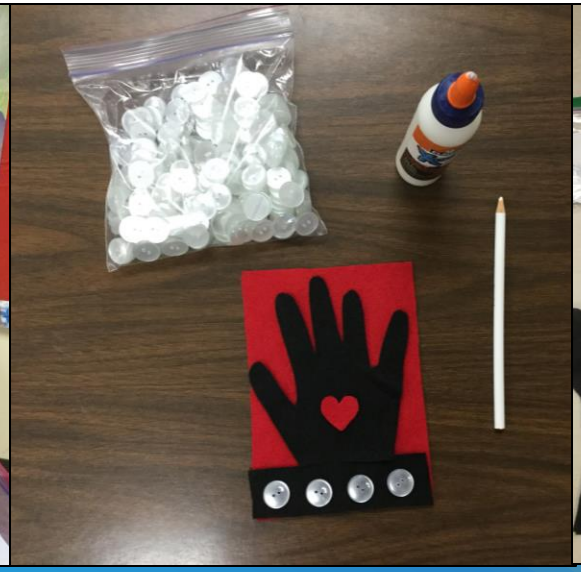
Supports tech integration for all students

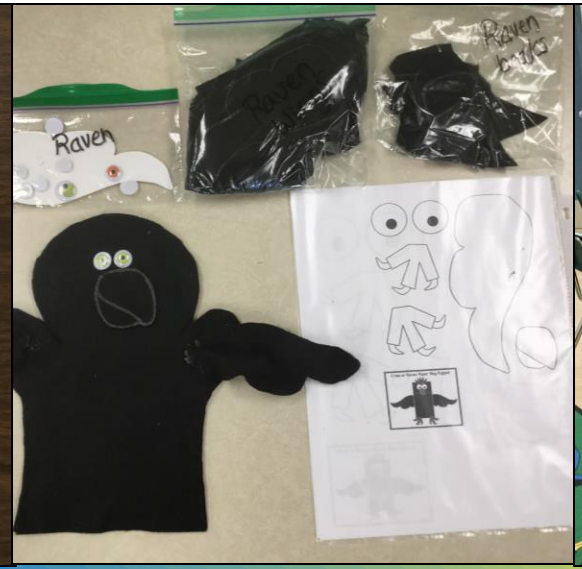
# What are we doing now?

- Our staff **work hard to provide students with a range of opportunities** but despite their efforts, our students have limited opportunities compared to our peers in other parts of the province and other parts of the north.
- Our students and their families **work hard to overcome extreme economic difficulties**, with sawmills closing, unemployment rates of up to 90% in recent years (Statistics Canada, The Tyee - "Where Struggle is Hardest for Families" (2011) (http://thetyee.ca/News/2011/03/03/WhereStruggleIsHardest/), and reductions in health and education funding which have made for reduced services.

