
Transformation Through Drum Building: A Look at One School's Journey and Learning Through Crafting

By Dayna Muys



How the drum came back to the Ojibwe People

Long ago and yet not so long ago, the Ojibwe and Sioux peoples were at war with each other. Warrior societies flourished and around the village campfires the talk was always of war. The villages were becoming empty of men, and the women mourned and buried their husbands and sons. Only the women, children and old men were making up the village. The men and available youth were on the warpath, even though most of the people forgot what they were fighting about.

In one of the main villages, there lived a little girl, a little girl tired of war. She went into the lodges of the grandmothers and grandfathers and told them she was tired of all this talk of war, of burying her male relatives, and friends, she was tired of death and dying. She asked that, "there must something that she could do to stop the wars." "You!" cried the grandmothers and grandfathers, "you're just a little girl!" After such rude behaviour from the grandmother and grandfathers the little girl decided she would go on a fast. She and her grandparents did all the preparations; she would begin her fast on the night of the full moon. She took nothing but a blanket and went out on the hill by herself determined not to come back down until she received an answer.

For seven days, nothing happened. No visitors or visions came to her, and the little girl was getting hungrier and hungrier. With the moon full again, the little girl was close to death, and feeling abandoned and alone. As she lay on her blanket dying, the birch trees caught the moonlight and reflected it back to the earth around her. It was like daylight out on the hillside, so the little girl watched the moon and prayed to the creator. Through her tears, it seemed to her she saw 7 figures surrounding the bright ball in the sky that recognized as Grandmother moon. It looked as though the 7 figures were gently carrying Grandmother from the sky towards Mother Earth, the little girl knew the 7 figures and that 7 grandfathers. She reached her arms out to embrace the grandmother, with the final strength in her body she got up and took her blanket and spread it on the ground so that the grandfathers could rest Grandmother moon on it.

The grandfathers sat with the little girl around her fire for 4 days and gave her the teachings of the 7 grandfathers. The Grandmother began to talk to the little girl telling her how to create a drum, the correct way to stretch the rawhide and lace it on. She told the little girl that the men were so busy with the war that they forgot how to connect with their hearts. If the little girl would give them the drum, they would once again connect with their hearts. She said that the drum is animate and has a spirit, when the little girl was finished making the drum she thought of how much it looked like Grandmother moon. The little girl took the finished drum to the Warriors lodge, where the men accepted the drum and began to use the drum and use their voices as medicine prayers. They started connecting with their hearts, and soon all thought of war left their minds. With the Sioux People still raiding the Ojibway, the little girl decided to make another drum, but on the face of this drum the little girl painted one half red and the other half blue, down the middle she painted a yellow strip. The little girl went and presented the Sioux Warriors with the drum, soon after the Sioux Warriors laid down their weapons and they too started to connect with their hearts. Peace came into the people hearts

<http://sheshdrumgroup.tripod.com/drumstory/drumstory.html>).

Stories of the drum have been found in cultures throughout the world, from the Ojibwe people of Canada as told in the story above, to the Nigerian story of *The Singing Drum* (<http://www.worldstories.org.uk/stories/story/21-the-singing-drum>). “Drumming has been an integral part of Aboriginal cultures since time immemorial, as the drumbeat represents the heartbeat of Mother Earth” (Goudreau, 2008, p. 73). The act of building a drum and drumming has now become an integral component of learning, our community, and to the students of the Maple Ridge Environmental School. This paper intends to look into the philosophy behind emergent learning, cross curricular learning, full circle learning, experiential theory, place-based and community based learning which all are evident and intertwined throughout the process of drum making. The craft of drum building was chosen as

drums are an instrument that are used daily at the Environmental School and the students therefore already have a strong connection and relationship with them. Having them build their own drums was the next step in creating a deeper more meaningful, personal connection. This paper will document the full circle of learning that takes place within the building of the drums. Beginning with learning about smudging and blessing of the material from our Kwantlen elder, to sawing, sanding and putting together our frames, to shaping and attaching the hide to the frame, to painting the hide and then the students eventually learning how to play the drum. As this project intends to be very cross curricular, this paper will also focus on different curricular components that are covered and emerge throughout the process of drum building. This will be shown through individual stories, photos and teacher reflections on the process. As I personally work with mainly kindergartens and grade 1 students, this age group will be the focus of this content. I was extremely interested in the personal and cultural growth within the school community that may emerge from this project and this paper speaks not only of the growth, but also the professional and philosophic growth that I as an educator have gone through during the planning and building process with my students.

The project of drum building was ignited by Clayton Maitland, our school principal. He spoke to me about his process of getting to know of the histories and knowledges of place, he found drum to be quite significant. He thought that having students build their own drums would provide the community with a “connection to the histories and knowledges, as a sense gain a deeper understanding of Mother Earth and as a connection to song.” Clayton then shared these ideas with Hearth Keepers (group of teachers, parents and community members that come together to create a voice for the community where decisions are made based upon consensus). He then set up a drum making and story telling experience with Katzie First Nation at Swan-e-set Longhouse. This experience then inspired us to create the drum building project for our students, which then could open up many different possibilities and opportunities for learning. Then, as a community, gathered resources and one mother from our school applied for a grant from AIC-Artists in the Classroom that would assist in the costs. We received this

grant last fall and are using the funds to cover drum-making supplies and to pay for the costs of hiring Lekeyten, a Kwantlen elder who performs in ceremonies throughout the community. “Lekeyton has been an Elder in Residence at Kwantlen Polytech University and an Advisor to Simon Fraser University. He provides cultural teachings at the Langley Child Development Centre and has taught drumming circles to children as young as pre-school”(Robertson, 2014). In January 2015, 88 students ages 5-13 began learning how to build their own individual Aboriginal Drum with help from community members, including Grandparents, parents, former students and their parents, teachers and Lekeyten, who shares stories of the drum, teaches local traditions, provide cultural knowledge, teach drum making, drumming and song.

