



# CALM & CONNECTION THROUGH NATURE-BASED EDUCATION

Cape Breton University  
EDUC 6800: Project Report  
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# EVALUATION

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## INTRODUCING THE PROJECT

My design journey focus surrounds a solution-based response to a call for mental health and well-being supports and nature connection in schools towards greater sustainability mindset shifts. The discovery phase of my design process looked to support greater feelings of student safety and potential life-long sustainability mindsets. The design journey proved to be both inspirational and encouraging, leading to new and improved goals in building my project into something relevant. Learners face increased levels of stress, anxiety, technology, and imbalanced physical and mental health (Berger & Lahad, 2013). My project focus led me to create a resource to support teachers to implement mindfulness into nature-based education. This resource was created following an extensive literature review and consultations with experts in education. Here, my project found its form.

Activities were created to best meet realistic needs in education. These activities are designed to be accessible, low resource, and quick to read so that they can be accessed regularly outdoors for increased well-being in classes. While the increased stress levels impact cognitive function and focus, the strategies and activities in nature are designed to re-set this towards greater resiliency, calm, concentration and focus (Reece, 2013; Bratman, Daily, Levy, & Gross, 2015).

In the discovery phase, my initial intent with this project was to research locally on the topic of mindfulness incorporated into nature-based education and its role in mental health and

connection to sustainability thinking and action. In beginning my review, I shifted to a focus on creating a literature brief that I could offer to districts and administrators. However, through my consultation phase it became clear that educators did not have the necessary supports or resources required to address the needs identified through the literature review. Through my identification of this need for support, I adapted my project accordingly. It was in the interpretation and ideation phases of my design process, after hearing stories, reviewing the literature and listening to experts that I recognized a need for support and practical application on the topic. My final goal became to develop an accessible resource to support the wellness that leads to environmental connection through a nature-based education. Students must feel safe to learn and nature-based mindfulness supports well-being as an established habit. The activities I created can promote deep nature connection. This nature connection leads to greater sustainability habits, practise, and mindset later in life (Bratman, Daily, Levy, & Gross, 2015). Therefore, the benefits of this project surround personal wellness and social and environmental responsibility.

The purpose of this report will be to evaluate, reflect, and describe the design process of my inquiry project and outcomes. This project has developed greater opportunity for growth for me and others in education. Ideally, it will carry the impacts forward from these beginnings. This report shares this journey.

## SUCSESSES & CHALLENGES

The success of this project is ongoing in nature and connected to my own learning and knowledge gained. The final goal of creating a resource has been met successfully, yet it seems it is the journey that informs this resource that I feel is the real success. From networking and

community building, to learning and hearing stories of student's personal successes, this project feels successful in meeting my goals and objectives. Anticipating real, long term benefits for students sent a wonderful message to educators that felt meaningful. Success is also in creating something that others can access. For example, hearing stories of educators using mindfulness practise focused on self, community, and environmental kindness, educators shared impactful successes as students developed a regular of mindful routines for themselves that supported calm and kindness in spontaneous ways. In some classes, learners are already accessing breathing in stressful moments, while kindness is an area brought up and appreciated during circle times. Educators seemed very interested in the idea of moving these practises outdoors. In learning more and personally experiencing activities, I found myself finding increased levels of balance, calm and connection. I am excited to regularly move great learning outdoors. Connecting mindfulness to nature based education is a wonderful success that feels incredibly meaningful and supportive. This will also support me in ensuring regular access in my long-term practise.

Another success is found in the literature review. The literature offers credibility while informing and strengthening my comprehension of the significance of this practise in developing learners, while shedding light on powerful connections between mental health and wellness, nature-based education, and its impact on the sustainably mindset. There are a host of benefits offered through mindfulness practise, nature-based education, and regular focus on moving learners outdoors. The research that informed the learning aligned with insights offered by seasoned experts. Repeatedly studies show that children and youth thrive on being outdoors for calm time and indeed connect with nature in new and successful ways in order to meet long term sustainability mindset shifts (Louv, 2008). This to me is the greatest success.

The strengths of this project are in action based and solution-based outcomes. Collaborating on knowledge and resources, while accessing a variety of greater experts in the field, such as nature programs, local counsellors and teachers, books on the topic, and teaching materials worked together to create a support and relevant document. While initially it proved more difficult to connect to grade nine to twelve learners, accessing curriculum and speaking with teachers practising strategies was especially significant. This was the side of the document that was most difficult to offer to educators and hence, it feels very successful to offer support for secondary teachers. This support focused on connecting to specific secondary curriculum and engaging in core competencies. The core competencies in the curriculum support these practises as part of a regular routine.

The challenges surround educator interest, support and comfort with the activities and certain topics shared through the resource. For example, if a teacher is uncomfortable managing students outdoors or does not hold an interest, it was difficult to engage real use of these solutions. I navigated this to the best of my ability through local collaboration, research sharing, and networking. Offering established networks has been useful learning here, as I was able to direct inexperienced but interested teachers to my local Environmental Educations Network and support them through resource sharing.

Supporting and engaging educator overwhelm was another challenge. Encouraging these educators, who felt that this was another focus for their already full days, was at times difficult to navigate. I addressed this by encouraging slow, step by step support and responses. Welcoming these educators into networks while offering support in trying one activity were two ways that I engaged in this challenge.

## MEETING THE GOALS AND OBJECTIVES

The goals of the project:

- to support educators to create deep nature connection opportunities in public education
- to support educators to guide students towards balanced, mental health, and calm through nature connection
- to empower educators and students to more effectively take on sustainability action
- to help educators access and connect nature-based education with mindfulness, potentially resulting in calmer minds and healthier habits for both educators and students

The objectives of the project:

- To connect with experienced educators and counsellors for insight, expertise, and guidance through interviews and questionnaires
- To create a relevant teaching resource that will promote and act as a tool and practical guide to support educators to move outside for calm learning
- To disseminate the resource in a relevant way

I achieved my proposed goals and objectives as I had set out to, with many adaptations to my project plan through the design process in order to meet relevant needs. Relevant needs became the focus of my project. These needs surrounded educators calling for strategies for supporting learners' mental health and shifting practise to embed supports. While initially planning to do research, I realized a greater need to answer this call for support. Some educators had the desire but did not know how to go about getting started. Other educators, including myself, sought strategies for supporting potential long-term sustainability mindsets in learners.

## CALM & CONNECTION

This resource became the focus of the project. Entering into a support network of likeminded educators was an area that held unanticipated levels of support. It developed through the design process and consultations. This engaged into a supportive community of educators that will be key in the sustainability of this project.

One goal surrounding sustainability action was met through deep nature connection. The literature review, experts' stories, and past observations identified this success. It was exciting to draw connection between mental health supports through calming nature connection and sustainability habit and mindset support. I consider this to hold extreme value and hopefulness.

The educator consultations led to First People Principles of Learning connections and curricular connections that I feel offer great meaning to the project. Insight gained in this area holds great value in drawing a mental-physical-spiritual response through First People learning practices. Relating this to the curriculum extends the benefits as educators feel supported to access these connections.

Through these successes I feel I extended my initial goals and objectives in doing what I set out to do. I achieved my goals and objectives while making my learning meaningful and relevant. My successes and the challenges that I faced over the design process helped support me in meeting my goals and objectives.

## IMPACTS

This project impacts people and the planet in hopeful ways. These impacts became known through feedback during the consultation process and through the literature review



process. Learning specifically considered long-term potential impacts such as mental-health benefits and long-term sustainability mindset shifts (Hordyk, Dulude, & Shem, 2015).

**Educators:** Educators and experts that have been accessing these practises offered observations and stories that gave credit and confirmed the long-term potential impacts of this project. For example, teachers noticed greater focus in accessing mindfulness education practises and were eager to practise outdoors rather than indoors. This was encouraging, ideally leading to more regular access in the long term. Educators already practising mindfulness-based education or nature-based education reported feeling greater balance and relaxation in their practise. Educators commented on the impact of focusing on the non-judging mind. Creating a failure free zone, where students are supported in being themselves potentially impacted their self-esteem and greater class connection. In one example, a middle school student expressed that through the community kindness activity that they felt closer to classmates that they had previously felt separate from. This expresses that greater community impacts are at play. Moving all of this outdoors elevates these impacts to a new level, connecting deeply in and with nature.

**Students:** The literature review offered a powerful form of feedback as to the impacts. Reading of studies showing place-based connections and wanting to protect their special place was hopeful. One teacher who regularly moved outdoors shared how their elementary students became focused on leaving their special place as they found it, and would ‘tidy’, ensuring no garbage was left, and all loose parts were re-scattered closely to how they were when they arrived. This was entirely student led. Connecting this to the literature, studies show that this connection carries to the long-term impacts on a sustainability mindset (Louv, 2008). Extending these impacts in literature discussing youth, secondary students communicated greater calm when anxious, and increased focus. Research shows that the impacts on mental health and well-

being are extensive for children and youth practising mindfulness in education and or learning through nature-based education (Berger & Lahad, 2013).

**Greater community:** Input was key to this design process, so potential impacts were explored during the development phase. In discussion with administrators, learners, counsellors, Education Assistants, and colleagues there was supportive feedback. The impact of this is that educators in turn felt empowered to proceed with these regular practices through this support.

Overall, this resource will support learners and educators as it offers a hand in a time of need. Education needs to respond to increased stress and mental health challenges in classes. Education needs to respond to the realities of the climate crisis today. Educators are calling for support with this. This resource responds with one small but foundational form of support that is not insignificant.

“We begin each day with the deep breathing or yoga outdoors. My students have come to rely on this time of re-set. Their sit spot time is up to 5 minutes with outstanding levels of focus.

Impressive for 6-year old’s!”

Kindergarten Teacher

“My sit spot time is my only quiet time in all the busy. It’s my favorite calm time. I wish it was for all day.”

Grade 1 Student

## KEY LEARNING

My own learning from this experience was deeply encouraging. It is very future oriented, in that my practise has shaped and improved in philosophical ways that I believe in. One learning focuses on the resource I created, while other learning surround the connections and impacts. Next year, I teach two students specifically that will require these practises to reduce their

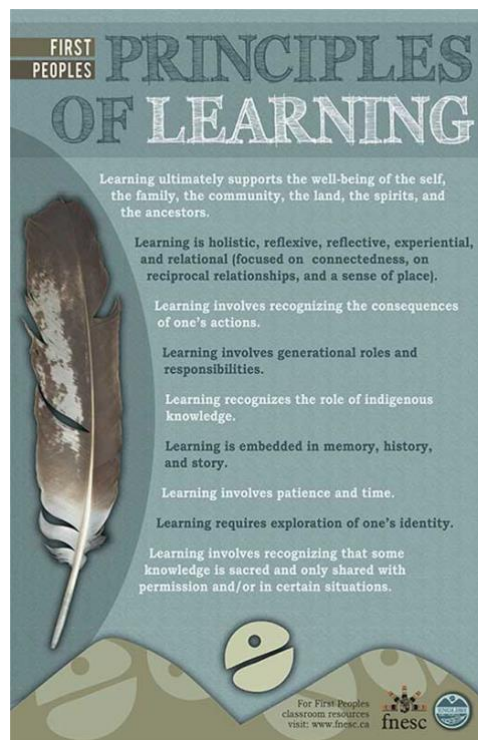
anxiety and manage their diagnosed mental health challenges. My learning is that I can support these students while simultaneously supporting all others in the class, diagnosed or otherwise, with whatever their lives are unfolding, through regular mindfulness practises outdoors. I can feel confident in the difference I am making, and in sharing my stories and research with colleagues. Here, I can access my resource, but also have the professional insights gained to shape and support through the networking and understandings gained from my design thinking process. I have come to understand my project through a process of trust-building.

Another learning surrounds collaborator engagement. It initially proved difficult to connect to secondary teachers, as there were cultural barriers to overcome. This kind of work was absent at the local secondary level for the most part. This was the side of the document that was most difficult to promote. This offered a great lesson around leading by example. The more conversations opened up, the more these activities were accessed. This was exciting to see as teachers found a supportive community in their school to access and gain support through.






















An exciting phase of my design process was when a consultation with an Aboriginal Education teacher taught me about The Six Cedar Trees book and its connection to the First Peoples Principles of Learning curriculum. This eventually became my whole framework, as I learned the power and meaning in this support. I designed my activities through this framework. The activity framework became circular in nature, without needing a beginning or end point. I used the word *being* as opposed to *doing* as a way to draw attention to the act of being in the present moment. The six framework titles connect to the six First Peoples Principles of Learning animals, along with the six British Columbia core competencies.

They connect as follows:

- communication-wolf-being together
- creative thinking-raven-being creative
- critical thinking-salmon-being critical
- personal awareness and responsibility-bear-being reflective
- social responsibility-beaver-being connected
- positive personal and cultural identity-orca-being responsible



CONNECTING THE CORE COMPETENCIES WITH FIRST PEOPLES PRINCIPLES OF LEARNING

Core Competencies						
Facets						
Indigenous Connection	<b>COMMUNICATION</b> Wolf is a great communicator.	<b>CREATIVE THINKING</b> Raven is a creative thinker.	<b>CRITICAL THINKING</b> Salmon is a critical thinker.	<b>PERSONAL AWARENESS &amp; RESPONSIBILITY</b> Bear is our great protector.	<b>SOCIAL RESPONSIBILITY</b> Beaver is our diligent collaborator.	<b>POSITIVE PERSONAL &amp; CULTURAL IDENTITY</b> Orca is our guardian and navigator of the sea.
	  Wolf teaches us to communicate clearly.	  Raven teaches us to be creative and playful in all that we do.	  Salmon teaches us to think critically and persevere when faced with a challenge.	  Bear teaches us to reflect on our feelings and find balance with rest.	  Beaver teaches us to work cooperatively to make a change for the greater good by making the world a better place for all.	  Orca teaches us about who we are, where we come from, and to understand our own personal histories by learning the ways of our ancestors.

\*Created by Tracey Coelho, based on *The Six Cedar Trees* by Margot Landahl. Indigenous animal images from Cowichan School District.



The above image was created by Tracy Coelho and offers connection between First Peoples Principles of Learning with the British Columbia Core Competencies. This learning was exciting to me as I see using *The Six Cedar Tree* book and resources in connection to this chart through my assessment of mindful outdoor time. Connecting to curriculum increased legitimacy and acceptance. I realize that First Peoples connections can go much further in my practise and

extended beyond boundaries. This is also long-term learning that will carry and strengthen my practise.

Underpinning my entire design thinking process is the idea of a solution based long term model that will support future education practises. I will be supported by new activities and practises into my future, while also having the trust in the benefits and networks. Overall, the future access of my project have been my goal.

## OUTCOMES

The project successes surround accessing experts and literature on the topic. This confirmed philosophies and beliefs by establishing a firm foundation from which to write my resource with increased confidence. Another reason for that successes is the networking that came from the consultations. Interested educators met in groups, and encouraged one another, creating a connected community that will support the longevity of the benefits to practise and outcomes. Another area that was successful was offering support to the inclusive class model. Supporting all students is a wonderful focus that will continue to deepen with time and practise. The reasons for the success here surround relevance and the nature of the project focus.

Beginning supports have been promoted and put into place through the implementation phase, building trust and interest. Challenges were supported by the wisdom of modelling. One educator shared the power of engaging fully with those that were interested. From this place of leading by example, others would follow when it was right for them. Philosophical and ideological differences challenges can be supported with time and examples.

## MAKING A DIFFERENCE

This project has made a difference in networking for a supportive community and gaining a resource to support this community. Ideally this will guide and support others starting out in these practises, to support their students and move outdoors to do so. With the long-term in mind, differences associated with this project surround a potential cultural shift in how we support nature connection by moving outdoors for calm connection. This connection piece is established following the establishment of a safe learning environment. Potential long-term difference are possible through habit shifts and sustainability mindset development. The literature made difference for me in confirming that these long-term benefits are indeed very possible and hopeful.

The resource also makes a difference in how to offer First Peoples learning and how to integrate these learnings into regular routines and supports. Supports such as the Six Cedar Trees book, and the self-assessing rubrics and language that connects to it, offers students a model of a meaningful living curriculum that they do not see as separate from other areas. This makes a difference in perception and understanding of how well-being and learning happen in real life routines and habits. As the resource is accessed over time, I hope the subtle differences made over time offer strong support, ideally reshaping regular routines and school culture.

## PROJECT SUSTAINABILITY

It is my hope and trust that this resource is sustainable in nature, as this sustainability underpins the premise of the project. Replicating the activities and curriculum into regular routines should be easy in that they are written into the resource document. Ensuring the sustainability of this resource and practise as a whole offers opportunity for workshops, local

## CALM & CONNECTION

dissemination and ongoing collaboration. Through networking, a number of educators now gather monthly to discuss opportunities. Ideally for some, and certainly for my practise, this project will guide regular habits and supports in daily education experiences. Students and educators will benefit, and my hope is that this will promote ongoing commitment.

Ideally, these practices being embedded in core routines and daily habits means that students will not only benefit but may choose to practise with their families or outside of school on some level. The potential of this is there, as real education supports students to bring their learning to their lives. The sustainability of this project has much potential, and the support is there through the resource to depend on, along with a strong local support network. Educators that have informed the resource will also ideally hold an increased connection to the activities and therefore be more inclined to access them regularly. Their participation is key to the dissemination and sustainability of this project.

## LEADING CHANGE

Leading change comes naturally to my project work as the practises I focused on had been accessed little by some of my colleagues. Identifying a need, listening, and responding through my resource has supported my understanding of my process in leading change. One lesson learned is to listen and to support through collaboration. To lead by example in my district and share what I am actively doing was another lesson in leading change. This promoted my project more than anything else. Recognizing these leadership qualities extended my project promotion.

Mental health support is a local focus in discussion and educators are looking for support with implementation. Considering that this is a focus area, leading change in this focus area is



## CALM & CONNECTION

being well received. With resources and literature to back up my project work, this will be one area to continue to lead through. I am collaborating on creating a potential workshop as professional development options.

Leading change in my district relies on relationship to British Columbia's new curriculum. Connecting to First Peoples Principles of Learning supports educators in applying the curriculum to real learning. Any workshops or promotion needs to connect to the curricular side, as well as the research, in order to be heard in my district. There is opportunity from professional development supports so this is one option to highlight the project and encourage access. My learning here is the importance of highlighting significant components such as First People education, curriculum links and health benefits.

## SKILLS & KNOWLEDGE DEVELOPED

My skill development learning has been extensive, and I will carry this forward. Initial exploration in the discovery phase led to a learning to respond through solutions. Thoughtful systems, insights and routines such as outdoor mindfulness management skills, communication skills and student supports were other skills that I explored. I heard repeated examples of students that struggled to sit still during a sit spot. Through my project phases, I developed in my skill in understanding stamina. Increasing stamina with a group allows for long term benefits as they establish connection over time. The significance in offering skills for inclusive education to support all learners in a group became another key skill development for me. I have also developed my leaderships and networking skills. Leading by example and modelling has extended my leadership style. Through practise in these areas I further developed in my process, leadership style and confidence.

