NUU-CHAH-NULTH TRADITIONAL PEDAGOGY:
SHINING LIGHT ON AUTHENTIC CONTEMPORARY
ASSESSMENT PRACTICE

by

Kelly Johnsen
M.Ed., University of Victoria, 2008
B.A., Vancouver Island University, 1995

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
DOCTOR OF PHILOSOPHY

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Abstract

Historically, the Nuu-chah-nulth People of Vancouver Island passed down knowledge and skills utilizing methods analogous with traditional Indigenous pedagogies around the world. These traditional teaching and assessment methods of the Nuu-chah-nulth have ensured the successful transfer of important physical, mental, cultural and spiritual knowledge over thousands of years. Within these pedagogies, assessment and evaluation is integral and inclusive, achieved through authentic and holistic means. Conversely, contemporary assessment in the post-secondary realm, despite endeavours to integrate formative assessment more frequently, tends toward a summative end result.

The historical traditional assessment methods of the Nuu-chah-nulth exemplify holistic values and are illustrated through the concept of heshook-ish-tsawalk, or ‘everything is connected’. This dissertation argues that there are insights to be gleaned from identifying these assessment and evaluation methods, and in bringing them forward into contemporary pedagogy.

Through a series of in-depth interviews, the researcher examined the learning and teaching understandings and experiences of several Nuu-chah-nulth Elders and cultural experts. Interviews took place within the homes of the Elders, and care was taken to ensure representation across a wide range of Nuu-chah-nulth territory. Augmenting these interviews, the researcher examined translated recordings of past Nuu-chah-nulth Elders while reflecting on her personal experiences as a Nuu-chah-nulth person. These personal experiences were analyzed through a self-study style examination of her own journey through education, and her recollections of traditional and contemporary assessment practice.
Significant themes emerged from the collected data, including the overarching importance of time, relationships, echoing, and demonstration in historical Nuu-chah-nulth assessment. These themes fit naturally within a circular medicine wheel framework, which effectively illuminates the holistic and connected nature of an Indigenous pedagogy. This study concludes that these themes hold significant importance for contemporary assessment practice.
# Table of Contents

Supervisory Committee ................................................................................................. ii
Abstract ........................................................................................................................... iii
Table of Contents ............................................................................................................ v
List of Tables ................................................................................................................... ix
List of Figures ................................................................................................................ x
Acknowledgments ........................................................................................................ xi
Dedication ....................................................................................................................... xii
Preface ............................................................................................................................ xiii
A Personal Experience of Decolonization: Phase One ................................................. 1
Rediscovery and Recovery ............................................................................................. 1
Chapter One: .................................................................................................................... 4
    An Introduction to the Research ................................................................................ 4
    Introduction ................................................................................................................. 4
    Beginning of the Study: How I Got to this Place ..................................................... 8
    Research Statement and Questions ....................................................................... 10
    Research Questions .................................................................................................. 12
    Overview of the Study .............................................................................................. 12
    Significance of the Study ......................................................................................... 13
    Researcher Positionality ......................................................................................... 15
    Notes on Terminology ............................................................................................. 17
    A Personal Experience of Decolonization: Phase Two ....................................... 22
    Mourning ................................................................................................................... 22
Chapter Two: .................................................................................................................... 24
    Review of Past Research.......................................................................................... 24
    Eurocentrism and Western-Centrism ..................................................................... 24
    Systems Theory ......................................................................................................... 26
    Indigenous Knowledge, Ways of Knowing, and Ways of Being ......................... 28
    Moving Forward ...................................................................................................... 34
    The Significance of Numbers - Tsawalk and Muu ................................................. 35
    Symbolism and the Medicine Wheel ...................................................................... 41
    Why Indigenize Curriculum? ............................................................................... 45
Commitment ......................................................................................................................... 89
Chapter Four: ....................................................................................................................... 92
The Findings ......................................................................................................................... 92
Chapter Overview ................................................................................................................. 92
Why Interview Elders? ......................................................................................................... 92
A Medicine Wheel Framework ............................................................................................ 95
Assessment from an Indigenous Perspective is Circular (Formative) ................................ 98
Contemporary Understandings of Indigenous Education in British Columbia .......... 104
The Interviews .................................................................................................................... 107
The Concept of Time ........................................................................................................... 108
The Importance of Relationships ....................................................................................... 119
Echoing ............................................................................................................................... 130
Demonstration ................................................................................................................... 140
Summary of Findings .......................................................................................................... 152
A Personal Experience of Decolonization: Phase Five .................................................... 153
Action ................................................................................................................................. 153
Chapter Five: ....................................................................................................................... 157
Discussion, Implications, and Recommendations ............................................................ 157
Chapter Overview ................................................................................................................. 157
Why is there a need to unearth these methods in the first place? .................................. 158
Guiding Questions ............................................................................................................. 159
Implications and Recommendations - Authentic Use of Traditional Knowledges in the Classroom ........................................................................................................... 160
Themes ................................................................................................................................ 161
Time and haahuupa: The ongoing process of teaching and learning .............................. 162
Relationships: hačatakın čawaak (we all one/related) ....................................................... 166
Echoing: naʔatahʔi wawaayiis ?aʔaquumitḥas (Listen and Repeat) ............................. 169
Demonstration: Becoming qu’uuς - Summative Assessment in the Nuu-chah-nulth Worldview ...................................................................................................................... 174
Reflecting on Current and Past Research around Indigenization .................................. 178
Ninety-Four Calls to Action ............................................................................................... 183
Indigenization as Reconciliation ....................................................................................... 186
Reviewing my Preconceived Expectations and Unexpected Findings .......................... 188
Summary and conclusion........................................................................................................ 189
Bibliography ......................................................................................................................... 192
Appendices.............................................................................................................................. 206
List of Tables

Table 1. Contrasting Euro-American-centrism influenced by neoliberal discourses and Indigenous ways of knowing................................................................. 42

Table 2. Assessment vs. Evaluation. Adapted from Angelo & Cross................................................................. 49

Table 3. Nine ways to incorporate authentic learning......................................................................................... 58

Table 4. Reasons for educational assessment.................................................................................................. 92

Table 5. My indigenized interpretation of Race, Brown & Smith’s Table 4.............................................. 93
# List of Figures

| Figure 1. | Representation of the medicine wheel | 34 |
| Figure 2. | The four cardinal directions | 35 |
| Figure 3. | The four aspects of human nature | 37 |
| Figure 4. | The Centrality of Relationships | 45 |
| Figure 5. | The interview process | 73 |
| Figure 6. | Situations and possible research approaches | 77 |
| Figure 7. | Example of a Medicine Wheel | 87 |
| Figure 8. | My medicine wheel interpretation of the data | 89 |
| Figure 9. | Research data summary – Time | 100 |
| Figure 10. | Research data summary – Relationships | 110 |
| Figure 11. | The Centrality of Relationships | 119 |
| Figure 12. | Research data summary – Echoing | 121 |
| Figure 13. | Research data summary – Demonstration | 131 |
| Figure 14. | Circle of Courage - a model of youth development | 135 |
| Figure 15. | Student Wholistic Feedback Form – WLU presentation | 163 |
| Figure 16. | Student Wholistic Feedback Form – WLU presentation | 164 |
| Figure 17. | FNHA Wellness Map | 165 |
| Figure 18. | Three Goals of Indigenization | 172 |
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Finally, a huge ƛekoo to my family, the multiple Elders who have taught me, and all of the priceless community and cultural experts who support all of us.

čuuč
Dedication

I dedicate this dissertation to my mother and father, for always believing in me. And to my entire Mack, Johnsen, Botting, North, Morgan, Tillotson, Anderson and Toquaht family.
Preface

My teachings have always been to introduce myself, and to acknowledge where I come from prior to embarking on any public discussion or presentation. Therefore –

ʔukłaamaḥ ya?acpiis. ṭukʷaaʔaqsup. ṭuḥukʷaḥ ṭumʔiiqsu ḥuupkʷiṣṭaʔaqs Gale. ṭuḥukʷaḥ ṭuʔwiʔiiqsu ḥuupkʷiṣṭaʔatḥ Gary. ṭuḥukʷiṭaḥ nananiqsu deets-kee-sup Bert, Lillian ṭumʔaqt, ṭuʔʔiš Holger, Muriel ṭuʔwaqt.

λeekoo ṭanik naʔaataḥ siyə.

My name is yu’uts-piis, a Toquaht woman. My mother is Gale. My father is Gary. My grandparents are Bert and Lillian Mack on my mother’s side, and Holger and Muriel Johnsen on my father’s side. Thank you for listening to me.

My First Nations name means “walking across the water, standing on a beach, or choosing her steps carefully” interchangeably. I’m told it means that I am in the process of making a change. My name was given to me by my nananiqsu “great grandparent” Jessie Mack when I was twelve years old, and took part in the ḥuukʷaana ceremony (initiation to the wolf clan). I was born on the West Coast of Canada, and I am a member of the Nuu-chah-nulth People. I have resided in the traditional territories of the Toquaht Nation from a young age. These aspects of my life inform my day to day being within the world, I know where I come from, and who my ancestors were.
It is imperative at this point to acknowledge and appreciate that I currently live
and work in the traditional and unceded territories of the Tseshaht and Hupacasath
People, in the Alberni Valley. The Toquaht, Tseshaht, and Hupacasath Nations are all
members of the Nuu-chah-nulth People, whose territories encompass the western and
northwestern portions of Vancouver Island. We also maintain familial and linguistic ties
with the Pacheedaht and Makah Nations of lower Vancouver Island and the US Olympic
Peninsula. I thank these all of these people for nurturing me throughout my life, and
allowing me to pursue my lifelong learning in these areas.
A Personal Experience of Decolonization: Phase One

Rediscovery and Recovery

Since beginning this educational journey, I have observed that my worldview has evolved in many ways. Some of this I attribute to age and experience, as I was raised in a small community and was quite naïve about the world and social inequity. But a large part of my emotional growth has been a result of discovering my heritage, and where I come from – both physically and in my ancestry. Undertaking research for my dissertation has guided me to scholars who have helped to encapsulate my experiences. As an example, Poka Laenui (2000) suggests five distinct phases of the decolonization process for a people. These phases include: 1) Rediscovery and Recovery; 2) Mourning; 3) Dreaming; 4) Commitment; and 5) Action. Each phase can be experienced in various combinations, and do not necessarily have clear demarcations between one and the next (p.152). My own personal experience relates closely with these five phases.

In the first phase, rediscovery and recovery, the foundation is set for eventual decolonization for a person or a people. This phase is the site where realization sets in, where a turning point is reached, and a new awareness takes hold. For me, this phase hit in about my third year of working in First Nations Education for the Nuu-chah-nulth People. After blithely accepting my place in the world for twenty-eight years, I began to understand the privilege I had been brought up with. Every day I was seeing the effects of generational trauma on an entire population, but it took a couple of years to realize what I was seeing. As a post-secondary counselor, part of my job was to determine which Nuu-chah-nulth students would receive full-time funding to attend college or university.
Generally, this meant that any students who were successful at being accepted into post-secondary studies were funded. Both First Nations and non-First Nations students are routinely admitted to post-secondary institutions through submission of their high school transcripts, and for the most part, non-First Nations students tend to find academic success. In my post-secondary office however, we were finding that our Nuu-chah-nulth students were not being academically successful, despite holding average or above-average grade twelve transcripts. To try and sort out the disconnect, we implemented an Adult Basic Education (ABE) entrance exam requirement for all Nuu-chah-nulth students, and our education office quickly discovered that despite demonstrating good grades on their high school transcripts, our students were not testing at a grade twelve level. Astonishingly, our students were attaining BC Dogwood grade twelve completion certificates, while testing between grades eight and ten in math and English. This realization, and the social justice implications behind these major gaps in academic attainment, triggered something in me.

I had always known that I was Nuu-chah-nulth by birth, but I had mostly been raised in a non-traditional setting. My father is non-First Nations, and our family lived in small towns rather than on reserve. My mother had lost her legal status as an Indian, according to the Canadian government, by marrying my father. And because of this, my mother’s three children were born without status as well. We regained our status in the 1980’s, but our holidays were split between visiting our relatives of European descent, and my Nuu-chah-nulth grandparents and family. Although as a child I did take part in some ceremonies and potlatches, I had no real understanding of where I was from, and my Nuu-chah-nulth roots, until I became a young adult. Working in a First Nations
organization and being exposed to the challenges faced by Nuu-chah-nulth people
brought home the realization that I was one of them as well. For unknown reasons, some of my people were not finding the same success within the dominant society that I had found. This new awareness caused me to become more active in discovering where I came from and led to my decision to pursue higher levels of education and understanding.

My conscious decision to pursue an understanding of myself and my culture relates directly to phase one of the process of decolonization. I feel that phase one of the process of decolonization also relates directly to Chapter One of my dissertation below. Phase one is the place where everything begins, where an understating is reached, and a decision is made to move forward in new discovery.
Chapter One:

An Introduction to the Research

This chapter outlines the imperative to chronicle and examine traditional and historical Indigenous pedagogies, specifically as related to the processes of assessment and evaluation. It acknowledges our lack of understanding of the importance of historical approaches and emphasizes the need to open our hearts and minds to integrating past knowledges into contemporary classrooms.

Introduction

My son, your song, it did not flee from you. You became ashamed of it. You permitted it to become dormant. It is still there. You must wipe off the mists of time and learn to be proud of your heritage… Yes, you must of a necessity change with time, else you be choked in the growth of time; then you wither and die… In this manner must you change, adopting only the good of the new while adhering to the good of the old.

-George Clutesi, Stand Tall My Son, 1990

As a current educator in the field of community support, First Nations studies, and special education, I feel keenly the need to provide a voice for those who are under-represented in our society. As a member of the First Nations community, I have witnessed and experienced this lack of voice, and have felt the effects of oppression personally. Forty years ago, when I was transitioning from elementary to high-school, I was categorized with a check in a box on a form, as an Aboriginal student. This label
automatically sorted me into an academic stream that churned out individuals who were not expected to move on into higher education. I was placed in accounting over algebra, and in trades courses instead of the higher academics. I sat in classrooms with underperforming peer-age students who were content to be pushed through their grades. It was the stream where all of the Aboriginal students were placed. To this day I will always remember one high-school teacher who reviewed my work, and questioned my placement. One phone call home to my mother later, I was moved into the ‘higher’ stream, and my grades and academic trajectory improved. I do not believe that these types of rampant discrimination take place as readily within today’s elementary-secondary school system as they used to, but oppression remains an issue to be resolved.

Over the past thirty-two years, I have studied, worked, and instructed in the post-secondary field, and I have been witnessing a surge of interest in the concept of ‘Indigenizing’ contemporary education, courses, and programs in British Columbia. This responsiveness has been a long time coming, and I am excited to be a part of it. So many of our historical and traditional pedagogies have been lost, or relegated to a few determined individuals who are clinging to their traditions and passing them on as best they can. I undertake this research study in an attempt to investigate some of these methods, and carry them forward.

This concept of indigenizing curriculum, or integrating traditional Indigenous instructional methods into contemporary post-secondary classrooms, inevitably clashes with the inherent dichotomy of traditional Indigenous pedagogy versus Eurocentric-based instructional pedagogy. Contemporary post-secondary course curricula, even those of courses and programs with titles such as First Nations Studies, tend to echo a Eurocentric
pedagogical format rather than embrace Indigenous ways of knowing. Indigenizing these curricula involves revising this Eurocentric pedagogy to better reflect Indigenous knowledge. Embracing and integrating traditional Indigenous instructional practices such as providing role-models, mentoring, demonstrations of skill, learning in place, and learning through experience would also include an integration of traditional forms of assessment to monitor learning outcomes. I hope to bring some of these historical and traditional assessment and evaluation methods to light with this study.

Eurocentric based pedagogy tends to view knowledge as separate from the self, while Indigenous pedagogies approach learning as one part of a holistic view of the whole world. Ermine (1995) describes this divergence when he states of Eurocentric thought that,

The intellectual tendency in Eurocentric science is the acquisition and synthesis of total human knowledge within a world-view that seeks to understand the outer space objectively. In the process, Eurocentric science, the flagship of the Eurocentric world, sought answers to the greatest question concerning our existence and our place in the universe by keeping everything separate from ourselves. (p.102)

Discussing the alternate approach of Indigenous knowledge, Ermine continues,

Those who seek to understand the reality of existence and harmony with the environment by turning inward have a different, incorporeal knowledge paradigm that might be termed Aboriginal epistemology. (p.103)
Eurocentric views on pedagogy permeate North American society, and have dominated the Canadian education system since the early 1700s. Beginning in the 1990s, however, it appears that the Indigenous world-view is experiencing something of a cultural renaissance (Waugh, 2011; Deloria & Wildcat, 2001; Agrawal, 1995). Deloria & Wildcat (2001) state that, “In recent years there has been an awakening to the fact that Indian tribes possessed considerable knowledge about the natural world” (p.1). They relate how, over time, the world-views of the Aboriginal people of North America have been both ignored and more recently erroneously revered as a replacement for religion by the non-Aboriginal population, but that we as Aboriginal people now have a chance to build upon a metaphysical foundation that has been passed down through generations.

Holistic forms of learning and doing, an integral part of Aboriginal ways of knowing for generations, correlate to what Bateson (1996) describes as a systemic approach to education. From a systems theory perspective, she feels that, “…a holistic view of education includes an understanding of whole persons embedded in whole systems, a view that separates neither developing mind from body nor school from community” (p.74). This framework resonates with the worldview of the Nuu-chah-nulth People of Vancouver Island, who embrace the concept of heshook-ish tsawalk, or ‘everything is connected’ (Atleo, 2004). Warner (2006) iterates that the beliefs or understandings of one cultural group do not necessarily mirror all others; because of the local nature of Aboriginal cultures, each group operates from a different perspective. However, Warner goes on to observe that a reliable constant is the holistic context and worldview of Indigenous culture in general (p.149). Similar Indigenous ideologies have been recounted in North, Central and South America, New Zealand, Australia, and
Hawaii. This worldview extends to all aspects of life and learning, and incorporates the
ideals of experiential learning through relationships with the instructor, the knowledge,
and the environment in which it is situated.

**Beginning of the Study: How I Got to this Place**

My own academic journey has not been linear, or with a specific ending in mind. As a teenager I loved to draw and experience the world through observation, so I felt that studying fine arts, and becoming a teacher, was the natural path. As many have found, however, the college and University experience opens the mind to many undreamt possibilities. My first involvement in Aboriginal education came about at Malaspina University-College when I enrolled in a liberal arts program. The program approached knowledge acquisition from a philosophical framework, and I revelled in the non-traditional set up of teacher and student. We investigated subjects in a large lecture hall and in individual study, and then picked them apart in small seminar groups where the instructor simply facilitated our discussions. Subjects ranged from theology, to literature, to the study of the Indigenous experience. We learned more from each other than we did from the lectures and texts. I loved it then, and today I still pull those experiences into my own teaching pedagogy. Upon graduation, I took a position in post-secondary academic counseling for First Nations students. This led me to working full time, and pursuing a M.Ed. degree over two summers.

Upon completing my Master’s Degree, I felt a little underwhelmed by my overall contribution to academia. It was a sentiment I wrestled with during my final M.Ed. project as I was advised by my supervisor to 1) outline the problem, 2) support my postulations, and 3) not to spend time on suggesting solutions. My advisor at the time
suggested that I pursue a Ph.D. if I wanted to really invest myself in following up on my M.Ed. findings. At that point in my life and career, I had no interest at all in dedicating more time to academics. However, after two further years of working in the education field, and continuing to witness the same student outcomes that drove me to pursue the M.Ed. in the first place, I decided to follow up on my gut feelings. First Nations students, and I include myself in that category, do not find success in academia to the same extent that non-Aboriginal students do. This is not a new phenomenon. My M.Ed. survey results suggested that those post-secondary students who did achieve the success they desired retained a strong connection with their history. They were supported by family and by connections to the places that they came from. I needed to bring this connection to light, and to explore the indications further.