Why Drums?

Through the process of drum making, the students will gain so much from the new experience and learn many things that cannot be measured. This section of the paper discusses why an activity such as this, is valuable and important learning, covering the principles and values the Environmental School follows, inspirations for drum making and the connection to Indigenous Education.

As a school community, we strive to “grow relationships and nurture practices of learning and teaching that embody the following principles and values” (Blenkinsop, 2012, p. 5): place and community, nature, ecology and sustainability, inquiry and possibility, interdependence and flourishing, imagination and integration. Finding projects such as drum making that draw upon and connect to the importance of each principle and value are so important to us as educators and to our students. Clayton, our principal speaks to the fact that as educators, we want to look at learning in a different way,

in deeper and broader sense, beyond the classroom and school building, into and with the natural world and expanding on learner experience, it is essential to remove conventional practice and place the environment, experience and activity in the foreground of learning. We have to continually examine "learning" and encourage growth in a multiple of ways.

The creation of music has been a big element in the daily activities of the students and creating musical instruments has acted as a large component of this. Last school year (2014), we had our students carve and learn how to play their own individual Aboriginal flutes, which was initially inspired by listening to the beauty of the sound and emotion that this instrument evoked when one was played for us by Vicki Kelly. This was a great way to connect to and learn about Aboriginal culture in our area and explore all of the learning opportunities that could come from such a project. Not only did the students learn so much from this process, we as a staff learned a great deal as well. It was evident through this process that the community became stronger and closer as they had to spend a great deal of time working together to build their flutes, as older students helped younger students, parents and grandparents came in to help and learn how to build their own as well. Currently, as Lekeyten has never learned how to play an Aboriginal flute or made one, he has been inspired by some of our students to learn how to play from them. We also learned the importance of time and slowing the building process down and the importance and value of a product that could be used became quite evident as well. Another aspect that became clear while creating our flutes was all of the learning that emerged from this experience and all encompassing project. Because of this, we decided that we needed to take this type of learning to the next level. Drum building became the next step and then a reality when we attended a professional development workshop held at the Katzie Longhouse. Here, alongside Katzie First Nation members, parents and other community members, we were able to learn how to construct our own drum. Randy Bates, a fellow staff member was then able to take what we learned from the Katzie members and developed a method of drum building that would work for our students.

Now, in the middle of my fourth year of teaching at the Maple Ridge Environmental School, I have noticed many changes and areas of growth in our staff and myself personally in the way we teach. This drum building project allows for many of the foundational characteristics of Indigenous Education to be recognized in the work that our students are doing. These weren't necessarily reflected on or recognized prior to this project. In *Look to the Mountain* (1994), Cajete speaks to a

number of elements that characterize Indigenous Education and many of these characteristics are quite evident throughout the process of drum building. Below shows a list of characteristics of Indigenous Education that are relevant to our process of drum building, which I will be referencing throughout the paper.

Taken from Cajete's, Look to the Mountain (1994, p. 28-30):

- *Integration and interconnectedness.*
- *It presents something for everyone to learn, at every stage of life.*
- *Art is a vehicle of utility and expression. It is recognized as an expression of the soul and a way of connecting people to their inner sources of life.*
- *It recognizes that true learning occurs through participation and honouring relationships in both humans and natural communities.*
- *It recognizes that we learn by watching and doing, reflecting on what we are doing, then doing again.*
- *Indigenous thinking recognizes that learning is complete only if it starts from the beginning and follows through. One skill builds on another, but the basics must always be honoured. Learning is step by step.*
- *It honours the fact that true learning builds your self-confidence.*
- *We learn through our bodies and spirits as much as through our minds.*
- *Indigenous people recognize that personal power, learning and thinking are expressed through doing. Therefore, learning the doing is an essential process.*

The pedagogy and reasoning behind drum making is to provide holistic, experiential, place-based activities that ensures each principle and value that our school strives to incorporate into its teachings are seen throughout this process.

The first principle being *Place and Community* is described as:

cultivating learning, in about, with and from local places. This includes spending extensive time immersed in the outdoor, dialoguing with the diverse people connected to these places, and exploring meaning of places in the context of the broader community associated with them, its past and future (Blenkinsop, 2012, p. 5).

Evidence of this principle is seen throughout our building process as we are connecting with our broader community and Kwantlen First Nation. Building this

connection and learning from Lekeyten has been a powerful component of this project, which will be described in greater depth further in this paper. We are also forming deeper connections to place as we are using elements from the natural world including cedar wood and animal hide and spending a great deal of time with them to create our piece of art. The “holistic practice of making things, encourages a sense of engagement, interaction and reciprocation with all that is around us” (MacEachren, 2000, p. 187) and provides a somatic connection to the natural elements of the drum because of the great deal of time spent holding, working and physically connecting with these elements. For example, the time spent sanding the rough cedar wood of the drum frame.

