

OLTD 511 – Pilot for Blended Learning Program

Richard McBride Elementary 2017/18

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About Richard McBride Elementary

Richard McBride Elementary is a K to 5 school located in New Westminster, BC, part of School District 40. The school serves the Sapperton region of New Westminster, and has a population that fluctuates between 395 and 415 students. Structurally, the school is starting to show signs of age and the city is currently deciding if a complete replacement would be more cost-effective than performing the seismic upgrades the school needs. However, when you lift the hood, the staff paints quite a different picture. Teachers at Richard McBride are innovative and open to new things, particularly technology. The administration is open-minded and willing to try new things for the benefit of its students. Due to the teachers' interest in technology and their frequent grant applications, the school has a computer lab and a Google Chrome cart, but also has a class set of iPads, several programmable robots, a Maker club and a great focus on coding for all grades. Recently it acquired a 3D printer, which has been used already for prototyping and creating by several grades and classes.

Perhaps for this reason, students at Richard McBride tend to be open-minded regarding their education. They understand the differences between each teacher, and embrace each year as an opportunity to not only learn new things, but also to *learn new ways of learning*.

Parents at Richard McBride are usually involved in their children's efforts to succeed, including homework. While some parents would like to see their child have more homework, others question the validity of worksheets.

About the pilot class

The class which will participate in this module is a grade 2/3 split, with ten students being grade 2s and twelve being grade 3s. Eight are girls, while fourteen are boys (the school has a population that is slightly more masculine as a whole). The majority of students need little assistance to grow and learn. One of the children is currently undergoing assessment as he has difficulty connecting to the rest of the class and the activities presented. He will need some extra guidance during the independent parts of day-to-day activity.

Current setting

This particular classroom is organized as a 3.5 and 1.5 divided schedule, so that the main teacher is with the class Monday, Tuesday and Wednesday full time, as well as Thursday mornings. Thursday afternoons and Fridays are taught by a different teacher, who will focus on teaching Social Studies on Thursday, working with the students in P.E. and catching up on the week's work on Friday.

This classroom has not had a teacher stay in the job for more than a year or so, and maybe due to this, the classroom itself is still very bare. The cupboards and shelves are empty, and there are only a few books available for the students. Due to this, an old laptop donation request was made during summer in order to supply the classroom with enough units to use during rotation time. Eight laptops are needed, and so far we have four. A barely used, colourful carpet was also found on Craigslist.

The plan

This proposed pilot is intended to experiment with breaking out of the usual teacher-guided classroom, helping students start guiding their own learning. The plan incorporates technology throughout the day in an attempt to help start building important 21st century skills with the students, as well as make them familiar with different uses of technology. Programs such as Mathletics, which adapt and respond to student's input, help personalize student experience; technology is used also to create content such as videos, stories and coded games, rather than simply utilizing premade content.

At the same time, the plan incorporates outdoor exploration and outside play, as according to the Active Healthy Kids Report (2012), playing “allows children and youth of all ages to try new things, test boundaries [and] learn from their mistakes.” With increased technology access, children tend to stay home during their free time more and more; this plan takes this into account and tries to balance their time in front of a screen with actual outdoors activities, which at the same time help connect students to nature.

The main teacher of this classroom will have the flexibility to try something new in a way that will hopefully engage each student at their own level and learning pace, with a focus on student-centered learning. For the first two weeks, a great deal of time must be spent building positive relationships with the students, explaining expectations of conduct and effort, and developing classroom norms, which will most likely be different than what they are used to. The biggest challenge will be for students to transition from a teacher-led to a student-led framework at such a young age.

Horn and Staker (2015) consider student-centered learning as learning that combines two ideas: personalized learning (“learning that is tailored to an individual student’s particular needs”) and competency-based learning (“students must demonstrate mastery of a given subject [...] before moving on to the next one”).

Horn and Staker (2015) also define blended learning as a “formal education program in which a student learns at least in part through online learning, with some element of student control over time, place, path and/or pace”, using “at least in part [...] a supervised brick-and-mortar location away from home,” with the learning steps “connected to provide an integrated learning experience.” This blended learning program was organized with this definition as a guideline.

In a regular teacher-guided classroom, personalized and competency-based learning can be a challenge to achieve, as the student delegates the control of their pace and place of learning to outside forces. However, by using a blended learning alternative, a weekly schedule can be devised to provide students with more control over how they learn, as well as a varied and exciting classroom culture.