# Language & Culture

# Engaging Parents in PALS
# (Parents as Literacy Supporters)



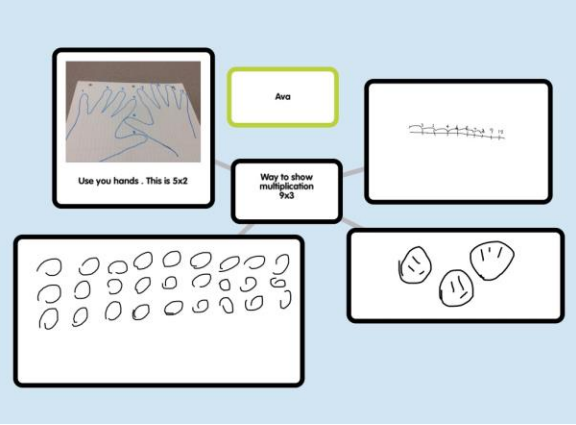


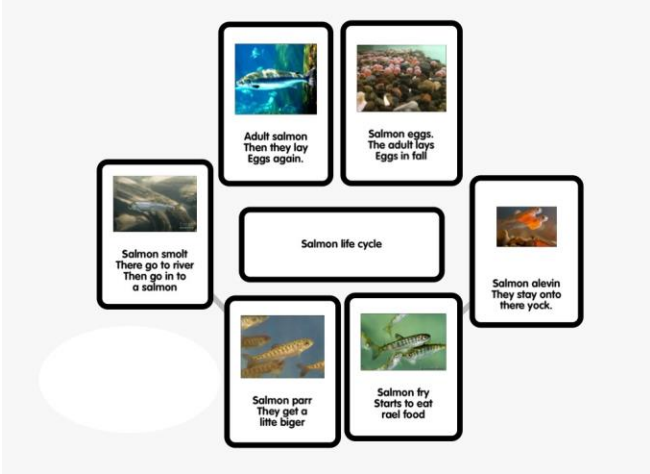

# Audio Language Stations

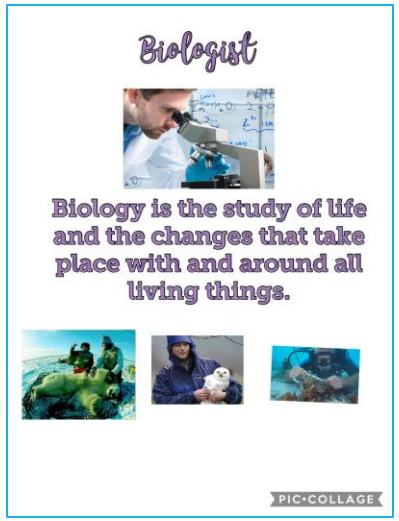
# Vocabulary Dictionaries and 3D Printed Language Plates

# Technology

# iPad Apps


Use you hands . This is 5x2
Ava
Way to show multiplication 9x3

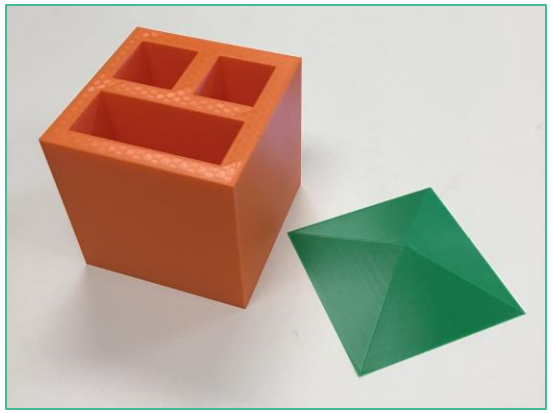

Adult salmon Then they lay Eggs again.
Salmon eggs. The adult lays Eggs in fall
Salmon smolt There go to river Then go in to a salmon
Salmon life cycle
Salmon alevin They stay onto there yock.
Salmon parr They get a litte biger
Salmon fry Starts to eat rael food

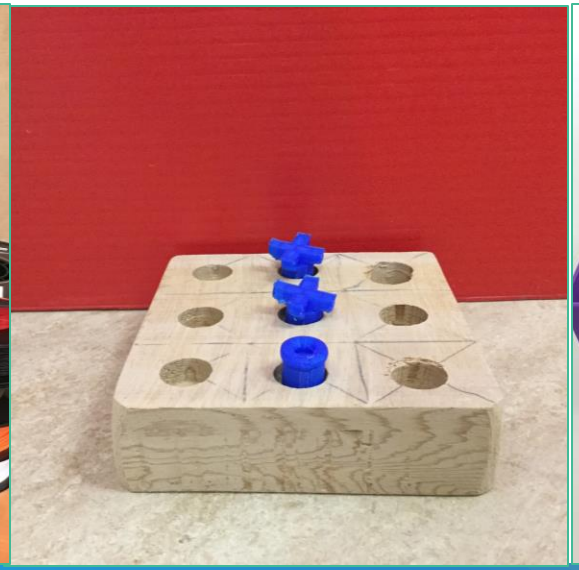

Biologist
Biology is the study of life and the changes that take place with and around all living things.
PIC•COLLAGE