The second principle is *Nature, Ecology and Sustainability*, which can be described as:

cultivating learning in natural settings, where we listen for what the more than human world has to teach us. Through the cycle of the seasons and the years, knowledge of ecosystems will be built gradually so that diversity, complexity and sustainability become part of our understanding of the world (Blenkinsop, 2012, p. 7).

As we use elements from the natural world, the students have learned more about the environment around them. Lekeyten has spoken to the students on many occasions about the natural world and what it means to him. For example, “on the day of smudging Lekeyten told stories of the direct interconnecting of all things, care and respect, and all being one. He connected those stories to the cultural stories” (as told to me by Clayton as I was not present on this day). He also is constantly referring to the skins and cedar as if they still lived and through his blessing of them with an eagle feather, we should recognize them as still alive and therefore the drum becoming a live being connected to the animal, cedar and all things.

Inquiry and Possibility are the third principles described as:

cultivating a spirit of inquiry involving everyone: the natural world, students, parents, community members, teachers and researchers alike. We are committed to exploring multiple pathways of learning and teaching that many different ways of knowing and forms of knowledge. Meaningful,

authentic, locally inspired individual, group and community projects play an important part of this process (Blenkinsop, 2012, p. 8).

This project has definitely been inspired by local and traditional culture, which the students in turn learned a great deal about and have placed within our own school culture. For example, Hay čx^w q^əsiem, which Lekeyten describes as meaning an “equity,” everything being equal from animals, to each person, to plants, to their drum. This concept is spoken of daily and has become a big component in the student’s daily discussion and ways of being. The drum building experience can lead to many different inquiry possibilities. Firstly, we have become open to different opportunities and aware of the questions that can emerge from and broaden this learning experience. We then have to help the students develop and push their questions deeper and be aware of the possibilities and where these ideas can lead. For example, many students have become quite passionate about their paintings on their drums, this could lead to new projects looking deeper into their meanings traditionally, scientifically and personally. For myself, drum building has led me down a path of deep inquiry into my own personal pedagogy and teaching philosophy.

The fourth principle being *Interdependence and Flourishing*, which includes: cultivating an appreciation of people both as unique individuals and as members of nested families, communities and places. We seek to understand the complex ways in which we can help each other flourish, and how to build relationships and systems that contribute to such flourishing” (Blenkinsop, 2012, p. 8-9).

This has become evident with the students creating and building relationships with each other and community members throughout the building process. The students have been given opportunities to connect with each other throughout the process as older students have used the knowledge that they have gained by building their drums first to then assist the younger students with their building process. Students that have previously not considered themselves “good big buddies” have gained newfound confidence in their ability to help and teach others. Younger students are now seeking out their drum building big buddies throughout the day

for help and companionship in different areas or during free time such as recess or lunch. I will discuss further in this paper different examples of how the learning has been shared further into our local communities as well.

The last principle being *Imagination and Integration*, which involves looking “for ways to integrate learning across curriculum, bridging language arts, sciences, histories, geographies, mathematics, physical and social skills. We develop educational practices and materials that nurture a sense of wholeness in learning and teaching” (Blenkinsop, 2012, p. 9). Numerous areas of the government-derived curriculum are covered through the learning that has emerged from the creation of the drums, which will be discussed in greater depth later in the paper.

The Drum Building Process

The following describe the full-circle learning process our students went through to build their drums.



Step 1: Prior to the start of building our drums, Lekeyten, completed a smudging ceremony, which taught the community about the traditional cultural practices of the Kwantlen First Nation group. He thanked the four legged for providing us with the hide needed for the drum and he gave thanks to the Creator for allowing the cedar tree to grow, which provided us with the wood needed for the frame of the drum. As he thanked and blessed the wood and skins, as the Kwantlen do whenever they build things out of items from the natural world, it gave our students a new understanding and experience of local cultures and traditions.



Step 2: Each student, girls and boys used the chop saw with help from a community member, in this case a former student of our now in high school, to cut 12 pieces of cedar wood at a 15 degree angle. These 12 pieces will then make the frame of the drum. While using this tool, each student learned about safety of the technology used and applied numeracy skills while subtracting pieces cut.





Step 3: Each student (sometimes with help from a community member) glued each piece of cedar wood together, ensuring they are following the pattern needed. They then used a large hose clamp to hold the frame in its circular shape while it dried.



Step 4: Each student (sometimes with help from an older student) sanded and filed their drum frame until it was smooth and ready to be skinned.

Step 5 & 6: Once the circular shape of the hide has been cut, each student marked the location of where the skin needed to be punched and then used a hammer to punch holes in the skin. These holes are then used to string sinew through to attach the hide to the



Step 7: The older students, who have previously learned how to skin the drum, each partnered up with a younger student to teach them how to complete this part of their drum. This is definitely a lesson in patience, communication and cooperation, as each older student has been instructed to ensure that their younger partner does most of the important work themselves.



Step 8: The second part of the drum that the students have to create is their own drumstick. The first step in creating their drumstick is to spend time in the natural world and find a stick that they are connected to. Lekeyten speaks to finding your special sticks, that some may find it fast and some may need a lot of time, but it will jump out at you and you will be drawn to it like a magnet.