The age group makes it a little more challenging, as they expect and crave structure during their school time. So, the blended model had to be chosen in a way that would allow the students to feel free to explore, as well as a clear structure for them to feel safe. Initially, the chosen model was going to be based on a flipped classroom, where students would be required to watch a video about a certain subject and walk into the classroom to actively participate in “what we used to call homework, with teachers providing assistance as needed” (Horn & Staker, 2015).

The idea was to allow students to follow the videos at their own pace at home, work through projects in the classroom and when they felt that they dominated a certain subject, they could prove their expertise and move on to the next without waiting for the rest of the class.

However, after some research on the subject of homework, the initial flipped classroom model had to be reassessed, with some adjustments made. Wright (2012), a strong initial adopter of flipped classrooms, highlighted many concerns; among them, flipping the classroom still means students have homework to do, which has been proven to not be as effective as we were once led to believe. Wright now focuses on inquiry and states that “it’s about ownership” of their learning; she gives students clear goals from the beginning of the year, allowing them to explore the concepts at their own pace.

Pressman, Sugarman, Nemon, Desjarlais, Owens and Schettini-Evans (2015) remind us that with younger grades, the recommended amount of homework was generally ten minutes per grade level, so that a student in grade 2 should have only twenty minutes of homework maximum per day. In reality, their study found that this number is sometimes three times higher than the recommended amount, and the benefits for younger grades is shown to be minimal in general.

Kohn (2006) highlights that “there isn’t a shred of evidence to support the folk wisdom that homework provides non-academic benefits at any age,” particularly for younger levels, but that despite the research, homework is simply seen as a given in every classroom. A further consideration with flipped classrooms is the stress that can be caused if a student does not have the chance to watch the video at home.


Student: _____		Week: _____		
	Jumping Rope Times	Playing outside with a friend	Playing with a ball	
	Monday			
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				
Total points:				

Figure 1

Taking these into consideration, as well as the age level of the students in this particular setting, some modifications were made to the flipped rotation model in order to fulfil the requirements and provide the result needed. Homework will be still given daily; it will comprise of a minimum of thirty minutes of outdoor play. The child may use this time as they see fit, as long as they keep track of their activities on their outdoor play journal (Fig.1). Students gather points to be traded for different outdoor items.

Instructional videos still can be watched from home, but they will be also available for students to watch during their independent online rotation without penalty. They should watch the video before jumping into the activities; the videos are short and would not take their whole rotation period, and after that, they would be free to use subsequent rotation

times to practice the subject they are studying until they are comfortable enough to prove their knowledge. In case students need a refresher, the videos can be watched again. This modification allows the teacher the freedom to work with small groups and apply the rotation model without dispensing all the knowledge from the front of the classroom; the classroom becomes a place for interaction, collaboration and self-guided learning.

The Schedule

Every week one block will be dedicated to music, one to P.E., one in the computer lab and two in the library, but these have not been decided yet. The following schedule attempts to give a possible example of a week.

Station Rotation 1 (SR1): Collaboration, Direct Instruction and Independent Online Work

Station Rotation 2 (SR2): Inquiry project based on passions/sparks, Writing, Arts

OEA: Outdoor Exploration Activities

STEAM: Science, Technology, Engineering, Arts and Math (Maker Space)

	Monday	Tuesday	Wednesday	Thursday	Friday
8:50 – 9:00	Welcome / Math Drill	Welcome / Math Drill	Welcome / Math Drill	Welcome / Math Drill	Welcome / Math Drill
9:00 – 9:10	Mind Up	Mind Up	Mind Up	Mind Up	Mind Up
9:10 – 9:45	SR1	SR1	SR1	SR1	Catch up day
9:45 – 10:35	SR1	SR1	Music	SR1	
10:35 – 10:50	Recess	Recess	Recess	Recess	Recess
10:50 – 12:20	OEA	STEAM	STEAM	STEAM	Comp Lab
12:20 – 1:05	Lunch	Lunch	Lunch	Lunch	Lunch
1:05 – 1:15	Silent Reading	Silent Reading	Library	Social Studies	
1:15 – 1:35	Reading response	Reading response	Library		
1:35 – 1:55	SR2	SR2	Library		P.E.
1:55 – 2:48			SR2		

The website

A series of videos are available through the supporting website www.thebunnybin.ca . The videos are divided into two groups: one for grades 2 and the other for grades 3. Each group divides the curriculum into ten unique subjects; by the end of the year, students should be able to demonstrate that they know each area of the curriculum. The videos serve as starting point for students before tackling other online resources such as Mathletics, as well as refreshers to be used whenever they need a little more explanation.



The website also will hold other links to outside sources; currently a few subjects have links to songs or other fun videos. It will also contain links to games and relevant information regarding Mathletics and the correlation to each topic between the resources.