The extent of my knowledge gained through my design process could not have been anticipated. I am amazed at the journey of my development as an educator through the process. The design process allows for movement, which encouraged my project to become something relevant and authentic. It allowed me to apply learnings immediately to my project work. My knowledge in the research has taught me to trust in my journey and focus my routines and habits around integrating the concepts I have learned about.

## FUTURE LEARNING NEEDS

This project identifies a need in my district, and likely many others. This need is to increase support for educators to implement mental health initiatives and opportunities for deep nature connection. Mindfulness outdoors is one way to support all learners' mental health, while also supporting their deep nature connection. As a leader in my district, one future learning need is to further develop the network of support that is established. Offering a workshop in collaboration with other local teachers is one way to support this need.

A need also surrounds continuing to develop my resource in my own practise and deepen my activities for impact and change. Leading by example here is continuous. Offering to support and mentor any interested teachers will also be ongoing. I need to continue with the development of ideas so that the support can continually be implemented with relevance. For example, one colleague expressed their need for support with a recent secondary school decision to ban all cell phones. This teacher wants to support her students as they express their challenges with the decision. My hope is that the network of learners will support a creative plan to offer for the new teaching year. The activities will need to include specific supports towards working through the

## CALM & CONNECTION

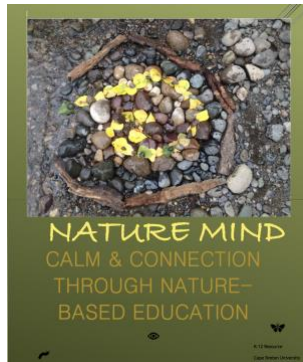
phone addiction that some learners will be entering with in their new school year. Therefore, relevance changes, so the activities should as well, through sharing what is working and supporting one another.

## FINAL REFLECTION

While this project has supported my long-term practise, it feels as though it fulfills a long-term search for authenticity. I have continually sought out education that will better my support of learning in a real-life capacity, and this process has encouraged me in deeply connected ways. It feels right to practise and promote mindfulness in outdoor learning and feels essential after the process of reviewing the literature and hearing stories. I am deeply grateful for this opportunity and for those who have shared in this journey.

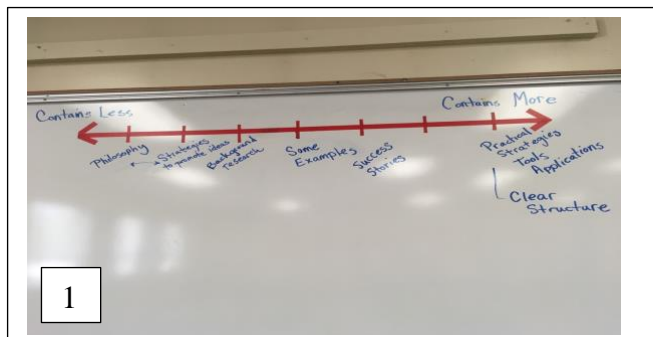
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## THE RESOURCE

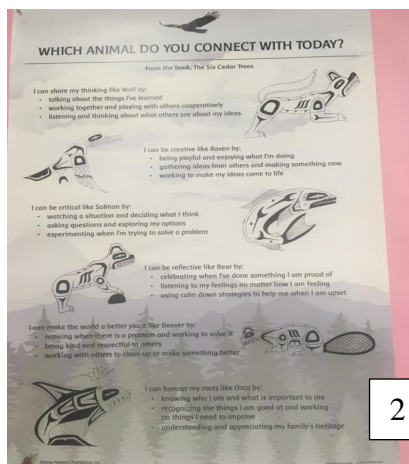


The culmination of this final project has been the creation of a teaching resource, *Nature Mind: Calm & Connection through Nature Based Education*. Please see attached and enjoy access to this resource.

## PROTOTYPE IMAGES



1. Design brainstorming based on feedback
2. Rethinking resources
3. Curricular connections



CONNECTING THE CORE COMPETENCIES WITH FIRST PEOPLES PRINCIPLES OF LEARNING						
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	<b>3</b> Wolf teaches us to communicate clearly.	Beaver teaches us to be creative and playful in all that we do.	Salmon teaches us to think critically and persevere when faced with a challenge.	Bear teaches us to reflect on our feelings and find balance with rest.	Beaver teaches us to work cooperatively to make a change for the greater good by making the world a better place for all.	Orcas teaches us about who we are, where we come from, and to understand our own personal histories by hearing the ways of our ancestors.

## THE PROPOSAL:

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CALMING MINDS THROUGH NATURE-BASED EDUCATION

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Cape Breton University  
March 24, 2019

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CALMING MINDS THROUGH NATURE-BASED EDUCATION

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## **1 | PROJECT SUMMARY**

### **1.1 Defining the Project**

This project will examine how Nature-Based and Mindfulness-Based education practices can merge to support teachers in addressing nature connection as well as mental health benefits with their classes, applying the learning gained to create a teaching resource. Both Nature-Based and Mindfulness-Based education has impacted the stress levels, general focus, and calm of young children. Stress and anxiety levels are a common challenge for children as many educators have witnessed in most learning groups (Flook et al., 2010). This research is an opportunity to learn from experienced educators and gain specific methods that could support students in deep nature connection, as well as in integrating stress management into their education and lives. While Nature-Based education is currently being explored with great enthusiasm in British Columbia and the world, the opportunity to extend this rich topic towards developing mental health strategies seems well timed (Louv, 2008).

The research portion will connect to teachers and counsellors in several Kindergarten to Grade 12 public schools in British Columbia. The objectives surround gaining expertise from those teaching self-regulation and stress-management practices through Nature and Mindfulness-Based practises through interviews and questionnaires. This research will work towards creating a resource that will be offered to support educators in better serving students to develop potentially life-long strategies to manage stress, anxiety, and heighten focus.

## **1.2 Research Question**

How might we better support educators in providing deep nature connection while addressing high rates of student mental health through regular mindfulness in nature time?

## **1.3 Compelling Needs**

Nature-based and mindfulness-based education are two intrinsically connected domains that often lack local and relevant resources in order to be effectively united to best support mental health and well-being in education while promoting deep nature connection. Nature Therapy is a researched area that supports the counselling community with mental health and it seems timely to offer this to all students to support the variety of challenges found in any class composition (Lahad, Berger, 2013). Heightened anxiety is a common theme that proves difficult to address in education as it is often cyclical in nature in that the education environment itself may spark the anxieties (Parker, 2018; Braun et al, 2017). While there is much research surrounding the benefits of integrating Nature or Mindfulness in education, less published teaching resources are found that connect the two to strategize around supporting mental health benefits (Louv, 2008; Parker, 2018). While there is much current interest in Nature-based and mindfulness-based education that have come with the new British Columbia curriculum, there is room for further discussion on practical strategy building (Parker, 2018). While practical resources exist for counsellors and school therapists, this resource will be explored to support the generalist classroom teacher (Lahad, Berger, 2013). The intent is that this project may support deep nature connection and extend mental health benefits through more directly connecting mindfulness education with nature-based education. Deeply



connecting students to their education and to nature requires creativity for 21<sup>st</sup> century learning, and this project seeks to support teachers towards engaging students authentically.

### **1.4 Considering the Literature**

The bodies of literature that currently frame this project explore the importance of nature-based connection or mindfulness-based benefits. I am looking to combine the two fields as I have found that they complement one another intrinsically. The current literature, with examples found in Appendix A and B, surround the benefits involved in including nature-based or mindfulness-based education in stress reduction practices. Considering the literature requires an understanding of the discussed terms. Jon Kabat-Zinn defines Mindfulness as “the awareness that emerges through paying attention...in the present moment, and non-judgmentally to the unfolding of experience moment by moment” (2016, p.1). In education, this extends to this definition being found in educational practice. Nature-based education is defined as learning and teaching through nature as teacher, outdoors in natural and or wild environments. This can be close or far from urban settings, but out of buildings. Self-Regulation is managing oneself without external influence or intervention, while calm is a state of being relaxed and without feelings of strong emotion. This is important as educators may know mindfulness as a program such as MindUp, or nature-based education as programs led by a contracted professional. Discussion from educators so far has ranged from interested to excited. One learning services teacher expressed an interest in a resource such as this for one individual who would respond well to doing this with an Educational Assistant regularly as a break instead of moving to an indoor quiet room. This feedback has encouraged me to create activities accessible to individuals as well as groups. My own experience offers insight into the

need for a researched resource such as this as I continue to see teachers as perceiving outdoor time as mainly active based, where students are not often offered the opportunity to slow down enough to connect deeply. Through these discussions and reflections, I am refining my outcomes towards relevance to my real goals, those of connection with nature, as well as the intrinsic benefits for mental health and wellness in both educators and students.

### **1.5 Meeting Goals and Competencies of Education for Sustainability**

Developing a resource that supports teachers acts as a promotion of deep nature connection as teachers are offered support while students feel the benefits of being in nature in calming ways. Education for sustainability begins with the deep connection to nature which acts as a vital element in addressing competencies through a deeper foundation. This strategy of beginning with connection will support the facilitation of integrating the interdisciplinary approach needed to effectively embed education for sustainability. Recognizing the many elements of sustainability, woven throughout curriculum in the case of public school, the final resource will support this integration.

Learning in an outdoor space is a beginning piece towards education for sustainability, while mindfulness addresses a basic human need to learn from. Sustainability of self promotes mental health and balance, where students may develop strategies for social-emotional engagement that they may develop empathy from.

Traditional models of sustainability speak of the three pillars. Explorations through this program have highlighted the elements that are missing from more holistic models. We now understand more about what reflects sustainability. Progressive sustainability models recognize the importance of embedding the nature world as central to the model, key to all else. This

project, in recognizing the importance of a holistic approach in education for sustainability, recognizes the awareness to action piece, in placing the human role in sustainability, rather than the human's role in areas such as economy, society. This project ideally reflects that being human as dependant on nature. Making an achievable, practical guide that allows humans to be healthy in nature accesses the most basic of beginnings, recognizing the roots to sustainability, an area I feel we need to return to re-imagine balance before moving outwards into deep reflection and conversation in awareness for action.

## **2 | GOALS & OBJECTIVES**

### **2.1 Project Goals**

The goals of this project are:

- to support educators to create deep nature connection opportunities in public education
- to support educators to guide students towards balanced, mental health, and calm through connection
- that educators and students may more effectively feel able to take on sustainability action
- that educators accessing nature-based education connect it to mindfulness potentially resulting in calmer minds and healthier habits for educators and students

### **2.2 Objectives**

The objectives of this project are:

- To connect with experienced educators and counsellors for insight, expertise, and guidance through interviews and questionnaires
- To create a relevant teaching resource that will promote and act as a tool and practical guide to support educators to move outside for calm learning
- To disseminate the resource in a relevant way

## **CH. 3 | BARRIERS & CONSTRAINTS**

### **3.1 Anticipated Limitations**

This research will be limited to public schools in British Columbia, from grades kindergarten to grade 12. The research learning opportunities gained is limited to teachers and counsellors who connect to nature-based education or mindfulness-education within their scope of experience. Their experience will range in working with students from a variety of socio-economic and cultural backgrounds.

### 3.2 Barriers / Constraints & Responses

- Teacher or counsellor engagement or potential disinterest: Have several educators to connect with at each various grade levels.
- Difficult communication potential: Have a range of times to schedule interviews as well as the option of email questionnaire responses in case of scheduling challenges that proves difficult to accommodate.
- Reliability and trustworthiness of sources: This will be tied to rapport. If strong researcher to participant rapport is established or developed, it will be more likely that honest, thorough responses and findings will emerge through the data collection process.

## CH. 4 | TIMELINES

### 4.1 Timeline (tentative timelines) & Methods

<p><b>Research</b> will take place from April 1, 2019 to April 30, 2019. The process will involve:</p> <ul style="list-style-type: none"> <li>• Sending Letter of Intent to all participants: April 1<sup>st</sup>, 2019</li> <li>• Receiving Letters of Intent: April 10<sup>th</sup></li> <li>• Secure all letter of Intent and prepare methods for receiving, organizing and securing all data: April 10<sup>th</sup></li> <li>• Scheduling participants in for Interviews beginning: April 12<sup>th</sup></li> <li>• Data collection through interviews and questionnaires by: May 1<sup>st</sup></li> </ul>
<p><b>Data Analysis:</b> April 20<sup>th</sup> to May 1, 2019</p> <ul style="list-style-type: none"> <li>• Process and organize the written data and all notes by: May 1<sup>st</sup></li> </ul>
<p><b>Resource Creation:</b> May 1 to June 8, 2019</p>

<ul style="list-style-type: none"><li>Using data received, create resource in format relevant to data recommendations by: June 8<sup>th</sup></li></ul>
<b>Resource Edit and Completion:</b> June 8, 2019 <ul style="list-style-type: none"><li>Edit resource and finalize by: June 8<sup>th</sup></li></ul>
<b>Disseminate Resource:</b> June 10 <sup>th</sup> <ul style="list-style-type: none"><li>Based on research feedback, promote and deliver resource in a relevant way beginning: June 10<sup>th</sup></li></ul>
<b>Final Presentation and Reflective Report Completion:</b> June 30 <sup>th</sup> , 2019 <ul style="list-style-type: none"><li>Create PowerPoint presentation and write report by: June 30<sup>th</sup></li></ul>

#### 4.2 Resources for Success

- CBU project supervisor and colleague support network
- Share schedule with my workplace in order to develop an aligned plan for collaboration of interview timelines. Connect to teachers with experience and interest in Nature-based and mindfulness-based education. Offer option of email communication for their timing ease and convenience.
- Columbia Basin Environmental Education Network (CBEEN) and Mindfulness in Education teacher mentors such as Mind-up educators and resources.
- Create work-life balance plan for success while building in time for project aligned with work and balance. My own mindfulness in nature practise modelled alongside project.

#### 4.3 Communication & Evaluation

- Communicate with support network listed in 4.2 to support in research planning and resource creation.

- Evaluation will be gauged through meeting outcomes and through reflection in promoting the goals and objectives identified.

## APPENDICES

### A References

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**C District Approval Letter: Please See the Attached Document**



## ETHICS BOARD COMMUNICATION

Through my application to the Cape Breton University Ethics Board for approval, it was agreed that this project is considered a consultation process rather than a research project that would require full ethics approval. For ethical review purposes, this project is not considered research based in its goal and objectives. The goal in creating a teaching resource requires consultation, but no data collection in the context of research. Therefore, it was agreed that the project would proceed with a consultation process.

## CONSULTATION QUESTIONS

### **Calm & Connection through Nature-Based Education** **Incorporating Mindfulness into Nature-Based Education**

#### **Consultations Questions – Teachers**

1. When you have offered Nature-Based education, what kind of activities do you access most regularly? What are the most significant benefits that you have observed?
2. Generally, how do your outdoor lessons typically run? Please briefly explain.
3. Have you practiced mindfulness-based education with students?
  - a. What kind of practices have you accessed?
  - b. What works? What doesn't?
4. What feedback would you give to those accessing Mindfulness-Based education practices for the first time?
5. What impacts have you observed around student's self-regulation, calm, participation or focus? Do you see a need for more of this in your class / school?
6. How would you recommend connecting mindfulness activities to nature-based activities? What would be useful?
7. What successes have you found in teaching self-regulation in your classes?
8. Are there three top activities that stand out to you that you would see as significant to include?
9. What format would you find most practical as a resource offering support in this area (paper, pdf, website, etc)?
10. Do you have any further wisdoms / insights to share?

#### **Interview Questions – Counsellors**

1. Have you noticed any benefits of Nature-Based education? Are you familiar with the research in this area?
2. Have you accessed Nature-based education relevant your practice? If so, what kind of nature-based practises have you accessed?

3. Have you practiced mindfulness-based education with students?
  - a. What kind of practices have you accessed?
  - b. What works? What doesn't?
4. What feedback would you give to those accessing Mindfulness-Based education practices for the first time?
5. What impacts have you observed around student's self-regulation, calm, participation or focus? Do you see a need for more of this in your students / school?
6. How would you recommend connecting mindfulness activities to nature-based activities? What would be useful?
7. What successes have you found in supporting self-regulation?
8. Are there three top activities that stand out to you that you would see as significant to include?
9. What format would you find most practical to support educators in this area (paper, pdf, website, etc)?
10. Do you have any further insights to share?

## RESEARCH OVERVIEW

# MINDS MATTER!

## CALM & CONNECTION

## THROUGH NATURE-BASED EDUCATION



Support your learners through calm & connection while meeting the Core Competencies in creative and real ways

- Communication
- Thinking 
- Personal & Social



Move learning outdoors to support nature connection

IT'S ESSENTIAL!

With calmer minds and mental health support, students can

LEARN & GROW



### KNOW THE RESEARCH



- With worldwide rise of urbanization and electronics comes a decrease in exposure to nature
- Evidence indicates that decreased nature exposure impacts mental health
- Nature moves beyond cultural or linguistic barriers and develops skills for conflict resolution, self-identity establishment, friendship building and relaxation skills
- Children and youth engaging in nature receive benefits of an increased resilience capacity, a buffer from stress, confidence, social skills, communication, motivation, concentration, physical skills, leadership skills, and an increase in confidence in being outdoors
- Nature experiences decrease anxiety and depression
- Nature experiences increases learning, cognitive function, and memory
- Nature based environments strengthen authentic ties in human connection and relationship building
- Studies show natural spaces as replenishing attention, cognitive function, memory and focus
- When children are exposed to nature, they develop a desire to protect it
- Encourage calm and connection in all learners!

#### BENEFITS INCLUDE GREATER:

- Resilience \* stress reduction \* confidence building \* social skills \* relaxation \* communication \* motivation \* concentration \* physical skills \* leadership skills \* cognitive function \* support for anxiety & depression \* memory \* attention \* conflict resolution \* self-identity \* friendship building \* focus \* creativity \* innovation \* critical thinking skills \* community building \*



### RESOURCES



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## DISTRICT APPROVAL LETTER



**Cape Breton University**  
Cape Breton University  
P.O. Box 5300, 1250 Grand Lake Rd.  
Sydney, Nova Scotia, Canada B1P 6L2  
[www.cbu.ca](http://www.cbu.ca)

Dear Ms. Turner,

Re: School District Letter of Approval

Please accept this letter requesting permission that my project *Incorporating Mindfulness into Nature-based Education* be approved for implementation in School District #6. As a graduate student with Cape Breton University, my project work surrounds an interest in seeking out strategies to support teachers with high student rates of stress and anxiety. This research will examine potential strategies incorporating Mindfulness-based education into Nature-based education practices through the new British Columbia curriculum.