Step 9 & 10: Once the student has found their stick, they must carve the stick into the correct shape (including notches on one end where the hide will be attached) and desired smoothness. They are assisted and coached in safety and technique by older students. They then have to sand the stick until they feel that it is ready.





Step 11: The student then attaches a piece of deer hide tanned leather to one end of their drumstick to create the mallet that will ensure that their drum is not damaged while playing.

Step 12: Painting their drum

This step traditionally is done one year after the drum is completed. As of now our older students have completed painting their drums, but the younger students are going through a much longer process. This process involved a lot fine motor work, painting and colouring skills (I will speak to this process later). The older students have chosen an image that was meaningful to them, either from the Internet or personally designed, learned painting techniques and then took many hours to fully complete their painted design. Below are some finished or on their way to being finished examples.

Crafting and the Creation of Art

“The ceremony of art touches the deepest realms of the psyche and the sacred dimension of the artistic creative process. The sacred level of art not only transforms something into art, but also transforms the artist at the very core of his or her being” (Cajete, 2000, p. 46). As Cajete states, the process of creating art or crafting has had a profound impact on my own life as well as many of my students. In many of my student’s cases, the largest impact of their artwork or craft has been the connection that I have seen them build with their drum. This is evident in the time, care and compassion that they have put into this process.

Time has been one of the big realizations that we as a staff have noticed throughout the drum building process. As an educator I have come to understand the importance of time and not rushing through something as I may have normally done in the past. As David Orr (2004) states, “slowing the pace of learning to allow a deeper kind of knowing” (p. 96). Time allows an honouring of the practice, process and each child’s natural rhythms, which allows them to in turn, work at their authentic pace. By allowing for and respecting the time and process, it then allows more to emerge from the process than if had been rushed, new ideas and thoughts have emerged. Initially I would have predicted that by this stage in the project the students would have been learning how to sing and play their drums alongside our Kwantlen Elder, but the art form has taken another path. Instead, we have taken more time and care into each individual step and followed learning paths that have emerged. An awareness that “doing and relating to art makes the process and context of art making infinitely more important than the product” (Cajete, 1994, p. 153), as we grow and learn so much about ourselves through the process. This has become quite evident in the time that certain students are taking on specific steps when building their drums. For example, our older students have now finished painting their drums, but this process was quite a learning experience for the students and teachers. While away at a winter leadership camp, one of their activities was to paint their drum. The teachers present provided them with quality paint and paintbrushes and had them start painting their skins. One of them noticed

that they needed to take a pause and look back at the process of painting, as most lacked the essential painting skills need to do a good job and were producing a product that they knew the students would not have been proud of. With more specific instruction on how to use the paintbrush properly, not to crowd their design and to be more patient, the students then got back to work. Students who we have not seen take very much time, care or interest in art like this before have spent upwards of 8 -10 hours finishing their painted piece. Michelle Bouchard(fellow teacher) thinks that, “many of them painted for so long because they did not want that process to be over.” I feel that many of the students were perhaps in the state of *flow* throughout the process. Nakamura and Csikszentmihalyi describe flow in detail in their paper *The Concept of Flow* (2005) as:

experiences during which individuals are fully involved in the present moment. During these experiences each person enters a subjective state with the following characteristics:

- Intense and focused concentration on what one is doing in the present moment
- Merging of action and awareness
- Loss of reflective self-consciousness...
- A sense that one can control one’s actions...
- Distortion of temporal experience (typically, a sense that time has passed faster than normal)
- Experience of the activity as intrinsically rewarding, such that often the end goal is just an excuse for the process (p. 90).

She also had to make one student stop “because he just kept adding and adding and adding. Loving the process so much that (she) was worried that it would impact his final product and take away from the picture he initially wanted.”

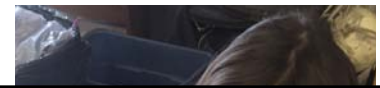
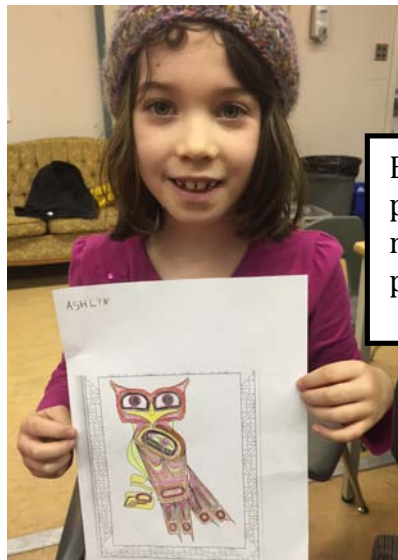
This truly follows one of the main characteristics of Indigenous Education that Cajete speaks about: “Indigenous thinking recognizes that learning is complete only if it starts from the beginning and follows through. One skill builds on another, but the basics must always be honoured. Learning is step by step” (Cajete, 1994, p. 30). For example, first learning what the cultural significance of the drum and the

process of building one means, to the learning how to use each tool specifically prior to using it, to each individual step in the building process, to then learning how to paint, to finally painting their drum skin and then eventually learning how to play their drum.