My Ph.D. research topic did not spring forth immediately from my mind the minute I applied to the University of Victoria. I went through years of experiencing new ideas and concepts during my time in residency and through the time I spent doing my Ph.D. courses online. I took on a part-time teaching position at a small community college, and my eyes and mind were opened even further through my experiences on the other side of education. For so long I had taken courses, and counseled First Nations students through the intricacies of pursuing a degree. I had read transcripts, and had submitted assignments and exams for marking, but I had never experienced the power and responsibility of being a teacher. My Ph.D. supervisor advised me to take these experiences, and to distil them into a research focus. My first attempts were far too broad, as I have always felt the need to exemplify the tenets of Mary Catherine Bateson and her
holistic ways of looking at the world. I feel that she would be proud of me however, as I have definitely embraced the concept of lifelong learning.

The Indigenous people of the world, and specifically the Nuu-chah-nulth people in my traditional territory, have always known that we are all connected to the planet, both physically and metaphysically. This knowledge is passed on from generation to generation, and it is a source of strength as well as a foundation from which to instruct and to learn. My hope is that my research may help to continue on in this tradition. Umeek (Dr. Richard Atleo) is a relative of mine through my mother’s roots, and I find myself following along the path he set out in his book *Tsawalk: A Nuu-chah-nulth Worldview* (2004). Education is a journey.

**Research Statement and Questions**

My research approach in this study reflects the Nuu-chah-nulth worldview of *heshook-ish tsawalk*, or ‘everything is connected’. This worldview defines our people, has been passed down through countless generations, and tends to align with the worldviews of many Indigenous peoples in North America and around the world. For example, Cajete (2000) states, “A Lakota saying, *mitakuye oyasin* (we are all related), focuses on relationships and metaphorically personifies what Aboriginal people perceive as community” (p.70). Similarly, of the Maori worldview, Klein (2000) writes,

The creation story develops a holistic world-view. There is no break or distinction in the cosmology. All things have their own genealogy or whakapapa and are ultimately linked with the gods Rangi and Papa.
Human beings are included in this genealogy and are only one part of the "great genealogical web." (p.320)

In a general sense, instruction at all levels from pre-school to post-graduate work in North America continues to relate most strongly to the traditional Eurocentric pedagogy. In this model, one teacher instructs a group of people through a process of lecture and consequent regurgitation of the materiel through quizzes, essays and exams. I feel that, in accordance with the holistic views outlined above, instruction and assessment in the classroom must become more formative and less summative, focusing on connectedness, relationships, and lifelong learning, rather than on letter grades and percentages.

This study is built upon the theoretical frameworks of systems theory, Indigenous methodologies, and of Indigenous ways of knowing. Each of these frameworks outline the connectedness of the world, including not just the physical, but also the metaphysical aspects of life and learning. These frameworks tend to oppose what we know as the classic Eurocentric worldview, which proposes that advanced or ‘civilized’ thought supersedes all traditional or ‘stagnant’ ideologies. Accordingly, the Nuu-chah-nulth traditional pedagogy differs from contemporary Eurocentric post-secondary practice in that teaching, learning, and assessment are integral, connected and organic. Authentic learning takes place within this context, with assessment as one part of the whole instead of as disruptive judgement pieces interjected into contemporary lesson plans. I propose that these traditional pedagogies, especially regarding ongoing assessment, have immeasurable worth, and should inform contemporary teaching practice.

As an Aboriginal Nuu-chah-nulth person with experience as both a learner and an instructor in a contemporary Indigenous Focus education program, I find myself situated...
with a unique vantage point on current teaching practice. As the Indigenization of education is of emerging prominence, this knowledge is especially pertinent.

**Research Questions**

My research questions are:

1. What is the traditional pedagogy of the Nuu-chah-nulth and what practices are used by the Nuu-chah-nulth to assess proficiency in various areas?

2. Through reflection on past and current experience with education, assessment, and the Indigenization of contemporary post-secondary courses, how can my own experiences shine light on the challenge of authentic Indigenization?

3. How may these findings inform contemporary teaching practices and assessment processes, especially in those programs that advertise an Aboriginal or indigenized focus?

**Overview of the Study**

To complete this study, I underwent a qualitative research process which follows an Indigenous research paradigm. Initially, the site of my study was recorded interview conversations with Nuu-chah-nulth cultural authorities to create narratives that capture our worldview on teaching, learning, and assessment that fosters authentic learning. A second site for this study involved unpacking my own experiences as a Nuu-chah-nulth person, having experienced the British Columbia school system, and now working in advanced education, instructing in an indigenized program. This gathered knowledge,
along with information collected from experts on Indigenous education from around the world, helped to form an understanding of assessment from an Indigenous worldview. Thus, the methodology of my study will included interviews and a self-study, encapsulated within a narrative format. In conclusion, this information was then analyzed with the purpose of identifying concepts that may possibly be adapted to contemporary assessment practice.

**Significance of the Study**

Shirley Sterling outlines how historical traditional pedagogies are reflected in contemporary pedagogical studies in her chapter in Battiste and Barman’s *The Circle Unfolds* (1995). In her chapter, she describes how her grandmother, Yetko, approaches the responsibility of teaching her grandchildren. Sterling states that, “A modern pedagogical discipline which resembles Yetko’s interaction with her grandchildren is the humanistic view of learning” (p.120). Humanist educators exemplify realness, respect and empathy in their instructional methods (Winzer & Grigg, 1992). This discipline deviates from the pervasive ‘chain of command’ and practice-centered view of education as favoured by the Roman Catholic Church and the British class system (Brauner, 1964). I feel that examples such as how our grandmother’s traditional and historical teachings reflect modern educational pedagogy are important to review in more detail. As will be discussed in my literature chapter, our traditional and historical instructional methods are there to inform our contemporary practice; we need to bring them to light.

In a later chapter in Battiste and Barman’s *The Circle Unfolds* (1995), Arlene Stairs endeavours to show how, “…the linguistic and curricular content of Native education can be adequately pursued only when embedded in traditional cultural values
concerning ways of using language, of interacting, and of knowing” (p.139). These concepts must be explored not only in the education of First Nations children, but also in any attempt to indigenize curriculum for all students at any level. Understanding how First Nations educators utilize Indigenous ways of knowing in their instructional methods provides an important lens for understanding how to move forward with informing contemporary educational practice in the wider view.

This research may benefit the field of culturally sensitive curriculum design, and inform the expanding interest in the Indigenization of educational systems. Shining light on traditional Aboriginal instruction and assessment practice may illuminate ways in which contemporary course developers can integrate Indigenous ways of knowing into contemporary college and university courses. As Cajete (2005) explains, “In exploring the tribal foundations of American Indian education, we are really tracking the earliest sources of human teaching and learning” (p.71). For too long North American educators have clung to Eurocentric methods of teaching and assessment, when time-worn local methods have worked for generations to ensure the passing-down of knowledge. These traditional methods may work to enrich and bolster contemporary practices.

The Truth and Reconciliation Commission (TRC) on the Residential School system in Canada and the resulting TRC: Calls to Action (2015) have made it clear that we must acknowledge the importance of “Developing culturally appropriate curricula” (p.2) and “utiliz[ing] Indigenous knowledge and teaching methods in classrooms” (p.7). These calls to action in and of themselves are a spur to further our knowledge in this area.
Researcher Positionality

As a member of the Nuu-chah-nulth community, I had connections to research participants from each of the three Nuu-chah-nulth Regions. My work in Aboriginal education over the past twenty-two years has offered me access to a wide range of education, cultural, and community experts in various fields. Growing up in the small communities of Tofino and Ucluelet, as a grand-daughter of Toquaht Chief Bert Mack, I had experience in attending gatherings and potlatches, and taking part in cultural ceremonies. Through these experiences and through connections inherent through family ties, I was able to draw on a large network of associates to locate interview subjects for my research.

Additionally, as an instructor in an Indigenous Focus program at a small community college, I had access to the opinions and encouragement of co-instructors in the program. The Dean of Human Services at the small community college I instruct at expressed continuing interest in providing a deeper Indigenization of the current program which boasts an Indigenous focus.

From an historical point of view, for the past six years I have instructed and worked as a department chair in the human services department of a small community college, specifically in the area of training education assistants to work in elementary and secondary schools. This program, delivered in a small city on Vancouver Island, is advertised as having an Indigenous focus. This focus has been achieved through the expedience of providing one instructor with First Nations heritage, one First Nations education history course, and the use of talking circles and Indigenous guest speakers in many of the other required courses. Over time, my feelings around the authenticity of this
program’s Indigenous focus became more and more cynical. My own fledgling understandings of authentic Indigenization were not being adequately reflected in the curriculum and learning outcomes of each course within this program. Fortunately, our Dean recognized this concern as well.

As a result of our feelings, and through consultation with other local community members, our Indigenous focus program recently underwent a complete revitalisation and consequent development of more culturally responsive curricula. Utilizing personal experience, community feedback, and a review of relevant curricula, our team redesigned our Indigenous focus program to better reflect Indigenous ways of knowing. This process was a learning experience for all involved and it has informed my own research into my Ph.D. study.

Previous to instructing within a small community college’s education assistant program, in 2008 and 2009 I had the opportunity, two summers in a row, to co-teach an online nursing course on cultural awareness. This course was my introduction to the concept of Indigenization, and I feel that even though it was just one course within an entire four year nursing program, it approached the subject in a relatively authentic manner. The co-teacher and I assigned readings through the University’s online Moodle web-based discussion interface and facilitated the resulting discussions over an eight week period. At the end of these eight weeks, we accompanied the twelve fourth year nursing students to a remote Nuu-chah-nulth community off the west coast of Vancouver Island. The community hosted us for seven days, in which we took part in daily community activities, walked the territory, accompanied licenced nurses on home visits (with permission), and lived in the community twenty-four hours per day. One week
following this visit, we met with our students for a final sharing circle at the University, and each student then presented a portfolio that expressed their understandings of the cultural awareness instruction that they had received over the ten week period. Some of the portfolios were simply written, but a few were more dramatic in nature – a song that a student had written, and a poem that another recited. We, as instructors, split the final evaluation three ways, with an instructor grade, a self-evaluation grade and a peer-evaluation grade forming an average mark. The students were exposed to Indigenous literature, sharing circles, mentorship, and experiential learning, as well as place-based instruction when we visited the community.

All of these past experiences and current connections to community and academia serve to inform my positionality within the study and to influence my research goals. Having generally described the significance to contemporary post-secondary education of this study, I will now undertake a review of past research and literature to relate them to my current question.

Notes on Terminology

In general society, there seems to be an apprehension about causing offense or showing a lack of respect by using incorrect labels when referring to the First Peoples of Canada. Many non-Aboriginal members of Canadian society are confused over how to address Aboriginal people. At faculty and planning meetings at my college, I have witnessed people voicing their concerns about a lack of understanding of correct modes of address. These concerns are echoed each year by the students in my classroom. Many of my students admit that they have been too afraid to ask questions for fear of saying the wrong thing. What do the First Peoples of Canada prefer to be called? Bob Joseph, a
member of the Gwawaenuk Nation, and founder of the Indigenous Corporate Training Inc. (2015) has an answer, “It depends… It really depends on which hat people are wearing” (p.3). His statement is true, but he continues on to voice what I and other First Nations people feel; we are honoured to be asked. The gesture of reaching out, and demonstrating a willingness to be instructed in proper protocol, is generally greatly appreciated. I have yet to meet a Nuu-chah-nulth Elder who did not appreciate an opportunity to pass on their knowledge and teachings.

Joseph (2015) distributes an e-book titled *Indigenous Peoples Guide to Terminology* from his website (https://www.ictinc.ca). In it he outlines some of the concerns his clients confess to when they come to his company for training. In response to these concerns, he writes,

…the First Peoples of this land now known as Canada formerly had unique communities with unique names - there wasn’t a need for collective nouns or complicated terminology. With European contact and ensuing colonization, the government required people to be defined and labeled for ease of governing. In Canada, we seem to be using a definition of Indigenous Peoples that mirrors the constitutional terminology of Aboriginal Peoples as stated in Section 35 that includes the Indian, Inuit, and Metis Peoples. (p.3)

Section 35 refers to a section contained within the Canadian Constitution Act of 1982 which states,

35. (1) The existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed.
(2) In this Act, “aboriginal peoples of Canada” includes the Indian, Inuit and Métis peoples of Canada.

(3) For greater certainty, in subsection (1) “treaty rights” includes rights that now exist by way of land claims agreements or may be so acquired.

(4) Notwithstanding any other provision of this Act, the aboriginal and treaty rights referred to in subsection (1) are guaranteed equally to male and female persons. (Constitution Act, p.63, 1982)

The term ‘aboriginal’ as a blanket qualifier for all of the First Peoples of Canada works well in a legal sense, but it has not been accepted universally by all indigenous groups across our Country.

In my own nuclear family, we use different labels for ourselves. My mother was raised in the 1950s and was forced to attend residential school, with her two sisters, at age seven. To this day she prefers to refer to herself and her peers as Indian. This is what she grew up with, and is comfortable with. My own preference is for the use of the term First Nations for myself, and Indigenous in the collective sense. I do not prefer the term Aboriginal as it holds connotations of homogeneity for me. An article entitled Why We Use "Indigenous" Instead Of "Aboriginal" on the Animikii Website (2017) states that, “Aboriginal is an oversimplification that hides more meaning than it conveys” (p.1). I have co-workers and friends who reside on our local reserve who refer to themselves strongly as Native or Indian; and I have acquaintances who call each other by colloquial names that I find distinctly discriminatory. My own understandings around labeling and addressing groups are important as I am in a position to influence learners. My students gain cultural awareness in my educational program, and they spread this awareness to
their families and friends outside of the school. In my professional life and in this study, I use the following terms in different situations depending on context.

- **Aboriginal**: This is the generally accepted all-encompassing term for the first peoples in Canada. It includes all people who identify as First Nation, Inuit, and Metis. The Canadian government adopted this term legally in 1982 in the Canadian Constitution Act. This term is limited to the boundaries of Canada; the United States has not adopted this term, legally or in general practice.

- **Indigenous**: A noun which is growing in popularity, and in most cases is used interchangeably with Aboriginal. It refers to what the United Nations (2004) has stated; “Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them” (p.1). The important distinction in my view is that Indigenous refers to our continuity with the land. This resonates with me, and therefore is my preference.

- **Indian**. “Indian” is the legal identity of an Indigenous person who is registered under the Indian Act. This term is very much out of favour in a broad sense, except in cases where people self-identify with this term. Generally used only in direct quotes, or when referring to aspects of the Canadian Indian Act of 1876, which is still in effect with amendments. To this day, individuals who are recognized by the government as having legal ‘status’ as Aboriginal or Indigenous are still labeled as being ‘registered’ Indians in Canada.
Within this study, various scholars are referred to and quoted. As per the American Psychology Association’s citing rules, each author’s words will be reproduced as they are written. Therefore, I will be using various terms interchangeably in my study, including Aboriginal, First Nations, Indigenous, Indian, Native, and American Indian.
The second phase of Laenui’s (2000) processes of decolonization is mourning. Within this phase, it is natural for a people or a person to, “…lament their victimization” (p.154). This is a natural process of healing, and of letting go. In the first phase of asking questions and in doing so, uncovering the injustices of the past, it is natural to feel anger and pain. So much of our Nuu-chah-nulth history has been lost through the processes of colonization, and in the stoic forbearance of our Elders. Many injustices were just never spoken of.

It hurts me to acknowledge that for the first two and a half decades of my life I was only vaguely aware of my mother’s history in residential school. She never told us that my grandparents were forced to put their eight, ten, and twelve year old daughters onto the MV Frances Barclay freighter boat, and send them away for eight months of the year. My mother has since asserted that nothing bad happened to them while they were in residential school, but the removal itself, and the law that forced them to attend, was bad all on its own. My mother and her sisters had no desire to think or speak about their time in residential school. For them it was in the past, and best forgotten about. Accordingly, for the longest time residential school survivors across Canada were not heard, and the majority of Canadians had no idea these atrocities happened. I am not sure what contributed more to this silence; reluctance on the part of the survivors to recount their ordeals, or a refusal to believe the stories on the part of Canadians, especially the
Canadian Government. Whatever the reasons, my education in the nineteen seventies and eighties contained no whisper of the history of residential schools in Canada.

A direct result of the colonization of Canada by European civilizations was the loss of language and culture of North American Indigenous societies. The loss came about through a sheer reduction in population due to disease and genocide as well as through the implementation of massive changes to our ways of life. The loss of culture and language over time has had a direct effect on my generation, and will continue to affect generations yet to come. My mother grew up hearing my grandfather speak our language, but she had no occasion in which to learn it herself. Nuu-chah-nulth students were forbidden to speak their language while they were in boarding school, and were banned by the authorities to engage in cultural ceremonies while they were at home. My mother grew up having very little culture to pass on to me. I resent this. I resent knowing that my grandfather was taught so much about our culture by his father, a man I knew only briefly as he passed away when I was very young. All of his knowledge has been lost.

Phase two of the process of decolonization relates to the sadness and anger generated by the realizations of what has been lost. Chapter Two of this dissertation is an examination of the past, and what has been learned and uncovered so far. At this point in my research, I need to take a measured look at where we are, and from there, make a plan on how to proceed.
Chapter Two:

Review of Past Research

In this chapter, I expand my knowledge of what has come before me, from an academic point of view. We stand on the shoulders of those who come before, just as we acknowledge our ancestors in the Nuu-chah-nulth tradition. Together we build upon a foundation of experience and knowledge.

Eurocentrism and Western-Centrism

Increasingly, modern understandings of Aboriginal ways of knowing recognize that disparaging characterizations of the knowledge of marginalized or local populations may be hasty and naive (Agrawal, 1995). In fact, Battiste & Henderson (2009) are adamant in their assertion that not only are Indigenous knowledge and methodologies valid, they are essential to the healing of our First Nation communities (p.6). Eurocentric methods of research cannot adequately address the variety of issues that present themselves within the Aboriginal population of Canada, while Aboriginal ways of knowing are uniquely prepared for just such a challenge. These methods are also essential when addressing the concept of Indigenizing curriculum. It is not enough to simply add Indigenous content in the form of textbooks and readings, or hire an Aboriginal instructor to teach within a Eurocentric pedagogy. Authentic indigenization attempts must incorporate Indigenous ways of knowing in more than just content and instruction; they must be respectful of local cultural knowledge as well as allow for revision of assessment and evaluation methods.
‘Eurocentrism’ and the dominance of a ‘Western Culture’ embrace the overarching tendencies to interpret history, customs, ethics, values, technology, and experiences from a ‘European’ viewpoint. In a broad sense, this refers to thought and philosophy originating in the area known as Europe, and in areas strongly influenced by European colonization (including the Americas). Eurocentrism embraces an implied belief, which may be overt or covert, in the pre-eminence of the European viewpoint or experience. This pervasive ideology stems from the phenomenon of ethnocentrism, which refers to the regard of one’s own ethnic group or society as superior to others. From this worldview, other population groups are assessed and judged in terms of the categories and standards of evaluation of one’s own group (Amin, 1989). This approach to history, culture, experiences, and education results in the marginalization of opposing viewpoints, negative attitudes toward them, and stereotyping of groups of people outside of European or Western culture.

From a pedagogical perspective, “Eurocentrism diminishes the educational experience by focusing on the contributions of European people, which represent only a small segment of the total contributions made by people from all cultures” (Neal, 2012, p.862). The tendency of the dominant culture to continue to adhere to these values stems from the understanding that,

Advocates of the ascendancy of Western values argue that there is a disinterested Western cultural tradition that is rooted in a commitment to rational inquiry, that is governed by rigorous standards of evidence, and that has, over the centuries, converged on the truth. (Price, 1992, p. 208)
The contrast between these worldviews is where the motivation for my study sits. Is it important to bring to light historical traditional instructional strategies, or hold to the conventional tenets of European and Western ideology?