In this research, teacher and counsellor participants will engage in interviews that will examine how incorporating regular Mindfulness into Nature education may impact the stress levels, self-regulation, and joy of learning at school. Stress and anxiety levels are a common challenge for students and this research is an opportunity to examine specific methods that could support learners in integrating stress management into their education and life. Through conversational interviews or written interviews via email, participants role will be to answer ten questions to support the creation of a teaching resource. By sharing observations, insights and experience, a relevant, more purposeful resource can be created that will guide the incorporation of Mindfulness-Based education into Nature-Based education. It will work to support Kindergarten to grade 12 educators in responding to student stress while offering strategies that



support resiliency that could potentially be life-long. This work will ultimately support teachers in better serving students to manage stress, anxiety, heighten focus and promote self-regulation especially while in social situations such as at school.

Participants will be explained the intent of the research and informed through a written letter of consent before responding to interview questions.

**Researcher - Laura Carrara:** Cape Breton University      **Email:**

**Supervisor - Dr. Patrick Howard:** Cape Breton University      **Email:** Patrick\_Howard@cbu.ca

I am requesting your signature as approval for this research to begin on March 15<sup>th</sup>, 2019. If you should have any questions about this research process, please do not hesitate to contact me, Laura Carrara, at . Thank you for your time and support.

Sincerely,

[laura.carrara@sd6.bc.ca](mailto:laura.carrara@sd6.bc.ca) [laura.carrara@sd6.bc.ca](mailto:laura.carrara@sd6.bc.ca)

Laura Carrara District Approval

I Paul Carriere have been informed of the purpose of this research and approve of Laura Carrara implementing this research in School District #6.

Signature: [Signature]

Date: March 14, 2019

SD #6 Role: Superintendent

Contact Information: paul.carriere@sd6.bc.ca 250-341-5317



## DISSEMINATION PLAN

### Dissemination Strategy Planning

Laura Carrara

May 6, 2019

#### 1. What is the campaign purpose, the intended impact (benefit)?

Engaging in a campaign to support the implementation of my project goals prior to completion feels important in gaining acceptance and in networking towards a greater shift in educational practises rather than handing a finished document to those who may lack connection to it. While my final project's purpose is to support mental health, well-being, and nature connection, the campaign that I will speak to here will work to include educators in the development of this support (resource) so that they may be more involved in creating something that will specifically meet their and our student's needs. In essence, networking to support the needs of the greater education community through an ongoing document feels more important at this point than delivering a final document that educators have no tie to. The purpose is therefore to engage and increase my network in my project ideas, deepen conversations and gain perspectives so that my final project is most relevant and applicable.

The impacts of my campaign are two fold. Educators and students engaged in consultation for the formation of the resource document will directly benefit from the final outcome (the practical application of activities and strategies that are created with and for them). The campaign will promote confidence in accessing the final resource as educators involved in the plan and implementation phase will hold a connection to the project. Educators may also find benefit in their reflection to create the activities that they would later access. These activities will work to promote their own wellness in a complex work environment.

2. Describe the primary target audiences for your campaign.

Target audiences of my project campaign are primarily educators and students. While both are being consulted, my invitation has extended to administrators and counsellors. I would group these with educators as the resource itself speaks to those engaged in educating students in a learning environment. Murphy explains the need for involvement, particularly in the initiation phase, in creating change (p. 68). People don't receive change as openly when surprised with it, or when thrown into it. I would like to honour resistance early on and face it so that I may work with it towards acceptance from some, ideally by the implementation phase. For this reason, I am engaging in this campaign process, hoping to make my project interests known so that they may be more openly accessed upon delivery without any surprise or feelings of non-inclusion.

[Murphy, M. \(2016\). The Tug of War Between CHANGE & RESISTANCE. \*Educational Leadership\*, 73\(9\), 66-70.](#)

- ✓ If you have additional important audiences describe them here:
  - Students are an audience as well and bring rich ideas to this conversation. I am offering activities to receive student feedback through.

3. What specifically do you want your audiences to do? To know? To believe?

My intent is that my campaign audience builds the resource so that they will later (upon completion) use and apply it regularly in their individual context.

I want them to know that all ideas are valued and that my consultation with them is interested in hearing their experience as well as their imagination and ideas not yet experienced. Ideas around how to find calm in the fast pace of school in a natural space outdoors are helpful in the support of this document.

Believing in the resource itself, and its potential to promote wellness and connection is key to this campaign, so that parties are invested in the project's purpose and implementation. Also, believing in the need for us to better serve the vast variety of mental health needs present in every class is essential so that we may be aligned in our desire to seek effective solutions.



4. What key messages do you want your campaign to communicate?

After reflecting on Social Marketing, specifically the concept surrounding the behaviour change I am focusing on, I find my campaign promotes the acceptance of a new behaviour or for some, or the modification of an old behaviour. For educators to regularly access an outdoor space for pause and relaxation to support mental health and connection in their students during regular school days is my final outcome. If an educator is already doing this inside, move things outside. If they are doing this outside from time to time, increase frequency so that habits form from regular routines (Kotler, P. & N. Lee (2006).

With regard to rewarding good behaviours, I would see the use of one's ideas in a greater useful resource as being the intrinsically motivational factor through this consultation campaign.

What is my key message?

I invite you (students and educators) to share your imagination and expertise to promote local nature-based connection, calm, and wellness.

5. What communication channels will you use? Consider what is available to you. (public media, print, school/organization networks/resources, social media channels etc. ) Be as specific as you can about ways you intend to use each channel you identify.

School networks are my key channels, as I am learning the importance of creating a locally guided and locally applicable document. I am quickly learning the importance of conversations and shorter but productive emails or discussions. The building from one person's sharing, along with their excited recommendation of who to contact next has me trusting in the value of networking. The local knowledge shared so far has been extensive. Use therefore has been through in-person conversations or via email contact.

Student communication is primarily delivered through lesson activities and circle conversations.

I will continue with recommendation-based connection, as it is leading in successful directions. Community based networking is also proving to be relevant. I am consulting community based educators and members out of public schools as well.

I have learned that this method is most relevant for my campaign as students and networks are not all connected to social media or even the same public media channels. Email has been reliable if a contact has been away or schedules don't align.

6. What permissions will you require? (model release forms, parental permissions, school/board permissions)

I have already received permission from my school district and from all administrations whose teacher's are involved in consultations.

7. What creative strategy will you use? Consider highlights you will emphasize, scenes, sounds, images taglines, tone, overall impression to be achieved through graphic elements – text, colour, font, ect.

Networking is proving to require creativity in one's ability to schedule. From here, successful connection in person is ideal, so draws such as "let's hike together to discuss this" will continue to be key to successful consultations.

Creative strategies that I want to further explore surround storytelling. Sharing stories is a natural and powerful tool to access information, create quick connection, and to network through. As my campaign is primarily focused on networking, this strategy will be worth leaning on.

8. What costs, if any, may be associated with dissemination related strategies? What resources will you need to access? What may be available to help you achieve your strategies? (Consider both material and human)

No costs are associated with my campaign. Connection to stories and the sharing of these stories is key, so teachers sharing their professional development connections as well as their own networks is useful in achieving the goals of my campaign.

## MID-TERM REPORT

May 26, 2019

Laura Carrara

### Mid-term Progress Report

#### GOALS and OBJECTIVES

Though some of the process has changed in meeting my objectives, most of my goals and objectives have stayed true to my plan at the time of writing my proposal. Re-forming of my ideas had happened before the process of writing my proposal. Due to the ongoing nature of my project work, what has been implemented is also continually changing and some new resources will be used in my writing to come.

Most of my consultations are completed, however the nature of networking is that doors continually open through the process. Many supportive resources have been recommended to include in my work. I am continuously adding while writing my resource, as I engage with colleague's expertise or a new book or article that has been introduced to me. In re-visiting my goals, nature connection has increased as a focus through my consultations, in response to a need for creative methods in climate change education. The need for connection to come first is an insight promoted in several of my consultations. In meeting my objectives, I have connected with most educators for expertise, I am actively writing the teaching resource, and I am engaged in a local plan for dissemination, that will likely need to take place in September.

#### CONSTRIANTS and BARRIERS

The constraints I have encountered surround educator relevance. My learning is that educators must participate on their own interest and accord. They need to seek this subject area

by their own experience and engagement. Some have struggled to see relevance to curriculum in my project focus. Another has indeed been scheduling, however both of these constraints have also led to opportunity.

I have managed these through creativity. The first has initiated a curriculum connection included in my resource to increase legitimacy and hopefully encourage those doubting to see relevance. This has brought a useful tie-in to my project. The scheduling issues have offered remarkable times of connection, hike-conversations and sampling experiences relevant to the resource are examples that have allowed for much larger scope of discussion that I could have hoped for.

### **NEW OPPORTUNITES**

Opportunities and unanticipated developments surround the incredible support I have received through my connection with experts and colleagues. This support has me engaged me in my local learning community in a new way, has increased my network of local educators, and has increased my trust in my own project work. Topics I had been unfamiliar with, such as forest therapy (also known as forest bathing) has me recognizing the legitimacy my resource offers to those local to me. These experiences have led me to focus on local and regional connection. This has been a new opportunity, as connecting to local resources and places builds relevance in achieving my outcomes and addresses connection.

### **TIMELINES**

My timelines are on track, with the realization that there is no ‘completing’ the consultation phase. While enough official consultations are complete and compiled, I am actively exploring new directions and do not anticipate an end to this! However, my resource will not be entirely completed by June 8, but instead by June 20, as I want to continuously include the

resources I am still engaging in. I will edit by June 30. I will simultaneously create my PowerPoint presentation and written report by June 30<sup>th</sup>. As there are some colleagues that I plan on connecting with over the summer months, my dissemination will likely wait until September. This updated timeline still allows time for unknowns that may arise.

### **PROJECTED CHANGES**

Projected changes include an increased focus on deep nature connection, as well as the inclusion of curriculum links so that educators feel legitimized in accessing this resource as educational. I had initially expected a finality to my consultation phase, so a change would also be the ongoing nature of this welcome component to my project work. It has led me into greater discussion and reflection in moving forward.

### **LEARNING**

Summing the learning in this space would seem insignificant. I moved through the initial phases in my project work with doubt and questioning. Engaging with experts has been a journey in itself, and the learning has been deeply fulfilling, while also confirming. The confirmation that this project addresses a worthy cause in education has been enriching, and I feel grateful for the opportunity to dive into a project that has shifted my own perspective and practice.

Conversations expertise shared has guided my reflection, and this has in turn has me re-shaping my practice. I have explored place-based learning, collaboration, and the need for nature connection for all ages for deeper understanding. My successes in the implementation are in learning how to access resources local to me to support my practice and deepen place-based education. My challenge surrounds how to increase relevance, or 'buy in' from some colleagues. The inclusion of curriculum connection and First People connection has been a great learning in addressing this challenge.

## THE PROCESS: ACTIVITIES & DESIGN CHALLENGE BRIEF

### Activity 1: Define a Challenge

Name: Laura Carrara

**Dreams and Gripe Session: Finding opportunities often begins with noticing problems or gaps. “I wish there was \_\_\_\_\_ in my school or organization.**

Dreams – things I wish would exist:

- Daily outdoor learning connected to mindfulness
- Culture shift towards valuing outdoor learning
- Access to nature-based mindfulness learning to ease stress on students of all ages in public schooling
- Enhancing holistic learning opportunities including social emotional learning through nature-based mindfulness connection

→  
Gripes – things that could be better

- Appreciation of the mental health benefits of bringing all learners outdoors for mindfulness connection daily
- Increase understanding (beyond common sense) of the need/significance for regular nature learning

Flip the dreams and gripes into possible project design challenges. Begin with your question “How might we...?”

- Promote daily outdoor learning time (past recess) at a school and school board levels
- Research
- Place-based learning guide to increase access (beyond school site)

How might we?

- Research would likely be a key player in identifying the needs and opportunities involved
- Link current mindfulness education and nature-based communities to pair them towards student’s mental health benefits

\*\* adapted from IDEO (2016) Design thinking for educators workbook

Sketch out your end goals – what will I work to produce?

- Research stress differences made by daily mindfulness outdoor time
- Variety of age ranges
- Discuss findings with schools and school board
- Meet with school board to discuss local potential for improvements

Define indicators of success – what measures will me know my ideas are successful?

- Are my research findings indicating a need for a shift?
- Promote a school board priority of daily outside time that moves beyond high energy recess time and sport
- Create a guide for local place-based access

Establish constraints – What constraints will I have to manage?

- Culture
- School culture and priorities

Other things to keep in mind

- How can we better engage educators towards this type of education if the research is potentially lacking (I have not found much on this topic, and am still searching)

### Write A Brief

Write up a short 'brief' that clarifies the challenge you'd like to address. Write it as if you were giving it to someone else to design. Capture thoughts on why this is a problem, a challenge and what the opportunity for design will be.

Something I continually witness through ages and departments in public schools is that student's stress and anxiety levels are very high. From kindergarten learners, right through to grade 12, students are facing a lot of stimulus, not always fostering skills towards a healthy, happy and joy filled learning. Therefore, through researching student stress levels before and after regular outdoor learning time paired with mindfulness education, and engaging in conversations, the hope would be that a culture shift, and further 'reason' would draw more educators outdoors for calm learning times. School boards promote daily outdoor activity, and offer it as unstructured recess time, or competitive sports, but pairing this outdoor time with mindfulness can be rich for calming learning minds and promoting happiness.

How might we?!

Capture the design challenge you've decided to work on....

### CHALLENGE QUESTION:

How might we better support high rates of student stress / anxiety through daily mindfulness and nature-based learning time?



February 10, 2019

Laura Carrara

### **Design Challenge Brief**

#### **Inwards Out: Calming Minds through Nature-Based Education**

##### **The Challenge Question**

How might we improve support of high rates of student stress and anxiety through regular mindfulness incorporated into nature-based education?

##### **The End Goals**

The end goals of my project are slowly becoming clearer to me. After establishing a gap in Nature-Based education, in that activities are often high energy, I have continued to question how to fill that gap in. While sitting with this challenge question and brainstorming often, I have established the following flexible plan. My interest is in learning how educators in public schools may support student stress through regular mindfulness time in nature. A deeper focus acknowledges how this connection to selves can support a deeper connection with the natural world. While my reading of research has been that connecting these worlds of slow learning outdoors for calmer minds holds incredible value, my deeper question considers why it is missing in public education. My goal is therefore to promote accessibility.

I have begun a **literature review** to compile the current research. My goal here is to gain information to support my interest in calming minds through nature learning, shifting that focus on physical activity and play towards mental health and connection. I hope to merge the research that I have found and develop a stronger, wiser plan based on my findings. This will, in turn, support my design project as I carry these learnings forward.

Step two will interview kindergarten to grade 12 teachers, **seek input** from counsellors, access the literature review, and possibly connect with some learners to support my development

of a useful tool for teachers. This will be a time of gathering information and seeking out wisdom and practical local knowledge to support step three.

In step three, I will create a readable, succinct **document** that acts as a useful guide to teachers. This guide will be research based following the literature findings, with the primary focus being practical application and strategies for success.

Next, I will **deliver** it to teachers and **gain feedback** through their and my observations to gauge the usefulness of this guide. I will then apply these insights to **improve** this tool.

### **The Constraints, Opportunities & Indicators of Success**

One limitation will be connecting to those educators that do not value Nature-Based education or Mindfulness-Based education and perhaps have not accessed the research.

This opens an opportunity to offer this research in an accessible way. Another opportunity for this project could hold deep learning opportunities through nature connection. My learning is that sustainability education is often missing an essential first step, that of deep nature connection. This work may allow students the opportunity to authentically connect to themselves, as well as more deeply with nature so that they might care for what they connect to.

An indicator of success will be to see students offered this deep learning opportunity as a regular part of their education. While this is a long-term indicator, a more short-term indicator might be encouraging feedback that is observed after the guide has been implemented.

### **Preliminary Survey of the Sources to Inform the Design Planning and Implementation**

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British Columbia curriculum link: <https://curriculum.gov.bc.ca/node/64315>

## CALM & CONNECTION

Book Titles:

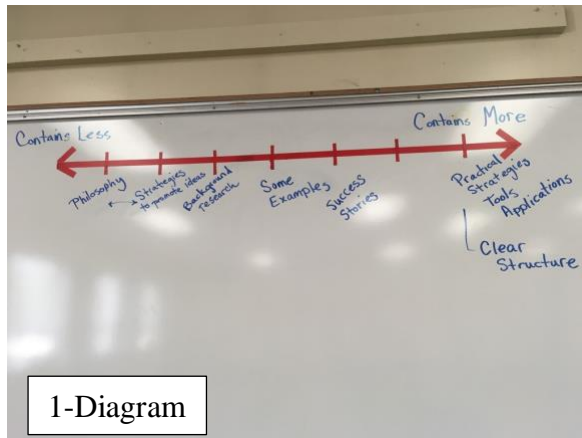
- Last Child in the Woods - by Richard Louv
- Wherever You Go, There You Are - by Jon Kabat-Zinn
- Breathing Like a Bear – Kira Willey & Anni Betts

### Phase 4: Experimentation - Create Prototypes

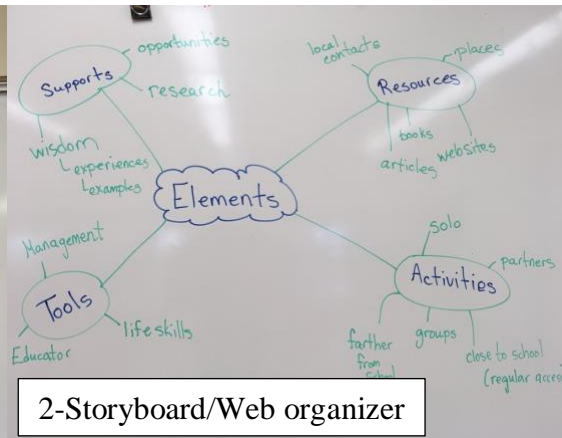
Laura Carrara

April 14, 2019

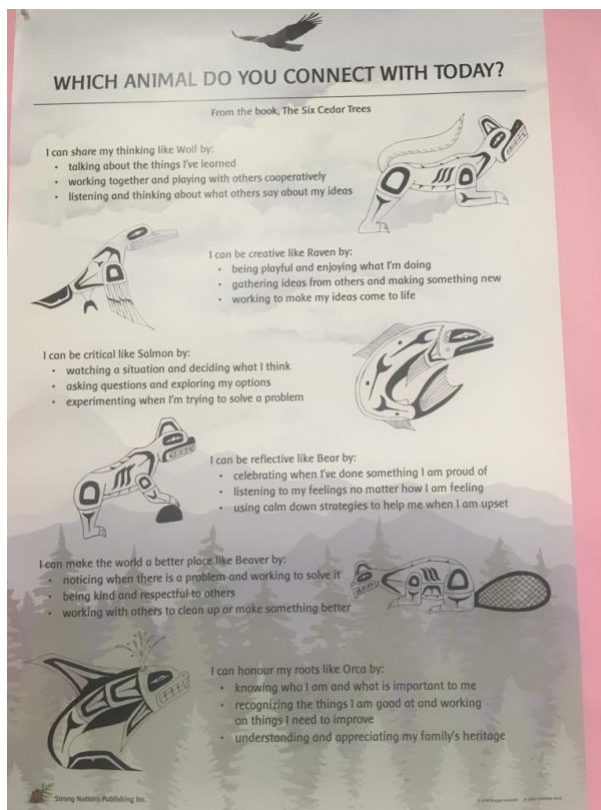
Share photos of your prototypes here:



1-Diagram



2-Storyboard/Web organizer



3- A resource I am exploring

1. My inclusion scale based on feedback. This inclusion scale was hugely helpful in refining information.
2. Elements to include based on feedback. This moved around quite a bit during the process. Since this time, other inclusions keep coming in.
3. A colleague recently suggested I frame some work around this document, an excellent idea that I am working with.
4. Students offered reflective feedback after playing their part in Elements to Include.