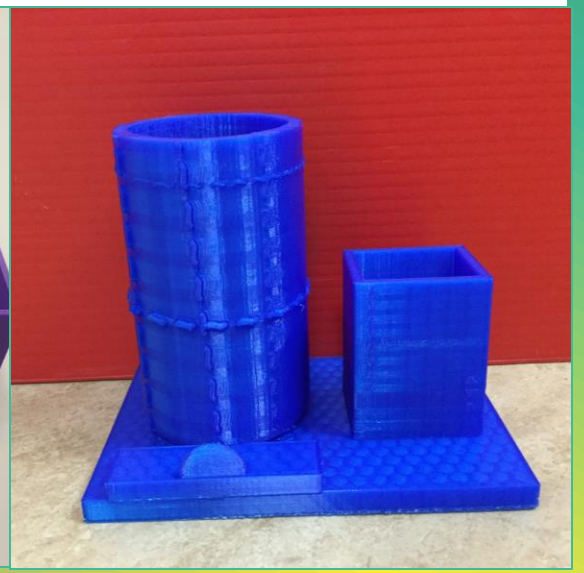

English
Gitxsan
Respect
Hlo'omsxw
Happy
Luu amah goot
Grandpa
Ye'eh
Family
Wil'naa t'hal
PIC•COLLAGE


Chloe's Plot Profile Little Red
Time Passing
Level of Excitement
Mom mmakes food 1
Red leaves 1
Wolf talks to Red 5
Red keeps food 3
Wolf dresses up 7
Red visits Granny 3
Red notices teeth 10
Wolf eats Red 8
Woodcutter frees... 4
Graphing
Chloe's Plot Profile Little Red
Level of Excitement
Time Passing

