Conclusion

Where it began

As settler-educators, we want to acknowledge that we are on a journey of un-learning and re-imagining educational practices with regards to Indigenous Education. When we began our MEd program, we both had experience working in systems that have yet to fully comprehend and answer the TRC's (2015) calls to action. We also felt that although we have made attempts at teaching Indigenous Education, we remained rooted in our Eurocentric pedagogy and often taught using a historical narrative supplemented by cultural activities. As we entered into the literature review phase of our Masters, we realized we needed to approach our topic through a new lens of thinking.

Two-Eyed Seeing

Elder Albert Marshall described Two-Eyed Seeing as "to see from one eye with the strengths of Indigenous ways of knowing, and to see from the other eye with the strengths of Western ways of knowing, and to use both of these eyes together" (Bartlett, Marshall, & Marshall, 2012, p. 335).

This philosophy resonated with both of us as we began our Chapter 1 and 2 research.

Joanna's Reflection on Indigenous Knowledge Systems

"There is danger in a single story. The single story creates stereotypes, and the problem with stereotypes is not that they are untrue, but that they are incomplete. They make one story become the only story" (Adichie, 2009, 13:05).

<u>The single story</u>

I grew up in a small village on Vancouver Island. My parents were educators, and my dad drove all of us to our respective schools each morning. From my car window, I would watch students from the Nuu-Chah-Nulth nation reserve walk or bike four kilometers to school. The older students often piggy-backing their younger siblings, or waiting patiently while the smaller children investigated nature. My friend was never on time for school. He always crept in after dropping off his younger sister, silently hopeful our teacher would allow for a discreet entrance, instead of the usual public shaming:

(She notices him entering our room)

SIGHS.

 "If you **can't** get to school on time, how can you expect to learn anything?"

Francine would come to school periodically, sometimes arriving in the middle of the day, gliding to the back of class so she could sit, eyes closed, feeling the cool of the metal on her face.

"You need to be an active participant in this class. Stop being **lazy** and sit up straight."

I graduated. After completing my first degree, I decided to become a teacher. The PDPP program required all students to take an Indigenous Education course:

"Why do we have to learn this?"

"It was in the **past**, we need to move on…"

"Some schools don't even have **native** students, so why do I need to teach this?"

I completed my final practicum at what was known as a "rough" middle school. Overheard:

"Always *late*-"

"*Dirty* clothes-"

"Well, look at the parents-"

"Going to *drop out* anyways-"

This is Canada's historical narrative. This is an educational system built on Eurocentric values intended for the success of white settlers. This is a single story. Uncomfortable, isn't it?

I sat in discomfort. Realizing that I perpetuated my own stereotype, this neutral, nice, white woman.

Holding my *silence* accountable.

I wanted some company to guide and clarify my understanding. I invited Indigenous scholars Marie Batiste, Dwayne Donald, and Mi'kmaw Elder Albert Marshall to join me and we sat together.

So why, as settler-educators, do we *reinforce* colonial stereotypes and *resist* changing the story?

I turned to Batiste: "we've been marinated in Eurocentrism...embedded within a place of dominant thinking...where there is an inside...and an outside...so basically we've got a system of Eurocentrism that is embedded today in all of our educational systems, there is a notion of superiority...and we need to rethink what those superiorities are and to rethink how we have

come to know who we are and how we begin to judge others by those standards that were given to us at some point in our lives" (2016, 40:59-42:54).

Exactly! Exclaimed Donald, and "the social-spatial separation of Canadian (insiders) and Aboriginal (outsiders)...has been passed down generation by generation in the form of an authoritative national historical narrative…" (2009, p. 23).

Perpetuating stereotypes.

Canadian curriculum has been telling a single story, and in this narrative, students are taught what is important and of value based on colonial methodologies and pedagogy. This historical rendering has led to Indigenous knowledge as ***lesser*** compared to Westernized forms of pedagogy. (They all nod). Due to colonial ideologies, Indigenous education is therefore viewed as...Donald jumped in: an "anachronistic study...as a possibility...only if there is time...and a troubling form of civilizational separation is maintained" (2009, p. 24).

I recognize that in my own teaching practice I chose to value Western curricula ahead of Indigenous pedagogical practices: instead of embedding First Peoples Principles into our daily classroom experience, I would ***separate*** this learning, usually in the form of traditional cultural activities.