4- Role play and reflection

**Get Feedback:** What kind of feedback do you need to refine your idea? What is the most important question you want to ask? Are you trying to determine if people will participate in your idea? Use it?

I am looking to gain further feedback in secondary applications. Questions around application and culture are significant as I look to fit my resource to a useful, purposeful model for access in secondary culture. There seems to be a much more ‘natural’ fit in elementary curriculum. I am trying to define how to make my resource accessible and culturally appropriate enough for all educators to use it.

Feedback goals:

- How will educators use my final resource?
- What format will be most accessible for this resource?

**Select Feedback Participants:** Who do you want to engage in the feedback process? Who will you learn most from?

I need to initiate and re-visit conversations with:

- ✓ Jenn: Experienced Secondary outdoor education teacher
- ✓ Emily: Experienced Counsellor who has accessed several Mindfulness programs for elementary age children
- ✓ Simon: Nature school teacher who has accessed mindfulness in nature with his elementary school classes
- ✓ Tim: Nature school teacher who has accessed mindfulness in nature through his experience teaching middle and secondary students

**Build a Question Guide:** List any questions you may have about your idea. Think Specifically but also consider broad question; what motivates, people, their worries, concerns, hopes, aspirations.

- ✓ What will promote the ideas, supporting or convincing those inexperienced with this research to try these practices?
- ✓ What will offer confidence for those entering these practices?
- ✓ What will encourage those who already access regular nature-based education to move towards connecting it to mindfulness and calming activities?

- ✓ What will motivate teachers to access these practices with regularity?

**Facilitate feedback** – Take notes – Consider what the feedback is saying about what you should KEEP as part of your idea; INCREASE; DECREASE or STOP.

- Education is in the early phases of recognizing how to ideally support the diversity of mental health challenges in any given group and therefore increasing strategies that are necessary to engage in regular supports has been well-expressed.
- Education is in the early phase of recognizing how to support technology and technology addiction in youth. Including strategies that would support this issue, especially at the secondary level have been encouraged.
- Keep the level of collaboration and decrease the amount of time observing and trying to re-establish research that is already established.
- The research recognizes that mindfulness and outdoor education support mental health in education. To avoid being redundant, focus on practical application of these practises, especially working in conjunction.

**Integrate Feedback:** Look back at your original goals for getting feedback. What have you learned? Based on your earlier learning and research from the ideation phase, do your ideas still hold true? What is most important? How might you improve your idea? How can you emphasize what was most well received about your prototype?

**Reflections:**

While my initial vision was to compile qualitative research, my project has evolved towards collaboration and practical application. While I am still planning to support Kindergarten through grade 12 teachers, I am finding information increasingly difficult to gain past grade 8 other than in subjects specific to being outdoors (outdoor education, aboriginal education for example). Using the research already in place, I am excited to create a document that will support teachers to put it to practice. My school board is supportive of my work and most feedback has been receptive and encouraging, emphasizing the need to offer mental health supports through nature connection that all can personally benefit from. When this has not been the case the concern has primarily been of increasing expectation or pressure on teachers.

My ideas still hold true, but my project has been dramatically improved upon through feedback. While research and observation was more important to me initially, after digging deeper into the research and gaining feedback, what is most important at this stage is offering support and guiding teachers towards practical tools and access to resources highlighting the benefits in the area.

Therefore, my shift in focus has been an improvement over time, and I feel my project will hold more opportunity for change in the system. Other recent improvements are to use the Six Cedar Trees book by Margot Landahl and Celestine Aleck to guide my resource. I am so inspired by this idea and connecting my resource to Aboriginal ways of knowing while also to B.C.'s core competencies.

### Identify What's Needed:

List the materials that you will need to create your refine concept? Are these supplies available to you? Will you need to purchase? Seek donations? Funding?

Available:

- Computer & internet
- Collaborator interest
- Journals, books, articles, stories, experienced educators willing to share

Need to Purchase/Fund:

- N/A for the timeline of this project.
- This would be applicable as a future option such as publishing a document or establishing a support network, club or curriculum.

Costs: (How much do you need?)

N/A at this time.

People: (Who can help you realize your project? Who is invested in supporting your concept? Can you identify champions for your idea?)

- Jenn: Holds a high level of interest in guiding this work into secondary education. This is an area that I am struggling to gain experienced feedback through so Jenn is a key player realizing realistic opportunities for engagement in this area.
- Laura S.: Interested in connecting this work to our Environmental Educators collaborative team. This group consists of teachers working in a wide variety of capacities so is a very supportive connection.

Sources: (How can I get funding for my idea?)

N/A at this time.

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# NATURE MIND CALM & CONNECTION THROUGH NATURE- BASED EDUCATION



A K-12 Resource

Cape Breton University

Master of Education

Laura Carrara

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## COLLABORATOR ACKNOWLEDGEMENT



Collaboration is key to feeling supported in exploration. As learners depend on us for guidance, we educators support, explore, and innovate together. Educators everywhere are doing incredible work throughout the nature-based education field. Worldwide, there are educators who are working hard toward a paradigm shift in education and toward a greater sustainability mindset. I am extremely grateful for those who offered their insights and made valuable contributions in the creation of this resource. Through the expertise and experience of innovative humans excited to explore the realms of learning in nature, we see the impacts in healthier students, learning communities, and habit building. These experiences in turn create stronger connections and build responsible citizens who are capable of big picture thinking. When we feel safe, we can learn. When we feel safe together, we can grow together. When we feel safe outside, we can connect to nature. When we connect, we can care. To all those that have shared, inspired and given, I am deeply grateful.

To the children who have shared in this journey, I offer your wisdom. You have guided these pages with your honest demand for authentic education and responsibility. We thank you.



## INTRODUCTION



Nature and mindfulness are a natural partnership, especially when paired in education. Here you will find a kindergarten to grade twelve resource designed to support educators to implement this partnership in response to a need to re-calm growing minds and reconnect to the natural world.

Imagine a typical public-school classroom. Consider all the joy, needs, desires, interests, passions, resilience, kindness, anger, sadness, and frustration that students may arrive to school with on any given day. It can be difficult to support all of the directions. Now imagine





offering calm connection in the form of a Nature based experience, grand or small in their day. They feel the wind, hear birdsongs, watch a worm, or simply sit.

One teacher begins her day here. She moves her grade one class outdoors immediately after they arrive. Just outside the school doors, they engage in yoga postures, followed by deep breathing. They feel the wind on their faces. Some choose to be barefoot. Without mats, they connect more deeply to the earth, feeling the cool grass underneath them. Some close their eyes, some look to the sky. These students are well practiced. They end in a circle so each voice may be heard as they wake into their day. These learners are connected again. Their minds are ready for learning and being together. As they walk back inside, they recognize where they begin their day. With connection.

The literature review should act as a compass to guide conversations and build trust in the importance of practicing mindfulness in nature. The brain benefits are clear. The intent of the activities found here is to inspire. You will find opportunities to support calm or mindfulness in capacities more or less relevant to your learners, context and access to natural spaces. Once a habit is formed of integrating calm into outdoor learning time, your imagination can unfold the opportunities for integrating these into other lessons and parts of your day. May you move outwards for peaceful connection in yourself and others through these beginnings.

“MY SIT SPOT TIME IS MY ONLY QUIET TIME IN ALL THE BUSY. IT’S MY FAVORITE CALM TIME. I WISH IT WAS FOR ALL DAY.”  
GRADE 1 STUDENT



## PART 1: REVIEWING THE LITERATURE

### PURPOSE & BENEFITS



When Howard Gardner included an eighth intelligence in 1995, Naturalistic, to his list of seven multiple intelligences of 1983, he opened a door to accepting and understanding the significance of Nature in education. Embracing inclusive education in classrooms of belonging means offering Nature-based education as essential for some learning minds, and as the research demonstrates, is beneficial to all. We now know the extensive benefits of Nature-Based education practices and this document is designed to move this learning towards application. The list of benefits is extensive. Supporting learning, mental health, and offering brain breaks, while increasing dopamine and acetylcholine, hormones that work towards focus, motivation, resilience and active learning are on this list (Race, 2013).

Muir, Carson, Orr, Louv and so many others have highlighted the significance of deep connection to nature. In reality, there is no disconnect. We breathe it, we eat it, we are it. Re-framing worldviews towards a paradigm shift is necessary now to meet the challenges of today. We know that running, playing and moving outdoors holds incredible benefits for our happiness and health. But there is another way too, at times missed in Western education. The holistic practice of nature-based mindfulness in education prioritizes emotional health, personal and social responsibility while supporting executive function and emotional regulation in children and youth. This supports lifelong learning and well-being (Parker, 2018). Once students feel safe to learn, and well-being is an established habit, these activities offer deep nature connection. This nature connection leads to greater sustainability habits and mindset later in life. Therefore, the benefits are underpinned by personal wellness and social and environmental responsibility. The purpose of these pages is simply to support implementation. Offering dedicated time to mindful nature connection supports mental health while encouraging the paradigm shift towards sustainability in a partnership of responsibility and growth.

"MINDFULNESS IS ABOUT BEING FULLY AWAKE IN OUR LIVES. IT IS ABOUT PERCEIVING THE EXQUISITE VIVIDNESS OF EACH MOMENT. WE FEEL MORE ALIVE. WE ALSO GAIN IMMEDIATE ACCESS TO OUR OWN POWERFUL INNER RESOURCES."

~ DR. JON KABAT-ZINN



## THE LITERATURE



Whether perusing the variety of works from current experts such as Louv and Sobel, or travelling back to Carson and Thoreau, the messages deliver the same sense of urgency; that educators must re-connect kids with nature, now (Louv, 2015; Sobel, 1996).

There is a wealth of quality, peer reviewed research and information that informs this topic. Here I will offer enough information to help support a greater comprehension and trust that these practices should be a regular part of education. Data gives credit to this relatively recent movement of re-connecting children and youth with nature. It supports feelings around perception, significance, importance, or questioning for educators. After reading the research, there is no disputing that moving into nature for calm and connection in outdoor learning will support mental health in learners, while simultaneously supporting sustainability education. Peer reviewed articles and respected authors repeatedly share the same message: that we must bring children and youth into nature and calm minds and bodies to reconnect (Louv, 2015; Berto, 2014). Exploring the literature allows us to trust in the outcomes we work towards as we dive in to the possibilities with purpose.

The central area focused on in reviewing the literature is nature and its association with mental health and sustainability connection. Both mindfulness and nature contact supports mental health, calm and connection (Race, 2013). Separation may be found throughout the research, however they will be paired here. For the purpose of this document, the term Nature will be used in the interest of wild and domestic nature. This allows the term to range from wilderness as we would perceive it, to domestic, or human shaped nature such as playing field or garden. Indeed, humans eat and drink nature, breathe and create through nature, and are nature, however intentional movement out of doors and into a physically natural space, whether wild or domestic, is the focus here.

For the purpose of this resource, the term mindfulness will be based on Jon Kabat-Zinn's work, and defined as the practice of moving ones' attention to the present moment with openness and non-judgement (1997). There are many forms that one can practise mindfulness through. The active components are found in three elements: attention, attitude, and intention. Attention is a self-regulation skill that can be practised through activities such as yoga, breathing, or meditation. Attitude promotes natural curiosity, while being open and accepting. Intention focuses on intrinsic motivation, and supporting this for engagement (Parker, 2018).



Studies show a worldwide rise of urbanization while by association a decrease in exposure to nature. Paralleling this is worldwide evidence of the increase in mental disorders and attention deficits. Evidence indicates a connection between these patterns, that decreased nature exposure is resulting in increased psychological changes impacting mental health (Bratman, Daily, Levy, & Gross, 2015). Ultimately, nature deficit disorder as Louv has coined it, results in negative impacts on cognitive, emotional, and physical well-being (2005). Additionally, increased distance from nature in modern times has resulted in an increase in alienation, depression, and loneliness (Berger & Lahad, 2010).

In the most recent hundred years on planet earth, with all that modern life and free choice embraces, humans have developed a new form of distress. Questioning belonging, identity, meaning, and community drives this distress. Psychologists have described the detachment of humans from nature as directly deteriorating well-being and social-psychological health (Berger & Lahad, 2013). Over half of humans live in urban settings, yet these environments tax the attention control that filters relevant from irrelevant stimuli in brains, depleting cognitive function and making it more difficult to focus attention (Bratman, Daily, Levy, & Gross, 2015). Greater access to technology is one reason for decreased nature connection in families, keeping families indoors while leading to a host of negative symptoms in mental and physical health (Reece, 2013). This is apparent when walking through most schools by the number of students choosing to wear the shirt “I paused my game to be here.” Other reasons for disconnecting surround fear, screen time, the youth trend of lethargy, and limited green spaces. These trends are limiting youth’s personal development and sense of self, as well as interpersonal development (Sackett, 2010). The increase in access to electronics directly corresponds with the decrease in visits to parks and natural wild spaces (Louv, 2008). The long-term impairment here is limited community and sustainability development. O’Brien reflects on the relatively recent challenge for educators to support learners in their release of electronics to fully engage in nature and challenges educators to be creative and innovative in doing so (2016).

Meanwhile, greater that 95 percent of humans’ time on planet earth has been intimately connected with the more than human world. The term *biophilia* is used to describe the natural affiliation and human focus on life and processes, bringing insight and understanding into why children are intuitively drawn to nature and how nature immersion is so important in healthy brain development. Research indicates that nature connection and immersion in children under the age of eleven establishes stewardship and environmental responsibility that will last a lifetime. This connection also leads to innovation and creativity, essential to 21<sup>st</sup> century learning (Louv, 2008). Humans are wired for nature, considering it an innately safe place, and have evolved through it while depending on the connection for survival (Hordyk, Dulude, & Shem, 2015). The empathy gained through deep nature connection and



identifying with nature in the early years of life underpins sustainability actions and habits of nature protectivity later in life (Gurholt, 2014). These empathic relationships and the emotional connection gained acts as present and future benefit to nature connection and future sustainability life habits. Cultures supporting nature connection, such as Norwegian and Swedish “friluftsliv” (translated as free air life) carry that environmental connectedness through to adulthood (Beery, 2012, Gurholt, 2014). In the practice of friluftsliv, similar to Japanese shinrin-yoku (translated as forest bathing), there is opportunity for slow, deep nature connectedness. Here, the senses take in their place, with acceptance, awareness, and appreciation. Through the trillions of bacteria that are on or in each and every human, to the food, air and water that lives depend on, humans thrive and survive through nature connection (Sampson, 2015). Specifically, in considering the mind, humans look to nature for healing, stress reduction, and clarity. Eco-psychologists suggest that nature re-attachment is necessary for everyone’s mental health, well-being, happiness, innovation and the sustainability practices that will extend to the physical preservation of planet earth (Berger & Lahad, 2013). Detached relationships, play, experiences, and intuition impact greater issues of detachment. This detachment in turn limits imagination, body, emotion and well-being, leading to an increase in mental illnesses such as depression and fatigue (Berger & Lahad, 2013). Depression and fatigue are specific examples in that these are not based solely on psychological or personality-based traits (Berger & Lahad, 2013). Psychologists are now re-examining the healing elements and cognitive restoration found in re-connecting humans with nature (Hordyk, Dulude, & Shem, 2015).

Thankfully, nature is restorative and replenishing and allows humans to rehabilitate and even thrive following crisis (Joye & Dewitte, 2018). For example, contact with nature is used as a tool in treating depression and mood disorders in youth (Berman et al., 2012). Studies show that youth who have been challenged in nature, through adventure therapies, receive beneficial stress responses that increase motivation and involvement, and more quickly engages mental states that require support (Eckstein & R  th, 2015). Outdoor experiences are considered therapeutic, sometimes replacing a need for other forms therapy (Eckstein & R  th, 2015). Outdoor immersion is accessed as an intervention, supporting rehabilitation and prevention in at-risk youth (Wilson & Lipsey, 2000). For some, ecotherapy is the primary support for mental health issues. Either as supplemented or primary support, psychologists agree that nature is healing (Sackett, 2010). Data shows a 90% increase in self-esteem through nature walking while feelings of tension and stress are reduced by 71% through time for personal reflection in nature (Sackett, 2010). Self-esteem, self-awareness and stress management are essential areas of healing in youth. Humans look to nature for emotional connection and consequently whether conscious of it or not, feel an emotional connection just by being there (Ulrich, 1983). Children and youth that connect to special places turn to those places to re-set joy and balance, increasing resiliency and self-regulation in times of



hardship. Knowing nature and making time for calm acquaintance is the key to finding benefits and creating connection (Louv, 2008).

Simply looking at a natural landscape reduces stress and promotes relaxation (Sampson, 2015). Now moving out into nature, research demonstrates an increased and restored ability to apply focused attention and active working memory than in urban outings (Berto, 2014). Studies researching forest bathing have found immunity boosts as anticancer proteins increase (Sampson, 2015). Meanwhile, a reduction in the stress hormone cortisol and adrenaline that can support mental health (Bratman, Daily, Levy, & Gross, 2015). Typically, in a stress response, the brain's amygdala blocks the para-sympathetic nervous system to activate the sympathetic nervous system, which is designed to save lives. Mindfulness and nature connection re-activates the para-sympathetic nervous system, especially important in times of stress (Race, 2013). This is perhaps the reason for the Zen saying: *sit in meditation for twenty minutes a day, unless you're too busy. Then you should sit for an hour*. Simply put, opportunity for mindfulness and proximity to greenspace promotes decreased levels of mental distress and stress responses while promoting an increase in well-being and connection. Some of the reason behind these benefits are due to chemicals emitted by plants. Plants in the forest actually show the ability to lower anxiety, heart rate, emotional responses, aggression, and stress (Sampson, 2015). Meanwhile, uninterrupted nature contact and connection opens individuals to their basic nature, authenticity, self-worth, and self-esteem, strengthening social bonds and increasing confidence that can be difficult to find in modern life and technology. (Berger & Lahad, 2013). These bonds to nature and community in turn create greater responsibility in citizens of the world.