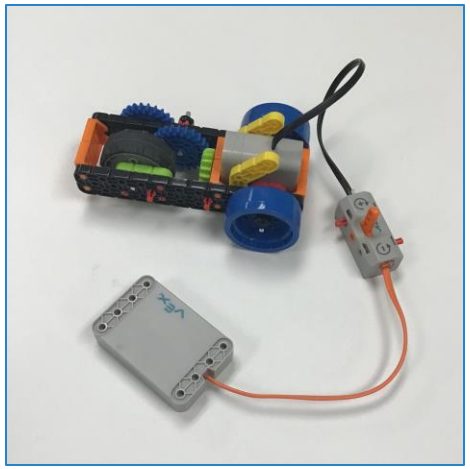
# 3D Printer





# VEX Robotics

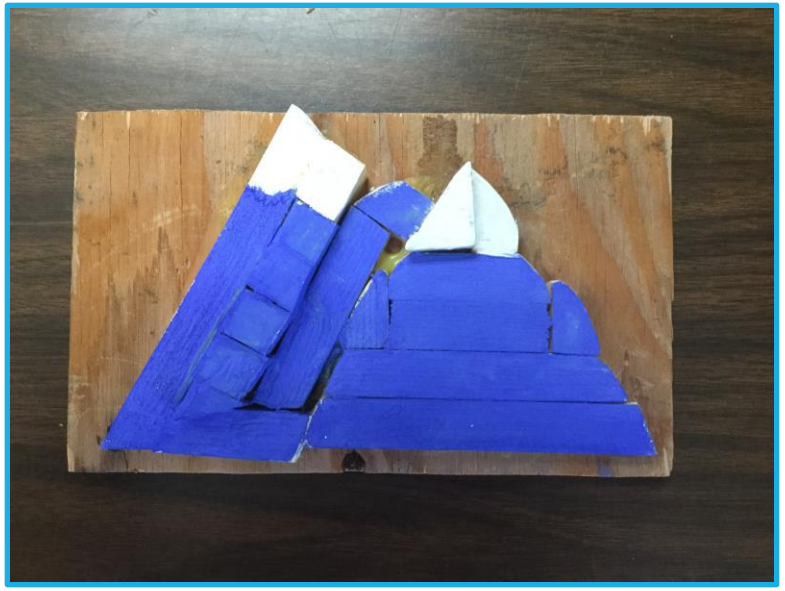


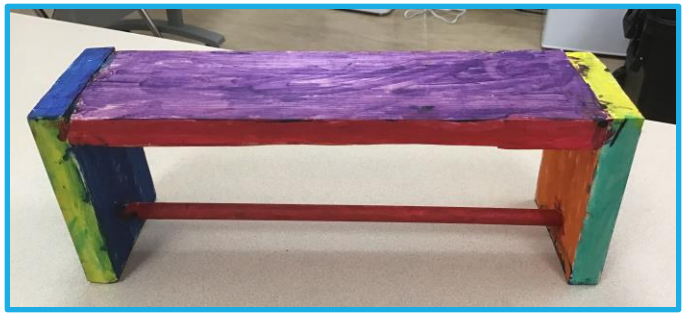
# Cricut

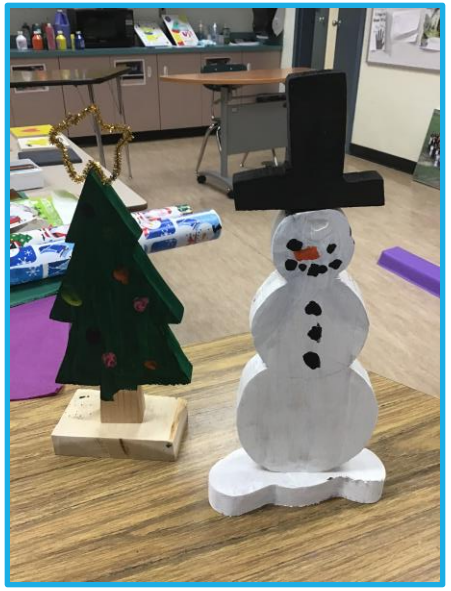
# Virtual Reality

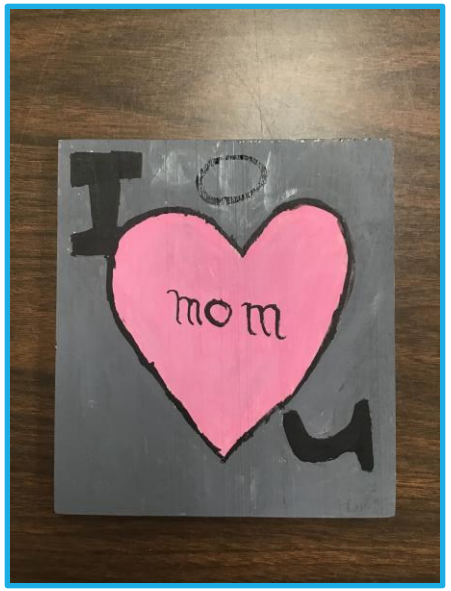

# Woodwork & Art

# Woodwork & Art Projects









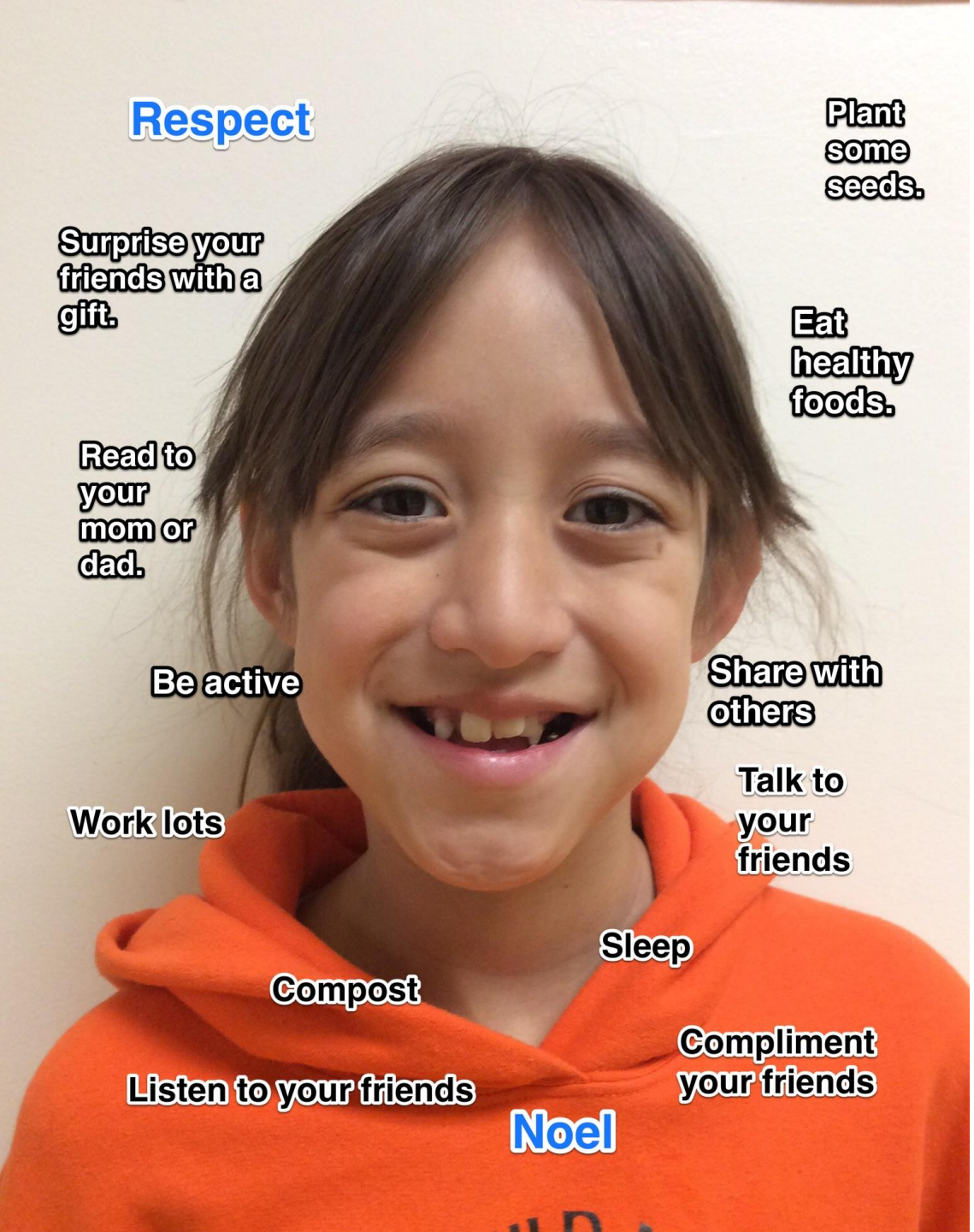

SCHOOL

# What have we built so far?

Woodwork cart for tools

Desk and bike for alternate seating and movement

Table for 3D printer




# What do we want for our school?

We have wonderful, curious, eager students and we would love to be able to match their enthusiasm with an update to our Resource Room that improves their access to technology and maker activities while improving literacy, communication, social relationships, and understanding of culture.

4 workstations in this style

**Big enough to accommodate students**

Inspiration source: https://www.familyhandyman.com/project/ikea-kallax-hack-craft-room-storage/

https://foter.com/work-tables-with-storage

# Moveable Workstations

- Accommodate our technology and woodwork projects more effectively
- Build 4 moveable workstations to accommodate students' project work (woodwork, robotics, 3D designing and printing, Virtual Reality content creation)
- Create a more welcoming way to meet with parents - when all workstations are put together they create a big table to meet with parents for workshops and support programs