**Systems Theory**

The idea of looking at phenomena through a systems theory lens can be traced back through history to the beginnings of European philosophy. Aristotle stated that, “The whole is greater than the sum of its parts” (as cited in von Bertalanffy, p.407, 1972). This may have been part of the beginnings of what we now know as general systems theory, but throughout the years, many different iterations have been developed, discarded and picked up again. The most notable period where systems theory was abandoned began in the ages following Descartes, who, in the scientific revolution of the sixteenth century, proposed that any aspect of nature could be broken down into its individual components and examined apart from the whole. These classical scientific principles predominated philosophical thought for hundreds of years until around the turn of the 20th century, when some scholars began to question the viability of the scientific method in describing the “…organization within every living system” (von Bertalanffy, p.410). In the 1920’s, von Bertalanffy postulated the following,

> There exist models, principles and laws that apply to generalized systems or their subclasses irrespective of their particular kind, the nature of the component elements, and the relations of “forces” between them. We postulate a new discipline called General Systems Theory. (p.411)
Systems theory can be utilized to look at the overarching ecology of society. In looking at a general ecological view of society rather than focussing on the individual differences, relationship patterns may emerge. These patterns can help us to see how everything is connected, and may be used to teach respect for each other and for the environment.

Cybernetics is the discipline that studies patterns in organization, and according to Bateson (1996), “...the most persuasive models for complex systems are biological, and the abstract study of systems opens up a whole new range of metaphorical recognitions” (p.73). These findings resonate with what Indigenous people see as a “holistic” or connected worldview. Bateson uses the following analogy to describe how she interprets the term holistic: “A holistic view of the forest is not limited to the growth of trees for potential human use, but includes the interaction of the winds and the rain and the bacteria of decay in the soil” (p.74). Using a systems theory lens, an authentic holistic view of society in North America would include the history of all cultures residing within the territory as well as how each culture and how the population as a whole interacts with each other and with the environment. Deloria and Wildcat (2001) relate this concept to an Indigenous worldview when they describe their interpretation of Indian metaphysics. “The best description of Indian metaphysics was the realization that the world, and all its possible experiences, constituted a social reality, a fabric of life in which everything had the possibility of intimate knowing relationships, because, ultimately, everything was related” (p.2). These interpretations of cybernetic theory echo the Nuu-chah-nulth concept of heshook-ish tsawalk: Everything is connected.
Indigenous Knowledge, Ways of Knowing, and Ways of Being

Although the concept of Indigenous ways of knowing and being standing as counterpoint to Eurocentric philosophies has been argued since the 1970s by such well-respected Aboriginal researchers as Vine Deloria, Marie Battiste, and Linda Tuhiwai Smith, many theorists exclaim over this ‘new’ way of looking at the world. It is challenging to locate even earlier accounts of individuals holding forth Indigenous knowledges as equal in importance to Eurocentric thought, but there can be reward in reviewing the documented accounts of historical Indigenous people. Ohiyesa, also known as Dr. Charles Eastman, was a Sioux scholar in the late 1800s. Describing his upbringing, he said, “Everything the young Indian boy did was in preparation for adulthood … Indian children patterned their lives after adults and imitated them in their games and sports” (Eastman, as cited in Wilson, p.56, 1975). This recorded statement, from over one hundred years ago, supports our Indigenous understandings around lifelong and experiential learning.

Ohiyesa straddled the line between a traditional Sioux upbringing in the 19th century and Eurocentric-style academia, as his father converted to Christianity after being captured during a raid on ‘hostiles’ during the Sioux Uprising of 1862. Ohiyesa was moved from a traditional Sioux lifestyle to the American education system, and he eventually became a medical doctor. He was a prolific author, providing us with a historical glimpse into, “Information about his life as an Indian and later as a product of white civilization; information concerning Indian life, customs, and religion; and, most importantly, information dealing with Indian and white relations” (Wilson. p.56, 1975). Ohiyesa also related and published children’s stories that he recollected from his youth.
Studying Ohiyesa’s children’s stories, Wilson (1975) writes that Ohiyesa highlights, “the Indians' concept of creation and their close relationship to nature and animals (p.60). These writings hold value as they help us to see how Indigenous understandings of the world have remained constant over time.

The original works of Ohiyesa produce some sobering reflection on my part however, as he wrote in 1911,

First, the Indian does not speak of these deep matters so long as he believes in them, and when he has ceased to believe he speaks inaccurately and slightingly.

Second, even if he can be induced to speak, the racial and religious prejudice of the other stands in the way of his sympathetic comprehension.

Third, practically all existing studies on this subject have been made during the transition period, when the original beliefs and philosophy of the native American were already undergoing rapid disintegration. (Eastman, p.252)

These words mirror my own fears around writing about Indigenous ways of knowing, especially where it relates to pedagogical practice. In the classes I teach, my students are predominantly non-Indigenous, and are in general terms unaware of local Nuu-chah-nulth cultural practice. Throughout the academic year, I receive requests from them for more and more in-depth knowledge around cultural experience, but I must remind them that we as Nuu-chah-nulth are not operating in a fish-bowl. We do not go about our lives expecting to be observed and studied as curiosities. I cannot normally bring a class of
fifteen adult learners to a potlatch or celebration feast unless I am specifically invited. Much traditional knowledge is closely guarded and only passed on to the ‘correct’ individuals. Many ceremonies are only held behind closed doors with no in-and-out privileges during these certain hours. And yet, the appetite is there, and certain aspects of cultural knowledge can be shared in a respectful way.

In 1995 Agrawal wrote that, “One of the more glamorous phrases that has now begun to colonize the lexicon of development practitioners and theorists alike is Indigenous knowledge” (p.413). He goes on to explain that recently,

Where ‘Eurocentric’ social science, technological might, and institutional models - reified in monolithic ways - seem to have failed, local knowledge and technology - reified as ‘Indigenous’ - are often viewed as the latest and the best strategy in the old fight against hunger, poverty and underdevelopment. (p.413)

Illustrating this point, the current political climate of environmental crisis and global awareness has spurred interest in the ideologies of populations that have managed to subsist in balance within their environment over long periods of time. Agrawal maintains that, “Because Indigenous knowledge has permitted its holders to exist in ‘harmony’ with nature, allowing them to use it sustainably, it is seen as especially pivotal in discussions of sustainable resource use” (p.414). This renewed awareness of the importance of Indigenous knowledge in the environmental arena is providing validation for the use of Indigenous ways of knowing and teaching in other theoretical areas. Also illustrating this point, in the Association of Canadian Deans of Education’s Accord on Indigenous Education (2010) it is stated that, “The time is right for a concerted and cooperative effort
that creates transformational education by rejecting the ‘status quo’, moving beyond ‘closing the gap’ discourse, and contributing to the well-being of Indigenous peoples and their communities” (p.2).

In Canada, prior to the 1970s, Eurocentric academic enquiry viewed Indigenous and traditional knowledge as inefficient, inferior, and barbaric; Indigenous knowledge systems were not given due attention, as only Eurocentric methodologies and perspectives were seen as valid (Battiste, 2009; Agrawal, 1995; Deloria, 2001). Describing historical and traditional instructional practice, Wooton and Stonebanks (2010) wrote, “Indigenous values, beliefs, teachings, languages, and other cultural skills these children learned from their parents, grandparents, and other extended family members were denigrated and suppressed” (p.111). They continued, “In North America, the Eurocentric education system treats Indigenous cultures as repositories of artifacts from long-dead cultures” (p.114). The centuries old practices of assimilation in North America have suppressed the value of traditional Aboriginal pedagogy and vaunted the ideals of a modern neoliberal society. Contrasting with the holistic worldviews of Indigenous people worldwide, the neoliberal worldview perceives,

that every human being is an entrepreneur managing their own life, and should act as such. In terms of moral philosophy this is a “virtue ethic”, in which human beings are supposed to act in a particular way according to the ideal of the entrepreneur. (Fitzsimons, p.23, 2002)

North American Indigenous cultures are far from ‘long-dead’ however, and integrating aspects of Indigenous ways of knowing and teaching into contemporary instruction can
only improve on modern neoliberal pedagogy. Wilson (2008) identified that within Indigenous epistemologies, generally,

there are common themes and broad patterns of Indigenous ways of knowing that bind or weave the communities together and they suggest that reclaiming Indigenous knowledges and epistemologies is an important strategy toward the actualisation of sovereignty and self-determination among tribal nations. (p.951)

Educators should therefore attempt to integrate Indigenous knowledges within their curriculum design because as, “Indigenous peoples’ epistemologies are marginalized by power imbalances, it is these ways of knowing and worldviews that should be included by educators as foundations for pedagogic approaches” (Bishop, Ladwig & Berryman, p.187, 2014). In this way, pedagogy may pave the way for social justice. Battiste & Henderson (2009) describe a pedagogy informed by Indigenous knowledge when they describe learning “…as a sacred and holistic, as well as experiential, purposeful, relational, and a lifelong responsibility” (p.5).

Sanford, Williams, Hopper, and McGregor (2012) crafted a table to demonstrate some of these differences between Euro-American-Centrism/Neoliberalism and Indigenous ways of knowing. This table is inserted below, in Table 1.
Table 1. Contrasting Euro-American-centrism influenced by neoliberal discourses, and Indigenous ways of knowing (Sanford, Williams, Hopper and McGregor, p.4, 2012)

<table>
<thead>
<tr>
<th>Ways of knowing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Euro-American-Centrism/Neoliberalism</strong></td>
<td><strong>Indigenous</strong></td>
</tr>
<tr>
<td><em>(Predetermined curriculum)</em></td>
<td><em>(learner/teacher collaboration)</em></td>
</tr>
<tr>
<td>Prescribed learning; expected outcomes pre-determined</td>
<td>Learning is emergent</td>
</tr>
<tr>
<td>Teacher to student focused</td>
<td>Focus on students and teacher interaction</td>
</tr>
<tr>
<td>Learning happens in the classroom; classroom is quiet</td>
<td>Learning happens in many locations, inside and outside the school; classroom can be noisy</td>
</tr>
<tr>
<td>Knowledge is transmitted</td>
<td>Students construct knowledge through gathering and synthesizing information</td>
</tr>
<tr>
<td>Students work independently</td>
<td>Students work in pairs, groups, or alone depending on the purpose of the activity</td>
</tr>
<tr>
<td>Teacher evaluates student learning</td>
<td>Assessment is used in context to promote and diagnose learning</td>
</tr>
<tr>
<td>Teacher monitors and corrects students' responses</td>
<td>Learners are guided to find their own solutions and answer their own questions</td>
</tr>
<tr>
<td>Teachers evaluate student learning; teaching and assessing are separate</td>
<td>Students evaluate their own learning; teachers also evaluate; teaching and assessing are intertwined</td>
</tr>
<tr>
<td>Students are ranked according to pre-determined criteria</td>
<td>Students have multiple opportunities for success and quiet recognition</td>
</tr>
<tr>
<td>Teacher chooses what is to be learned</td>
<td>Students have some choice of learning activities and topics</td>
</tr>
<tr>
<td>Focus is on a single discipline</td>
<td>Approach is compatible with multi and inter-disciplinary investigation</td>
</tr>
<tr>
<td>Culture is competitive and individualistic</td>
<td>Culture is cooperative, collaborative, and supportive</td>
</tr>
</tbody>
</table>
This table effectively outlines the dichotomy between Eurocentric and Indigenous ways of knowing. As illustrated, connectedness and relationship building are key concepts within the ideas of an Indigenous pedagogy, and these concepts are integrated into aspects of instruction. Many of the key concepts illustrated in Table 1 can only occur in the presence of a strong connection between the teacher and the learner.

**Moving Forward**

Regarding an Aboriginal cultural renaissance, Waugh (2011) believes that, “Aboriginal people are returning to some of the core values of their legacy, re-affirming their own spiritual vision of reality, and inspiring young Aboriginals to move their cultural gifts to a higher social plane” (p.136). Since 1988, when I first attended Malaspina University-College, now known as Vancouver Island University (VIU), I have experienced some of this renewal first hand. My cultural experience at VIU in the years between 1988 and 1995 consisted of an occasional conversation with other Aboriginal students; I was not able to locate any Aboriginal courses, specific supports, or places to gather. Returning to the institution, and visiting other institutions since my graduation in 1995, I have witnessed the emergence of new Aboriginal academic programs and cultural supports such as VIU’s Shq’apthut First Nations gathering place (personal observation, 1988-2017; VIU website, accessed May 12, 2017). These observations are supported by Waugh (2011) when he states that, the cultural ground of Aboriginal intellectual life continues to have an impact below the surface of Canadian culture and, as Aboriginal communities grow and become more predominant …we will likely see a
variety of attempts to incorporate elements within Canadian institutions.

(p.149)

The BC Government Advanced Education Ministry (2015) recently released their Aboriginal Post-Secondary Education and Training Policy Framework and Action Plan: 2020 Vision for the Future (Retrieved from www.gov.bc.ca on June 25, 2018). In this publication, the government states that, “A greater number of Aboriginal learners are participating in post-secondary education”. Continuing with, “In 2009/10, over 24,000 learners enrolled in BC’s 25 public postsecondary institutions identified as Aboriginal” (p.7). These increasing numbers will help to provide the impetus to continue the development and offerings of culturally appropriate supports and programming.

Additionally, from the Canadian Federal Government level, a report from Canada’s Truth and Reconciliation Commission of 2015 outlines the recommendation, for the whole of Canada, that all students enrolled in nursing, medicine, legal studies, social work, and education be required to take courses addressing Aboriginal history; residential school history, Aboriginal rights; and Indigenous knowledges and worldview (as cited in Hare, 2016). If followed, this recommendation could make vast steps toward a larger sense of cultural awareness as these areas intersect greatly with Aboriginal society in Canada.

**The Significance of Numbers - Tsawalk and Muu**

Since time immemorial people have attributed sacred meanings to numbers. The most significant numbers for the indigenous population of North America are three, four, and seven, and they play an important role
in the lives of American Indians: in their mythology, rituals and ceremonies, chants, literature, architecture, visual arts, households, etc. American Indian numerical symbolism has much in common with that of other traditional societies, but in some aspects it is unique. (Danchevskaya, p.65, 2017)

Most of, and arguably all, Indigenous societies in North America exist within a framework that understands that all aspects of life are interconnected. The Nuu-chah-nulth do not perceive a duality between the physical and spiritual worlds, we exist in a world where both intertwine. This concept can best be described using Umeek’s (2004) words; “…the spiritual and physical form a single unified continuum” (p.88). The Nuu-chah-nulth word for ‘one’ is tsawalk, and this term is used together with heshook-ish to symbolize the mindfulness of ‘we are all connected’. But, tsawalk itself can be understood in a deeper context. A plurality is encapsulated within an attempted translation of tsawalk when referring to an individual person. We as Nuu-chah-nulth human beings view ourselves as being one, yet at the same time as being connected to everything else. The creator is also the creation. This understanding of our place within the world can also be seen in the Nuu-chah-nulth view that the physical is merely a manifestation of the spiritual (p.10). The concept of human life being a single part of a larger continuum is also expressed through the Nuu-chah-nulth understandings of how our current awareness is informed by our yaqwiiʔitq quuʔus, Ancestors, or our nananiqsu, Grandparents. These terms can also be understood as simply the people who came before us. These ‘people’ are spiritual manifestations who not only look out for and protect us in the contemporary world, but who exist outside of time. They are in the
world, not were; they are our ancestors, but are also manifestations of the spiritual world inhabited by *quʔušinmit*, Son of Raven, and his peers.

Umeek (2004) expands on this conception in his explanations on how individuals may be one thing in their current form, but retain the potential to change into another. As outlined in origin stories handed down over thousands of years, all creatures retained the essence of human and animal at the same time, and held the power of *quis-hai-cheelth*, which is the ability to transition between forms (p.59). In the stories I grew up with, *quʔušinmit*, Son of Raven, transformed readily between bird and human form. He also had the potential to become a leaf, a salmon, a grain of sand on the beach. There are stories in which Son of Raven became something which a human woman would eat, and would then transform themselves in her belly to become a baby subsequently born. There is always a reason, and there is always something to learn. The protagonist of these stories always came to some realization at the end. The concept of constant transformation and growth can translate to an educational perspective as this phase-transition also relates to the acquisition of knowledge over time. Similar to going through developmental stages in life, learners constantly transform into different versions of themselves as they gain experience and knowledge over time. Transitions are not always simple or easy, and this holds true for the acquisition of knowledge. Humans experience these transitions or transformations on larger and smaller scales across their lifespans.

*Muu* in Nuu-chah-nulth is translated as the number four. In the numbering sequence, the first five numerals in our language are *tsawalk, utla, xaats-sta, muu, suh-tcha*. From an early age, I remember my mother and grandmother reciting these numbers to the youngsters in the family, and we were encouraged to repeat them back. In this way,
all of us were taught as grandchildren. Unfortunately for my current linguistic capabilities, my early Nuu-chah-nulth language training was in basic names and numbers; I never learned the more intricate aspects of sentence formation and conversation. Over time, however, I have been coming to an understanding of how certain numbers resonate with integral aspects of Indigenous ways of knowing. Having an understanding of basic Nuu-chah-nulth counting systems has helped me process this information and recognize their significance. As Nuu-chah-nulth people, we interpret the human life cycle as comprised of four developmental stages; birth, adolescence, adult maturity, and the transition to death. Generally, each stage is acknowledged through ceremony and feasting, and with accompanying initiation rituals.

People from the Huu-ay-aht Nation, a member Nation of the Nuu-chah-nulth, also discuss the overarching concept of the significance of the number four, when they relate that,

The sky, sea, forest, mountains and earth were inhabited by creatures possessing special powers, such as the Thunderbird, giant sharks, the ya’i spirits of the mountains, and the pok’mis, or wild people of the woods. Tribal and family histories recount numerous instances of how the Huu-ay-aht ancestors encountering these and other creatures, possessed of spirit powers and treasures, which they bestowed. These powers and treasures have been inherited through many generations. Presiding over all are the four great spirits of the Above, the Horizon, the Land, and the Undersea. (Hoover, 2000, p.41)
There are four cardinal directions – a fact that holds true across multiple cultures. Generally from an indigenous standpoint, these are oriented to the sun, rather than on magnetic compass points. The Nuu-chah-nulth acknowledge this understanding in ceremony and in how they position themselves in daily life. Prior to the advent of maps, charts or global positioning, the Nuu-chah-nulth would refer to landmarks or common experience to comprehend location. The sun comes up from that direction, it goes down in the opposite direction. The mountain peaks are this direction when I face a certain way, and waves come in from another direction when the wind blows from this way. In ceremony, however, and specifically in cleansing ceremonies, gratitude is directed toward the East, from the direction in which the sun appears each day. In a cleansing ceremony we took part in during our week residing in a remote community off the coast of Vancouver Island, we emerged from the sweat-lodge four times. Each time we came out, we gave thanks to the four directions, beginning with East. Each time we went into the lodge, water was poured over the hot rocks to produce steam. We completed this cycle four times.

A final word on the significance of muu. Four is a sacred concept across many North American Indigenous cultures. Not all originated in the Nuu-chah-nulth territory, but many have been adopted for use by the Nuu-chah-nulth people. We do not have archaeological data to support the use of sweat lodges in ancient times on our coast, but the ceremony has been embraced and adapted by many Nuu-chah-nulth spiritual and medicinal healers. These understandings are not based on recorded or written records, as all of the Indigenous Peoples of North America descend from an oral culture. Accordingly, to gather this knowledge I have reviewed literature collected by scholars in
various locales which are referenced here, as well as drawn from my own cultural experiences over my four decades of life. Brendtro, Brokenleg & Bockern state that, “The number four has sacred meaning to Native people who see the person as standing in a circle surrounded by the four directions” (p.418). Correspondingly, as related in their handbook for Integrating Aboriginal Perspectives into Curricula (2003), the Manitoba Education and Training Department state that,

This cultural concept is based on the Aboriginal belief that natural occurrences happen in fours and four is a sacred number. Often, giving thanks to the Creator mentions the four elements, earth, air, wind and fire, the 4 seasons, 4 directions, 4 human races, 4 chambers of the heart, 4 quadrants of the body, 4 sections of the brain. (p.10)

Williamson (1989) describes the number four as having the highest cultural significance when he states that,

…crucial periods in the story last four days, four weeks, or four years. The Mescalero Apache say that man passes through four stages of life ... Hopis who are about to travel away from the village for a period of time spread four lines of cornmeal across their entranceway to seal the door. No one will enter while they are absent ... Throughout their lives, formulas such as these, related to the celestial sphere, guided the traditional behavior of Native American. (p.299)
Symbolism and the Medicine Wheel

From a cultural perspective, symbols are used in the semiotic sense, to assign meaning to something other than itself. Indigenous Peoples have embraced this concept for millennia, utilizing symbolism in everything from art to allegory in storytelling. Halas (2013) articulates this when she states,

Ways of perceiving symbolism range from a concept so broad that it encompasses the entire human world of meanings to one that narrows the term solely to representations of the transcendent sphere. If, thus, the word symbol refers to every element endowed with a meaning, then the entire sociocultural human reality may be considered in terms of symbolism.