Studies show the advanced benefits of experiencing (domestic and wild) nature to experiencing technological nature, nature appearing on a screen when engaging in emotional responses and connection (Sampson, 2015). Nature holds an advantage in restorative therapies over artificial environments in that humans have evolved to be connected to nature. That nature activates a reduction to stress through the parasympathetic nervous system is due to that evolutionary connection (Bratman, Daily, Levy, & Gross, 2015). Place-based learning environments that support experiential education specifically in natural environments work to support typical Western educational practises, improving environmental engagement and stewardship. These practises offer support to children and youth growing in urban settings or with high levels of technology exposure (Lane-Zucker & Sobel, 2005). Studies show natural spaces as replenishing attention, cognitive function, memory and focus (Reece, 2013).

Research specific to nature's influence on children also indicate reduced rates of depression, stress, Attention Deficit Hyperactivity Disorder and bullying while improving concentration,





social interactions, immunity, learning, and critical thinking (Sampson, 2015). Nature-based education also supports critical thinking skills and skill development (Ernst & Monroe, 2004). In consideration of those children growing up in impoverished environments, deserving an education that supports nature connection is essential. Here, for children and youth that have faced trauma or relocation, nature offers a holding place for difficult emotions such as anger and agitation. Nature moves beyond cultural or linguistic barriers and allows for spontaneous interaction that offers conflict resolution, self-identity establishment, friendship building and relaxation. Nature may be the one thing that is always present (Hordyk, Dulude, & Shem, 2015). Children and youth engaging in nature receive benefits of increased resilience capacity, a buffer from stress, confidence, social skills, communication and language, motivation, concentration, physical skills, leadership skills, and an increase in confidence in being outdoors (Hordyk, Dulude, & Shem, 2015). Nature therapists work to empower resilience through physical-spiritual-mental channels to encourage processes of recovery connecting to the right brain that promotes coping resources to improve quality of life while coping with difficulties. Stories also activate imagination and allow children to address larger issues and past trauma, reducing anxiety and supporting healthy stress management (Berger & Lahad, 2013). Nature offers a 'safe place' in that humans have evolved in knowing nature as a place of refuge and preference (Bratman, Daily, Levy, & Gross, 2015).

In connecting to place, one study shows 96.5 percent of adults as choosing an outdoor environment when asked to identify their most significant childhood environment (Sampson, 2015). Creating a safe place in nature and fulfilling tasks that connect us to ancient roots such as nature art, ceremony, conservation, and trust building fosters mental wellness in the unspoken therapies that take place through connection. For example, planting a tree can foster healing from a recent move or divorce, while art can offer a play therapy model that addresses recent trauma or hardship (Berger & Lahad, 2013). Nature based environments strengthen authentic ties in human connection and relationship building as well (Beringer, 2004). This offers hope for responsible authentic community connection. Forest schools see higher academic rates, curiosity, willingness to take risks and motivation and life satisfaction (Sampson, 2015). Even small levels of nature exposure hold profound results in increased memory, impulse control, attention, academic achievement, and concentration (Bratman, Daily, Levy, & Gross, 2015). Importantly, research demonstrates that when children are exposed to nature, they develop a desire to protect it (Hordyk, Dulude, & Shem, 2015).

Supporting outdoor time is similar to indoors in the value creating routines. Young, Haas, and McGown share core routines that support deep connection in their book *Coyote's Guide to Connecting with Nature*. They also share important wisdom on the Nature mentorship that



educators can gain wisdom through. In mentorship, teaching time is limited, while the questioner is key. For example, provoking wonders through many easy questions and a few difficult ones offers opportunity for exploration. The third is to act as a trickster, invisibly encouraging connection to flourish while pushing learners comfort zones. Deep nature connection intrinsically requires a certain level of quiet and tuning to senses that mindfulness also connects to (2016).

Simply put, nature paired with mindfulness reduces stress and creates connection while offering mental and physical health benefits (Race, 2013). Research describes how when a learner is in a state of stress, their prefrontal cortex where productive thinking takes place, fails. Nature and mindfulness can support this by strengthening the prefrontal cortex, lowering peak stress responses. Being calm and reflective in natural (non-threatening) environments therefore works towards balancing and relaxing through the parasympathetic nervous system (Hordyk, Dulude, & Shem, 2015). Therefore, moving stress management support deeper in school settings, is moving mindfulness outdoors. Studies show that walking in nature offers affective benefits such as decreased anxiety, and cognitive benefits such as increased working memory and focus (Bratman, Daily, Levy, & Gross, 2015). Mindful walking therefore holds powerful benefits.

In conclusion, research shows that there are two qualities necessary for nature connection: access to nature, and personal receptivity with nature. Once in nature, it is the emotional and sensory receptivity of the child or youth that determines how deeply nature may nurture that human, and how deeply the connection can go. That being said, if education fails to offer it, the opportunity may not exist for that child. While Western practises erode these necessities, it is now the position of educators to respond (Hordyk, Dulude, & Shem, 2015). Wonderfully, many organizations, researchers, authors and educators such as Richard Louv, No Child Left Inside campaign, and Take me Outside campaign are part of a greater movement to engage in solution, reconnection and support (O'Brien, 2016).

The research legitimizes this resource as a tool to support what can be difficult to deliver in an age and culture where mainstream norms can typically value consumption, media, and productivity. The literature review is essential in gathering credibility to a subject some might perceive as frivolous, unscientific, or an additional responsibility to already busy work. The research demonstrates that this subject matter has been reviewed with scientific connections, with a vast array of studies confirming the extensive list of benefits. It is through education that psychological supports and nature connection can support all learners and support a greater culture of environmental responsibility through sustainability.







The following page is a poster that is designed to support or inspire when offering this research to a district, colleague, family, or student. Collaboration and education around this topic is key so that this area is not overlooked in daily school rhythms. This poster offers one way to support that education.

"NATURE IS NOT A PLACE TO VISIT. IT IS HOME."

~ GARY SNYDER



# MINDS MATTER

## CALM & CONNECTION

## THROUGH NATURE-BASED EDUCATION



Support your learners through calm & connection while meeting the Core Competencies in creative and real ways

- Communication
- Thinking
- Personal & Social



Move mindfulness outdoors  
Support nature connection

With calmer minds and mental health support, students can

LEARN & GROW



### Know the Research



- With worldwide rise of urbanization and electronics comes a decrease in exposure to nature
- Evidence indicates that decreased nature exposure impacts mental health
- Nature moves beyond cultural or linguistic barriers and develops skills for conflict resolution, self-identity establishment, friendship building and relaxation skills
- Children and youth engaging in nature receive benefits of an increased resilience capacity, a buffer from stress, confidence, social skills, communication, motivation, concentration, physical skills, leadership skills, and an increase in confidence in being outdoors
- Nature experiences decrease anxiety and depression
- Nature experiences increases learning, cognitive function, and memory
- Nature based environments strengthen authentic ties in human connection and relationship building
- Studies show natural spaces as replenishing attention, cognitive function, memory and focus
- When children are exposed to nature, they develop a desire to protect it
- Encourage calm and connection in all learners!

#### Benefits include greater:

- Resilience \* stress reduction \* confidence building \* social skills \* relaxation \* communication \* motivation \* concentration \* physical skills \* leadership skills \* cognitive function \* support for anxiety & depression \* memory \* attention \* conflict resolution \* self-identity \* friendship building \* focus \* creativity \* innovation \* critical thinking skills \* community building \*



### RESOURCES



- Beringer, A. (2004). Toward an ecological paradigm in adventure programming. *Journal of Experiential Education*, 27(1), 51-66.
- Bratman, G.N., Daily, G.C., Levy, B.J., & Gross, J.J. (2015). The benefits of nature experience: Improved affect and cognition. *Landscape and Urban Planning*, 138, 41-50.
- Hordyk, S.R., Dulude, M., & Shem, M. (2015). When nature nurtures children: Nature as a containing and holding space. *Children's Geographies*, 13(5), 571-588.
- Louv, R. (2008). *The last child in the woods: Saving our children from nature-deficit disorder*. New York: Work-man Publishing.
- Reece, R.F. (2013). *Ecowellness: Construction & validation of the Reese ecowellness inventory*. (Unpublished doctoral dissertation). University of North Carolina: Greensboro.

## PART 2: INVITATION

### DEAR EDUCATOR



I invite you to participate in actions towards inclusive education that directly support mental health in your students. Along with this invitation comes a reality of the changes you may find in your own wellness as an educator in a dynamic workplace. Teaching is fast paced, complex, and emotional at times. As O'Brien (2016) suggests through her work with Sustainable Happiness, building in mindful time in nature offers an opportunity for us to feel more balanced in our practice, hold moments of calm, re-center ourselves, and even perhaps find an increased connection to joy in our meaningful work.

There are resources to support that are included in the Reference & Resources section, and ample research to support you in answering any questions that may arise in your practice. Additionally, many districts and communities offer the Mindfulness-Based Stress Reduction eight-week long course that could also support you in finding balance and in turn better support your students.

You will notice many principles of meditation and mindfulness practice embedded in the activities. With some alternate wording and re-formatted activities to offer an inclusive environment in education, the benefits are ideally the same. The idea here is accessibility. It would be unfortunate if words or perception held educators or families back from accessing a deeply researched practice bursting with benefits. The same goes for delivery. Some activities are based on principles of Jon Kabat-Zinn's Mindfulness curriculum, while others are based on building resilience and focus in finding calm. Re-modelled for maximizing children and youth engagement, and worded for inclusion, these curriculums are connected to the work of many masters in the field. Building blocks for a lifetime of healthy mental practice and appreciation for nature connection are the foundations of these activities.

The Mindfulness Based Stress Reduction program established in 1979 by Jon Kabat-Zinn has opened opportunity and acceptance of the wide range of benefits of connecting mindfulness and meditation to address stress responses pro-actively. Mental health challenges such as anxiety, depression, trauma, Highly Sensitive Children, Post-traumatic Stress Disorder, Social-Emotional learning, Fetal Alcohol Spectrum Disorder and apathy, among others are extremely typical in some form in every group of learners. Students need to feel safe in order to learn. Nature-based learning and nature connection cannot happen until learners feel safe to learn. Meanwhile, Nature-based learning and nature connection prove to offer powerful forms of stress reduction in children and youth (Sackett, 2010).



Therefore, offering this form of regular support increases inclusiveness. This safety factor is the foundation, so establishing safe environments is key. Pairing the worlds of calm and connection outdoors therefore acts as a natural fit for this kind of support. While educators often access outdoor learning as a place for fitness or play, which is of course essential to health, calming activities will not disappoint in their health benefits, connection, calm, and in regrouping all learners (and educators) in their high-sensory and full days.

The beneficial side of outdoor calm time is that connection piece. As learners develop their comfort and safety, they also establish an ability to connect to place. Place-based connection shares the key to strong community engagement, and this holds true for the human and more-than-human community of which we are a part. Engagement in this community building supports our learners further, encouraging them to flourish. It is our role to be nature mentors, to act as an invisible support in meeting the needs of our learners with quiet skill of a coyote, while mindfully listening to deeper needs. So, with the research backing us and the benefits ahead of us, let us begin.

## USING THIS DOCUMENT

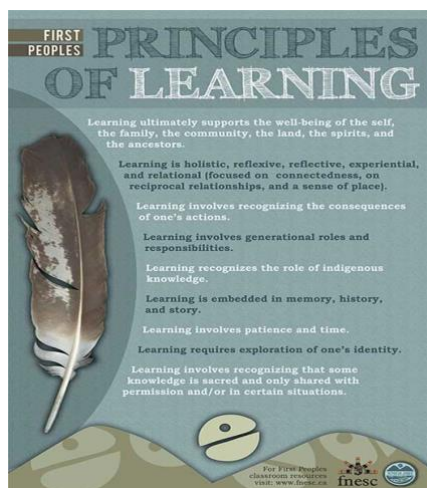


Navigating this resource will be personal to your unique situation, age group, and interest. Following the headings and symbols will help you navigate grade level appropriateness, associated outcomes and core competency connection. Please view and use this resource as a circular model. The flow will come from you so that the delivery encourages relevance to your context.

Please note that all activities are offered as invitations, and deliberately lack great detail. This offers flexibility and originality to your specific situation, delivering an idea, but not directing it. Be creative, be relevant, and enjoy molding activities to become something special to students and their situations. Fit them into your projects. Fit them to your place.

This resource is guided by the beautiful book *The Six Cedar Trees*, by Landhal and Aleck (2017) and the resources connected to it. This book weaves First People's connection into B.C.'s Core Competencies, while in turn making these Core Competencies more accessible to children and youth. The First People connection is key in education and in this work, so ensuring traditional territory recognition and using the resources approved by the First Nations Education Steering Committee and First Nations Schools Association is a relevant fit for all students. These supports are included in the References and Resources section.





The activities become circular in the planning process, without a need for a beginning or end point. The idea instead is authentic learning for life through regular relevant implementation. The word *being* rather than *doing* is used as a way to draw attention to the act of being in the present moment in nature. The six framework titles connect to the six First Peoples Principles of Learning animals, along with the six core competencies. They connect as follows:



- Communication-wolf-being together
- Creative thinking-raven-being creative
- Critical thinking-salmon-being critical
- Personal awareness and responsibility-bear-being reflective
- Social responsibility-beaver-being connected
- Positive personal and cultural identity-orca-being responsible

Within the activities you will find curricular links. These correspond with the British Columbia Curriculum Core Competencies (CC), as well as the Big Ideas that range from kindergarten to

grade 12 (gd k-12). The Big Idea curricular links extend through multi-age groups relevant to each activity. This being said, it is important to note that in this capacity where unanticipated benefits are found, curricular links may extend through to other connections as well. Here, I have supplied a basis to guide curricular connection. Please consult the curriculum and build links yourselves as you see relevant to the unfolding of your learners' goals.

Additionally, curricular connections can be linked to all courses through the core competency connections. Big idea links are included as B.C.'s curriculum promotes cross curricular learning opportunities. All activities offer curricular connections through all grades from kindergarten to grade 12. While some activities are more suited to specific grade levels, all activities could be adapted to meet the needs of all age groups.

These activities are purposefully kept to one-page so that they will be easy to read, refresh, or weave through other activities. These activities are meant to be accessible for when you need them most and act as cue cards to follow along in the moment. Timing is flexible. A rough gauge has been offered but can be altered to suit your situation. Timings are intentionally left out of the activity so that the steps can be offered in a way that makes sense to the situation. For example, if learners are fully engaged, or if they are struggling to engage on a given day, take their lead.

"WHEN A FLOWER DOESN'T BLOOM YOU FIX THE ENVIRONMENT IN  
WHICH IT GROWS, NOT THE FLOWER."  
ALEX DEN HEIJER

## TOOLS & SUPPORTS





The experience of many seasoned teachers in various areas of education that have informed this resource offer us the value of structure and a well-organized plan. Managing a group outdoors is a skill of its own, and practicing calm outdoors, with all the exciting changes, wonders, and things to notice is another. Firstly, please understand that this is an ongoing practice, and one that builds stamina over time. Like with all practice, practicing these activities regularly is key in accessing deeper benefit. Whether this is daily or weekly, I encourage you to remove judgement and enjoy whatever benefits you see unfold.







The following symbols guide the sensory practices explored through each activity. These are found at the top of each activity card.

Sound: 

Smell: 

Feeling, Emotion,  
Empathy, Attachment,  
Connectedness:

Sight: 

Touch: 



Inward Reflection: 

Taste: 

There is a grade range provided for each activity. This is indeed flexible, and only a guide. Relevance, interest, outcomes are all wiser gauges towards guiding whether or not an activity will meet the needs of a group.

Some activities found here, like all learning opportunities, require a high level of trust building to fully appreciate the benefits that may unfold. Without trust, students may not be as willing to hold their giggles, silence, or honour the opportunities in such activities. Even after building trust and stamina, some days may hold impacts, while some may not. On those off days, perhaps moving to a laughing meditation could be your better option. Move with the needs of your group and they in turn will grow to trust in this process.

## PART 3: PLANTING SEEDS

### ACTIVITIES



The activities shared here flow in a circular nature. One activity does not lead to another, rather each supports and builds on each other. Removing sequence offers a gift of flexibility as educators support the relevant needs of their learners in any given moment.

It is always appropriate to acknowledge that you are all standing on the traditional territory of your local First People's before beginning each activity.

Spaces are a key element to the application of this resource. The spaces we engage in will be whatever is accessible to you. Beauty and wildness will be found where you look for it. Whether you teach in urban environments or rural, find a space or a few spaces that feel right. It does not need to be far, and accessibility means you will be out more. I think back to my own first teaching assignment, in an inner-city school. Here, we would meet on a little hill on the edge of our playing field in an otherwise busy location near an intersection where traffic was a constant. On this hill was one maple tree. We named it Max. My class and I knew this tree well, and it became our sacred space. Insects and dandelions lived under it, while clouds drifted over it. It was perfect.



"THE CRISIS (OF SUSTAINABILITY) CANNOT BE SOLVED BY THE SAME KIND OF EDUCATION THAT HAS HELPED CREATE THE PROBLEMS."

~ DAVID ORR





## BEING TOGETHER - WOLF



### MINDFUL LISTENING



GRADES: K-12

TIME: 20 minutes

#### MATERIALS:

- Chime

#### CURRICULUM CONNECTION:

- Communication (CC)
- Positive personal & cultural identity (CC)
- Personal awareness and responsibility (CC)
- Social Responsibility (CC)
- Confidence develops through the process of self-discovery (Career Ed. k-4)
- Effective collaboration relies on clear, respectful communication (Career Ed. k-4)
- Leadership requires listening to and respecting the ideas of others (Career Ed. 4-7)
- The value of work in our lives communities, and society can be viewed from diverse perspectives (Career Ed. 8-9)
- Engaging in networks and reciprocal relationships can guide and broaden career-life awareness and options (Career Ed 10-12)
- Language shapes ideas and influences others (English Studies 10-12)

#### ACTIVITY:

~ This activity acts as a great reminder for all of us, as we engage actively in a listener's role. Move to a quiet space outdoors. This could be a corner of your field, a nearby wooded area, or other accessible location. Share an example before moving into partners.