# Commercial Workstations

$3700

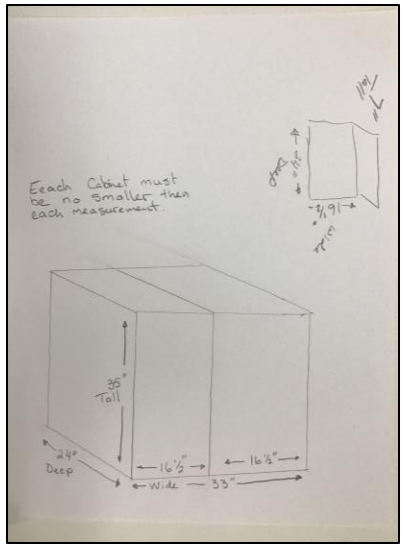
$3200

https://www.worthingtondirect.com/makerspace-furniture/workbenches-shop-tables.htm

# Our Plan (more affordable)

**Current Resource Room** + **Workstation Plans** = **Final Result**

Mismatched tables and lack of storage




**Happy Hardworking Kids**

**A less expensive alternative – making our own workstations**

**(allowing us to have 4 for the price of 1 ☺)**

# Estimated Costs

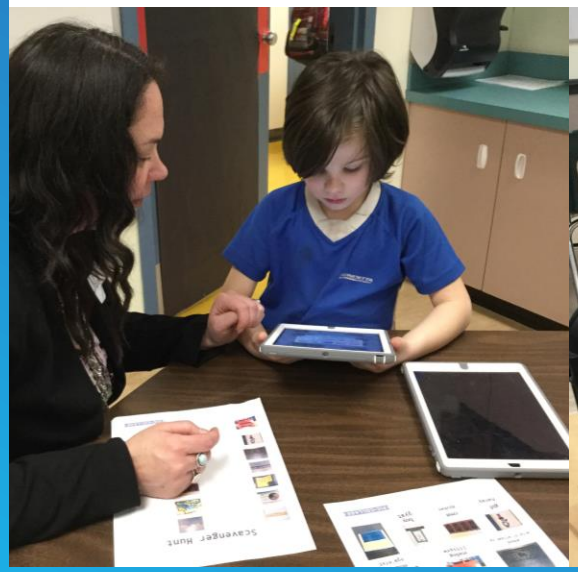
| | |
|---|---|
| Plywood for worktable tops | $600 |
| Premade shelving (2 per workstation) | $2000 |
| Casters ($60 each, 16 total) | $960 |
| Paint, stain, and wood finish | $400 |
| Storage bins | $400 |
| Supplies | $200 |
| Seating (adjustable stools) | $1400 |
| Labour (on top of volunteer and student hours) | $840 |