(p.976)

Assigning meaning to various aspects of human nature and the physical/spiritual world helps the human race to understand and find purpose in their lives. Thus we can understand the all-encompassing nature of the medicine wheel. Calliou (1995) outlines the usefulness of this model when she states that, “Medicine wheels can be pedagogical tools for teaching, learning, contemplating, and understanding our human journeys at individual, band/community, nation, global and even cosmic levels” (p.51).
For millennia, the North American Plains tribes utilized stone circles or hoops in ceremony to represent our connectedness with all things, including the spiritual and astrological worlds. In 2014, a news story in the Winchester Times revealed the possibility of an ancient stone circle site in Western Virginia. Consultation with an archaeologist has revealed that the site may be over 10,000 years old. The circular site is arranged concentrically, with a smaller circle sitting at the Eastern edge of a larger circle. This arrangement of circles coincides with the rising of the sun in the East, on a specific day – June 21st, the summer solstice (Van Meter, 2014). In a more contemporary context, Bopp et al. (1984) explain that the medicine wheel is “…an ancient symbol used by almost all the Native people of North and South America” (Bopp, Bopp, Brown & Lane, p.9). They go on to explain in their book, The Sacred Tree, that the medicine wheel as a conceptual framework allows us to understand things that we cannot quite see, by allowing us to visualize these concepts as ideas and not as physical objects (p.9). In a
general sense, this wheel presents conceptual ideas as intersected sets of four. However, Battiste (1995) rightfully warns us against a pervasive tendency to reduce concepts such as these to Pan-Indianism (p.52). There is no single understood perception of how medicine wheels should be utilized, but most Indigenous people acknowledge the significance of the representation of the circle in artwork, tradition and ceremony. Accordingly, many versions of the medicine wheel do not conform exactly to the frameworks described here, but most are representations of interconnectedness in some form. Following are some relevant examples:

![Figure 2. The four cardinal directions](image)

As outlined in the previous section, the four cardinal directions hold cultural significance for most Indigenous societies. Bopp et al. (1984) discuss the importance of each segment of the medicine wheel when applied to the four directions. They describe the process of analyzing each direction as a step along a path, or journey, beginning with
the East (p.38). This journey is symbolic in nature, and is designed to help human beings discover not only who they are now, but also to develop the potential gifts they hold inside.

Immanence is defined by the Canadian Dictionary and Thesaurus (2004) as “pervading the universe” (p.257). Graveline (1998) explains how, when relating to the concept of immanence, “mysterious powers are found in all Earth’s creatures: rocks and crystals, birds and feathers, trees and wood, plants, animals and humans, and are visible especially in dreams and visions through ceremony” (p.52). She continues, “These mysterious powers are manifested and observable in the way the seasons change, the way the day follows night, the way the sun moves across the sky. All the physical changes throughout the day…have personalities, are forms of energy shape-shifting” (p.52). Accordingly, the medicine wheel represents not only the tangible aspects of the four directions, and what these symbolize, but also the metaphysical aspects of human nature. These aspects are illustrated in the figure below.

Figure 3. The four aspects of human nature
The medicine wheel in Figure 3 outlines the four aspects of human nature; the spiritual, the emotional, the physical, and the mental. These four aspects are placed on the wheel to directly correspond with the four directions as illustrated in Figure 3. Our spiritual aspect is associated with the east, with beginnings, with the spring and with enlightenment. The south is associated with our emotional aspects, with summer and with our psychological understandings of the world. West corresponds with our physical realm and actions, and also with the fall. North is where our cognitive energy lies, with the Elders and with winter. These conceptions represent an interconnected understanding of ourselves within the world, as all are encompassed within a circular shape. This shape signifies much more than the four directions, four seasons, four and aspects of being a human, it allows for us to teach and to learn through a holistic and self-constructed process (Calliou, p.53, 1995).

**Why Indigenize Curriculum?**

The following description and definition of indigenization was taken from the University of British Columbia’s International Health Library Wiki (HLWIKI, 2018), Indigenization is a concept gaining increased attention in Canadian universities, academic libraries, and elsewhere around the world. The goals of indigenization pedagogically and bibliographically are to: 1) develop practices that ensure that Aboriginal students see themselves and their realities reflected in academia; 2) ensure that non-Aboriginal students learn the literacies (e.g., skills and knowledge) that enable them to work with and live alongside their Aboriginal neighbors knowledgeably and respectfully. As an emerging 21st century concept, indigenization is
rooted in and linked to fields of postcolonial, decolonial and Indigenous research paradigms, and the discourse is varied, situated and complex.

For various reasons, including prompting from the Truth and Reconciliation Commission’s *Calls to Action* (2015), many Canadian post-secondary institutions have recently been announcing their intentions to better engage with Indigenous communities and students. Significantly, indigenization attempts are gaining in prominence. Gaudry & Lorenz (2018) have analyzed these attempts and have come up with three visions of indigenization that institutions typically embark on. They define these as:

*Indigenous inclusion* is a policy that aims to increase the number of Indigenous students, faculty, and staff in the Canadian academy. Consequently, it does so largely by supporting the adaption of Indigenous people to the current (often alienating) culture of the Canadian academy.

*Reconciliation indigenization* is a vision that locates indigenization on common ground between Indigenous and Canadian ideals, creating a new, broader consensus on debates such as what counts as knowledge, how should Indigenous knowledges and European-derived knowledges be reconciled, and what types of relationships academic institutions should have with Indigenous communities.

*Decolonial* indigenization envisions the wholesale overhaul of the academy to fundamentally reorient knowledge production based on balancing power relations between Indigenous peoples and Canadians, transforming the academy into something dynamic and new. (p.218)
Through the process of doing research for my dissertation, the truth of Gaudry and Lorenz’ three visions of Indigenous inclusion became more transparent to me. As a First Nations person, it had been important for my college to hire me as a figurehead, representing the college’s attempts at indigenization via *Indigenous inclusion*. However, over time, and perhaps responding to the pressures of reconciliation efforts across Canada, my local college has developed programs and indigenization efforts that more closely resemble Gaudry & Lorenz’ vision of *Reconciliation indigenization*. Through this vision of academic indigenization, post-secondary institutions have been working towards a broader integration of Indigenous worldviews and ways of knowing. For example, in my institution’s newly revised Educational Assistant/Community Support program, we have built cultural awareness into each of the core courses. Students meet mainstream course outcomes through an Indigenous focus via the addition of readings, field trips, holistic assessment strategies and guest speakers.

The advantages of integrating Indigenous ways of knowing in curriculum reform to better suit the needs of Indigenous students, as well as to provide increased cultural awareness for non-Indigenous people, are many. As local Indigenous groups are invited to take part in institutional advisory committees, governance, focus groups and other forms of consultation, Indigenous students in turn perceive that they have a stronger voice within the institution. Increased employment of Indigenous faculty and staff also plays a large part in the feelings of inclusion on the part of students (AVED, 2012). At the very least, the implementation of Indigenous ways of knowing in a classroom setting will provide invaluable cultural awareness and understanding to non-Indigenous students. Barnhardt & Kawagley state that non-Indigenous people “…need to recognize the
coexistence of multiple worldviews and knowledge systems, and find ways to understand and relate to the world in its multiple dimensions and varied perspectives” (p.9). Based on my own experience teaching in a small college on Vancouver Island, my non-Indigenous students generally have a limited awareness of local First Nation groups and customs. Building a cultural awareness of local First Nations traditions into my curriculum has been well-received and appreciated by all of my students, and a common sentiment is that the non-Indigenous students were afraid to ask questions for fear of offending people. Acknowledging local customs to build bridges of understanding between my Indigenous and my non-Indigenous students has built up a sense of pride within my cohorts (personal reflection, 2017). Friesen & Friesen (2002) support this sentiment when they state that, “The old ways can build self-esteem for Native youngsters and widen the horizons of Euro-Canadian thinking” (p.79).

Consequently, it is important to acknowledge that while some of the cultural practices and understandings described in this work may not relate directly to all members of the Nuu-chah-nulth people, there is an overarching feeling that reclaiming historical traditional practice is beneficial. Moorehead, Gone & December (2015) refer to this when they state,

An important component of this Indigenous cultural revitalization is an emergent social movement dedicated to the reclamation and promotion of Native healing. Champions of these Indigenous therapeutic traditions have emphasized the reclaiming and adapting of traditional social relations, Indigenous knowledge, and ceremonial practices long disrupted, denigrated, and suppressed through colonization. (p.384)
Friesen & Friesen (2002) outline three pedagogical aspects to examine when considering curriculum reform from an Indigenous viewpoint. First that the traditional First Nations philosophy involving the interconnectedness of life must be taken as a whole. Second, that while Indigenous knowledge systems are fluid enough to recognize individuality, they hold fast to traditional truths and values. And third, that assessment is not static or unidirectional, and may vary based on the relationship between the student and teacher (p.77). As I will elaborate on in the following chapter on methodology, my interviews with Nuu-chah-nulth Elders were designed to help me gain a deeper understanding of the pedagogical aspects suggested above, focussing on traditional Aboriginal assessment practices: More specifically, to investigate local Nuu-chah-nulth assessment from both a historical perspective as well as in contemporary practice.

**Authentic Learning Environment**

An important aspect of the Indigenizing process is to develop an authentic learning experience that adequately reflects the Indigenous ways of knowing and being that must be part of any instructional design. The following framework, developed by Herrington & Oliver (2000), outlines nine ways in which authentic learning can be incorporated into instructional design,

Table 3. Nine ways to incorporate authentic learning. (Herrington & Oliver, p. 26).

1. Provide authentic contexts that reflect the way the knowledge will be used in real life.
2. Provide authentic activities.
3. Provide access to expert performances and the modelling of processes.
4. Provide multiple roles and perspectives.

5. Support collaborative constructions of knowledge.

6. Promote reflection to enable abstractions to be formed.

7. Promote articulation to enable tacit knowledge to be made explicit.

8. Provide coaching and scaffolding by the teacher at critical times.


The relevance of this framework to the Indigenization of contemporary college courses is apparent in that it highlights the importance of collaboration, relationship building, reflection, and in providing for authentic assessment practice. Additionally, these nine principles also adhere to the Nuu-chah-nulth concept of *heshook-ish tsawalk*, as well as reflect the connectedness, adherence to tradition, and fluidity of assessment as outlined by Friesen & Friesen on page 52 of this literature review.

As we have previously reviewed in Table 1 above, Sanford, Williams, Hopper and McGregor (2012), describe the Indigenous learner/teacher relationship as a collaboration (p.4). Evidence of collaboration can be found in circle or Talking Circle work, which is integral to traditional Aboriginal pedagogy. This custom has evolved naturally from the tradition of story-telling, where a circle of learners surrounds the story-teller or person demonstrating knowledge. An integration of the Talking Circle in
contemporary college classes is not new, as it is an approachable way to authentically integrate Aboriginal pedagogy and teacher/student collaboration into contemporary classwork. Generally, a group of people sit on chairs placed in a circle. Everyone involved must sit within the same circle to ensure inclusion. An object of significance, usually a feather or other culturally important artifact, is passed from person to person and only the person who holds the object may speak. On the West Coast, this ceremony most likely has its roots in the concept of a talking stick. For centuries, it has been a First Nations custom in Western Canada for speakers at cultural gatherings to hold a heavily decorated stick or cane while speaking to the crowd. Others who wished to speak were passed the cane, and in this way, discourse was ordered (personal reflection, 2017). In college classrooms, sitting in a circular formation has become increasingly common, and this is especially true in programs which espouse an Indigenous focus. The teacher sits as a participant in the circle, and instruction takes place with increased student interaction in the discussions. Occasionally, the instructor will call for a talking circle check-in; a question is posed, and each student responds in turn with their own reflections as the cultural object is passed to them. Running Wolf & Rickard (2003) state that, “Talking circles, as a unique instructional approach, can be used to stimulate multicultural awareness while fostering respect for individual differences and facilitating group cohesion” (p.39).

From a pedagogical perspective, a benefit of a talking circle format is that it may help to reduce the formation of stratified classroom talk. Hung (2015) describes the difficulties that may arise when certain students contribute more often than others (which necessarily limits the contributions of others) when he states that when he, “…considers
the class as a whole, my underlying assumption is this: Students’ self-perceptions, patterns of participation in whole-class discussions, and achievement and learning outcomes are linked and influence one another in important ways” (p.257). This sense of connection, outlined previously in the concept of *heshook-ish tsawalk*, is central to the concept of providing an authentic learning environment. Each student is viewed as important and integral to the whole, with opinions and reflections as valid as any other. When a classroom is not stratified, and each student contributes equally, this sense of connectedness and ownership of the space helps to the students to authentically reflect on the knowledge being transferred.

**Assessment vs. Evaluation**

Black & Wiliam produced a seminal work on student assessment in 1998. In this paper, they reviewed the results of 250 articles or chapters, to gain a better understanding of the efficacy of formative assessment. In their 2001 paper, *Inside the Black Box*, they provide the following definition of ‘assessment’ in general,

> We use the general term assessment to refer to all those activities undertaken by teachers – and by their students in assessing themselves – that provide information to be used as feedback to modify teaching and learning activities. Such assessment becomes formative assessment when the evidence is actually used to adapt the teaching to meet student needs.

(p.2)

The concept of ‘evaluation’ differs from this conception of ‘assessment’, as Angelo and Cross (1993) illustrate, when they state, “Evaluation focuses on grades and may reflect
classroom components other than course content and mastery level. These could include discussion, cooperation, attendance, and verbal ability” (p.1). Assessment and evaluation are terms that are both used within this study, and it is important to acknowledge differences between the two concepts. Using very broad strokes to define each, the differences can be summed up in the following table:
As demonstrated, assessment encompasses perceptions of ongoing, continual and lifelong learning; relationships within the instruction process; and scaffolding of learned information to support new learning. It is an interactive process between the student and the teacher, and this interaction extends beyond the teacher to classmates and to the environment in which the learning is taking place. Evaluation, conversely, focuses on final ratings and mastery level (Angelo & Cross, 1993). Evaluation is important in itself, to provide data on a student’s knowledge retention, and of instruction effectiveness. All of the college and university courses that I have either taken as a student, or taught as an instructor have included a series of course outcomes. These

<table>
<thead>
<tr>
<th>Dimension of Difference</th>
<th>Assessment</th>
<th>Evaluation</th>
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<tbody>
<tr>
<td><strong>Content</strong>: timing, primary purpose</td>
<td><strong>Formative</strong>: ongoing, to improve learning</td>
<td><strong>Summative</strong>: final, to gauge quality</td>
</tr>
<tr>
<td><strong>Orientation</strong>: focus of measurement</td>
<td><strong>Process-oriented</strong>: how learning is going</td>
<td><strong>Product-oriented</strong>: what’s been learned</td>
</tr>
<tr>
<td><strong>Findings</strong>: uses thereof</td>
<td><strong>Diagnostic</strong>: identify areas for improvement</td>
<td><strong>Judgmental</strong>: arrive at an overall grade/score</td>
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outcomes are generally measured through a process of final evaluation. Students
generally do not have an opportunity to resubmit the work these final marks are based on,
but sometimes allowances can be agreed upon.

**Formative and Summative Assessment**

Formative assessment relies on the concept of feedback. Learners are instructed
and become part of an interactive process. The feedback they provide to the instructor,
and to their peers, forms the basis of formative assessment when the information is used
to scaffold the student to new levels of understanding. Clark (2010), an expert in the field
of formative assessment, writes that, “In the formative assessment classroom, students are
building their understanding of new concepts and working together to assess the quality
of their own and their peers’ work against well-defined criteria” (p.344). This interaction
between the learner, the instructor, the knowledge, and the student’s peers reflects the
concepts of relationship building and connectedness of Indigenous ways of knowing and
being.

Summative assessment differs in that its main purpose is to determine
quantitatively how well, or how much, the student has learned. A final grade on a written
paper, or exam, is considered to be a summative assessment of the student’s grasp of the
course content. Clark sums up his feelings on formative versus summative assessment
when he states, “In summary, formative and summative assessment may be beneficially
aligned within the same system but summative assessment should not be used as the
primary source of data to determine the focus of any classroom intervention” (p.343).
Both forms of assessment have a place in contemporary pedagogy, but formative and
constructivist assessment is of greater import from an Indigenous knowledges point of view.

Scholars and educators sometimes use the term evaluation to define what I have just described as summative assessment. The terms may be used interchangeably, although there is some acknowledgement that evaluation is more encompassing of the entire process of teaching a course (Institute for Teaching, Learning and Academic Leadership, 2016). My intention is to continue to use the term summative assessment, whenever possible, to describe final grades from an instruction standpoint, but there will be academic quotes that will use the term evaluation.

**Indigenous Assessment Approaches**

While the indigenization of college and university level courses and programs is becoming more and more common across Canada, research into authentically indigenizing assessment within programs is an emerging study. Verwood, Mitchell & Machado (2011) investigated the use of culturally relevant teaching in their study of instructional and assessment methods at the Native Education Centre in Vancouver. In their study they state, “To use assessment to open up as many opportunities to as many students as possible, methods and models of assessment must consider multiple talents, life experiences, and diverse ways of knowing” (p.62). In describing the benefits of an experimental medicine wheel framework for assessment that they developed, they continue,

This gave students permission to let go of focusing solely on traditionally perceived academic expectations around academic writing, grammar and presentation of ideas, and allowed students to create a space where they
could write about less-valued aspects of learning, such as their beliefs, values, and reflections. (p.63)

While this study focuses on the provision of culturally relevant instruction and assessment methods for students of Aboriginal ancestry, the concepts may relate directly to indigenization efforts which benefit all learners. Cupples & Glynn (2014) write that, “It is of benefit to us all the break away from Eurocentric ways of knowing” (p.66). They refer to the work of Escobar (2007) who argues for the counterhegemonic alternatives to education that decolonial modes of thinking and articulating provide. Cupples & Glynn conclude by stating that, “Embracing the decolonial option might therefore advance our thinking and professional relationships in innovative ways” (p.67). Similarly, Fleet & Wilson (2009) argue that despite the inevitable tensions which arise when curriculum design challenges the way it’s always been done,

Nevertheless, assisting the shaping of assessment policies and practices to enable the hearing of Indigenous voices more clearly may aid in shifting the power dynamic into a more equitable relationship with Indigenous world views. Rather than a normative standard focus, there may increasingly be a growth-oriented conversation as assessment strategies acquire lesson a checking function and more the characteristics of a reciprocal teaching tool. (p.403)

Utilizing these more holistic and Indigenous world view-based approaches to assessment in the post-secondary classroom will work to more authentically represent indigenization efforts.
Situating Traditional Aboriginal Assessment Practice within Contemporary Curriculum

Where it relates to the indigenization of course content, assessment is an integral part of course delivery, and as such, should be addressed equally. Nelson-Barber and Trumbull (2007) question the lack of traditional Indigenous assessment practices in education when they ask,

If, in fact, the use of local wisdom, recognition of culture, and active involvement of community are mainstays in the established standards of educational practice in Indigenous communities (and contribute to student success), why is this understanding not applied to the realm of assessment? (p.134)

This question relates to concepts of cultural validity where it relates to assessment and evaluation. If Indigenous knowledges and understandings are integral to the curriculum under development then “…assessments developed for a specific cultural group should be sensitive to its ways of knowing and traditional knowledge” (Solano-Flores & Nelson-Barber, 2000, p.561). Solano-Flores & Nelson-Barber refer here to elementary-secondary curriculum developed to support learners from a particular cultural background, but I feel that the same should hold true for more generalized post-secondary indigenization efforts. Perhaps, a student immersed in a constructivist and indigenized approach to learning within the classroom should not be expected to demonstrate this knowledge through common contemporary summative assessment methods, such as formally structured research papers or rigid written exams. Discussing constructivist theories on assessment, Yurdabaken (2011) states that, “Instructional practices should stress high level thinking
and deep understanding, focus on real life problems, give importance to students’ metacognitive knowledge and focus on improving reflective skills by making use of different assessment practices” (p.76). Initial investigation into traditional Indigenous assessment practices reveal the possibilities of peer- and self-assessment, reflection, observation and practical knowledge demonstration. Combinations of these constructivist assessment methods may reflect student learning as rigorously as do summative assessment methods.