While the inquiry project is well defined on the website, the majority of pages focuses on math. The full program will incorporate all other subjects as well, interspersed within the math curriculum as well as separately through the day. An ideal schedule would include individual time for the students to practice, create, learn or explore online; time for the students to create and work through projects with hands-on traditional tools such as scissors, glue and paper; time for the students to sit with the teacher in small groups, so that they can check their assumptions and get guidance in a smaller setting; and finally, time to go outside and explore nature, using the knowledge they learned as well as technology to record their findings (ipads).

The chosen model

For this pilot, the classroom will be working on a **Station Rotation model** (Fig.2). This model allows for a little more structure, which is necessary for the younger levels, and will provide the students a sense of safety while also allowing for individual freedom and

exploration. At the same time, the station rotation model takes in consideration an outdoor component, which will be used by students to apply what they have learned in math and science to the real world.



Figure 2

Each area of the classroom can be used for different purposes, depending on the task at hand and the time of day. There are two scheduled rotations, morning and afternoon.

The independent online work area (Fig.3) is comprised of eight laptop stations which would be available throughout the day. Students can use it during morning rotation to work on Mathletics, to watch videos or resources on math topics and projects.



Figure 3

Between recess and lunch, the number of computers available will be enough for every child to have access to it as the Chromebooks will be booked for one block every day. This will help children complete their projects coding on Scratch as well as working on other STEAM projects online. After the Chromebook block is over, computers are put away and students will resume work on other STEAM projects, using hands-on trial and error and prototyping.

The collaboration area (Fig. 4), a lovely rug as well as two sets of conjoined desks, will be used for our daily Mind Up practice and also during the morning rotation for collaborative projects involving math and science. In the afternoons, the same area will be used for work on inquiry, writing or art projects, as



Figure 4

required. According to Horn and Staker (2015), there are “two core jobs that are the highest priority to students. First, they want to feel successful. They want to feel that they are making progress and accomplishing something, rather than experiencing nothing but repeated failure or running up against walls. Second, they want to have fun with friends.” This area becomes the heart of the program as it achieves both, by providing an opportunity for students to work with friends and be creative. STEAM projects and Maker Space activities are explored in this area.

During the afternoon rotation, the computers from the Independent Online Work area will be put away and all the desks will become a part of the collaborative work area, available for inquiry projects based on student’s passions and spark, independent writing or Art projects.



Figure 5

The direct instruction area (Fig. 5) has eight chairs on a C formation, and the teacher chair on the other side. During morning rotation, this area is intended for direct instruction, working with students solve problems, and helping them clear out

any doubts they may have regarding math and science. If students have no specific question, they are asked to bring their Jump Math book and work through the book with the teacher during their rotation. In the afternoon rotation, students work with their writing and spelling, and get direct literacy instruction.

Every Monday, students will also have two blocks of outdoor exploration activities, where they are able to enjoy nature as well as reinforce things they have learned during the other rotation blocks. The class will go to the park equipped with their projects as well as laptops when needed. Students would be able to show fractions, counting and simple equations, as well as learn about science and ecosystems in a hands-on format.

At the same time, every student will have an outdoors kit to be used as homework for a minimum of thirty minutes every day upon arrival at home. The child may use the kit as it sees fit, as long as they stay outside for the whole time. The kit will comprise of a jumping rope, a small ball and other outdoor toys.

Conclusion

Throughout this process, the teacher becomes no longer a lecturer, but a cheerleader, an organizer, a facilitator and guide. Instead of giving everyone the same content at the same time, the students would be able to determine what they should bring up to the teacher and what are the questions that need teacher assistance. The blended learning model as described allows for the student to take a bigger role as contributor to their learning as well as other students' learning. Collaboration, variety, inquiry and outdoor

activities bring to the students a more wholesome learning experience. For younger levels, a rotation becomes a perfect framework, providing some choice in each individual section as well as the ability to control the pace in which they progress throughout their learning.

In order for this pilot to be successful, being enthusiastic and creating a good rapport with students as well as explaining how the schedule will happen becomes very important. Clear guidelines and expectations help younger age students feel supported. Simply creating a plan incorporating a blended model does not ensure student learning, and frequent reassessment as well as utilizing best teaching practices in general are crucial for the program to work.

The goal is not only for students to learn, but also for them to become excited about learning, and many more adjustments will be undoubtedly needed throughout the year in order to reach every learner. But the concept is exciting, providing enough controlled chaos to motivate students and help them reach their potential.

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Images of classroom created online with Roomstyler

Website created with Weebly

Videos recorded using Screen-Cast-O-Matic and Photoshop