So as a settler, and as an educator who is afforded white privileges, I need to-

Batiste replied: "You must unlearn your biases in order to challenge this 'notion of superiority.' You must acknowledge the importance of Indigenous pedagogy. You will then be able to respect this knowledge and value its importance without appropriation" (2010, p.17).

<u>Decolonize</u>

At this point, I decided I needed to know **how** educators can begin this complex process.

Decolonization can be defined as an unlearning, or an unraveling of the current structures in place that create disparities, promote racism, and are inequitable. Decolonizing Canadian education requires us to dismantle and rewrite not only our systemic narrative, but also, our personal story.

There is a definite tension that exists between Indigenous methodologies (IM) and Western theory, but, embedded within the tension, there is a supportive space that offers us the opportunity to reconcile our differences. "Yes," replied Elder Albert Marshall, "this is Two-Eyed Seeing/Etuaptmumk: to see from one eye with the strengths of Indigenous ways of knowing, and to see from the other eye with the strengths of Western ways of knowing, and to use both of these eyes together" (Bartlett, Marshall, and Marshall, 2012, p.335). This methodology allows for multiple perspectives to emerge, affording the opportunity to 'weave' between and blend Indigenous Methodologies with Western methods. This opening of both eyes encourages co-learning, and...Elder Albert Marshall became animated: "...use[s] all our understandings so we can leave the world a better place and not compromise the **opportunities** for our youth by our own inaction" (Bartlett, Marshall, and Marshall, 2012, p.336).

The sun was setting on our time together. I thanked my guests for spending their time guiding and supporting me. It was now time to begin the work.

The inspiration for investigating the benefits of implementing the computer science curriculum in schools came from my experience of running an introduction to computer science course with my grade 8 class a few years ago. Microsoft TEALS offers a remote learning course called Introduction to Computer Science; this course brings in instructors actively working in the field of computer science and programming to assist teachers in introducing students to computer science and the world of computational thinking. The positive impact of practicing computational thinking and the cross-curricular advantages I observed in my students during this course inspired me to further investigate the research and support for implementing technology in a fun and effective way.

When incorporating technology into your classroom, it is important to do it in a way that is fun, relevant, and engaging. Teachers can do this by introducing technology in a way that connects with students, taking them on field trips to local tech industries, and bringing in real world examples of technological innovations to spark interest and inspiration. Develop learning content that is visual and interactive, and weave in real-world examples of people creating technologies that will change and make the world a more positive and innovative place.

Technology is everywhere, and students are engaged with the digital world more than ever. Actively encourage and recruit a diverse range of students to engage with technology and employ inclusive pedagogies to meet the needs and interests of these students. Empower them to be creators and innovators of technology by connecting the digital world to their daily lives throughout their educational journeys.

Dual Perspectives:

As we conducted the literature review, we explored how we could connect our two separate interests together: Indigenous Pedagogy and Technology. At first glance, these two topics seem disparate. However, upon further review, we discovered that by practicing Two-Eyed Seeing, new ways of thinking emerged. The digital tools could potentially improve interactivity and engagement, while increasing connections and mitigating feelings of loneliness. Furthermore, we would be able to reach more educators with the included Indigenous Education learning opportunities.

Where we are now

On Vulnerability

Our project is the culmination of countless hours of discussion, research, and reflection regarding one central question: What tensions exist that lead to educator resistance toward exploring Indigenous pedagogy in their classrooms?

As settler-educators, the authors have experienced this tension and know that this resistance can be a contentious issue among some educators. The research demonstrates that this resistance is mostly rooted in fear. Fear of failure, not getting it "right" or not doing enough. We think that any educator can relate to these feelings, and we wanted to offer a solution to this resistance so that we may all take action and provide reconciliatory education.

So how can we overcome this resistance and explore Indigenous pedagogy in our learning environments? By allowing vulnerability. By giving ourselves permission to maybe fail. To maybe mispronounce words, stumble over territorial acknowledgements, and become emotional

when learning and teaching about Residential Schools, the 60's scoop, and other events led by the Canadian Government that have led to stereotypes, systemic racism, and intergenerational trauma. If we can learn to teach algebra, we can allow ourselves to sit in discomfort and learn to teach Indigenous Education by embedding it into our curriculum on a daily basis.

After conducting research and studying current resources, we realized that while Indigenous pedagogy is becoming embedded (albeit, slowly) into BC curriculum, these learning experiences are usually limited to face-to-face teaching. We needed to find the intersection of "space" and "place." We needed to determine how Indigenous pedagogy fit into the online world.