As contemporary college course structure tends to require grading on a static academic scale, assessment practices built within an indigenized course structure must be designed and implemented to reflect an authentic Indigenous worldview while retaining value for the academic system. The roles of the instructor and of class peers hold importance both within the contemporary college course structure as well as within Indigenous teaching and assessment practice. Therefore, the instructor and class setting are integral to the process of Indigenizing curriculum. Reflective skills may be improved via group work, self-reflection and discourse with the instructor. The instructor may assign assessment weight to observation of student progress, which is often already integrated into a mark percentage assigned to ‘participation’. These forms of assessment reflect a more authentic integration of Indigenization than do written research papers and anxiety-inducing written exams. In my own teaching practice, I bring in aspects of self- and peer-assessment, observation, participation and group work to bolster the approved course description that includes a mid-term and final exam.

As a researcher I can recall specific examples of Nuu-chah-nulth modes of instruction and assessment by calling upon my own experience with a Nuu-chah-nulth
Elder and his teachings about medicine making (2010). This Elder and I went for a walk through an area known to provide a number of medicinal plants. I was expected to follow and listen, and to repeat information when asked. A leaf was placed in my hand for me to learn the smell, texture, and its response to the current season. Some plants are only harvested when the medicine is present; at other times of the year different effects are produced. This experience outlined the concepts of experiential learning, observation, mentorship, and demonstration of skill. Interwoven through this experience was an overall reinforcement of the connections we shared with each other and with the environment. I learned how we were related, what the medicines were used for, who was and had been using them, and what other medicines were in the vicinity. The expectation of the instructor was for me to repeat back to him the knowledge that he was imparting. He would correct me if I got any parts wrong, but he was naturally demonstrating formative assessment practice through this Nuu-chah-nulth haahuupa (teaching). This reinforcement through relationship strengthened the learning. Authentically integrating these concepts into the classroom would strengthen the concept of Indigenization of post-secondary institutions.

Friesen & Friesen (2002) summarize assessment practices in traditional Indigenous pedagogy when they write that, “…evaluation was traditionally a matter of personal accountability between teacher and pupil” (p.78). In this manner, both the student and the instructor share responsibility for the transfer of knowledge. Friesen & Friesen express this mutual accountability when they state that, “…student performance would reflect the teacher’s ability to teach” (p.78). In this case, Indigenous teaching methods do find some harmony with Eurocentric teaching methods, as contemporary
teachers tend to be judged by their student’s performance. They differ, however, in that Eurocentric pedagogies tend to celebrate the meeting of objective standards, where Indigenous pedagogies rely on individual, subjective achievement. Crebbin (1992) articulates these divergent approaches to assessment as “consumptive” and “constructivist”. She characterizes consumptive pedagogy as looking at knowledge as something to be consumed; subsequently this consumption can be measured quantitatively through standardized testing. Constructivist approaches to pedagogy recognize that teachers are, “…working in complex, diverse and subtle ways to enhance each student’s uniqueness… (evaluating) such learnings requires a whole range of multidimensional measures, along with individual monitoring of students’ learning experiences and their ongoing development of cognitive, creative and social competencies” (p.10). A mentorship approach to instruction, as is common in Indigenous culture, would naturally support this constructivist pedagogy.

This constructivist approach to teaching and assessment resonates with the type of appraisal common in many Indigenous cultures. Constructivist theory states that, “…knowledge is formed when an individual interacts with his/her environment” (Yurdabakan, 2011, p.77). During this interaction, learning is reinforced through a process of questioning by an Indigenous mentor. As an example, I can use my own training under a Nuu-chah-nulth Elder as he has been educating me in the proper gathering, preparation, and use of traditional medicines. Similar instructional methods apply to learning other aspects of life in the Nuu-chah-nulth community. Mentors teach drum-making, canoe-building, fishing, fish-processing, singing, dancing, oral history, and resource gathering among many other areas of expertise.
Individualized teaching and assessment ensures that different roles within the Indigenous community will be filled, as each student and mentor is directed into their areas of strength. Those individuals with an interest and aptitude in a specific area will be guided toward that role. Those who have a strong voice and good leadership skills will become the next song leader, those who have an aptitude for fishing will be providers for the community. Similarly, within the instruction of a course, individualized learning and assessment could include emphasis on oral presentations over written assignments, group work over individual projects, or co-assessment over linear instructor assessment. In a classroom of twenty students, individual strengths will emerge over time and students may use these strengths to help determine their future career goals. Demonstration of required learnings, as laid out in the curriculum, could take various forms and not come simply from examinations and written submissions. Some examples of assessment that will meet course outcomes and grade requirements include reflection, oral presentations, self-and peer-assessment, and grading on class participation.

**Reflection as a Pedagogical Tool**

Hatton & Smith (1995) define reflection as, “…deliberate thinking about action with a view to its improvement” (p.52). Their work was informed by the original writings of Boud, Keough & Walker (1985) where they defined reflection as, “…those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciations” (p.19). When undertaken appropriately, this process of reflective thinking takes place both in action, as well as on action (Schon, 1987). Herrington, Parker & Boase-Jelinek (2014) discuss this concept when they state that reflection occurs, “…both in decision-making while engaged
in the learning context and on the subsequent events in a more extended and sustained manner” (p.24). In-action reflection can take the form of dialogue or discourse between an instructor and learner, or between learners in a class setting. In-action reflection can also be realised through writing, gathering materials for a portfolio, or taking part in discussion forums. On-action reflection takes place over time, as the student internalizes knowledge by adjusting their worldview to accommodate new learning. This internalized knowledge relates to course assessment through the meeting of course objectives (p.25).

The process of using reflection as a pedagogical and formative assessment tool in classrooms that espouse Indigenous ways of knowing is also in keeping with the contrasts outlined in Table 1 above by Sanford, Williams, Hopper & McGregor (2012). Students construct their own knowledge through synthesizing the information gathered. Boud, Keogh and Walker (1985) defined the process of reflection as principally comprising three closely related stages: returning to the experience; attending to feelings; and re-evaluating the experience. To accomplish this, student reflection must be nurtured in an environment where emotion and connection to the knowledge is considered as important as is the cognitive process.

**Self- and Peer-assessment**

The practice of self-assessment in college course curriculum provides the student with an increased stake in their own learning. Ozugal & Sullivan (2007) posited that, “Student monitoring of their own progress through formal self-evaluation may improve their self-regulation skills and their performance”. And that, “Self-evaluation as a classroom assessment practice enables students to take a more active role in their own learning and may help them acquire a longer-term self-evaluation skill” (p.394). To
relate this process to Indigenous ways of knowing, as described in Sanford, Williams, Hopper & McGregors’s (2012) Table 1 above, “Students evaluate their own learning; teachers also evaluate; teaching and assessing are intertwined” (p.4). This statement helps to illustrate the holistic nature of an Indigenous pedagogy. Equally, “Like self-evaluation, peer-evaluation can have an effect on the amount of time students spend on a task and on their level of engagement in it” (Anderson et al. 2001, p.38.). Peer-evaluation provides a platform for students to compare their own work with their cohorts, and to develop relationships where important interpersonal skills are developed.

**Relationships**

We are taught a common understanding of interconnectedness: that all things are dependent on each other. All things and all people, though we have our own gifts and special place, are dependent on and share in the growth and work of everything and everyone else. We believe that beings thrive when there is a web of interconnectedness between the individual and the community and between the community and nature. (Graveline, p.55. 1998)

Foremost in importance in any culturally inclusive education model should be an understanding of the importance of relationships. According to Ledoux (2006), “An Indigenous pedagogy recognizes the child as a physical, spiritual, emotional, and intellectual being, one who learns best in a circular, holistic, child-centered environment” (p.270). Ledoux continues, “The traditional Aboriginal method of educating children saw the whole child, therefore all aspects of the child (mental, physical, emotional, and spiritual) were addressed” (p.270). The information imparted should be reflective of the whole world and the student’s place within it; but how it is imparted will define the
continued learning of the student throughout his or her life. Bateson (2003) argues that it is not necessarily what is learned during a child’s formal education, but how, which will be remembered and which will carry on throughout that child’s lifetime. She questions whether formal education “...inspires(s) graduates to read widely in later life, or do focused assignments transform reading into a narrowly instrumental activity, replacing curiosity with conscientiousness?” (Bateson, 2003 p.1). Bateson comments further that, “Much of the substance of what we teach and test becomes irrelevant; habits of mind do not” (p.1). A respectful relationship between student and teacher will allow for the growth of these habits of mind.

Figure 4. The Centrality of Relationships
Carolyn Shields (2004) outlines a theory of acknowledging the centrality of relationships. This refers to the work of Nodding’s in 1986, related to a pedagogy of care. The diagram in Figure 4 represents these relationships in graphical form. Shields argues that subjects taught in school can only be really understood against a background of shared meaning (p.114). The student must have a solid understanding of their identity in relation to the school, the teacher, their classmates and their community (see Figure 4). In Nuu-chah-nulth tradition, teaching does not begin at 8:35 and end at 3:15, it begins when the child awakes and is put to rest as the child falls asleep. In this holistic manner, children accompany the elders and adults through all activities, and the importance of the activity is explained at the same time as instruction is received. The relationship of the Elder or adult to the child is also reiterated, and this facilitates anchoring of the knowledge.

Gillespie (2005) writes of the student-teacher relationship in her nursing department when she says,

their [the students’] ‘ease’ within a connected student–teacher relationship allowed them to focus on learning, a distinct difference from non-connected relationships where they focused on ‘pleasing the teacher’ and ‘getting it right’. The nature of the connected relationship and the connected teacher role supported an increased scope of learning, including the development of clinical judgement, communication and organization abilities, and increased ability to synthesize and utilize nursing knowledge” (p.212).
To be inclusive of all aspects of the environment, including the humans residing within, an education system must include the relationships between the student and teacher as well as how the student and teacher interact with the wider world in general. In Nuu-chah-nulth pedagogy, these relationships are strengthened through an acknowledgement of familial and tribal connections. Generally, most adults are considered to be ‘aunts’, ‘uncles’, ‘cousins’, ‘sisters’, ‘brothers’, or ‘grandparents’ to the younger ones they are instructing.

**Where do we go from here?**

In the review of literature for this dissertation, the need to search the past for traditional historical Indigenous pedagogies that can help us move forward in education has become very clear. Prodigious indigenous scholars such as Linda Tuhiwai-Smith (1999), Marie Battiste (2000), Henderson Youngblood (2000), and Vine Deloria (2006) have all iterated the need to look more deeply into Indigenous ways of knowing and being in this world. In 2005, Gregory Cajete (Tewa) reminded us that,

American Indian education historically occurred in a holistic social context that developed a sense of the importance of each individual as a contributing member of the social group. Essentially, tribal education worked as a cultural and life-sustaining process. It was a process of education that unfolded through reciprocal relationships between one’s social group and the natural world. This relationship involved all dimensions of one’s being while providing both personal development and technical skills through participation in the life of the community. It was essentially an integrated expression of environmental education. (p.70)
This statement reminds us that contemporary pedagogy must become more holistic, but also that the Indigenous people of this world hold this knowledge and understanding within themselves. Our best way forward is to bring to light the traditional historical methods of the past.
A Personal Experience of Decolonization: Phase Three

Dreaming

The third phase of Laenui’s (2000) processes of decolonization is *dreaming*. In this phase, Laenui likens the process as, “…the formation of a fetus in a mother’s womb. That fetus must be allowed its time to develop and grow to its full potential” (p.155). Accordingly, in this phase of my personal journey through decolonization, I formulate my strategies for learning.

In order to learn from our Elders, we must learn in the way that they wish to teach. My initial research into doing a PhD pointed toward an interview process from a formal point of view. From a personal point of view, I had to initiate an oral storytelling methodology. Despite the fact that I had an audio recorder and was obliged to ask for each Elder to sign a HREB contract, I felt the need to make each session an occasion for learning through storytelling. I arranged to meet at the Elder’s houses instead of asking to meet at a more formal location, I brought a small gift to show my appreciation, and I asked as few questions as possible. I wanted the knowledge to flow naturally, and I feared that asking a lot of questions might steer the conversation into areas that I wanted to prove. My most poignant memories of my great grandparents involve sitting in their living room, listening to my great grandfather play his drum and sing while my great grandmother wove coloured grass into baskets. In these times, our grandparents would tell us stories and we’d learn about our histories. Unfortunately, since my nuclear family lived in a city far away from my great grandparents, these occasions were few and far between. Through my research methodology, my plan was to recreate these settings in the hope for authentic results.
Phase three of the decolonization process is *dreaming*, and I feel that this phase correlates with the methodology section of my dissertation. In this chapter I discuss how I planned to obtain the knowledge I needed to answer my research questions. In a lot of respects this is one of the most important aspects of my research, and it correlates strongly with Laenui’s concepts around allowing the process to, “…run its full course” (p.155). He describes how decolonization may fall short of its promise when he states that,

True decolonization is more than simply placing Indigenous or previously colonized people into the positions held by the colonizers. Decolonization includes the reevaluation of the political, social, economic, and judicial structures themselves and the development, if appropriate, of new structures that can hold and house the values and aspirations of the colonized people. (p.155)

My hope is that through sitting with Elders in their own time and place, and by listening to the stories they had to tell, would allow me to fully realize the implications of what they had to teach me.
Chapter Three:

Methodology

My Ontological and Epistemological Stance

Wilson (2001), an Opaskwayak Cree from Northern Manitoba, took a hard look at research paradigms when approaching his own PhD studies. I came across his work while researching Indigenous research methods and I agree with his assertions that any research paradigm is comprised of four aspects; ontology – which is our way of being in the world; epistemology – which is our ways of thinking about our existence in the world; the research methodology we choose – which is how we plan to use our thinking (epistemology) to gain more knowledge about the world; and finally, our axiology – which is the set of morals and ethics that govern how we act in the world (p.176). He goes on the assert that, “An Indigenous paradigm comes from the fundamental belief that knowledge is relational. Knowledge is shared with all of creation” (p.177). My own understanding of the world resonates with this statement, and my ontological and epistemological stance reflects the multi-dimensional aspects of my relationship with society and the environment.

I am the daughter of a Nuu-chah-nulth woman, who is the daughter of a hereditary chief the Toquaht Nation. My grandfather traced his history back through un-numbered chiefs, and an anthropological study uncovered evidence of our ancestors in our traditional territory from 5000+ years ago. I am from this place, and this shapes my reality. I am also the daughter of a man whose own grandfather emigrated from Denmark. Through genealogical study, I have traced these roots to other Scandinavian areas. This is
also my reality. I am a product of a mixed heritage but my choice over time has been to embrace my Aboriginal ancestries. I have never resided on a reserve, and although my upbringing more closely resembled that of a Caucasian middle class family, I always knew that I was part of the Nuu-chah-nulth people. Occasionally I attended, or was part of, traditional ceremonies and potlatches. I was inducted into our clan through a ḥu-kwana ceremony that remains as a sacred part of Nuu-chah-nulth life. My mother was sent away to residential school when she was 10; this is also part of my reality. My relationships to community, to our lands, and to my family are so deeply ingrained in me that I cannot imagine any other way to be in this world. My choice to employ Indigenous research methods to undertake my study and to frame my study within a systems theory and Indigenous knowledge framework comes from this ontological understanding.

Epistemologically, I recognize that my research within the Nuu-chah-nulth territory must be co-constructed on an equal basis with the people that I interview. Research from an Indigenous standpoint involves a holistic and collectivist approach to data collection and interpretation (Foley, 2003). Additionally, as I employ an Indigenous philosophy, I must triangulate the physical, the personal and the spiritual worlds. Regarding spirituality, Foley elaborates further that, “The sacred world is not based entirely in the metaphysical, as some would believe. Its foundation is in healing, the lore, care of country, the laws and their maintenance” (p.46). Cajete (2005) explains that from an American Indian epistemology, “…learning is ultimately a subjective experience tied to a place: environmentally, socially, and spiritually. Tribal teaching and learning was intertwined with the daily life of both teacher and learner” (p.71). With this understanding, my epistemological approach for this research was to immerse myself in
each site where I conducted the interviews. My plan was to visit the remote communities where my research participants reside, and not to invite participants to Port Alberni, where I live. Port Alberni would have been easier, and my participants do come ‘to town’ frequently, but in order to encourage an authentic relationship I felt it was important for me to travel. The participant’s, and my own, connection to place and to the protocols of our culture are best nurtured in our traditional territories.

**Qualitative research**

The interpretive nature of this dissertation was grounded in the field of qualitative research. Denzin and Lincoln (2005) define qualitative research as characterized as, …a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. (p.3)

As this study investigated traditional Nuu-chah-nulth assessment practices through the use of interview, self-study and interpretations of narratives and story, the only research choice could be qualitative.
Study design

The design of this study was divided into four phases: a review of past literature and knowledge; interviews with individual Nuu-chah-nulth members; an ongoing self-study type evaluation of the process; and finally, an analysis bounded within an overarching story framework. Using Indigenous research methods, each phase of this study informed the next. Following is an overview of each segment, each of which will be described in more detail in the next section.

1. Review of previous knowledge – During this phase of the study, I investigated the concept of assessment through a review of literature. This information came from library searches, reading books that I have collected over time, and through requests for information from various resources within the Nuu-chah-nulth territory. Additionally, Indigenous ways of knowing from other areas of the world were reviewed. In particular, scholarly work from the Indigenous peoples of North America, Australia, New Zealand, and of the island of Hawaii were studied.

2. Individual interviews – This phase of the study involved building a shared understanding of what assessment means within the context of the Nuu-chah-nulth worldview. I endeavoured to conduct interviews with Nuu-chah-nulth community members and was successful in working with three Nuu-chah-nulth Elders.

3. Self-study type look at my own story – As a Nuu-chah-nulth person, I hold a set of experiences and history that must colour this
research. As an instructor in a program that advertises an
Indigenous focus, I also come from a place where my past and
current experience must be a part of this research. A self-study
reflection of my experiences both prior to and during the course of
this study served to tie this personal experience to broader concepts
of indigenizing curriculum.

4. Research through story – The interviews with Nuu-chah-nulth
Elders were analyzed through an Indigenous lens. As Indigenous
research naturally enfolds me within the study, a holistic view of
the entire process can be best viewed through analysis on a macro
level.

**Study Design Objectives**

The design of this study intended to allow for the co-creation of an understanding
of traditional Nuu-chah-nulth pedagogy and how this pedagogy may advise the
Indigenization of contemporary college course curriculum in the future. The use of a two-
tiered interview process facilitated a deep investigation of traditional Indigenous
knowledges from a Nuu-chah-nulth perspective. Reminisces gathered from initial
interviews informed a second line of questioning that was designed to bring forth current
and remembered instances of Nuu-chah-nulth pedagogy, and specifically, Nuu-chah-
nulth assessment methods. This qualitative data was then manipulated to extrapolate
contemporary models for college course assessment.

A self-study type lens employed during this process was used, along with the
interview data, to review this study from a storytelling viewpoint. The words of the
Elders were analyzed as a whole, and not purely as individual interviews. As a member of the Nuu-chah-nulth people, I was equipped with experiential knowledge around Elder interviews and our oral history. I had taken part in many focus group and individual meetings with community and cultural experts throughout my life, and used this experience to decide on a holistic approach. This research method was utilized to provide a holistic, yet bounded, overview of the study as a whole. The use of an overarching story framework is necessary to set a concrete start and end period to this research, while allowing for a holistic study of all information gathered within these boundaries. This holistic format follows the directives of an Indigenous methodology, and for the use of a systems theory approach.