Another similarity is seen with the kindergarten and grade 1 students. To prepare them and help them acquire the skills needed to paint the skins of their drums, we needed them to work on fine motor skills and learn painting techniques. Our first step was to have them practice painting straight lines without mixing colours. The second step was to have many different Aboriginal style animal drawings, copied quite small with intricate designs for them to colour. This was an amazing activity for many reasons. Firstly, students who we have never seen colour or enjoy colouring before were taking their time to be extremely careful and precise. This was because “it was for their drums,” announcing with pride that this has to go on their fridge at home or that it is for their mom.

Our most recent step was to take the colouring fine lines and details and combine it with the painting skills that we have already practiced. Michelle (a fellow teacher) provided the students with a simple picture with lines that they had to paint over. This step-by-step is so important as it again looks to the characteristics of Indigenous education and one skill building upon another and provides the students with experiences that will deepen their knowledge and help them gain confidence with the skills needed. Again, the all of the students completed work that was far beyond our expectations, all taking the care and time needed to produce amazing

work because “it was



Example of a Grade 1 student's progress throughout our “getting ready to paint our drums” process.



for their drums.” It has been quite evident throughout the painting process for both groups that the “craft project(s) developed patience, care, and compassion” (MacEachren, 2000, p. 188), but also that fact that “true learning builds your self-confidence by coming to understand who you really are and living to your full potential” (Cajete, 1994, p. 30).



Fraya (9), one of our students explained to me her experience with drum building and painting which speaks fully to the manifestation of these values:

When I was done building my drum I wasn't really happy with it because I didn't like how I did it, the choices I made and compared it to others. Then when Lekeyten came he taught us so much about our drums that when I banged on my drum with my drumstick it felt soothing and the vibration bounced off my ear. I brought it home, made up some songs on my drum and played with Lekeyton. He taught me that every drum is different, but every drum has a connection and I realized that it doesn't matter what it looks like, it matters how it feels .

Full-Circle of Learning and Community Building

As in First Nations culture, many “teachings are symbolized in the full-circle, which represents inclusiveness and wholeness. It is a traditional symbol of continuous movement; an action with no beginning or end” (Robertson, 2014). Students will experience the full-circle of learning with this project, from constructing their own supplies to making the drum, learning the traditions, rhythms and songs of the drum and passing on their knowledge to others. As I have outlined above, the process that the students have gone through starts right at the beginning of sawing the cedar wood for the frame, gather not to the extreme that MacEachron (2000) describes in her paper, *Crafting as a Practice of Relating to the*

Natural World. She indicates that, “it may not be practical to make all our items by hand, but (I) contend that every child should have the experience of walking out onto the land, gathering supplies, shaping them into some functional item and then using that item” (p. 191). Each individual patiently worked on each step until his or her drum was completed. Some students have now had the opportunity to pass on their knowledge to others, as this is another step in the completion of the circle and “recognizes that we learn by watching and doing, reflecting on what we are doing, then doing again” (Cajete, 1994, p. 29). Firstly, older students were taught the drum making skills prior to the younger ones, as they then became mentors to help and assist. Secondly, a group of older students were called upon to take what they have learned and visit a neighbouring school and pass on their knowledge to them. Thirdly, other students brought the knowledge to other areas of the community. This in turn, became a unique community-building project in addition to being a cultural art project. Not only has this project formed stronger connections between older and younger students, it has brought in and connected us with different members of the community. Grandfathers have helped in the initial stages of sawing the pieces of wood, former students and a parent have come back to help and assist in the process and because of our help from Lekeyten, stronger ties have been formed with the Kwantlen First Nations. Our next goal is to have our students help and teach their parents how to build their own drum as well. It has been great to see that “learning sometimes occurs most thoroughly and vividly when diverse people possessing different kinds of knowledge pool what they know and join in a common effort to accomplish something that needs to be done” (Orr, 2004, p. 98). As we continue to share our knowledge, our community will continue to grow as well. Clayton Maitland (principal) and Lekeyton our Kwantlen Elder are planning on going to the Aboriginal Education Research Forum in Winnipeg to speak and share our drum building experience with all of those in attendance.

Teaching Others:

For the first time, our school visited another school in our district to pass on and share knowledge that we have gained from our drum building experience and from our local Kwantlen Elder. Randy (fellow teacher) who accompanied the students on this experience noted how focused our students were now that they were “pros” and the confidence boost that accompanied putting their understanding into action. He also noticed that it was a great experience for the students when it came to developing relationships with other students. It was great to see how the relationships and conversations were easily initiated between kids who did not know one another prior to this as, “doing something together is a great way of beginning to talk and get to know each other” (Randy).



Story shared by one of our student's mother about her daughters (age 6) drum building and cultural learning experience:

“For one of our Spark badges, The World Around Us, the girls had to learn about Aboriginal culture. So Mekina volunteered to share some things. This was a big milestone for me, since I had been hoping her whole life that despite being adopted into a Caucasian family, she would be able to learn about and appreciate elements of her Cree and Metis heritage.

For our opening activity at Sparks, we usually have colouring pages, so she brought some leftover pages from some of the PALS workshops she went to at the Katzie reserve last year. She told the girls that an Aboriginal artist had come to her school and taught them that for aboriginal art, you have to colour slowly and stay in the lines. She showed them some of her work from school.

For Circle time, she wore her cedar headband that came from her Aboriginal head start Preschool in Mission, and started drumming on the drum I had made last year at the learning workshop with the Katzie. She would have rather brought hers, but it isn't quite finished.