#### How:

- Offer an open-ended topic relevant to your group and outcome goals. Topics could surround special play spaces, relationships, or interests.
- Have a partner sit facing you. They will share for 2 minutes on anything relevant to the topic. Your role is to actively listen, showing eye contact, saying nothing, engaging with your body.
- After a signal of 2 minutes, you will now briefly re-cap to state back to your volunteer what you just heard. Your volunteer now has the opportunity to correct any miscommunications in what you repeated back.
- Now it is your turn to share for 2 minutes. After the chime, your partner shares back what they heard you say. You make any corrections.
- Put learners into partners. Have partners sit facing one another. Establish a chime sound for transitions. Partners choose who will share first. Partner 1 shares for 5 minutes. Chime sounds.
- Partner 2 shares back for 1 minute. Partner 1 makes any corrections. Partners switch.
- Debrief the power of active, or mindful listening as a skill to resolve conflict or discuss disagreements. Discuss why this activity is called Mindful Listening. Where is our complete focus during the activity?

#### Adaptations & Notes:

- For young children, if stillness is a challenge, talking time can be altered to meet needs. Following the mindful listening could come "listening with your bodies" where children could move like creatures and imitate movements using the same sequence.
- For older learners, highlight the significance of creating a failure free zone (non-judging zone), where student feel safe to share openly without criticism. If appropriate, chose emotional or provocative topics to engage through.

## STORY TELLING



GRADES: K-12 (Ideally K-6)

TIME: 10 to 20 minutes

MATERIALS: None

- Choose a book from FNEESC database of authentic First Peoples texts (see reference section)
- Use seasonally relevant story such as those by Messner & Neal or Gear (see reference section)

### CURRICULUM CONNECTION:

- Communication (CC)
- Positive personal & cultural identity (CC)
- Personal awareness and responsibility (CC)
- Social Responsibility (CC)
- Language and story can be a source of creativity and joy (English L.A. K-9)
- Exploring stories ... helps us understand ourselves and make connections to others and to the world (English L.A. K-9)
- Language shapes ideas and influences others (English L.A. 10-12)

### ACTIVITY:

~ Plan to describe a place-based walk to a destination your learners will recognize. Choose a local natural space and build a slow-moving, descriptive storyline.

~ Move students to a quiet space outdoors. This could be a corner of your school field, a nearby park, or other accessible location.

### How:

- Have learners make a circle, then lie on their backs, feet still forming a circle, heads outwards. Invite them to close their eyes or look upwards into the sky.
- Tell a story. The key is to share it slowly, with detail. Slowly move through the small details. Describe the sights, sounds, touch, taste, smells, and energy of the area in detail (or focus on only one area in greater detail). For support with this, slowing down a reading of a seasonally appropriate place-based story such as those in reference section by Messner and Neal works beautifully.

### Adaptations & Notes:

- For young children, it could be a creature such as an owl, deer, or slug slowly moving through the story. If stillness is difficult, learners can move like the creature and engage through movement in silence.
- For older learners, highlight the sensory connection and heighten descriptive language. Ensure relevance.
- If story-telling feels intimidating at first, begin by reading a slow-moving story, perhaps elaborating on the details works equally as well.
- This activity is tricky on very sunny days. Remind (young) learners not to look into direct sunlight as they gaze upwards.

# HUMAN DOING TO HUMAN BEING



GRADES: K-12

TIME: 15 minutes

## MATERIALS:

- Mats optional

## CURRICULUM CONNECTION:

- Creative thinking (CC)
- Positive personal & cultural identity (CC)
- Personal awareness and responsibility (CC)
- Social Responsibility (CC)
- Daily and seasonal changes affect all living things (Science K)
- Curiosity and wonder lead us to new discoveries about ourselves and the world around us (English L.A. 1-3)
- Understanding ourselves... helps us develop a balanced lifestyle (Physical and Health Ed 4-5)
- Health choices influence, and are influenced by, our physical, emotional, and mental well-being (Physical and Health Ed 6-10)
- Spending time outdoors allows us to develop an understanding of the natural environment, ourselves, and others (Outdoor Ed 11-12)

## ACTIVITY:

~ This visualization activity acts as a great reminder to slow it all down. Move students to a quiet space outdoors. This could be a corner of your school field, a nearby park, or other accessible location. Learners should sit comfortably on the ground.

## How:

- Invite learners to close their eyes and reflect on their day ahead. Think of the list of things they will do. Consider what will be fun and what challenges may come.
- Now...still with eyes closed, invite each learner to lie down.
- Invite them to imagine their favorite outdoor spot. They now need to completely move there in their minds. Try to feel or taste the wind or calm, smell the scents, hear the sounds, image what they would see there. Try to BE there.
- Invite them into 2 to 5 minutes of silence where they may really go there. They get to visit their special place.
- Follow this activity with a discussion. Learners can move to this place at any point in their day. Especially as they experience challenges, encourage them to reflect back on what it feels like to BE rather than DO.

## Adaptations & Notes:

- Mats or a jacket down can increase comfort.
- Kindergarten learners may benefit from a story first to support the visualization process. Encourage them to close their eyes as you read from any relevant book. Possibly choose a book from the FNEESC database of authentic First Peoples texts or using a seasonally relevant story such as those by Messner & Neal or Gear (see reference section).
- Discuss the mental and physical health benefits of this practice as a powerful calming tool to access at any time of strong feelings such as anger, frustration, overwhelm, etc.

## CIRCLES



GRADES: K-12

TIME: 20-40 minutes

### MATERIALS:

- Circle sharing stick, shell, or other natural item
- Sit-upons if desired

### CURRICULUM CONNECTION:

- Communication (CC)
- Critical Thinking (CC)
- Personal awareness and responsibility (CC)
- Positive personal & cultural identity (CC)
- Social Responsibility (CC)
- Effective collaboration relies on clear, respectful communication (Career Ed K-3)
- Developing healthy relationships helps us feel connected, supported, and valued (Physical and Health Ed 4-5)
- Safe environments depends on everyone following safety rules (Career Ed 6-7)
- Questioning what we hear read, and view contributes to our ability to be educated and engaged citizens (English LA 4-9)
- Engaging in networks and reciprocal relationships can guide and broaden career-life awareness and options (Career Ed 10-12)

### ACTIVITY:

~ This activity acts as a great way to begin or end a day, as we gain insight into where our learners mind's and focus is. Circles offer a safe closing ritual. It can also be used in resolving group challenges. Some classes, even schools, do this activity indoors as a daily check in. Move to a quiet space outdoors. This could be a corner of your field, a wooded area, or other accessible location. Invite students to sit down in a circle.

### How:

- Explain or remind the rules of circle sharing. Examples of rules could surround safety (no wrong sharing), listening with the whole body, being kind, keeping it short, what is shared is not to be repeated outside of the group, say "pass" if not sharing. Create your own as a group the first time running this activity.
- Introduce or acknowledge a form of sharing stick, rock, shell, or other natural item. Explain the item's significance and why it has been chosen. Thank it for its generosity in facilitating today.
- Invite a student to hold the item and begin their sharing. Have them pass to their left, allowing each to share.
- If engaging in a challenging topic or conflict resolution, allow the circle to extend beyond the initial round of sharing. Invite students to repeat back what they understood others to have said before responding (like in Mindful Listening, page 20). Give time for responses. Remind group of the circle rules if necessary.

### Adaptations & Notes:

- Highlight the significance of creating a failure free zone, where students feel safe to share openly without judgement. When appropriate, choose emotional or provocative topics to engage through group challenges.
- Sit-upons can be useful for damp ground. Sitting on backpacks, or a cloth bag makes a great sit-upon!
- The advantage of doing this activity outdoors is the connection that extends beyond our learners. They grow more accustomed to sensing weather patterns and gaining comfort in being in nature within a supportive community.
- First Nations have generously offered their wisdom of sharing circles. Circles are also used around the world in a variety of settings. They work to bring peace, facilitate tough dialogue and resolve conflict situations. Circles are a gift to offer our learners.
- They offer a powerful tool if respected, so respect for the rules (such as safety and confidentiality) must be established before beginning and then upheld.

## BEING CREATIVE - RAVEN



### MINDFUL NATURE ART



GRADES: K-12

TIME: 75 minutes

#### MATERIALS:

- Pictures of nature artists such as Andy Goldsworthy (weblink found in resources)
- Camera (optional)

#### CURRICULUM CONNECTION:

- Creative Thinking (CC)
- Personal awareness and responsibility (CC)
- Positive personal & cultural identity (CC)
- Engagement in the arts creates opportunities for inquiry through purposeful play... and risk taking (Arts Ed K-2)
- The mind and body work together when creating works of art (Arts Ed 3)
- Artists experiment in a variety of ways to discover new possibilities... perspectives (and expressions) (Arts Ed 4-6)
- Through art making, one's sense of identity and community continually evolves (Arts Ed 7)
- An artist's intention transforms materials into art (Arts Ed 10-12)

**ACTIVITY:**     

~ Move to a quiet space outdoors. The ideal location would be a place where learners would be able spread out and build their art. Places with fallen leaves, sticks, uneven ground or beaches are great locations. If ongoing, this location would require little disruption or take down from others. Ideally, this activity happens in one session.

~ Invite learners to sit down and share some examples by artists first.

#### How:

- Share a selection of pictures of the work of Andy Goldsworthy. The sky is the limit here in terms of connections. Your focus may be on artistic elements, specifically colour, seasons or natural resources. Discuss according to your goals and enjoy sharing these amazing examples of nature connection.
- Invite learners to individually consider what they would like to build. They could 'sketch' this in the dirt with their fingers, or on paper. Encourage imagination.
- Explain the guidelines: *Pick up rather than picking* (no picking living things), stay in silence, work alone, stay in your own area, establish signal.
- Invite learners to begin building. Give time enough for creativity but read your group.
- Once complete: Invite learners to go on a gallery tour. Move through each art piece as you like (together or freely). Make expressive artist-style comments about the works.

#### Adaptations & Notes:

- Nature connection can be deep here. This activity works beautifully from young children to adult learners. It should stay peaceful and calming. Underlying outcomes are rooted in place-based connection and shifting perceptions of working with what is available (local food links) rather than 'using up' (global economy links) nature.
- Educators could inspire or support this lesson by pre-placing selected resources such as willow sticks, rocks, tree cones, or bright leaves scattered about the area.
- Some teachers take pictures to display back at school.
- Discuss Zach Pine (American nature artist) in relation to his career as an environmental artist: <https://www.zpcreativewithnature.com>

## NATURE YOGA



GRADES: K-12

TIME: 30 minutes

### MATERIALS:

- Chime
- Mats optional if ground is wet or rocky

### CURRICULUM CONNECTION:

- Creative Thinking (CC)
- Positive personal & cultural identity (CC)
- Personal awareness and responsibility (CC)
- Our physical, emotional and mental health are interconnected (Physical and Health Ed k-3)
- Understanding ourselves and the various aspects of health helps us develop a balanced lifestyle (Physical and Health Ed 4-5)
- Health choices influence, and are influenced by, our physical, emotional, and mental well-being (Physical and Health Ed 6-10)
- Finding enjoyable recreational activities can motivate people to participate more regularly in physical activity (Physical and Health Ed 11-12)

### ACTIVITY:

~ This activity acts as a great reminder refresher for all of us, as we mindfully give attention to our bodies. Move to a quiet space outdoors. This could be a corner of your field, a nearby wooded area, or other outdoor location. Ideally this is a quiet, calming natural space. Some teachers enjoy beginning their days or weeks here.

#### How:

- Acknowledge the First People territory of the land you sit with today.
- Share an example before moving individual quiet spots: Move through a yoga sequence or flow such as a sun salutation.
- Invite students to move into their own personal spaces. Students should not be able to touch each other but could also have their own larger space to move in without visually seeing others close by. Either way, have students stand in mountain pose with their eyes close or looking up to the sky (or imaging being a tree).
- Begin with an appreciation of your surroundings such as the views, trees, and sky. Then ring the chime. Have everyone hold mountain pose until the ringing has stopped.

~From here, there are two options:

- 1) Slowly lead learners through a series of yoga postures. Hold postures for an appropriate length of time. Whether you're following a resource, yoga cards, or going from personal knowledge, support students less and allow free flow to their movements more. Avoid teaching the 'right' way (within safety considerations) and allow confidence to grow through their personal explorations of slow movement. This is where the creativity comes into play as yoga postures change to how a person is feeling in their moment. OR...
- 2) Learners slowly move through and hold poses on their own with the support of cue cards. There are many options out there, choose the format that most appeals to your learners.
- Complete the session with the same chime.

#### Adaptations & Notes:

- No need for mats! This allows full connection to the earth.
- Young learners enjoy moving and breathing like local creatures!
- For older learners, highlight the importance of creating a failure free zone, where student feel safe to move openly without judgement.
- If your families hold spiritual concerns about yoga practice, call it stretching and offer respectfully alternative wording.



## NATURE MANDALA



GRADES: K-12 (Ideally K-9)

TIME: 30-60 minutes

### MATERIALS:

- Pictures of Nature Mandalas (search google images for many examples)
- Chime

### CURRICULUM CONNECTION:

- Creative Thinking (CC)
- Personal awareness and responsibility (CC)
- Positive personal & cultural identity (CC)
- Engagement in the arts creates opportunities for inquiry through purposeful play... and risk taking (Arts Ed K-2)
- The mind and body work together when creating works of art (Arts Ed 3)
- Artists experiment in a variety of ways to discover new possibilities... perspectives (and expressions) (Arts Ed 4-6)
- Through art making, one's sense of identity and community continually evolves (Arts Ed 7)
- Individual and collective expression can be achieved through the arts (Arts Ed 8)
- Identity is explored, expressed, and impacted through arts experiences (Arts Ed 9)
- An artist's intention transforms materials into art (Arts Ed 10-12)

### ACTIVITY:

~ This activity draws our attention to circles and cycles. Move to a quiet space outdoors. This could be a corner of your field, a nearby wooded area, or other outdoor location. Ideally this is a quiet, peaceful, and calming natural space.

### How:

- Share a few examples before moving to individual quiet spots. Show pictures of nature mandalas that represent the use of different materials and colour. If relevant, share a brief history of the mandala. Share the plan: The chime will ring, hold silence. Find materials close by. Build a mandala. When chime rings, hold silence once again to end. Meet back at circle.
- Invite students to move into their own personal spaces. Students should move to their own space where they do not visually see others.
- Begin with an appreciation of your surroundings such as the views, trees, and sky. Then ring the chime.
- Have close their eyes until the sound has ended.
- Learners may now begin to find materials within a small area in their solitude location. They should not need to move very far. Encourage them to appreciate the tiny things close to them. Create mandalas.
- Complete the session with the chime.
- Students meet back at circle. Guide learners through a gallery tour if relevant for your group.

### Adaptations & Notes:

- For older learners, highlight the importance of creating a failure free, or non-judging zone, where students feel safe to engage without criticism.
- If your families hold spiritual concerns about the word mandala, re-name it to *circles* and offer respectful alternative wording throughout the activity.
- For younger students, this activity could be extended to creating fairy mazes or faces of creatures. This supports imagination.
- To extend this, a group could create a labyrinth or mandala with rocks or chalk that individuals could walk through. See Mindful Walking, page 30 for instruction on how to use a walking mandala, or labyrinth space.

## WEAVING WEBS



GRADES: K-12 (Ideally K-6)

TIME: 30 minutes

### MATERIALS:

- Blindfold per partnership
- Long lengths of yarn, one per student

### CURRICULUM CONNECTION:

- Communication (CC)
- Creative Thinking (CC)
- Critical Thinking (CC)
- Personal awareness and responsibility (CC)
- Positive personal & cultural identity (CC)
- Social Responsibility (CC)
- Daily and seasonal changes affect all living things (Science K)
- Curiosity and wonder lead us to new discoveries about ourselves and the world around us (English L.A. 1-3)
- Indigenous societies throughout the world value the well-being of the self, the land, spirits, and ancestors (Social Studies 3)
- Understanding ourselves... helps us develop a balanced lifestyle (Physical and Health Ed 4-5)
- Health choices influence, and are influenced by, our physical, emotional, and mental well-being (Physical and Health Ed 6-10)
- Spending time outdoors allows us to develop an understanding of the natural environment, ourselves, and others (Outdoor Ed 11-12)

### ACTIVITY:

~ Move to a quiet space outdoors. This could be a corner of your field, a nearby wooded area, or other outdoor location. Ideally this is a quiet, calm natural space.

#### How:

- Acknowledge the First People territory of the land you sit with today.
- Share an example before moving partners to quiet areas.
- Invite partners to move into their own spaces.
- Partners decide who will begin as the weaver or guide. Weavers put on blindfold.
- Guides lead the weaver, who unravels a length of yarn, moving to a special distinctive place, such a tree or stump. Guide uses gentle hands or words to direct.
- Weaver now sits at the special place, learning it with all senses other than sight (not eating, but tasting the air). They then, with less support from their guide, follow the yarn back to where they began.
- Remove the blindfold. The weaver tries to find their special place, with the help (if desired) from the yarn. Their guide helps after three attempts. The weaver explores the space once again.
- Partners switch roles.

#### Adaptations & Notes:

- Encourage trusting partnerships before beginning. This allows full connection to the earth as the weaver will connect with full focus rather than silliness.



## BEING CRITICAL - SALMON



### MOMENT MAPPING



GRADES: K-12 (Ideally K-6)

TIME: 30-60 minutes

#### MATERIALS:

- Class set of clip-boards (or books) to sketch on
- Paper
- Pencils

#### CURRICULUM CONNECTION:

- Critical Thinking (CC)
- Personal awareness and responsibility (CC)
- Positive personal & cultural identity (CC)
- Engagement in the arts creates opportunities for inquiry through purposeful play... and risk taking (Arts Ed K-2)
- The mind and body work together when creating works of art (Arts Ed 3)
- Artists experiment in a variety of ways to discover new possibilities... perspectives (and expressions) (Arts Ed 4-6)
- Through art making, one's sense of identity and community continually evolves (Arts Ed 7)
- Individual and collective expression can be achieved through the arts (Arts Ed 8)
- Identity is explored, expressed, and impacted through arts experiences (Arts Ed 9)
- An artist's intention transforms materials into art (Arts Ed 10-12)

**ACTIVITY:**     

~ Move to a quiet space outdoors. This could be any accessible outdoor location near your school that would be easy to return to. Ideally this is a quiet, calming natural space.

#### How:

- Gather together and explain that students will find a special spot that they need to be able to recognize in a month. Move into individual spots.
- Learners take a 'photo-sketch', sketching exactly what they see in their spot.
- Take a mindful moment here, using senses to connect to the space.
- Return and repeat this activity each month of the school year. This allows ongoing connection.
- Create a 'Moment Map' art project near the end of the year connecting all the sketches.
- Discuss and learn through the changes that happen in this place. Connect to seasons, colours, and weather patterns.