**Reciprocity with the Indigenous Community**

In undertaking Indigenous research and in analyzing the words of the Elders I interviewed through the lens of story, I must hold myself accountable for completing this work in a good way. As Wilson (2008) discusses in his chapter on *Relational Accountability* (p.97), the research I gather within the Nuu-chah-nulth territory and from Nuu-chah-nulth Elders must benefit the community. To do so, I, as the researcher, must maintain my personal integrity as I move through the research process (p.102). Wilson outlines four ways in which we as researchers may hold ourselves personally accountable during the Indigenous research process. In this section, I will address how I held myself relationally accountable through the progression of my research. The following list is adapted from Wilson’s chapter on *Relational Accountability* (p.97).
1. How we choose what to study - Doing research with Indigenous people and communities, not on them

As a Nuu-chah-nulth person who has worked in the post-secondary education field for over twenty-three years, I have witnessed the frustration that some Aboriginal people experience in the academic system. Wilson (2008) outlines the general view of the Indigenous researcher when he states that,

As Indigenous researchers, I think we tend to focus on the positive. We all recognize the terrible stuff that has happened in the past and is going on today in our communities, but there is a common or collective saying of, "So where do we go from here in order to get over this negative stuff?"

(p.109)

Although my immediate goal in taking on this study was to provide enlightenment to contemporary post-secondary institutions in their indigenization efforts, my long term intent is to provide an authentic voice for Indigenous-based curriculum development. The Elders that I chose for interviewing are all well-known for their contributions to the education of the Nuu-chah-nulth people. They may not work in post-secondary institutions, but they are the knowledge keepers for their communities. Although I was constrained in my research and interviewing process by the University of Victoria’s Human Research Ethics Board in order to abide by their standardized rules, I ensured that I approached each Elder in ways in which are commensurate with our Nuu-chah-nulth ways of being within the world. By treating each interview as a visit with an Elder to receive their teachings, I assured them each that my goal was to learn with them and not to take their knowledge away from them.
2. How we gather information - Our methods must be community driven

As explored in the following section of this chapter, my primary research method was interview. In describing this aspect of Relational Accountability Wilson (2008) relates a conversation with Jane where she states,

Sometimes when you go into doing research, you don’t want to come with a set of questions. Especially to an Elder… So you enter into conversation. And from there, extrapolate what the Elder is saying… That is a valid tool. (as cited on p.112)

My interviews with three Nuu-chah-nulth Elders were undertaken with this concept in mind. I was aware of where I wished to begin, but I was open to allowing the conversation to flow with each of the Elder’s recollections.

3. How we interpret information - Build relationships with the idea until you reach a new understanding

When describing this aspect of maintaining Relational Accountability in the Indigenous research process, Wilson (2008) states that,

All the pieces go in, until eventually the new idea comes out. You build relationships with the idea in various and multiple ways, until you reach a new understanding or higher state of awareness regarding whatever it is that you are studying. (p.116)

By interpreting my Elder interviews holistically, I was able to view them as a story that exponentially increased my knowledge about how assessment is viewed from a Nuu-chah-nulth point of view. The concept of heshook-ish-tsawalk really hit home for me
through this process, as well as the tenets of systems theory and Indian metaphysics. I believe that analyzing these data was transformational, and that Wilson (2008) summed up the experience for me when he wrote, “…we have some non-linear form of logic. What it involves is our whole lifelong learning leading to an intuitive logic and way of analysis” (p.116). What was truly transformational was the realization that the data fit best within a medicine wheel format, and the connections between each concept or theme were so clearly relational.

4. How we transfer knowledge – The Indigenous style is not linear or through written discourse

Wilson (2008) writes that, “One of the problems with the style of analysis required from an Indigenous paradigm comes when you try to present it in written form or some other manner that is understandable to other people” (p.122). To combat this dichotomy, through the Indigenous research process it was important to ensure that my findings were presented in a way that reflected the spirit in which the data was gathered. As each concept that emerged from the research was relational to each other piece, the best and most truthful way to present the themes was through a medicine wheel framework. This circular framework emphasised the importance of each concept while allowing for each to intersect and harmonize with the others. Additionally, I have remained in contact with the Elders who I interviewed to keep them apprised of my progress. Once my research is complete, I will present each with a bound copy of this work.
Within the scope of the proposed Indigenous research framework, the data collection piece was conducted through the use of unstructured and semi-structured interviews in the form of individual in-depth interviews. Unstructured and semi-structured interviews have the benefit of allowing the interviewee’s space in which to reminisce and combine information, strengthening their abilities to recall information from their own history as well as from histories passed down through generations. This was helpful as Indigenous ways of knowing are passed down orally, and are not written in many documents. Individual in-depth interviews were used with certain individuals who hold a lot of traditional knowledge, in the hope that important information could be collected.

Figure 5. The interview process
The process outlined in Figure 5 above was utilized to undertake the initial design of the projected interviews. In the first step, I came up with a strategy to move forward with my interview and participant selection process. I researched and designed a set of interview questions which can be reviewed in Appendix 3. These questions were formulated to discern the knowledge I hoped to find, but to also allow for the interviewee to direct the conversation. I wanted to ensure that room was provided for unanticipated knowledge to emerge. Second, I arranged to conduct the interviews in a setting that was conducive to gaining the type of knowledge I hoped to receive, namely, historical traditional pedagogical information. By undertaking these interviews in the interviewee’s home, I hoped to provide a safe space for authentic discourse. Third, I conducted the interviews by opening with a scripted question that was designed to allow for free recollection. From there I allowed the interview to follow where the interviewee wanted to take me. In this way, I tried to ensure that the responses came from the participants and were not biased by my own previous understandings. Finally, I spent time in transcribing and analyzing the responses I received. In two cases, I returned for a follow-up interview to gain a fuller understanding of the participant’s accounts.

The choice to use an interview process to gain an understanding of what exactly Indigenous assessment looks like, from a Nuu-chah-nulth perspective, was made early on in my PhD journey. In terms of gathering knowledge of this scope and qualitative value, there really were no other choices. Focus groups are wonderful for gaining a community’s feelings around certain subjects, but I wished to pull out specific, individual stories about historical traditional and contemporary Indigenous assessment practice. To do this, I interviewed a small number of Elders and other Nuu-chah-nulth community
experts. I endeavoured to interview a wide variety of community members, including Elders and experts in various aspects of Nuu-chah-nulth life. I took care in my participant selection process to interview community members from three geographical areas of the Nuu-chah-nulth people; Central, Northern, and Southern. Care was also taken to identify experts in the most important aspects of Nuu-chah-nulth life; language, culture, food gathering including food preservation, and artwork. With the three individuals I ended up interviewing, I feel that I met these self-set benchmarks.

**Story as Research**

Story is a practice in Indigenous cultures that sustains communities, validates experiences and epistemologies, expresses experiences of Indigenous peoples, and nurtures relationships and the sharing of knowledge. Storytelling is also a central focus of Indigenous epistemologies, pedagogies, and research approaches. (Iseke, p.559. 2013)

As discussed in Iseke (2013) and Wilson (2008), Indigenous pedagogies are based in the oral tradition, and share how we live and understand the world around us. Kovach (2009) describes the “…inseparable relationship between story and knowing, and the interrelationship between narrative and research within Indigenous frameworks” (p.94).

In my study, the Elders I interviewed explained their understandings of assessment from the Nuu-chah-nulth worldview through a series of stories and examples. Instead of analyzing each of the interviews separately, what worked most authentically was to assess them as a narrative from multiple points of view.

Utilizing story as a research method allowed me to mine a rich understanding of
traditional Nuu-chah-nulth pedagogy, including assessment, from the Elders I interviewed. As Kovach noted in 2009, “The oral rendition of personal narrative or formal teaching story is a portal for holistic epistemology. It is the most effective method of capturing this form of knowing in research” (p.96). Additionally, Kovach iterates the importance of relationship in an Indigenous inquiry-based approach to research (p.98). As a Nuu-chah-nulth person, my connections to the Elders I interviewed helped me to relate to each on a personal level as well as a researcher.

**Self-Study**

Berry & Crowe (2009) describe self-study in an education context as, “…a framework for inquiry into one’s beliefs and practices as an educator with a focus on better understanding the interaction between beliefs and practices for the improvement of teaching and learning” (p.85). Generally, self-study looks at how the role of the self relates to the practice, and how reflection on this role can lead to a better understanding of questions around instructional and curriculum change. Self-study methods include journaling, examining communications, writing reflections, and studying our own actions in retrospect. As an educator, Hawley (2010) refers to our common desire to improve practice when he says, “At the heart of their argument is the recognition that engaging in self-study research forces teacher educators to confront their moral and ethical obligations to students and to the larger teacher education community” (p.61). These methods may be unsettling at times, as it takes fortitude to dissect one’s own actions impassively, but the long term benefits should be worth a small amount of discomfort. I must admit that it has been difficult to bare my soul so to speak, but I have found that these sections have helped to open my mind to the larger picture.
As I am an individual central to this process, the methodology of a self-study type approach has also been well situated as an approach to undertake this study. Although I am naturally a part of the research progression, my personal observations and reflections provide even further insight into the many aspects of Indigenous education. Through critical analysis of my own educational practices, and reactions to student-faculty-curriculum circumstances, I have a unique set of experiences to draw from. Interactions with students, co-instructors in the program, community members, and Aboriginal experts have provided me with valuable knowledge to incorporate into this study. Since one of the driving forces behind self-study is the aim of improving practice, I feel that this methodology was well suited to the research goals that I hold to. Improving the curriculum and instructional practices of the two courses I teach has been my overriding objective in this study. An additional goal is to inform the academic world of the successes I achieve, through my dissertation work as well as through publications and academic presentations. As the long term validity of my research must come through peer acceptance and contribution to academia, it is important for me to ensure that positive results of my research goals are distributed.

**Research Participants**

Participants in this study were drawn from the Nuu-chah-nulth community. Three Nuu-chah-nulth community Elders agreed to be interviewed by me, and I made a concerted effort to adequately and equally represent all three regions in the Nuu-chah-nulth Territory. I interviewed one community member from each of the three Nuu-chah-nulth Regions. Several current co-instructors in the program I teach in also expressed
interest in providing feedback for my self-study piece. And, I was also a co-participant in this study, through a self-study type perspective.

**Research Ethics**

Given the interdependent nature of the work conducted by myself and the participants, and that I represent the University of Victoria to the community, ethical research was a necessity on professional and moral grounds. Therefore, it was critical that I conduct the study with the utmost consideration for research ethics by respecting the participants, the research process, and the outside community involved. Permission to conduct research within the traditional territory of the Toquaht People must come from the Toquaht Nation, and that permission was obtained prior to any research undertaken. A copy of the authorization letter I received from Toquaht Chief and Council is attached as Appendices page 4.

**Data Collection**

Data collection occurred in the summer and fall of 2017. All data gathered from participants was collected with the explicit permission from the participants and in compliance with the University of Victoria and the Tri-council policy statement: Ethical conduct for research involving humans (TCPS 2). Copies of permission forms utilized are located in Appendix 1.

Data was collected from multiple sources. This data was divided into two sets; first from the initial unstructured and semi-structured interviews, and second from the set of follow-up interviews as determined by the results of the initial interview process.

Locating prospective interview subjects in the summer of 2017 involved a process of investigation within my local Nuu-chah-nulth communities. Individuals were
approached, and asked if they have an interest in participating. Two individuals with Elder status in the Nuu-chah-nulth community expressed interest and helped to point me toward a third. An invitation to be part of a recorded interview is generally met with approval in the Nuu-chah-nulth community, especially if tea and refreshments are supplied. Nuu-chah-nulth Elders are generally pleased to be given an audience to pass on their knowledge, and I experience this generosity often when I ask community members to come in and speak to my class.

Adherence to both local community protocol as well as meeting the University of Victoria’s Human Research Ethics Board guidelines was strictly followed. Initial individual interviews with experts in traditional Aboriginal education and assessment practices were unstructured and semi-structured. The initial opening script and questions were:

- I am trying to develop an understanding of assessment from a Nuu-chah-nulth perspective. When I use the word assessment, I mean to demonstrate proficiency of any knowledge that is being transferred from one person to another person. This knowledge can be many different things; carving, cutting fish, learning a song or dance, building a full sized canoe, passing on a story, teaching the medicinal properties of plants, or even passing on knowledge of cultural ceremonies.

- From a cultural perspective, can you tell me how proficiency would be determined?
Answers and reminisces around these questions were used to determine a second set of interview questions, questions designed to draw out a deeper understanding of traditional Nuu-chah-nulth pedagogy and assessment.
Data Analysis

Qualitative case study research amasses huge amounts of raw data; therefore, it is essential to maintain the data in an organized and timely fashion (Denzin & Lincoln, 2005). More importantly, preliminary data analysis must be conducted immediately post-collection or better yet, “The right way to analyze data in a qualitative study is to do it simultaneously with data collection” (Merriam, 1998, p.162). This particular study combined elements of interview summaries, memos, voice recordings, and outlines into research notes kept by myself. These procedures organized the data as it was collected; easing the task of simultaneous collection and analysis.

After reviewing all the data sources, the materials (interview transcripts and follow-up notes) were manually coded and preliminary meanings were generated from the interviews, and observation field notes.

Triangulation of the multiple data sources is built into data collection and analysis for the purpose of achieving trustworthiness. “Triangulation has been generally considered a process of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or interpretation...triangulation serves also to clarify meaning by identifying different ways the phenomenon is being seen” (Stake, 1994, p.241). With this in mind, I ensured that each participant was fully aware of my goals and that I was accessing multiple points of view. The research plan was to be as open as possible, allowing for participant feedback and follow-up information gathering.
A Personal Experience of Decolonization: Phase Four

Commitment

Laenui (2000) describes the fourth phase of the decolonization process as commitment. In this phase, people will combine “…their voices in a clear statement of their desired direction”. He continues, “There is no single “way” or process for a people’s expression of commitment” (p.157). This is simply something that materializes at the conclusion of the dreaming phase of this process. It occurs naturally, organically, and as a “…pro forma expression of a people’s will” (p.157). In my personal path through decolonization, I have already experienced the processes of rediscovery and recovery, mourning, and dreaming. These phases have guided me toward an understanding of what steps are necessary to improve my life, as well as inform my instructional practice. The words of the Elders I have interviewed, along with the knowledge I have gathered through a lifetime of living as an Indigenous person, have provided me with a grounded centre from which to draw inspiration.

In my regular instructional practice, I refer to aspects of my culture and upbringing that are relevant to the subject I need to convey. I am fortunate enough to have many experiences from which to draw, and I am finding that this ongoing reflection has helped me discover even deeper understandings of what has occurred in my lifetime. Things that happened to me in my youth hold deeper meaning for me now that I reflect on them as an adult. Interactions with family members who are now gone seem more important now than they did when they were happening. For example, my grandfather once rescued me from a hike gone wrong by piloting his fishing boat to the cove where we were stranded. The Canadian Coast Guard were sitting in the harbour, waiting for the
weather to clear before going out looking for us. My grandfather, with his lifetime of experience in our ancestral territories, and the knowledge of countless generations of sea-going Toquaht ancestors behind him, just did it. He passed the Coast Guard boat and had a good idea of where we would come out of the woods. He found us on the beach, sent in a smaller boat to grab us off some rocks, and passed the Coast Guard again on our way back home. I was just happy to be warm again, but it was years later that I realized that he just knew where to look and was able to navigate stormy waters better than the people who were trained for the job.

It makes sense for me to bring my personal experiences to the classroom, as I have always known that building relationships is integral to the teaching and learning process. I feel that you cannot build a relationship without revealing personal aspects of your life to your students. Stories such as the one above help to convey the concept of *heshook-ish tsawalk*, or ‘everything is connected’. As Nuu-chah-nulth people, we understand the sea because we are connected to it. Through a lifetime of working and living on the coast, and knowing every stream and cove, my grandfather knew that we would follow the river bed if we became lost, and that the stream came out in this particular bay. Through his grandfather and his ancestors before him, he was connected to our territories. This is not something that he had to work at, it was something that his family taught him as he was growing up; until it was integral to his person. He came to hold this knowledge naturally, through experience and through his relationships with the people and the environment around him. It is important for me to use these reflections to better provide my students with the cultural awareness that will benefit them as they move into their careers.
The fourth section of my dissertation, My Journey Through Colonization: Phase Four, is where I discuss the findings of my research process. This section correlates to the commitment phase of Laenui’s stages of decolonization in that the Elders that I interviewed were clear in their understandings of how things should be done. Our culture is rich with cultural protocols, and we use these protocols to guide us as we move forward. In the same way, the Elders I interviewed saw clearly the way forward. My purpose in this chapter is to provide an authentic interpretation of these ways.
Chapter Four:

The Findings

Chapter Overview

In Chapter/Phase Three, I provided a summary of the methodologies I employed to undertake this qualitative research project. Through the processes of interviewing Elders and analyzing my own experiences as a First Nations individual and an educator, I have compiled a body of knowledge that is framed within a case study. This fits with my overarching ideals of an Indigenous methodology and *heshook-ish tsawalk*, everything is connected. In Chapter/Phase Four, I provide the results of my study, including details from my interviews and the unpacking of my own experiences. The questions that guided me in this process are: What is the traditional pedagogy of the Nuu-chah-nulth and what practices are used by the Nuu-chah-nulth to determine proficiency in various areas? These are followed with: Reflecting on past and current experience with education, assessment, and the Indigenization of contemporary post-secondary courses, how can my own experiences shine light on the challenge of authentic Indigenization? And finally: How may these findings inform contemporary teaching practice, especially in those programs that advertise an Aboriginal or indigenized focus?

Why Interview Elders?

Throughout this work, I have stated that my plan was to interview Nuu-chah-nulth Elders to glean knowledge around historical and traditional Indigenous epistemology. I’m not sure that I have elaborated fully the reasons why I have chosen Elders to help me with
this task. In the Nuu-chah-nulth culture, Elders are naturally who we turn to for knowledge and advice. Kulchyski, McCaskill, & Newhouse (1999) write of Elders that,

In traditional Aboriginal societies Elders were and still are evolved beings who possess significant knowledge of the sacred and secular ways of their people, and who act as role models, often assuming leadership positions in their communities. They are highly respected by the people. They are the teachers, healers, and experts in survival, guiding individuals’ behavior toward an understanding of the natural ways of Mother Earth.

They continue their description with, “The Elders teach a world-view based on the knowledge that all things in life are related in a sacred manner and are governed by natural or cosmic laws (p.xvi).” Archibald (2008), a member of Stó:lō Nation writes,

From my understanding of First Nations cultural ways, authority and respect are attributed to “Elders” – people who have acquired wisdom through life experiences, education (a process of gaining skills, knowledge, and understanding), and reflection …Age is not a factor in becoming an Elder …being respected by others and having cultural knowledge are critical criteria. Elders have varying knowledges or “gifts” to pass on to others, whether spiritual, healing, medicinal, historical, storytelling, or linguistic. (p.37)

Our Nuu-chah-nulth word for Elder is Ḵiič’im, pronounced eech’im. The definition of this word is parent or Elder, interchangeably, and is understood to be ones who care for us and who pass on knowledge.
In my experience, both in my Nuu-chah-nulth community as well as in my post-secondary education role, Elders are essential members of society. In our territory, Elders are invited to all social and cultural gatherings, and increasingly are asked to provide support in post-secondary spaces. In the small institution that employs me, a significant number of educational programs have hired a First Nations Program Elder to be present for the cohort as they progress through the curriculum. Additionally, all of the campuses of the small community college I work at have Elders in Residence positions, with one to two Elders occupying offices and taking on various duties. It is satisfying to witness the increasing status of First Nation Elders in these traditionally Eurocentric circles.

Across the breadth of the Nuu-chah-nulth community, Elders are well-regarded for their input into social, educational and political issues. To support the voices of the three Elders I was able to interview for this dissertation, I was extremely fortunate to have access to a publication ordered by the Nuu-chah-nulth Community Health Services in 1995 that is now out of print. This book is *The Sayings of Our First People*, edited by Keitlah & Foxcroft. Dozens of our Nuu-chah-nulth Elders were recorded at that time, and their words compiled into a limited-edition book.