Amazingly, all the Sparks somehow knew that it must be time to stop colouring and come to circle! Then they listened to her for like 8 or 9 minutes of drumming! It was super awesome.

After that she showed her flute and played that a bit, then I talked about how everyone of us has a unique heritage. Finally we watched a cartoon of how Raven Stole the Sun.

Mekina did a terrific job with everything, especially showing her own learning that has happened at school!”

Story from Jodi MacQuarrie(fellow teacher):

Working with a little buddy can be a very rewarding experience and may bring out different abilities that we may have thought that the student had prior. Helping another build their drum had provided this experience to many students. For example, with one older looked like disengagement and quite disconnected from for his own drum and stick, “yet when he worked with his little buddy, he walked him through each step of how to find the perfect stick (it had to be not too thin or too thick, it had to have at least two little prongs where branches had broken off right near the top), preferably three so the leather could be tied and held snug under those parts. Then he showed how to carve it a bit at the end and sand it and how to tie it properly, cut off the ends of the sinew twine, etc. I thought he hadn’t learned a thing because he was so disengaged with the process for his own stick and drum but apparently not! Also, he was wonderful with his little buddy, reeling back in when he was distracted and away from where they were working, took him to Randy and the box of supplies each time to help him get a carving knife, twine, piece of leather, etc.”

Our next step in the continuation of full-circle learning will be to learn traditional songs and drum rhythms from Lekeyten, our local Kwantlen Elder. As drumming is already a daily, important component of our school (drums are used to call students into gatherings, as opposed to a bell), the hope would be that the traditional songs and rhythms that the students will be learning could be incorporated into our daily lives. We are also hoping to have the students present and participate with Lekeyten in Aboriginal Day and the first salmon celebrations. It is an amazing opportunity for the students to gain this cultural knowledge to accompany their drum. We have learned that traditionally, women were not permitted to play the drums, as a community we are aware of the potential gender limitations, but are looking beyond these with permission from Lekeyten and having all students, male and female learning to play their traditional drum. Music has many benefits and the hope that through the learning and playing of their drums, we will enable our students “to grow intellectually, emotionally, socially and spiritually” (Grytting, 2000, p. 66). Ghislaine Goudreau has written in her paper, *Hand Drumming: Health Promoting Experiences of Aboriginal Women from a Northern Ontario Urban Community* (2008), that “hand drumming circles have many health promoting benefits and builds on strengths already existent within their community” (p. 72). One of the areas of future study could be looking into the benefits for our own community throughout the drumming experience. Some of the

benefits that Goudreau (2008) discusses include the fact that the “participants believed that the beat of the drum in itself is good for their health. Some participants indicated that they gain physical energy from partaking in hand-drumming circles” (p. 76). It is also stated, “as much as drumming can provide energy, it can also relax our bodies. Many of the participants describe how the beautiful sound of the drum helps them to release tension” (Goudreau, 2008, p. 76). One of the most interesting links between drumming and well-being that Goudreau mentions is that “participants believed that the drum can be used as a tool to connect them to the Creator, the Spirit World, Mother Earth, and to other members of the community” (p. 78). I look forward to the learning that will emerge once the drumming starts taking place.

Curriculum Connections

Learning has emerged from the drum building process in ways and directions that we could not have imagined. The possibilities in learning have been endless and continue to grow and transpire as we look back on what we have done and reflect on many of the learning opportunities that we could have missed and as we continue with the building and drumming process. Within this section I will explore and document some areas of learning that our students have experienced as they have built their drums. Many of the foundational characteristics of Indigenous Education speak to the fact that education is “at its essence, learning about life through participation and relationship in community, including not only people, but plants, animals and the whole of nature” (Cajete, 1994, p. 25). As an educator who is striving to apply as many Indigenous educational practices within my teaching, “the emphasis is often on direct sense experience and in-context action as the primary source of learning” (Kolb, 2014, p. xviii). Experiences in connection with place drive much of our learning throughout the drum building process. This form of learning is described as:

essential First Nations traditional teaching and learning since this process entails the making of meaning from direct experiences - through reflection on doing or action. Learning through experience is a pedagogical approach

that has been well researched by various mainstream education experts including John Dewey, David Kolb, and Carl Rogers. Learning through experience is a tried and true method of learning - one that every person on the planet engages in from infancy and onward” (First Nations Pedagogy Online, 2009).

My students have shown how much can be learned from one extended hands on experience, from tool use, art work, learning about and from our local Aboriginal culture, to math and science, all of which being related back to their direct experience of building their own drum.

The areas of learning that I will speak to recognize many of the characteristics of Indigenous education that go “beyond objective measurement, honouring the primacy of direct experience, interconnectedness, relationship, holism, quality and value” (Cajete, 2000, p. 66). Holistic education speaks to the interconnectedness of experiences, whereas “much of traditional education tends to be static and fragmented, ultimately promoting alienation and suffering (Mahmoudi, 2012, p. 179). In our case, the connection of what we are learning back to our drum building process or learning that has emerged from the drum itself.