#### Adaptations & Notes:

- This activity is capable of many extensions. Connect to your projects and seasonal planning!

## CONNECT THE DOTS



GRADES: K-12

TIME: 10-30 minutes

### MATERIALS:

- Chime
- Mats are optional

### CURRICULUM CONNECTION:

- Critical Thinking (CC)
- Positive personal & cultural identity (CC)
- Personal awareness and responsibility (CC)
- Our physical, emotional and mental health are interconnected (Physical and Health Ed k-3)
- Understanding ourselves and the various aspects of health helps us develop a balanced lifestyle (Physical and Health Ed 4-5)
- Health choices influence, and are influenced by, our physical, emotional, and mental well-being (Physical and Health Ed 6-10)
- Finding enjoyable recreational activities can motivate people to participate more regularly in physical activity (Physical and Health Ed 11-12)

### ACTIVITY:

~ This is an adapted body scan meditation activity that acts as a great reminder to give attention to our bodies. Move to a quiet space outdoors. This could be a corner of your field, a nearby wooded area, or other outdoor location. Ideally this is a quiet, calming natural space. Explain the activity before inviting learners to move to individual quiet spots.

### How:

- Learners may place a jacket or mat down and lay down on their backs. They then listen to your voice and follow along with the body scan meditation. Questions may be asked but remind students to answer them in their minds.
- Invite students to move into their own personal spaces. Students should not be able to touch each other but could also have their own larger space to move in without visually seeing others close by. Have students lay with their eyes close or looking up to the sky.
- Begin with an appreciation of your surroundings such as the views, trees, and sky. Then ring a chime. When the ringing has stopped, begin connecting to dots.
- From here, narrate a connect the dots body scan (age appropriate):

~Begin by focusing on your toes. What are they feeling like? Using your mind, imagine colouring a dot on each toe (explain that they don't move, and how to colour dots with only with their mind). Move through each toe, colouring dots on each. Move up to the top and bottom of your foot, how does it feel? Colour dots there. Now move to the ankle, up the leg, hips, belly, back, ribs, and so on. Have learners imagine colouring dots at each point of their bodies, checking in at each dot to see how that area is feeling. Complete with the face, cheeks, lips, eyebrows, hair, etc., and top of head.

- Move slowly through this guided scan. Once complete, invite students to begin back at their first toe, simply connecting the dots throughout their whole body in silence (allow around 5 minutes for this, 2 minutes for young children).
- Complete the session with the same chime.

### Adaptations & Notes:

- If your families hold spiritual concerns about the word meditation, re-name it as *body connection* and offer respectful wording through the activity.

## MINDFUL WALKING



GRADES: K-12

TIME: 30-60 minutes

MATERIALS:

- Chime

CURRICULUM CONNECTION:

- Critical Thinking (CC)
- Positive personal & cultural identity (CC)
- Personal awareness and responsibility (CC)
- Our physical, emotional and mental health are interconnected (Physical and Health Ed k-3)
- Understanding ourselves and the various aspects of health helps us develop a balanced lifestyle (Physical and Health Ed 4-5)
- Health choices influence, and are influenced by, our physical, emotional, and mental well-being (Physical and Health Ed 6-10)
- Finding enjoyable recreational activities can motivate people to participate more regularly in physical activity (Physical and Health Ed 11-12)

**ACTIVITY:**       

~ Move to a quiet space outdoors. This is ideally a nearby wooded area, or other outdoor location that has opportunity for walking. Ideally this is a quiet, calming natural space. Explain the activity.

**How:**

- Learners will move individually through a space in silence. From here, there are two options:

~Invite learners find their own space to begin. Students have their own larger space to move through without visually seeing others close by. Invite them to begin walking slowly in silence after hearing the chime. Explain beforehand that their movements should be slow, focusing on how their feet and bodies feel. If possible, they may want to move barefoot. Have them try opening and closing their eyes. Try stopping to smell, stand, and then move again.

OR

~ Invite learners to create a line where there are two-meter gaps between each person. Begin standing in silence, holding an appreciation of the surroundings such as the views, trees, and sky. Have an adult lead, while someone 'releases' each student slowly, with space between. Walk in silence reflecting on your body, or nature, stopping at last to gather in silence.

~Discuss the connection between human silence, movement, and natural connection. What happens around us and inside us when we are silently walking?

**Adaptations & Notes:**

- This activity naturally flows into a solitude spot if time allows.
- For older learners, highlight the importance of creating a non-judgmental zone, where student feel safe to move openly without worry of who is around them.
- It can be useful to support this activity with explanation for older students so they may recognize the opportunity before them and advantages of holding the silence.

## BALANCE



GRADES: K-12 (Ideally K-6)

TIME: 30 minutes

MATERIALS: None

### CURRICULUM CONNECTION:

- Critical Thinking (CC)
- Personal awareness and responsibility (CC)
- Positive personal & cultural identity (CC)
- Engagement in the arts creates opportunities for inquiry through purposeful play... and risk taking (Arts Ed K-2)
- The mind and body work together when creating works of art (Arts Ed 3)
- Artists experiment in a variety of ways to discover new possibilities... perspectives (and expressions) (Arts Ed 4-6)
- Through art making, one's sense of identity and community continually evolves (Arts Ed 7)
- Individual and collective expression can be achieved through the arts (Arts Ed 8)
- Identity is explored, expressed, and impacted through arts experiences (Arts Ed 9)
- An artist's intention transforms materials into art (Arts Ed 10-12)

### ACTIVITY:

~ This activity is a meditation activity that supports focus. Move to a quiet space outdoors. This could be a nearby wooded area, beach, or other outdoor location. Ideally this is a quiet and calming natural space. Share an example before moving individual quiet spots.

### How:

- Collect stones and sticks. Layer them vertically, building a tower. Emphasize slower and steadier the building.
- Think and focus on building this tower once, without it collapsing. What properties and material shapes will we look for?
- Invite learners to move into their own personal spaces. Students should have their own area without visually seeing others close by. Learner can begin collecting and building.
- Complete the session with your signal that draws learners in.

### Adaptations & Notes:

- Frame this in the similar way as you would the Solitude Spot following this activity, on page 21.
- Back inside, students could explore the work and rock balancing of European artist Pascal Fiechter at: <http://www.gravitymeditation.com/index.html>

## BEING REFLECTIVE - BEAR



### SOLO SPOTS



GRADES: K-12

TIME: 10-60 minutes

MATERIALS:

- Chime

CURRICULUM CONNECTION:

- Creative Thinking (CC)
- Personal awareness and responsibility (CC)
- Positive personal & cultural identity (CC)
- Social Responsibility (CC)
- Daily and seasonal changes affect all living things (Science K)
- Curiosity and wonder lead us to new discoveries about ourselves and the world around us (English L.A. 1-3)
- Indigenous societies throughout the world value the well-being of the self, the land, spirits, and ancestors (Social Studies 3)
- Understanding ourselves... helps us develop a balanced lifestyle (Physical and Health Ed 4-5)
- Health choices influence, and are influenced by, our physical, emotional, and mental well-being (Physical and Health Ed 6-10)
- Spending time outdoors allows us to develop an understanding of the natural environment, ourselves, and others (Outdoor Ed 11-12)

**ACTIVITY:**

~ This activity is an adapted sitting meditation, also known as a Sit Spot. Move to a quiet space outdoors, a nearby wooded area, beach or other outdoor location. Ideally this is a quiet, calming natural space with natural sounds. Share an example before moving individual quiet spots.

**How:**

- Acknowledge the First People territory of the land.
- Follow the S's: Sit, Silence, be Still, Solitude (away from others and distractions. Establish boundaries), be Safe (choose a safe location), no Snacking (not a time for this), Scribble (optional half way through to journal or sketch). Explain each S. Establish a call back signal.
- Invite students to move into their own personal spaces, spread out and get comfortable.
- Once everyone is seated and established, ring a chime.
- From here, there are two options:

~Allow learners to immerse themselves in their experience and call them back in an appropriate time for your group.

OR

~Half through the solitude spot, ring again to invite them to switch to journaling or sketching. Alternately, you could have them switch from big picture (sitting up looking at views) to small picture (laying on belly and appreciating the tiny world at ground level).

- Ensure the clear plan you choose before beginning your route so that learners understand what each signal means. Complete the session with a chime sound.

**Adaptations & Notes:**

- Have them sit or lay down, not stand. The connected goes deeper.
- With practice, kindergartens can handle 5 to 10 minutes, and older learners can handle any length of time feels appropriate.
- It is wonderful to return to the same place for a monthly re-visit solitude spot, creating a special place.
- Young, Haas, & McGown (References, page 51) offer deeper guidance in their Sit Spot description in their book, page 292.

## SKY BREATHING



GRADES: K-12 (Ideally K-6)

TIME: 5 minutes

### MATERIALS:

- Chime

### CURRICULUM CONNECTION:

- Creative Thinking (CC)
- Personal awareness and responsibility (CC)
- Positive personal & cultural identity (CC)
- Social Responsibility (CC)
- Daily and seasonal changes affect all living things (Science K)
- Curiosity and wonder lead us to new discoveries about ourselves and the world around us (English L.A. 1-3)
- Indigenous societies throughout the world value the well-being of the self, the land, spirits, and ancestors (Social Studies 3)
- Understanding ourselves... helps us develop a balanced lifestyle (Physical and Health Ed 4-5)
- Health choices influence, and are influenced by, our physical, emotional, and mental well-being (Physical and Health Ed 6-10)
- Spending time outdoors allows us to develop an understanding of the natural environment, ourselves, and others (Outdoor Ed 11-12)

### ACTIVITY:

~ This activity acts as a great reminder to move to breath in times of seeking calm. Move to a quiet space outdoors, ideally a quiet calming natural space. Some teachers are finding great benefit to beginning or ending their days with this activity.

#### How:

- Acknowledge the First People territory of the land you sit with today.
- Learners can stand in a group, spread out so that their hands are not touching. Alternately, invite students to move into their own personal spaces where they are not looking at another human.
- Share an example: Move through the breathing you choose to do in this session.
- Ring a chime. Begin a breathing exercise from the list below:

~ **Five-finger breathing:** hold up one hand. Run a finger over each digit. As you breathe deeply in, you go up the digit, and down as you go down the digit.

~ **Balloon breathing:** inhale 3 times as you gradually raise arms and then releasing breath slowly.

~ **Candle breathing:** imagine holding a candle. Take a long breath in, slowly blow out the candle without blowing it out. Repeat.

~ **Waterfall breathing** breath in, when releasing have arms go in front of body like a waterfall.

~ **Volcano breathing** arms move up and out from the middle overhead.

~ **Bunny Breathing:** Sit tall like a bunny. Breath in quick short breaths (sniff, sniff, sniff, sniff). Place hands on belly. Repeat and notice.

~ **Chime breathing:** identify how many chimes they need. Breathe in and out with the sound of the chime.

- Complete the session with a chime sound.

#### Adaptations & Notes:

- This is a wonderful activity to extend, moving through each of the exercises.
- Many teachers begin their day with one breathing exercise. Their learners can then turn to this practice in times of need.
- This activity extends a solitude spot or walking meditation nicely.
- A quick search will offer up many advanced breathing exercises useful on a regular basis for secondary students. Chime breathing is a great place to start.

## MINDFUL MOMENT



GRADES: K-12 (Ideally K-9)

TIME: 30-60 minutes

### MATERIALS:

- 1 hula hoop per student
- Toothpicks optional

### CURRICULUM CONNECTION:

- Critical Thinking (CC)
- Personal awareness and responsibility (CC)
- Positive personal & cultural identity (CC)
- Social Responsibility (CC)
- Daily and seasonal changes affect all living things (Science K)
- Curiosity and wonder lead us to new discoveries about ourselves and the world around us (English L.A. 1-3)
- Understanding ourselves... helps us develop a balanced lifestyle (Physical and Health Ed 4-5)
- Health choices influence, and are influenced by, our physical, emotional, and mental well-being (Physical and Health Ed 6-10)
- Spending time outdoors allows us to develop an understanding of the natural environment, ourselves, and others (Outdoor Ed 11-12)

### ACTIVITY:



~ This activity acts as a great reminder of the tiny world at our feet. Move to a quiet space outdoors. This is ideally a nearby wooded area, or quiet natural space. Begin with an example.

### How:

- Hand out one hula hoop per student. Invite learners to move to a space that is all their own. They will place their hula hoop down on an interesting area of ground, move down onto their belly into observation position. It is ideal to have an area of ground that is interesting to them, such as plants, a hole, puddle, etc.
- Students will enjoy a mindful moment in this position, observing for learning. Encourage them beforehand to observe deeply during this time, memorizing and focusing on each detail inside their hoop.
- Explain beforehand that their minds should only focus on what they see in this tiny world. If their minds wander gently bring back focus to the present moment here in this hoop.
- They may gently dig around, lifting rocks, or just watch, just not harm anything.
- Call students in and share findings in a circle.
- This activity could be extended to include sketching from memory the things they noticed.

### Adaptations & Notes:

- This could easily be adapted to meet science curricular connections at a variety of ages.
- Students could mark specific locations with toothpicks, highlighting certain point of interest as if it is a miniature world.



## SELF-KINDNESS



GRADES: K-12

TIME: 10 minutes

### MATERIALS:

- Chime

### CURRICULUM CONNECTION:

- Communication (CC)
- Personal awareness and responsibility (CC)
- Positive personal & cultural identity (CC)
- Daily and seasonal changes affect all living things (Science K)
- Curiosity and wonder lead us to new discoveries about ourselves and the world around us (English L.A. 1-3)
- Understanding ourselves... helps us develop a balanced lifestyle (Physical and Health Ed 4-5)
- Health choices influence, and are influenced by, our physical, emotional, and mental well-being (Physical and Health Ed 6-10)
- Spending time outdoors allows us to develop an understanding of the natural environment, ourselves, and others (Outdoor Ed 11-12)

### ACTIVITY:



~ This activity acts as a great reminder and focus on self-esteem, self-worth, and personal confidence. Move to a quiet space outdoors, ideally this is a quiet, calming natural space. Some teachers are finding great benefit in beginning their days with this activity paired with breathing exercises.

### How:

- Share an example before moving to individual quiet spots: Move through the meditation below, whispering the phrase 3 times to yourself and then follow with silence so that it sinks in.
- Invite students to move into their own personal spaces. Students should not be able to touch each other but could also have their own larger space to move in without visually seeing others close by. Either way, have students sit down on their own.
- Then ring a chime.
- Students think or whisper the words to themselves 3 times, then sit in silence, visualizing them. For young children, learners could follow by drawing what this meditation looks like.
- “I am safe, I am happy, I am healthy, I like myself.” Three times.
- Complete the session with the same chime.

### Adaptations & Notes:

- The original words for this meditation are: May I be safe, May I be happy, May I be healthy, May I live with ease. These have been adapted with the vision meeting the needs of children but can be further adapted to meet goals such as self-worth and self-esteem.
- For older learners, highlight the importance of creating a judgement free zone, where students feel safe.
- If families hold spiritual concerns about meditations, re-name it visualization and offer respectfully alternative wording through the activity. Share the curriculum connections to establish trust.





## BEING RESPONSIBLE - BEAVER

### SPECIAL TREE



GRADES: K-12 (Ideally K-6)

TIME: 30-60 minutes

#### MATERIALS:

- String
- Paper, Pencils, & Clipboards

#### CURRICULUM CONNECTION:

- Creative Thinking (CC)
- Personal awareness and responsibility (CC)
- Positive personal & cultural identity (CC)
- Social & Nature Responsibility (CC)
- Engagement in the arts creates opportunities for inquiry through purposeful play... and risk taking (Arts Ed K-2)
- The mind and body work together when creating works of art (Arts Ed 3)
- Artists experiment in a variety of ways to discover new possibilities... perspectives (and expressions) (Arts Ed 4-6)
- Through art making, one's sense of identity and community continually evolves (Arts Ed 7)
- Individual and collective expression can be achieved through the arts (Arts Ed 8)
- Identity is explored, expressed, and impacted through arts experiences (Arts Ed 9)
- An artist's intention transforms materials into art (Arts Ed 10-12)

#### ACTIVITY:

~ This activity encourages focus for connection. Move to a quiet space outdoors. Ideally this is a quiet and calming natural space.

~ Share an example before moving into partners and into quiet spots. Have students begin by being a tree. Identify with it, feel, and imagine being rooted and stretching outwards.

#### How:

- Form partners. Invite partners to move to their own individual area. Here, they will connect their fingers to create a frame. This frame will act as a camera frame. From here, one partner blindfolds the other, and leads them safely to a tree. Move their hand frames in front of their faces. Have them open their eyes to 'capture' pictures of that tree. Switch. Reflect on these images or follow with sketching or a sitting meditation under the tree (Solitude Spot, page 32).
- Supply partners with the Tree Book by Parish & Thomson (see reference section) to learn more about their tree.
- Next, individually students create a rectangle frame out of bits of string and sticks from the tree that they find. Students look through their frames at a variety of perspectives. Individually they can choose a view or perspective of the tree to capture (one leaf, bark, looking up for example), placing their frame they focus on one place they want to highlight as special to their perspective. Leave the frames where they are.
- To follow, have a gallery tour to explore the framed 'photos'.
- Gather frames and sketch the image. This image can be placed in the frame for presentation back in the school or homes.
- Complete the session with a discussion on the meaning of capturing memories. Is a phone or camera always necessary or should our mind do some of the work to save these memories?

#### Adaptations & Notes:

- Read your group, they may benefit from partners or individual time for a shorter lesson.
- This activity opens up great conversations around Leave No Trace practices.
- This activity easily connects to a greater Place-based project.

## CONNECT TO PROTECT



GRADES: K-12

TIME: 10 minutes

### MATERIALS:

- Chime

### CURRICULUM CONNECTION:

- Communication (CC)
- Positive personal & cultural identity (CC)
- Personal awareness and responsibility (CC)
- Social & Nature Responsibility (CC)
- Daily & seasonal changes affect all living things (Science K)
- Curiosity and wonder lead us to new discoveries about ourselves and the world around us (English L.A. 1-3)
- Indigenous societies throughout the world value the well-being of the self, the land, spirits, and ancestors (Social Studies 3)
- Understanding ourselves... helps us develop a balanced lifestyle (Physical and Health Ed 4-5)
- Health choices influence, and are influenced by, our physical, emotional, and mental well-being (Physical and Health Ed 6-10)
- Spending time outdoors allows us to develop an understanding of the natural environment, ourselves, and others (Outdoor Ed 11-12)

### ACTIVITY:

~ This activity offers focus on nature, creatures, and fear. Move to a quiet space outdoors, ideally this is a quiet, calming natural space.