Drawing from the words of the Elders in *The Sayings of Our First People*, the interviews from the three Nuu-chah-nulth Elders I was able to interview, as well my own experience working in Aboriginal Education, I found that my data reflected the interconnectedness of an Indigenous worldview. This inter-connectedness is well illustrated within a medicine wheel framework. Samples of differing types of Medicine Wheels are illustrated in Figure 7.
In Figure 7 I have provided an example of a typical medicine wheel. Each wheel is divided into four quadrants, and can be used to organize concepts according to each concept’s nature.

In the process of analyzing the data I gathered to answer these questions, several central concepts emerged. In relation to an Indigenous pedagogy informed by the knowledge of the Elders I interviewed, I noticed that four ideas kept coming to light. The Elders discussed with me their understandings of a traditional historical Nuu-chah-nulth
pedagogy, and over and over, these same four aspects arose. They were the concepts of: 
*Time, Relationships, Echoing,* and *Competency.* As I began to work out ways in which to frame this data, I realized again how everything is connected. I kept my mind open to various interpretations of the data but was not surprised to discover that they would indeed correlate with a medicine wheel. My decision to utilize a medicine wheel framework in presenting my research findings came about through an epiphany-type moment, in a discussion with my PhD co-supervisor. We were discussing my research goals over the phone, and she asked if any distinct themes were emerging. I listed them off, and realized suddenly that each of the concepts the Elders discussed with me fit within four major pedagogical concepts. I jotted them down on a slip of paper, and this became the draft for my findings chapter. Bopp, Bopp, Brown & Lane (1984) describe the intrinsic value of the medicine wheel as a framework when they iterate how it, “…can be used to help us see or understand things we can’t quite see or understand because they are ideas and not physical objects” (p.9) In this I concur, as I have found this symbol to be a powerfully reflective tool in the analysis of my gathered data. As I have discussed in a previous chapter, four is a sacred number for many Indigenous societies, and it is appropriate that the data would correlate with this conception.

In undertaking this research, and in living my life as an Indigenous person, I have accepted that very little in life occurs in a linear fashion. The knowledge I gathered from talking with the Elders is best outlined within a framework that allows for movement and does not contain abrupt beginnings and endings. Therefore, the order in which I break down the following data is arbitrary and should be interpreted as flowing and interchangeable. The following figure outlines the theoretical framework for this chapter.
In discussing how medicine wheel frameworks may relate to Indigenous pedagogy, Ragoonaden & Mueller (2017) state that “the Medicine Wheel presents a worldview that embraces concepts of cyclical interdependency and equilibrium in a holistic, interconnected and nested system”. They continue, “A Medicine Wheel is a circle divided into four parts, represents a wide variety of teaching practices emphasizing the centrality of a balanced position, and focuses on the individual’s volition to engage in experience” (Bopp et al., 2004; FNESC, 2008, as cited in Ragoonaden & Mueller, p.27). These
statements help to illustrate how a medicine wheel, while not universal to all Indigenous culture, is a suitable framework to encapsulate traditional cultural pedagogy.

**Assessment from an Indigenous Perspective is Circular (Formative)**

Before delving into my interview data, I must take some time to visit the concept of assessment from both an Indigenous perspective as well as within contemporary educational settings. Last year, a colleague and I were discussing our understandings of mentorship within the Nuu-chah-nulth community, and she voiced her belief that a person was acknowledged as having 'learned and demonstrated' the knowledge when they became ready to pass the knowledge to someone else (Green, J. personal communication, April 12, 2017). This understanding resonates with me as well, and I view this approach to assessment as circular in nature. I feel that this may be relatable to curriculum/assessment design when I look at the student/instructor relationship as one of mentor/mentee. The instructor provides information to the student, with an end goal of sending that student out into the world to spread the knowledge; to grow with the knowledge and to add their own understandings before passing it on. Facilitating a deeper connection between the teacher and student may infer greater responsibility on the part of the instructor, but I feel that this should be a necessary part of the instructional process.

As Bopp at al. discuss in *The Sacred Tree* (2004), the four dimensions of “true learning” are Mental, Spiritual, Emotional and Physical (p.29). Allowing space for relationships in the learning process, rather than teaching using the Eurocentric model, supports students from within the emotional dimension.

Assessment in a classroom setting however, whether it be in the elementary/secondary or post-secondary realm, can be a high stakes conversation from
the dominant society’s social and political point of view. Rather than holding personal or
cultural significance to an individual, summative assessment may have far-reaching
implications for a student’s academic success. Data-driven student assessment results
may also influence systemic educational aspects such as institution and department
funding, class size, program delivery, instructor salaries, school resources, and many
other areas. Black and Wiliam (2001) describe these strictures when they state that,

In terms of systems engineering, present policy seems to treat the
classroom as a black box. Certain inputs from the outside are fed in or
make demands—pupils, teachers, other resources, management rules and
requirements, parental anxieties, tests with pressures to score highly, and
so on. Some outputs follow, hopefully pupils who are more
knowledgeable and competent, better test results, teachers who are more
or less satisfied, and more or less exhausted. (p.1)

These views see assessment as an end result, rather than as a beneficial and ongoing
aspect of the learning continuum. Thankfully, modern institutions and instructors are
embracing the concept of formative assessment (over summative) more and more
frequently. In the educational program in which I teach, we underwent a complete
curricular overhaul over the past three years – and culturally based, formative assessment
was included and approved by our college’s internal education council. According to our
college’s education policies, all of the courses must have a final, summative grade
assigned for the student’s records. Within each course curriculum however, we now place
a much higher score on participation, peer and self-evaluation, and on demonstration of
knowledge rather than on written exams and research papers.
As noted, assessment within contemporary post-secondary institutions in North America serves a variety of purposes. For the benefit of students, instructors and the institution itself, assessment and evaluation must be optimised in terms of reliability, validity, authenticity and transparency. To help educators understand the purposes of assessment, Race, Brown & Smith (2005) outlined a set of reasons that assessment takes place. These reasons are outlined below in Table 4.
### Table 4. Reasons to Assess. Adapted from *500 Tips for Assessment* (Race, Brown & Smith. p.8)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To guide students’ improvement</td>
<td>The more detailed the feedback we provide, the greater is the likelihood that students will have opportunities for further development.</td>
</tr>
<tr>
<td>2. To help students to decide which options to choose</td>
<td>This can provide them with guidance on which options to select next.</td>
</tr>
<tr>
<td>3. To help students to learn from their mistakes or difficulties</td>
<td>Effective assessment lets students know where their problems lie, and provides them with information to help them to put things right.</td>
</tr>
<tr>
<td>4. To allow students to check out how well they are developing as learners</td>
<td>Students themselves can use assessment opportunities to check out how they are developing their study skills and can make adjustments as appropriate.</td>
</tr>
<tr>
<td>5. To classify or grade students.</td>
<td>Continuous assessment processes can address the classifying or grading of students, yet still provide opportunities for formative developmental feedback along the way.</td>
</tr>
<tr>
<td>6. To give us feedback on how our teaching is going</td>
<td>Excellent achievement by a high proportion of students is often due to high-quality facilitation of student learning.</td>
</tr>
<tr>
<td>7. To translate intended learning outcomes into reality.</td>
<td>Often it is only when students undertake tasks in which their evidence of achievement of the learning outcomes is being measured that they fully appreciate the nature and level of the competences they need to attain.</td>
</tr>
<tr>
<td>8. To help us to structure our teaching and constructively align learning outcomes to assessments</td>
<td>While ‘teaching to the exam’ is regarded as poor practice, it is very useful to keep in mind an overview of the various ways in which students’ knowledge and skills will be assessed, so we can help students to strike a sensible balance regarding the time and energy they devote to each specific element of their study.</td>
</tr>
<tr>
<td>9. To provide statistics for the course, or for the institution</td>
<td>Educational institutions need to provide funding bodies and quality assurance agencies with data about student achievement and progression, and assessment systems need to take account of the need for appropriate statistical information.</td>
</tr>
</tbody>
</table>
The table (Table 4) adapted from Race, Brown & Smith (2005) above outlines many of the reasons contemporary post-secondary instructors use assessment. Using this set of rationales, I took a look at the research I had gathered both through the literature review I completed in Chapter Two/Phase Two of this study as well as the narrative information I gathered from the Elders I interviewed to reformulate the table as illustrated below in Table 5.
Table 5. An indigenized interpretation of Race, Brown & Smith’s Table 4.

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<table>
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<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>To guide students’ improvement</strong></td>
<td>The mentorship model with an Elder guiding a learner exemplifies this concept.</td>
</tr>
<tr>
<td>2.</td>
<td><strong>To help students to decide which options to choose</strong></td>
<td>Through the process of observation, Elders, family and community leaders help to guide Indigenous youth into areas of strength.</td>
</tr>
<tr>
<td>3.</td>
<td><strong>To help students to learn from their mistakes or difficulties</strong></td>
<td>Experiential learning as demonstrated in helping with daily and seasonal tasks, such as gathering materials, storing food, and passing on cultural knowledge is a process of learning through doing.</td>
</tr>
<tr>
<td>4.</td>
<td><strong>To allow students to check out how well they are developing as learners</strong></td>
<td>Self-assessment is an ongoing part of experiential learning.</td>
</tr>
<tr>
<td>5.</td>
<td><strong>To classify or grade students.</strong></td>
<td>The ‘best’ students are held up as examples, which in turn spurs others to renew their efforts. For example, the best dancers are chosen to perform the most prestigious dances.</td>
</tr>
<tr>
<td>6.</td>
<td><strong>To give us feedback on how our teaching is going</strong></td>
<td>The mentor/mentee relationship is ongoing and reciprocal.</td>
</tr>
<tr>
<td>7.</td>
<td><strong>To translate intended learning outcomes into reality.</strong></td>
<td>Elders are always clear in their intentions when it comes to teaching and learning.</td>
</tr>
<tr>
<td>8.</td>
<td><strong>To help us to structure our teaching and constructively align learning outcomes to assessments.</strong></td>
<td>Over time, community members rise up to become the teachers for the next generation. In the same way that youth are guided along the path they are most strong in, Elders are chosen to become the passers of knowledge.</td>
</tr>
<tr>
<td>9.</td>
<td><strong>To provide statistics for the course, or for the institution</strong></td>
<td>Through observation and qualitative measurement, those Elders who demonstrate the ability to pass on knowledge in a ‘good way’ are held up in higher and higher esteem as the keepers of knowledge. There are no statistics kept, as success is measured through the quality and richness of the passing down of knowledge.</td>
</tr>
</tbody>
</table>
From a historical perspective, mastering Indigenous knowledges and aspects of everyday life was important for different reasons than we find today. A person would need to become extremely proficient in boat building or fishing, for example, as their livelihood depended on it. Today, we have other reasons for mastering knowledge, both in the contemporary education arena as well as in cultural aspects. It is becoming more and more difficult to exist in contemporary society without obtaining academic credentials through the public education system. An example would be running a power boat. Historically, the Nuu-chah-nulth people lived beside and on the surface of the sea. My mother was raised on a small reserve across the bay from town, and she and her sisters learned very early on how to row a small boat across the bay, unaccompanied. Later on, they learned how to run small power boats. Today, in order to run a small boat in British Columbia, you must hold a pleasure craft boating licence. To pass the exam, you must study the rules, either online or in pamphlet form, and then pass an exam. The modern necessity of passing an exam in order to legally operate a small boat forces individuals to accede to modern educational assessment methods. The historical and traditional teaching and assessment methods still hold importance, however, and I’ll present this argument in these next sections.

**Contemporary Understandings of Indigenous Education in British Columbia**

The First Nations Education Steering Committee (FNESC) was established in 1992 during a BC provincial First Nations education conference. According to their website (www.fnesc.ca),
That visionary group of people determined the need for a First Nations-controlled collective organization focused on advancing quality education for all First Nations learners, and they set out FNESC’s commitment to supporting First Nations in their efforts to improve the success of all First Nations students in BC. (retrieved from www.fnesc.ca on August 8, 2018)

FNESC has a mandate to represent people of all ages in British Columbia who 1) identify as being First Nations, and 2) access or have plans to access education in public grade schools, tribal-run grade schools, or public and private post-secondary institutions. To support this endeavour, FNESC publishes a variety of reports in both print form as well as downloadable PDF on their website. They are a valuable resource for up to date education policy in regards to First Nations education, both provincially as well as federally. In 2015, they worked with focus groups and Elders to produce a document on First People Principles of Learning, and I have used this poster both in the classroom, and in my curriculum development whenever applicable. The principles are as listed below,

First Peoples Principles of Learning

- Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors.
- Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place).
• Learning involves recognizing the consequences of one’s actions.

• Learning involves generational roles and responsibilities.

• Learning recognizes the role of indigenous knowledge.

• Learning is embedded in memory, history, and story.

• Learning involves patience and time.

• Learning requires exploration of one’s identity.

• Learning involves recognizing that some knowledge is sacred and only shared with permission and/or in certain situations. (retrieved from www.fnesc.ca on August 8, 2018)

Embedded within the learning concepts outlined above are many of the same perceptions that have come out through the course of my research. In the same way that I have illustrated my research data within a circular medicine wheel framework in Figure 8, I find that assessment is an inclusive part of the holistic nature of FNESC’s First Peoples Principles of Learning. Within the nine principles described above, I can locate the concepts of Time, Relationships, Echoing, and Demonstration. The fact that the Education Ministry within the BC Provincial Government has accepted these principles and is actively including them within all new elementary and secondary curriculum design, encourages me to believe that our words are being heard.

When considering the status of cultural knowledges within post-secondary education in British Columbia, I call upon the experiences of one of my co-instructors.
Jan Green is a past member of the Indigenous Adult and Higher Learning Association (IAHLA) and a current instructor in the education assistant program at my local institution. She shared with me the framework, developed by IAHLA, which she uses in her current course instruction. Jan has taught in a variety of settings in her career, from Indigenous adult basic education, to cedar weaving workshops, to contemporary college courses. She ensures that her instruction embodies the oral tradition and storytelling by:

- Building on existing knowledge - honouring student knowledge
- Facilitating knowledge sharing – through storytelling and the oral tradition
- Is interactive and engaging - learning by doing, learning from one another (personal communication, June 18, 2017)

These examples suggest that Indigenous knowledges and contributions to education are taking place in Canada, and have dedicated proponents who are working hard to ensure our voice is being heard. Similarly, the information I have gathered, and present in this work, interviewing three Nuu-chah-nulth Elders has significance both for my own understandings as well as for contemporary education practice.

The Interviews

Over the course of May through August 2017, I took part in a series of interviews with cultural experts and Elders in my Nuu-chah-nulth community. In accordance with cultural protocols explained to me by my elders, I ensured that I came bearing a gift, and I undertook these interviews in the Elder’s place of residence, as is customary. Visiting Elders and Indigenous community members where they live shows a level of respect.
Many times First Nations people are invited to take part in consultation on various subjects, but the onus is on them to remove themselves from their (sometimes isolated) community to accommodate officials in large urban areas. As outlined in my application to the University of Victoria Human Research Ethics Board, I have decided to not use real names in order to protect the privacy of my interview subjects. Therefore, I refer to my subjects as James, Ruth and Carol. All three are members of the Nuu-chah-nulth community, and all three are widely considered to be Elders whose responsibility it is to teach the younger generations. As mentioned previously, all of what the Elders I interviewed had to say was connected, and flowed naturally into a conception of Time, Relationships, Echoing, and Demonstration, see the summary of these ideas in Figure 9.

The Concept of Time

![Diagram of the Concept of Time]

The East is the place of all beginnings … Not only is the East the direction of birth and rebirth, it is also the direction of illumination. It is the direction where light comes into this world. Hence it is the direction of guidance and leadership … The capacity to watch over and guard the
wellbeing of others is an important gift, and one that is learned with great
difficulty. (Bopp et al., 1985, p.43)

In listening to the answers provided by the Elders I interviewed during my
interviews, I was struck by the wisdom they held within themselves. There was no
hesitation in their responses, they just knew that this was the right way. In accordance
with the Medicine Wheel teachings in *The Sacred Tree* (1985), I’ll begin my interview
analysis in the East.

I began my interviews of all three Elders with the following question. With this
question, I hoped to open up a dialogue that would be far reaching in scope and would
guide me to further questions.

This question is about demonstrating proficiency of any knowledge that is
being transferred from one person to another, this knowledge can be many
different things; cutting fish, learning a song or dance, building a full-size
canoe, passing on a story, teaching the medicinal properties of plants, or
even the passing on of cultural ceremonies. From a cultural perspective
can you tell me how proficiency would be determined?

In receiving answers from the three Elders, I was intrigued by their focus on time as a
fluid concept, and how teaching was not something that occurred according to a 24-hour
clock. Ruth exclaimed over how modern education rushes into instruction, without
spending an appropriate amount of time in the beginning to prepare. She said,

One of the main front-end protocols is always usually around prayer. As
part of the preparation, right. It’s that real preparedness that I don’t find
that often in society that people actually do the *tānapata* or deep thinking. Time is very limited, or supposedly limited, so we are often expected to just jump into things without preparation and that’s very much on the front end of anything. Even if you’ve been mentored for years you would know you are supposed to do that preparatory work at the front end.

Supporting this concept of front-end work, I researched information gathered by Hoover (2000), who had interviewed members of the Huu-ay-aht people, one of the fourteen Nuu-chah-nulth Nations. In his work, he stated that in Nuu-chah-nulth cultural tradition, proper preparations are of utmost importance when undertaking any pursuit.

For success in hunting, fishing and other pursuits, or for health and long life, Nuu-chah-nulth men and women sought to obtain spirit power through prayer and through special preparations, usually ?uusimch (a cleansing bathing ritual). This could involve fasting, continence, bathing in cold water, cleansing oneself with bundles of twigs and plants, singing and more. Each family had its own set of inherited ritual practices and sacred places that are closely-held secrets. (p.42)

James, one of the Elders I interviewed, let me know that this preparedness is an integral part of the process of teaching, and must come before the experiential learning begins. This process of preparing to learn takes time but is necessary for a successful outcome. In Tables 4 and 5 above, I outlined various reasons for which assessment takes place, in Table 4 from a non-Indigenous perspective, and in Table 5 from an Indigenous perspective. One of the reasons was to translate intended learning outcomes into reality, and that Elders were always clear in their intentions when it comes to teaching and
learning. In my interview with James, I found that he exemplified this understanding when he stated,

> Sometimes it (the preparation) goes on for a long time. One teaching I have that people want to learn from is medicinal plants, and the teachings around that. And I let the young guys know if I start teaching about the medicinal plants themselves, they are going to have to learn the teachings behind it. And in front of it. And go from there, and eventually they are either going to pass a test or fail a test.

This beginning work that James describes is not only part of the teaching that he plans to provide, it is also a practice of formative assessment. He described to me that his students must continually demonstrate their willingness to take an active part in his instruction, and if he feels that they are not ready to take in the knowledge, he will put the teaching aside until they are. The students understand this, and learn that in order to receive new knowledge, they must be ready to take the time needed to prepare themselves. James continually tests his students through observation and in gauging their readiness.

Carol is the third Elder that I interviewed, and she relayed her feeling that everything takes place in the time in which it is supposed to. Her understanding is that traditionally, the Nuu-chah-nulth people viewed time differently than people do today. Carol explained,

> Time has never been a priority in the lives of First Nations people. I mean time in regards to Western time and in regards to the clock. Our time was the seasonal time. Time to dry fish, time to pick berries, time to gather medicine, time to dry the medicine, time to give names to babies. And
everything was according to weather conditions, or availability, and you had no choice. If you were going to live, you had to go by the clock of the earth, not the clock of man.

She provided me with an example of how she would teach someone to do a task. She would spend time with them in the beginning, before they began the task, in explaining how she wanted the task done. She felt that this is important, and she told me that she finds it sad that people these days don’t like to pay attention, and they want to just go ahead and do something without taking the time to really understand why they were learning the task. This feeling reiterates what the other Elders I interviewed felt; that people in the world today always want to rush.