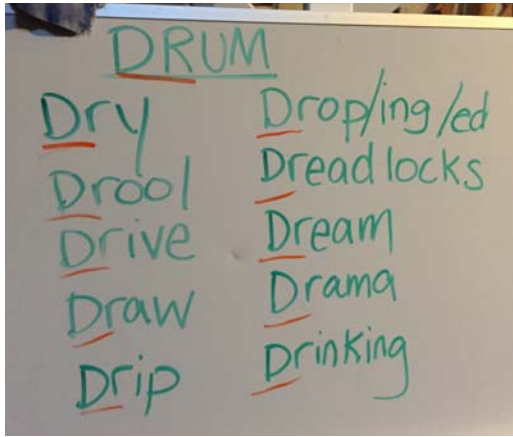
One of the first areas of learning that has arisen for my students through this process has been the safe use of tools. Each student age 5-13 has had experienced using the chop saw safely with assistance where needed, to create their specifically shaped pieces of cedar wood that they would eventually glue together to form the frame of their drum. Other tools that they have learned how to use have been files and sandpaper, which they have used to smooth and shape their frame. When creating their drumsticks, each student practiced and worked with carving tools to create the size and shape that they desired. One grade 2 student has gone beyond the learning that has taken place at school and has brought his drum making home with him. As he is always encouraged by his parents at home to use different tools to build and create, he decided that he would learn how to use his dad’s lathe to shape his drumstick. It



was very inspiring to see this student take his learning and push it to a new level that we as teachers could not have predicted.

Different aspects of numeracy have also been connected to this project as a lot of learning throughout the drum building project has either emerged from drum building or relates fully back to the drum itself or the process of building. For the younger students different numeracy concepts have been addressed. The number 12 has been looked at closely, as that is the number of sides in our drum. For example, as the students were using the chop saw to cut their pieces of wood for their frame, they were also focusing on counting the number of pieces needed. They were asked questions such as, if you have cut 2 pieces already, how many more do you need? Other students went further with these mathematical concepts. For example, one Grade 1 student approached me with the observation that her frame had 12 sides. I then asked her if she could tell me different ways you could make 12. She was quickly able to run through all the possible two number addition statements and was able to explain her method. She started with 10 and 2 and then went one number lower and one number higher. For the younger students, the notion of shapes emerged from the drum building process. The students first took note that the drum looked almost like a circle, which then led to activities revolving around circles and then further discussions and activities revolving around other 2-D shapes and then 3-D shapes.

As we strive to connect learning back to drum building as to create a more holistic learning environment, literacy activities that weave into this process have been a large focus for the younger students. The students have each been creating their own *How to Build a Drum* booklet. Within this booklet they have been working on recalling and putting into words the sequence of steps they have taken to create their drum, practicing reading and writing common sight words and working on difficult sound combinations such as *DR*.



Attached you will see a chart containing a list of Kindergarten and Grade 1 PLO's covered throughout the drum building process.

Relating to the Natural World

Connecting and developing deeper relationships with the natural world and place, which “includes all the particulars of nature and culture that locally shape human perception of, and participation in, the world” (Fettes & Judson, 2010, p. 123) are not only key themes of holistic education, but also within my teaching philosophy. Holistic education can be describes as, the “individual develops his/her relationships with the world and with others, simultaneously gaining knowledge and personal awareness from what these relationships bring to them and others” (Hare, 2006, p. 304). Secondly, “the holistic perspective demands that the world around us must be treated with respect” (Hare, 2006, p. 305). This section of the paper describes experiences my students have had that show their connection to their place and the natural world through drum building in a holistic, place-based setting. As place-based education calls for experiences that aim at “developing in young people a sense of affiliation with the places where they live (Smith, 2007, 192), this project has really allowed for the students to connect with and learn more about their place.

MacEachren (2000) demonstrates in her paper *Crafting as a Practice of Relating to the Natural World* that “crafting activities are recognized as a way of engaging and interacting with the environment in a manner which may encourage a sense of reciprocity with the earth and ultimately a deeper relationship with the land” (p. 186). For many of our students, crafting their drum has provided them with the means to create deep connections to the natural world, which is a main characteristic of place-based education. As the students have built their drums from raw materials, they have had the “opportunity to encourage an extended sense of self that includes awareness of the places the art material originates from” (MacEachren, 2000, p. 189) and have gained a greater appreciation for the cedar tree and animal in which our hides come from (traditionally this would have been deer or caribou hide, but in our case is cow hide). Cajete (2000) speaks to the relationship between art and traditional Indigenous life when he refers to how “artefacts are created with an acutely developed understanding and acknowledgment of the natural elements from which they are created” (p. 47). This project has been the first for us in terms of really understanding the natural materials from our place and creating art for a purpose, which all have a meaningful place within their lives.

There have been many stories throughout the drum building process of how student’s connections to the natural world have been impacted by the process. One example of this was when Lekeyten spoke to us about the process of finding our drumsticks. He said that as you are searching, you will be drawn to one particular stick and it will jump out at you, it could be instantly or it could take quite a long time. One particular kindergarten student’s manner in finding her stick was quite amazing. She is normally a very energetic, lively and quick to get things going, but with her drumstick, she was slow, patient and meticulous. She was unaware of time or the fact that most of the other students had found their stick, but we did not rush her and let her make the connection that she needed to make. In the end, the process took her two days and numerous trips back into the forest to find that perfect piece. The older student that was helping her carve also noticed that when

he was trying to teach her how to carve, she would not let him work on her stick and that she only wanted her hands on her piece.