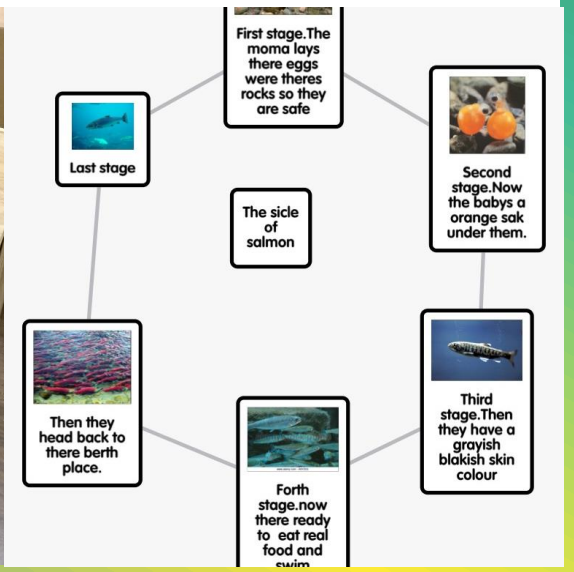
# Current Sources of Support

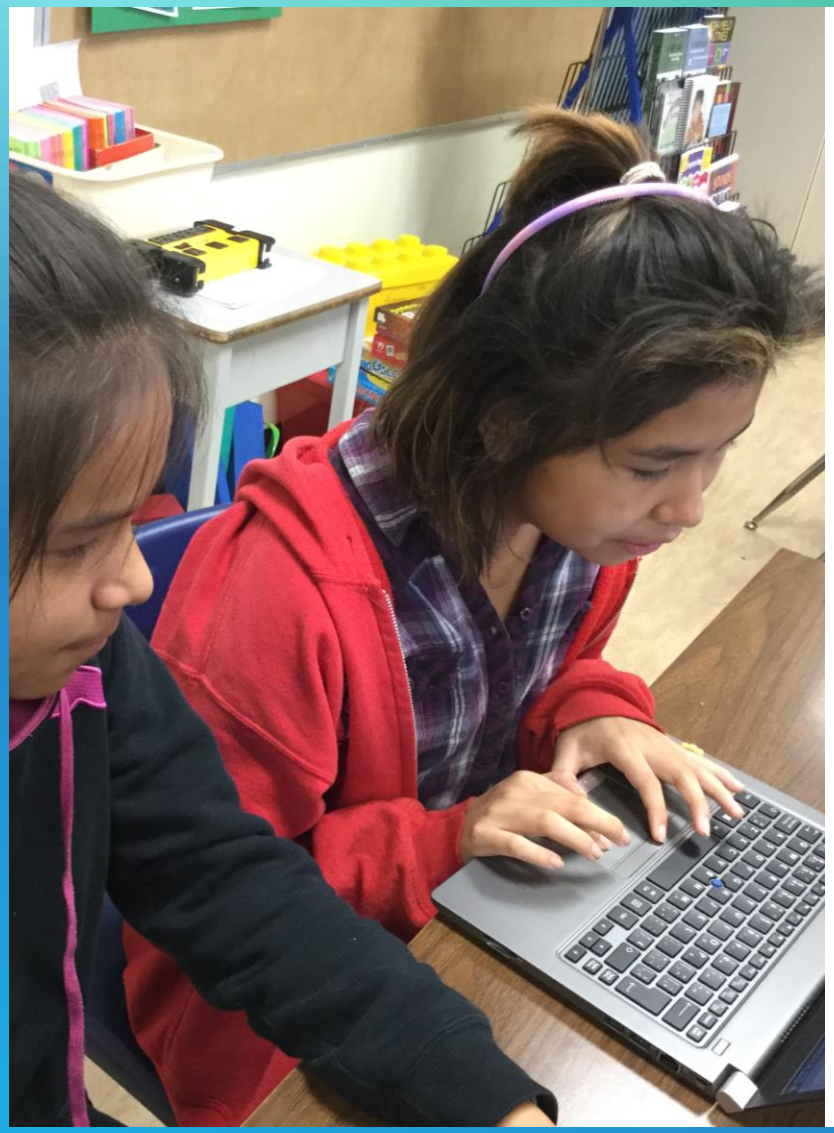
- Our school has committed funds from our Resource budget
- The Parent Advisory Committee has already donated funding for equipment, including a 3D printer and Virtual Reality equipment
- SET-BC has donated iPads and laptops to get us started
- DASH donated an electronic sit/stand desk and SmartBike
- Teachers purchased robotics equipment
- Private donations of labour, supplies and tools
- Student fundraising for equipment and additional robotics

# Valuing Technology in Elementary Schools

Students themselves identify the benefits of a "technology-infused" classroom: promoting collaboration, active learning, authenticity, and higher order thinking skills (Neokleous, 2019, p. 117).





# What the A4LE grant would mean to us

Our students face so many struggles and challenging circumstances. They meet these challenges with resiliency, tenacity, and a positive attitude toward learning.

Having proper workstations would elevate their ability to focus, create excellent projects, and show what they know in a range of ways that build their skills.

The workstations would also provide a space to meet with and encourage parents as they meet the demands of supporting their children.

# Thank you for considering our request

Melanie Millar
Resource Teacher
New Hazelton Elementary School
New Hazelton BC
250-842-5777 ext. 3003
melanie.millar@cmsd.bc.ca

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