We decided to further explore the potential of embedding Indigenous pedagogy into online learning experiences, and used Kirkness and Barnhardt's (1991) 4R's guidelines and Restoule's (2019) 5R's framework as a starting point for educators and those involved in facilitating online learning. We chose this framework purposefully, as it was researched and created by Indigenous scholars. As white settler-educators, we want to acknowledge that for us, answering the TRC's calls to action means we choose to deliver a curriculum that is not singular in nature; rather, Indigenous pedagogy is ingrained into the core of the curriculum.

The purpose of our project:

Our e-book aims to develop and highlight current resources for educators and instructors within the K-12 and post-secondary systems to support the adoption of Indigenous pedagogies in online learning environments. Our resources address how the 5R's of Indigenous education and research can be used as best practice to enrich online teaching platforms and remote learning. We also wanted to create a space for educators to (un) learn and be able to feel vulnerable. We grappled with our own feelings of white privilege, guilt, shame, and fear many, many times as

we began the work, and wanted to be transparent about our journey with other educators and facilitators. Finally, we wanted to address some of the gaps in the literature so that researchers are aware of new avenues to explore. Very little research exists on practical applications of digital tools in order to embed Indigenous pedagogy. We found that there is very little research that is Canadian-based which explores Indigenous knowledge systems. Furthermore, most research involving Indigenous communities focuses on place-based learning and outdoor education. We hope that future research will investigate how to implement Indigneous pedagogy into typically Eurocentric systems, and how to create space for non-Westernized thought in online environments.

TIEGRAD: A study in effective online learning

One of our biggest realizations was how our own program seemed to demonstrate each of the 5R's in practice, and therefore became a personal study as we began our own project. Upon reflection, we determined that how Valerie Irivine and other instructors designed and implemented the TIEGRAD program exemplified the use of the 5R's in an online environment. This became a secondary framework for best practice online learning and teaching.

Relationships:

From our first day, our cohort felt connected. Those who could not make the in-person summer session were present through video conferencing, and connections were encouraged through social communication channels such as Whatsapp and Slack, as well as our individual blog sites. Our instructors, especially Valerie, were honest, transparent, and at times, vulnerable. These qualities helped students connect and mitigated feelings of isolation once CoVid impacted our abilities for face-to-face learning and teaching.

Respect:

Indigenous cultural norms were respected and acknowledged. Each presenter acknowledged the land they were on in a different way, and this allowed all students to experience multiple perspectives.

Relevance:

Our required readings were varied and relevant to our program. Multiple perspectives on ideas were given and we were encouraged to seek new perspectives.

Responsibility:

Learners felt comfortable bringing their own interests, culture, and dynamic perspectives into the classroom space.

Reciprocity:

This program honoured student voice and choice. We were given every opportunity to embrace our own unique ideas and showcase our learning in various ways. Our coordinator, Valerie, even created a new standard of MEd guidelines so that we could work together, and use multimedia formats more freely.

Throughout this program, we were experiencing the impacts of CoVid 19 on learning from two perspectives: That of an educator, and that of a student. These perspectives shaped our project, and encouraged us to focus on how to meet the needs of both the student and the teacher during online learning.

Where next/Where are we going/heading?

As we move away from online learning as a reactive and emergency response, based on the impact of COVID -19, the policy recommendations below support online learning as an option equal to face-to-face teaching.

As online learning becomes more popular and prevalent, it is important that policies are reflective of these changes. For example, school districts and other institutions need to offer in-depth training regarding course design and facilitation for their staff. In addition to training, educational resources should be curated and developed to meet the same standard and learning outcomes that our current offline materials, and moreover, these resources are managed and organized through the districts and institutions for ease of use for all. This includes searchability, curation, organization and familiarity with each digital resource in order to support and equip staff who are searching for these materials for their courses. When materials are hard to find and spread out over multiple platforms, educators are less likely to engage with these resources due to time restrictive factors. By supporting our educators in training and providing a breadth of ready-to-use materials that support interactivity, connection, and engagement, we are in turn supporting the long term effectiveness of online learning and teaching.

We hope that our project embodies the spirit of Two-Eyed Seeing, as we believe that by combining these strengths and embedding them into the online learning environment, we can establish greater connections within our learning communities and truly meet the needs of all our learners.

As educators, we need to support each other in order to be vulnerable and open to new perspectives. It is our hope that educators who read this resource share it with colleagues, and

engage in discussion around how adopting Indigenous pedagogy can foster best practice teaching

and learning at their schools and institutions, either in-person or in online learning environments.