The Story of Beabs and his connection to his drum as told by Beabs:

At first I had no idea what I was going to paint and then I stumbled across a bear on the Internet that I really liked. In total it probably took me about 6-7 hours of painting to finish and in the end it was pretty cool. I didn't really think much of it at the time, but then I looked at the bear and because of the silver paint I used, I saw it as a Spirit Bear. Once I saw it as a Sprit Bear, it connected me more to my drum and the drumbeat started to give more of a voice... the drumbeat had a voice. Before, I saw it as a drum, cool and everything, then the notes started to seem different, deeper with more meaning and was powerful to me because I could make my own message with it and make different beats. I then started to think what these beats could mean. The lower beats made me think of bear because the bear is a powerful animal to me. Now I feel more connected to the drum through my painting because I have a different perspective.

Not only has the process impacted students, but also different staff members. As we have been trying to implement full-circle learning throughout the process of drum building and what that would look like once the drums were completed. Ana, one of our staff members thought that if we are taking something from the natural world at the beginning of this circular process, shouldn't we at the end, be giving something back? Her idea was that since we have used Cedar in the frames of our drums, we could plant a Cedar tree to "replace" the trees that we have used. For Ana the "whole process of building a drum caused her to become more aware of all the materials she used and where they came from. The circle did not feel complete if we were not to replant." This process has shown that "eventually the engagement, interaction, and reciprocation of the crafting process will all seem to intertwine and will nurture a deeper sense of relationship with the natural world" (MacEachren, 2000, p. 193).

Conclusion

Throughout the process of drum building, there have been many central themes and areas of learning that have stood out and become very holistic for the learner. Beginning with the growth of the community through working together to help each other build their drums, teaching others throughout the community what we have learned through drum building, we have included grandparents, parents, former students and parents into the projects and the connection that has grown between the school community and Kwantlen First Nation. The concept of time has also been big revelation, where learning activities have slowed to enable greater connections. Allowing students the time they need to create their drum has allowed for an authentic product. Another impact of allowing for time and the project to develop at a natural pace was that it has provided so many more learning opportunities to emerge that perhaps would not have otherwise. The deep connection the students have made to their drums and to the natural world through the process of crafting has been quite an amazing process to witness. Through crafting projects such as this “we can establish a practice for attending to the natural environment, broaden our awareness of the world and create a deeper sense of connection” (MacEachren, 2000, p. 199). Lastly, this project has allowed for a holistic learning and cross-curricular learning approach where areas of learning that may be separated in a conventional classroom setting are unified. Literacy, numeracy, community building, art, music, social and science activities are all connected back to the drum building process, creating a sense of wholeness. The students also used a large variety of tools, which enable them to apply the tools in others creative areas. David Orr (2004) describes the dangers of conventional school where learning areas are quite separate, students will graduate with the “belief that the world really is as disconnected as the divisions, disciplines, and subdisciplines of the typical curriculum” (p. 23).

Not only has there been many areas of growth for students throughout this project, but it has inspired further coursework for others, as learners and educators. One change that has grown throughout has been the awareness and importance of participation and experience in the natural world; the impact that participating and

experiencing new and exciting things within the natural world can for students and others. Barad (2007) speaks on this subject and where broader understandings have come,

“We are not outside observers of the world. Neither are we simply located at particular places *in* the world; rather, we are part *of* the world in it ongoing intra-activity... We don't obtain knowledge by standing outside the world; we know because we are *of* the world', participating in it cocreative process” (p. 196).

Other learning has been inspired and emerged from reading and learning from Cajete's *Look to the Mountain*. Cajete speaks to many characteristics of Indigenous education, which have become many of the starting points when planning and looking into new lessons for students. Much of the learning from drum building follows many of these characteristics. Now teaching includes, “one [who] looked for meaning in everything, especially in the workings of the natural world. All things of Nature were teachers of humankind: what was required was a cultivated and practiced openness to the lesson that the world had to teach” (Cajete, 2005, p. 77).

Through the process of drum making, the students and whole learning community gained so much from participating in the new experiences and learned many things that may not be measurable.

Land and Stars, The Only Knowledge

*North, West, South, and East.
Above and Below and All Around.
Within knowledge of the land,
We are existent.
Within knowledge of the stars,
We are existent.*

*Coldness and wind and the snow, northward.
Mildness and mountain and the rain, westward.
Hotness and desert and the hail, southward.
Warmess and mesa and the sun, eastward.
Starshine and sky and the darkness, upward.
Earthsorce and stone and the light, downward.*

*By this Northern Mountain, we live.
On this Western Peak, we live.
In this Southern Canyon, we live.
Upon this Eastern Mesa, we live.
Under the Sky Above, we live.
Above this Earth Below, we live.*

*We are Existent within knowledge of land.
We are Existent within knowledge of stars.
All Around and Below and Above.
East, South, West and North.
This is our prayer. This is our knowledge.
This is our source. This is our existence.*

*Always the land is with us.
Always the stars are with us.
With our hands, we know the sacred earth.
With our spirits, we know the sacred sky.
We are with the land and stars.
We are with the stars and land.*

*With offering, all around outside.
With offering, all around inside.
This is the knowledge we have.
This is the existence we have.
In thankfulness, we give and we know.
In thankfulness, we receive and we know.*

*-Simon Ortiz, 1993
(in Cajete, 2000, p. 310-311)*

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