~ Share an example before moving individual quiet spots.

### How:

- Acknowledge the First People territory of the land.
- Move through the meditation below, whispering the phrase to yourself and then follow with silence to visualize. This activity offers open engagement with nature connection (connecting to local species, endangered species). It also allows learners to engage with the part of nature that may be difficult for them (such as an insect or thunder) while reinforcing interconnection to all.
- Invite students to move into their own personal spaces. Students should not be able to touch each other but could also have their own larger space to move in without visually seeing others close by. Either way, have students sit down on their own.
- Then ring a chime.
- Students think or whisper the words to themselves, then sit in silence, visualizing them. This may need to be guided, and can be by posting the words, or guiding the speaking for young children. Young learners could follow by drawing what this meditation looks like. At each ring, switch to the next focus.

~ **“You are safe, You are happy, You are healthy, I like \_\_\_\_ about you.”** *Three times*, focusing on three different things (1<sup>st</sup>: Something you love from nature, something you fear, and anything you choose).

~ End with: **“We are safe, We are happy, We are healthy, I love \_\_\_\_ about us.”** *Three times*. Complete the session with the chime.

- Debrief by discussing why we may want to protect what we are connected to.

### Adaptations & Notes:

- The original words for this meditation are: May we be safe, May we be happy, May we be healthy, May we live with ease. These have been adapted with the vision meeting the needs of children and youth, but can be further adapted to meet goals such as nature connection and interconnection.
- If families hold spiritual concerns about meditations, re-name it visualization and offer respectfully alternative wording through the activity. Share the curriculum connections to establish trust.

## BUILDING WORLDS



GRADES: K-12 (Ideally K-6)

TIME: 45 minutes

### MATERIALS:

- Tree Book by Parish
- Possible Story book such as Over and under the snow by Messner & Neal

### CURRICULUM CONNECTION:

- Creative Thinking (CC)
- Personal awareness and responsibility (CC)
- Positive personal & cultural identity (CC)
- Social & Nature Responsibility (CC)
- Engagement in the arts creates opportunities for inquiry through purposeful play... and risk taking (Arts Ed K-2)
- The mind and body work together when creating works of art (Arts Ed 3)
- Artists experiment in a variety of ways to discover new possibilities... perspectives (and expressions) (Arts Ed 4-6)
- Through art making, one's sense of identity and community continually evolves (Arts Ed 7)
- An artist's intention transforms materials into art (Arts Ed 10-12)

### ACTIVITY:



~ This activity is a great way to connect mindful focus to imagination in young learners. Move to a quiet space outdoors. This is ideally a nearby wooded area, beach or other outdoor location with natural materials. This calming natural space could be one where the building would go untouched by other humans and revisited by your group.

~ Share an example before moving individual quiet spots.

### How:

- Rules should be discussed and surround: Pick up, don't pick (no picking living things such as moss, leaves from trees), stay close to your area, call signal, no talking to others, etc.
- Possibly read Over and under the snow by Messner & Neal
- Teach several amazing facts about the plants or trees around you. See Tree Book by Parish, in Resource section for support.
- Invite students to move into their own personal spaces. Here, they will gather natural materials. These materials will be used to build a miniature world, a beaver den or alternately, a fairy house.
- Give learners as much time to build as they can handle. Creativity takes time!
- Complete the session by calling students in and perhaps doing a tour of their worlds or homes together, presenting the works.

### Adaptations & Notes:

- This activity connects beautifully to curriculum surrounding needs and wants. Have students consider what needs should be met through their building.
- This area could be a place to return to. Discuss how it is totally normal that their building projects may have changed due to others playing there, wind, creatures, or even fairies using the space.
- This is a wonderful way to 'structure' unstructured mindful play.
- This activity could be used in a secondary context for a quiet curricular time. For example, it could be accessed to build maps or as a way to visualize global issues in social studies.

## MINDFUL EATING



GRADES: K-12

TIME: 30 minutes

### MATERIALS:

- Local berries or raisins in bowl
- Lunches
- Chime

### CURRICULUM CONNECTION:

- Critical Thinking (CC)
- Positive personal & cultural identity (CC)
- Personal awareness and responsibility (CC)
- Social & Nature Responsibility (CC)
- Curiosity and wonder lead us to new discoveries about ourselves and the world around us (English L.A. k-3)
- Indigenous societies throughout the world value the well-being of the self, the land, spirits, and ancestors (Social Studies 3)
- Understanding ourselves... helps us develop a balanced lifestyle (Physical and Health Ed 4-5)
- Health choices influence, and are influenced by, our physical, emotional, and mental well-being (Physical and Health Ed 6-10)
- Spending time outdoors allows us to develop an understanding of the natural environment, ourselves, and others (Outdoor Ed 11-12)

### ACTIVITY:

~ This activity surrounds sensory focus. Move to a quiet space outdoors. This could be a corner of your field, a nearby wooded area, or other outdoor location. Ideally this is a quiet, calming natural space.

~Explain how (and perhaps why) this activity will unfold.

#### How:

- Sit group in a silent circle.
- Invite students to choose a berry or raisin from a bowl. Explain that they can hold and explore it, but not eat it...yet.
- Guide learners to explore this food with all of their senses: sight, sound, taste with a lick, smell, touch, energy. Now invite them to put it in their mouths and move it around, really tasting. Finally, encourage them to chew as much as they can, tasting slowly, before swallowing.

~Explain the second activity before moving into solo spaces.

- Invite students to move into their own personal spaces. Students should not be able to touch each other but could also have their own larger space to move in without visually seeing others close by.
- Begin with an appreciation of your surroundings such as the views, trees, and sky. Then ring a chime. Have everyone pull out their lunches and have a meal, exploring and appreciating each food. Mindfully and slowly, everyone eats in silence, perhaps grateful, reflective, or just appreciating.
- Complete the session with the chime to gather.
- Discuss the food relevant to outcomes. For example, where the food came from, packaging, processing, etc.

#### Adaptations & Notes:

- Offer students the background reason for this activity can support trust. Food often come from far away, brought to us through many resources, and yet is often un-noticed, or under-recognized.
- Discussion to follow may surround topics such as local food, food waste, zero-packaging stores, food banks, ecological footprints, etc. depend on the age and outcomes.

## BEING CONNECTED - ORCA



### SPECIAL PLACE BUDDY ROCKS



GRADES: K-12 (Ideally K-3)

TIME: 30 minutes

#### MATERIALS:

- Hat or bucket

#### CURRICULUM CONNECTION:

- Creative Thinking (CC)
- Personal awareness and responsibility (CC)
- Positive personal & cultural identity (CC)
- Social Responsibility (CC)
- Daily and seasonal changes affect all living things (Science K)
- Curiosity and wonder lead us to new discoveries about ourselves and the world around us (English L.A. 1-3)
- Understanding ourselves... helps us develop a balanced lifestyle (Physical and Health Ed 4-5)
- Health choices influence, and are influenced by, our physical, emotional, and mental well-being (Physical and Health Ed 6-10)
- Spending time outdoors allows us to develop an understanding of the natural environment, ourselves, and others (Outdoor Ed 11-12)

#### ACTIVITY:

~ Move to a quiet space outdoors. This could be a corner of your field, a nearby wooded area, or other outdoor location. Ideally this is a quiet, calming natural space.

~ Share an example before moving individual quiet spots.

#### How:

- Invite each student to gather one pebble or rock around the size of their thumb. Encourage students to notice shape and colour.
- Invite students to get to know their rock. Move to a quiet location on their own. Learners should choose a space that is special to them to sit and explore their rock. They should explore with all senses, ideally with their eyes closed.
- Call in group and ask for the rocks. Collect all rocks into a hat.
- Seat group in a circle.
- Mix the rocks. Place each rock in the circle. Learners need to take identify and pick up their rock.
- Discuss how learners identified and found their rock. What did they look for?
- Have students place their special rocks in their special places, to return to in the future.

#### Adaptations & Notes:

- This special place could ideally be the same that students use for solitude spots and other activities of nature connection. Having a special place connects learners to place and all of the wonderful benefits of place-based learning!

## SOUNDSCAPE



GRADES: K-12 (Ideally K-6)

TIME: 30 minutes

### MATERIALS:

- Paper
- Pencils
- Clipboard or hard book for writing on

### CURRICULUM CONNECTION:

- Creative Thinking (CC)
- Critical Thinking (CC)
- Personal awareness and responsibility (CC)
- Positive personal & cultural identity (CC)
- Daily and seasonal changes affect all living things (Science K)
- Curiosity and wonder lead us to new discoveries about ourselves and the world around us (English L.A. 1-3)
- Understanding ourselves... helps us develop a balanced lifestyle (Physical and Health Ed 4-5)
- Health choices influence, and are influenced by, our physical, emotional, and mental well-being (Physical and Health Ed 6-10)
- Spending time outdoors allows us to develop an understanding of the natural environment, ourselves, and others (Outdoor Ed 11-12)

### ACTIVITY:

~ This activity connects beautifully to mapping and place-based learning. Move to a quiet space outdoors. This could be a corner of your field, a nearby wooded area, or other outdoor location. Ideally this is a quiet, calming natural space.

~ Share an example before moving individual quiet spots.

### How:

- Invite students to move into their own personal spaces. Students should not be able to touch each other but could also have their own larger space to move in without visually seeing others close by.
- Begin with an appreciation of your surroundings such as the views, trees, and sky. Now tune in to what is heard, closing eyes.
- Learners sketch out a 'map' of everything that they hear. Paying attention to direction, sound identification, and focusing on the variety and layers of sounds. Record all sounds, natural and humans made.
- Complete the session with by ringing a chime to gather.
- Share findings as a group.

### Adaptations & Notes:

- This activity is wonderful to do in a variety of locations, and explores mapping in a mindful, calming way.
- This activity connects well to bird watching and identification.



## COMMUNITY KINDNESS



GRADES: K-12

TIME: 20 minutes

MATERIALS:

- Chime

CURRICULUM CONNECTION:

- Communication (CC)
- Positive personal & cultural identity (CC)
- Personal awareness and responsibility (CC)
- Social Responsibility (CC)
- Daily and seasonal changes affect all living things (Science K)
- Curiosity and wonder lead us to new discoveries about ourselves and the world around us (English L.A. 1-3)
- Indigenous societies throughout the world value the well-being of the self, the land, spirits, and ancestors (Social Studies 3)
- Understanding ourselves... helps us develop a balanced lifestyle (Physical and Health Ed 4-5)
- Health choices influence, and are influenced by, our physical, emotional, and mental well-being (Physical and Health Ed 6-10)
- Spending time outdoors allows us to develop an understanding of the natural environment, ourselves, and others (Outdoor Ed 11-12)

### ACTIVITY:



~ This activity focuses on others. Move to a quiet space outdoors, ideally this is a quiet, calming natural space.

~ Share an example before moving individual quiet spots.

#### How:

- Acknowledge the First People territory.
- Move through the meditation below, whispering the phrase to yourself and then follow with silence to visualize. This activity offers open engagement with community connection (connecting to special people, difficult relationships). It also allows learners to engage with the part of their community that may be difficult for them (such as a challenging classmate) while reinforcing interconnection to all.
- Invite students to move into their own personal spaces. Students should not be able to touch each other but could also have their own larger space to move in without visually seeing others close by. Either way, have students sit down on their own.
- Ring a chime.
- Students think or whisper the words to themselves, then sit in silence, visualizing them. This may need to be guided, and can be by posting the words, or guiding the speaking for young children. Young learners could follow by drawing what this meditation looks like. At each ring, switch to the next focus.

~ **“You are safe, You are happy, You are healthy, I like \_\_\_\_ about you.”** *Three times*, focusing on three different things (1<sup>st</sup>: Someone you love, someone you know a little, someone you are frustrated by).

End with:

~ **“We are safe, We are happy, We are healthy, I love \_\_\_\_ about us.”** *Three times*. Complete the session with the chime.

#### Adaptations & Notes:

- The original words for this meditation are: May we be safe, May we be happy, May we be healthy, May we live with ease. These have been adapted with the vision meeting the needs of children, but can be further adapted to meet goals such as nature and community interconnection.
- If families hold spiritual concerns about meditations, re-name it visualization and offer respectfully alternative wording through the activity. Share the curriculum connections to develop trust.

## FOREST BATHING



GRADES: K-12

TIME: 1-5 hours

### MATERIALS:

- Relevant cue cards and materials to support the activities you choose

### CURRICULUM CONNECTION:

- Communication (CC)
- Positive personal & cultural identity (CC)
- Personal awareness and responsibility (CC)
- Social Responsibility (CC)
- Daily and seasonal changes affect all living things (Science K)
- Curiosity and wonder lead us to new discoveries about ourselves and the world around us (English L.A. 1-3)
- Indigenous societies throughout the world value the well-being of the self, the land, spirits, and ancestors (Social Studies 3)
- Understanding ourselves... helps us develop a balanced lifestyle (Physical and Health Ed 4-5)
- Health choices influence, and are influenced by, our physical, emotional, and mental well-being (Physical and Health Ed 6-10)
- Spending time outdoors allows us to develop an understanding of the natural environment, ourselves, and others (Outdoor Ed 11-12)

### ACTIVITY:

~ This activity offers a deeper connection, incorporating any of the above on a forest bathing experiential adventure. This is a great activity for a chosen field trip location or for a n outdoor adventure on trails. Ideally this is a calming natural space, immersed in nature rather than on the edge of human impact. The purpose of forest time is to enhance health, wellness and happiness so staying with these goals and adapting as necessary is key.

~ A gentle walk will incorporate the activities you choose from the options above. Invitations for sensory connection, mindful connection, and the recognition of our interconnection with nature is established through a selection of guided activities shared along the walk.

### How:

- Begin by recognizing the First People traditional territory that you meet on today.
- Follow with Sky Breathing as your group has practised.
- Have the cue cards or a list of activities appropriate to your group handy, and gauge when each is appropriate. For example, if a special spot is found, it may be time for a Solitude Spot. If a clearing is found, yoga might be next.
- Forest Bathing ideally ends with Mindful Eating. Connecting this eating or drinking to the local land is ideal. For example, drinking water and connecting it to the water from the land, or eating berries (ensure identification first) and acknowledging grateful interconnection.

### Adaptations & Notes:

- Please forgive this very generalized approach to Forest Bathing, as the focus is to make it accessible to young learners. This practice typically works in three stages:
  - 1) Disengagement from daily routines
  - 2) Deep breathing and nature connection through a series of invitations
  - 3) Transition back
- It is important to have the relevant cue cards ready and handy for this activity to run smoothly. Run a series of connective invitations.
- Adapt to the needs of your group.
- Learning more about Forest Bathing, Shinrin-yoku, or Forest Therapy will hold great benefits. This name is translated from the ancient Japanese practice and is found in other cultural practices in other forms. Finding a local workshop, or searching online, reading books or articles are all sources of inspiration for the teaching practice.





# FOREST BATHING PLANNING SHEET



MATERIALS:

CURRICULAR GOALS:

NOTES:

ACTIVITIES & SEQUENCE:       

"I ONLY WENT OUT FOR A WALK, AND FINALLY CONCLUDED TO STAY OUT TILL  
SUNDOWN, FOR GOING OUT, I FOUND, WAS REALLY GOING IN."

JOHN MUIR










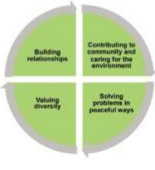













## PART 4: RESOURCES & NETWORKS

### CURRICULUM CONNECTION



Coelho (2017) created the following comprehensive chart to support Core Competency connections and inquiry through First People Principles of Learning. This is the place that all learning and outcomes are woven through. Using this language and connecting through local species is a powerful way to support learners to understand the Core Competencies and how their learning is relevant for real life.

CONNECTING THE CORE COMPETENCIES WITH FIRST PEOPLES PRINCIPLES OF LEARNING

Core Competencies						
Facets						
Indigenous Connection	<b>COMMUNICATION</b> Wolf is a great communicator.	<b>CREATIVE THINKING</b> Raven is a creative thinker.	<b>CRITICAL THINKING</b> Salmon is a critical thinker.	<b>PERSONAL AWARENESS &amp; RESPONSIBILITY</b> Bear is our great protector.	<b>SOCIAL RESPONSIBILITY</b> Beaver is our diligent collaborator.	<b>POSITIVE PERSONAL &amp; CULTURAL IDENTITY</b> Orca is our guardian and navigator of the sea.
	  Wolf teaches us to communicate clearly.	  Raven teaches us to be creative and playful in all that we do.	  Salmon teaches us to think critically and persevere when faced with a challenge.	  Bear teaches us to reflect on our feelings and find balance with rest.	  Beaver teaches us to work cooperatively to make a change for the greater good by making the world a better place for all.	  Orca teaches us about who we are, where we come from, and to understand our own personal histories by learning the ways of our ancestors.

\*Created by Tracey Coelho, based on *The Six Cedar Trees* by Margot Landahl. Indigenous animal images from Cowichan School District.

## ASSESSMENT RUBRICS



There are several impressive options for Core Competency self-assessment rubrics. Self-assessment is key to mindfulness and nature connection work as it guides the non-judging piece that learners grow through. The following assessment rubrics are created by Sandi Lewis (2018) and are written for kindergarten students to self-reflect through. They offer an excellent fit to assess for learning after moving through an activity. It is important to remember that these activities can be assessed and included in curricular outcomes and goals. Specifically, they connect well to self-assessments as students reflect on their personal journey through these core competencies and understand them better for learning. While these self-assessments are one example, they offer a template to build from for any early age and grade levels. Many teachers have extended these to include sketches and more writing. The early year assessment rubrics templates can be retrieved from: <http://www.rubberbootsandelfshoes.com/2018/05/bc-core-competency-self-assessment-with.html#more>. One example, Salmon, is shared here. Please follow the link to find all six relevant to each Core Competency.

Extensive secondary self-assessments templates can be found through the Comox Valley School District at: <https://portal.sd71.bc.ca/group/ssg2i21/Pages/Core-Competency-Self-Assessment-Templates.aspx>

\_\_\_\_\_ is a  
careful and curious thinker.

I get ideas when  
I explore with  
my senses.



I can try different  
ways of doing  
things.



RUBBER BOOTS AND ELF SHOES, 2018

"THOSE WHO CONTEMPLATE THE BEAUTY OF THE EARTH FIND  
RESERVES OF STRENGTH THAT WILL ENDURE AS LONG AS LIFE  
LASTS." RACHEL CARSON



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"BETWEEN STIMULUS AND RESPONSE THERE IS A SPACE.  
IN THAT SPACE IS OUR POWER TO CHOOSE OUR RESPONSE.  
IN OUR RESPONSE LIES OUR GROWTH AND OUR FREEDOM."  
VIKTOR E. FRANKL