My own understanding of how important it is to pause, and take the time needed to undertake a task properly, has come from decades of living as a Nuu-chah-nulth individual. In my work as an education advisor, in my positions on various Nuu-chah-nulth boards, and any time we attend community gatherings, we always begin with a prayer and a lengthy description of why we have gathered and what we hope to achieve. This precursor to any work that we do serves to ground us and to focus our energies on the task at hand. As another example, I was heading up several focus groups to see how our nurses could better serve our Nuu-chah-nulth communities many years ago. One non-Indigenous nurse relayed how she learned to do this ‘beginning work. She would travel to [remote community] once a week for community health visits, and it was a two hour drive on a logging road. The whole time she would be gripping the steering wheel and feeling anxiety because of the active logging trucks whizzing by. When she got to the community, she’d go to the houses and because she was in such a rush she’d decline the
tea and conversation they always offered and try to get the medical work done quickly. The community members would not respond positively to her presence in their community and she’d become frustrated with her work there. Finally, an Elder she was attempting to treat told her to get out of the house because she was being rude. Discussing the case with her co-workers later, this nurse was reminded that people in remote communities sometimes hold differing values when it comes to time, and in showing respect. By taking a short walk to calm herself after the harrowing drive each visit, and by accepting tea and some conversation prior to questioning community member about their health, this nurse found herself better able to relate respectfully to the people she wished to help. This deliberate use of time, that she previously felt that she could not spare, helped pave the way for a better and more efficient use of her time consequently. In this way, she accepted the formative feedback offered by her Nuu-chah-nulth clients.

The concept of allowing space for the natural progression of a task, whether it be in prayer, preparation, or in pausing to reflect, instead of jumping right in illustrates what the Elders I interviewed illuminated as one aspect of the importance of time. It was made clear to me not that time is unimportant, but that forcing knowledge to take place within a certain number of minutes, or within certain dates on a calendar is unrealistic and unhelpful. We should allow space and time for learning, and in turn, for assessment.

A second aspect of the importance of time involves the concept of observation, and specifically observation over a period of time. As I have mentioned in previous chapters, Nuu-chah-nulth Elders and community members are aware of the children and youth around them and are watchful. They approach the learning process by observing
and witnessing strengths that develop over time. During my interview I asked a follow-up question regarding this phenomenon: “Observation is a huge part in your teaching, probably more than I realized. How do you feel about this idea?” Ruth responded,

There is an intuitiveness and an observational part of teaching. When we say this process is labour intensive, it’s actually time intensive. Because we have nieces and nephews and grandchildren we’ve seen since they were little and we see the sensitivity. And they’ve gone out hunting and gone out gathering with us and they have demonstrated things that are not always related to what we are speaking of. But we can see are they sensitive to the trees, are they sensitive to the water, and are they picking up their garbage. How are they when we are gathering bark, or plants, not necessarily used for medicine or foods? We can see how they are developing over time, so not only a labour-intensive process, but time intensive. To see where their sensitivities are from a young age. They inherently have in their genes what comes through in the teachings. People present in different ways, and when they are on the land, they are so much in tune to their environment. Connected to the land and the water.

Demonstrating the Nuu-chah-nulth tendency to find humour in all situations, Ruth followed up her statement with, “Some people are good cooks, and some are good clearers, hahaha”. In this she means that through observation, she has been able to discern that some people show a decided proficiency for a task, but, some people demonstrate that they have no such proficiency. Therefore, these people may be assigned the less
glamourous jobs, such as clearing up the dirty dishes after a feast rather than participating in the cooking duties. The remark was made in jest, but it holds truth.

Studying the work of Bendtro, Brokenleg & Bockern (1998), I found a quotation from Lakota leader Standing Bear (1933) that is relevant to this study,

There was always one, or a few in every band, who swam the best, who shot the truest arrow, or who ran the fastest, and I at once set their accomplishment as the mark for me to attain. In spite of all this striving, there was no sense of rivalry. We never disliked the boy who did better than the others. On the contrary, we praised him. All through our society, the individual who excelled was praised and honored. (p.463)

This notion exemplifies the pan-Indigenous ideal of a common good. Competition has no place in a society that exists so completely in an interconnected worldview.

The sensitivity Ruth mentions is what I understand as a strength or proclivity. These proclivities are noted, and in both historical as well as contemporary settings, steps would be taken over time to mould a young individual into these areas. I provided James with the same follow-up question, “Observation is a huge part in your teaching, probably more than I realized. How do you feel about this idea?” He responded,

Who’s good at chopping will chop, who’s good at running machinery will run a saw. Those who show potential at an early age in dance or singing will be given the songs of our family to hold and perform in potlatch. Sometimes there are a limited number of dancers who could come out on the floor for each dance. Those spots would be handed to the best, those who show the best potential and who are dedicated to coming to practice
and in practicing the right way. It is a responsibility to show their connectedness to the family. Those are the ones who are called on when it is time to do that. It’s important to not tell the others that they are not good enough, so we tell them that they have other responsibilities. It’s part of that protocol. It’s our responsibility as the teachers to do the best that we can to observe who demonstrates when strengths and abilities.

Looking back again at Table 5, the second point outlines that one reason for assessment is to help students decide which options to choose. In First Nations communities, Elders, family, and community members help the Indigenous youth they observe to discover their strengths through this method of observation. They then guide them accordingly. I make sure to say contemporary as well as historical settings as this phenomenon remains a current part of Nuu-chah-nulth life. I have personal experience of the efficacy of this phenomenon through my past work as an educational counsellor. One student I worked with described her educational path to me. From a young age, this student would spend her summer vacations with her grandparents and would spend many hours snorkeling in the local river with her grandfather. They would start high up the river, and swim down it side by side, to observe the salmon and other creatures in the water. Over time, this student grew to love learning about the life cycle of salmon and began to take courses that would lead her to a science degree. She is now working as a Fisheries Biologist and credits these times with her grandfather as her reason for pursuing this career. He observed her aptitude for learning about the creatures she enjoyed watching and made sure that he spent the necessary time to teach her more, in this way reinforcing her pathway to her final degree.
I also asked Carol the same follow-up question, “Observation is a huge part in your teaching, probably more than I realized. How do you feel about this idea?” Her answers were very similar to both Ruth and James in that the strengths of individuals were always noted, and steps were taken to develop these talents where possible. This observation, and the decisions made to move beyond observation into teaching involve a process of assessment on the part of the observer. Carol said,

Whoever adopts you and sees whatever skill you have they will teach you.
It doesn't necessarily mean that it's family, sometimes it will be just someone you know. Thirty years ago this lady told me about medicine.
She took me out and she told me which medicine was for what. She physically took me out to see the plants, and I knew because I knew a little bit about another plant that I needed to squish it up to get the juices out to make it work. I remembered from when I was younger, and my Nan would take me out and teach me about the plants.

I appreciated Carol’s description of her own educational journey, and how the people around her recognized her aptitude for working with medicinal plants. She went on to describe how learning and observation began when children were very young when she continued with,

So learning starts when you're very young. You learn about how to take care of yourself, and then you learn about food, and then you learn about sleep. Those are all the basic things that young children learn. But as time goes on, I used to notice people in the older days seeing the talent in somebody. And someone who had also had that talent would notice if a
youngster had the beginning of a talent in that same area. They would look at each other and say, this is the one. Or if it was a dancer or if it was someone who was a hunter they could tell somehow by the person's abilities that they should teach them that skill. It's just not like that today.

Not everybody is suited for everything.

So, not only would Elders and community members observe and help youngsters decide which path to take, depending on what strengths and aptitudes they would demonstrate; they would also match up experts in certain areas with youngsters who were tending in those directions.

In having these conversations with the three Elders, as well as drawing on my own knowledge about my family and my upbringing, I surmise that transfer of knowledge in this way is time-intensive. Learning doesn’t happen over a few days or weeks, it happens over months, and years, and decades. The community is watching young people grow up and observing their abilities and strengths. As highlighted in Figure 10, mentoring, observing, requesting demonstrations of skills, questioning and listening are all parts of this process.
The South is the direction of the sun at its highest point. It is the place of summer, of physical strength and vigor … The South is also the place of the heart, of generosity, of sensitivity to the feelings of others, of loyalty, of noble passions and of love. (Bopp et al., 1985, p.48)

Relationships and the recognition of family connections are essential within Indigenous cultures and societies around the world. These connections facilitate ongoing formative assessment through the processes of mentorship, and in providing relevance to the information. Within our communities, these relationships are familial, but family may have different connotations in the Nuu-chah-nulth worldview than in that of mainstream society. Ruth Kirk (1986) described some of these family connections in her book, *Wisdom of the Elders*. She outlines that within the Wakashan languages, which are the various dialects spoken by the Nuu-chah-nulth and Southern Kwakiutl, there is little distinction between the words for brother and sister or cousin, nor between the words for
parents and aunts and uncles. “The sense of family went by generation rather than by specific parentage” (p.37). This lack of distinction carries across families as well. I have coworkers who are barely related to me who call me cousin and tell me that of course I am welcome at their gatherings. I am family. It was, and continues to be, within these connections that learning and ongoing assessment takes place.

Chief John Thomas recalls the beginning of his training to become a Nuu-chah-nulth man,

At age six you begin your training. You go with your uncle, never your father. He’s too close to you. There were ten of us little boys …Uncle told us to get spruce roots [to make into a target for use in spearing practice]. So the boys would dig under a spruce and bring him the roots. “No. Those aren’t the roots of the spruce tree,” he’d say. And we’d learn the different appearance of materials as well as the qualities. (as cited in Kirk, 1986, p.23)

In bringing roots back to their uncle, these boys were going through a process of learning and assessment. They were making decisions about which roots to bring back and were advised on whether they were correct or wrong. This process would develop their reliance on critical thinking, in that the boys would need to develop their reasoning skills to decide which roots seemed like the right ones. But, the familial relationship of their uncle to them, and an understanding that the roots would be used in further training exercises, provided a deeper understanding of the knowledge. The Elders I interviewed for this thesis emphasized our Nuu-chah-nulth tradition that children were taught to respect their elders from a young age. These boys would respect their uncle and wish to
please him by coming up with the correct answer. Knowing that these roots were needed as targets for spear throwing activities provided a deeper understanding of why it was necessary to learn how to differentiate spruce roots from other types of roots. As I have noted in previous sections, learning can only take place against a background of relationships (Shields, 2004). Within the passage by Chief Thomas noted above, I can discern both the importance of familial relationships as well as relationships to the knowledge.

In discussing the importance of relationships in learning and assessment with the Elders I interviewed, Carol brought up the introduction protocols that she was raised with when she described,

The first thing that we asked each other is where are you from, and you asked who their parents were, and then you kind of get a feel for the connection. You might find that you are related, or you might know their sister or brother, but when you are teaching someone, if you establish that relationship with a student that makes that student more comfortable.

This custom is also something that I have experienced as a Nuu-chah-nulth person. Since I was a child, I have been asked who my people are. This happens at potlatches or gatherings, at any time that I am introduced to other Nuu-chah-nulth people in various settings, over the phone when I was working as an education coordinator, and in my work as an instructor. Almost without fail, if I meet a Nuu-chah-nulth person for the first time, I am asked where I come from. As I have grown in my own personal cultural understandings I find that I am asking this question of people I meet with more and more frequency. I feel that this is an integral part of an Indigenous worldview, as it is not
something that people do with any frequency in mainstream Canadian society. With students, this work that I do up front, in our first classes each semester, helps to establish my connection with them. This connection may not fit within a rigid definition of mentor and mentee, but I feel that over time my relationships with my students take on the spirit of mentorship.

Wallace & Gravell (2008) describe the phenomenon of being a mentor or benefiting from a mentor relationship in the following passage,

Our mentor may have come in the guise of a fondly remembered teacher, an older brother or sister, a helpful boss or more experienced work colleague, an apprentice training instructor, or just a close and trusted friend. The chances are it was not part of an organised scheme or even an intentional process. We probably just fell into it in conversation, recognising at some point that here was a person who was helping us to see through our problems, helping us to grow and develop, feel good about ourselves. (p.9)

The relationships that Nuu-chah-nulth Elders form with their, for the lack of a better word, *students* tend to relate most closely with the general description of mentor. Locating concrete differences between conceptualizations of teachers, coaches, advisors, counselors and mentors is challenging, in that many of the core understandings of each vary in only minor details. Wallace & Gravell explore these differences and similarities however, and state that, mentoring, “…encompasses elements of coaching and teaching, and, for that matter, counselling. What marks it out as different from all of these, however, is its purpose. For mentoring is primarily about transition — about helping
someone to move from one stage to another” (p.15). This purpose of moving from one stage to the next correlates well with the concept of formative assessment. And it also correlates well with Umeek’s (2004) conceptions around phase-transition and transformation discussed in Phase Two/Chapter Two of this thesis.

I found some similar understandings about transitions when I asked Carol about the importance of relationships in learning and assessment. She had the following to contribute,

I knew the students in the classroom (Carol delivered language lessons in a semi-remote city on Vancouver Island), but I also went a step further. I went to see the students in their own homes. I thought that was really important because I wanted the students to feel that there was a connection between me and the student (she was a cultural support worker in the school, and acted as a liaison between the students, the parents and the teachers), not only in the classroom but also at home. Safety was something that I wanted to make the students feel. One student, lets call her Jane, said that I made it okay for to be brave, and to speak up in the classroom. She (the student) learned because she was allowed to voice her opinion or have a say and feel okay about that.

This example from Carol came from her recollection of thirty years prior, when she was working in a school district. She recalled teaching these young students about language but knew that to reach them in a more meaningful way, she’d need to go one step further and to develop a relationship with them by visiting them at their homes. In spending time in building up these individual relationships, Carol feels that she helped her students
transition from being shy to becoming more outspoken and brave. This is important from an assessment perspective as I feel that she worked to empower these students to take control of their own learning. By speaking up in class, they would become better equipped to take part in the other, interconnected aspects of the medicine-wheel framework of time, relationships, echoing and demonstration.

Also relating to relationships, the tradition of feasting, proper host protocol, and teaching during mealtimes are integral to Nuu-chah-nulth ways of being. Any gathering must include a feast, and it is the absolute height of poor manners to run out of food. I have attended gatherings where more people showed up than was expected and have seen hosts run out to buy twenty buckets of restaurant fried chicken to ensure there will be enough food. Both guests and hosts are expected to take part in guesting protocols by accepting offered tea and nourishment, and by bringing a small gift of boxed tea or canned food in thanks for the hosts time and attention. Over the years I have heard multiple Elders and leaders talk about the importance of providing food to those who are there to learn. Clutesi (1990), refers to this practice when he relates that,

Their role now would be as a listener, to swallow, as it were, the teachings as they would be given during meal times. It is believed to be the most appropriate time to fully accept messages. When you are swallowing food, so too will you receive teachings. (p.99)

The relationships and connections between the teacher and learner are important during this process as well. I recall a workshop I attended as part of my employment where an Elder discussed his remembrances of growing up in a remote community. He remembered an elderly community member, too old to go out fishing with the fleet, who
had a particular job. He was known as grandfather to all of the youth, and they helped him gather seafood off the beach from time to time. Once enough periwinkles, clams and oysters were gathered, grandfather would set up his cooking pot over a fire on the beach. As the children sat and ate their feasts, they were told to be quiet and to listen. Grandfather would tell stories and recount the oral histories of the community and of the families who lived there.

In my interview with James, when asked about the importance of relationships in learning and teaching, he had this to say,

We learn from our grandmothers and our aunties. We learn as we work beside our families.

Kirk (1988) also refers to the concept of learning from people you have close relationships with when she writes,

Special skills generally were handed down within families. This gave young people access to learning the secret rituals necessary for success, as well as the practicalities and techniques of hunting fur seals or making canoes, knowing where to peel cedar bark, or whatever. (p.44)

Through the course of interviewing three Elders, I uncovered a further, deeper, aspect of the importance of relationships in learning and assessment; the spiritual or metaphysical connections between the material or the knowledge being learned, and the student. When describing how the people who come to her for instruction in weaving, Ruth explains the following,
It opens them up to that whole world of information and experience that is sleeping, not necessarily lost, but through contact and all the different devices of oppression; if things haven’t been practiced they do sleep. But it’s more than just a physical level it’s an emotional and spiritual connectedness, especially to the materials. Because I look at something like weaving, I’ve learned a lot sitting with several aunties, but I have learned more from cedar bark than I’ve learned from a person.

These reflections from Ruth contain insights that are integral to understandings of assessment and learning from an Indigenous point of view. Considered from the Nuu-chah-nulth worldview of heshuk-ish-tsawalk (everything is connected), the concept of being connected to the material, or to the knowledge, resonates strongly. These connections go beyond the physical or social understandings of the world into the metaphysical and spiritual realm. This philosophical understanding of connections from an Indigenous point of view were explored in Phase One/Chapter One of this thesis when the work of Deloria & Wildcat (2001) and their understandings of Indian metaphysics were outlined.

Continuing with her narrative around connection, Ruth relates,

There’s something in that that is hard to put into words, it’s very much a oneness with the material that you are working with. I think that it can translate to other types of material, like the written word. Or other things in the more modern educational settings. But, it’s something to think about, how you are in tune with the material you are working with.
The linking that Ruth describes between the learning of physical or tangible skills and more impalpable aspects of knowledge, such as the written word, is important. My purpose in undertaking this research is to draw inferences from traditional cultural assessment and learning that will inform contemporary pedagogical practice. In this statement Ruth has drawn parallels between traditional cultural practice and how this practice remains relevant and necessary today.

At this point in our interview, I felt a need to probe for more clarification; I was intrigued and captivated by the notions that Ruth was bringing up in her narrative, so I asked her to elaborate on her conceptions of attunement. She said,

When I am teaching, I see an attunement, it’s almost like reaching a level of comfort with the materials. When I do a workshop, and say it takes three hours, over time I can see the shift. When the learners become attuned to the knowledge and are comfortable – even if it is not their own cultural background. You can see that shift in learning, and you can see it in all types of teaching, cultural or academic. It’s confidence, but more comfort, a comfortable feeling with the learning. When I really feel that someone is really getting it and making it their own. Getting a better understanding of how it works in their world, their understanding.

This perception of comfort, or attunement, with knowledge, whether it be physical or metaphysical knowledge, resonated with me and with my purpose for embarking on my research path. The notion is strengthened when the concept of relationships is added. These relationships exist on many levels, beginning with the connection between the teacher and the student. At an, arguably, deeper level, a relationship to the knowledge has
been traditionally known by the Nuu-chah-nulth people as ʻt̕aʻaapata or deep, reflective thinking. In the ʻt̕aʻaapata process, the student consciously and internally reviews the information, which helps to embed it within their person. This thinking reinforces the knowledge and is a form of personal and ongoing assessment.

This idea of relationships on multiple levels in intriguing, and again relates back to Shields’ (2004) concepts of the centrality of relationships. Students who are learning, and Ruth makes no distinction between the experiential process of learning to weave, and more the academic learning in a classroom, are surrounded by these relationships. I designed the graphic representation in Figure 11 to represent the holistic nature of these relationships in conceptual form.

Figure 11. The centrality of relationships with assessment
Learning and ongoing assessment occur at the intersection of all of these overlapping aspects. The descriptions of learning through relationships also harkens back to the overarching concepts of the Indigenous world-view that we are all connected as well as with the interconnected nature of systems theory. Within this conception of learning and relationships, assessment occurs as a natural extension through the process of mentoring.

Referring back to my review of existing literature in Phase Two/Chapter Two of this thesis, I recall the words of Black & Wiliam who “…use the general term assessment to refer to all those activities undertaken by teachers – and by their students in assessing themselves – that provide information to be used as feedback to modify teaching and learning activities” (p.2). Within Indigenous ways of teaching and learning, through the process of mentoring, Elders and experts in each community helped their student’s transition into higher levels of learning. Through the process of tătaaapata, students form their own relationships with the knowledge and self-assess on their learning pathways. Finally, we find connections within the medicine wheel framework when we realize that the Elders and community experts came to become the holders, and passers, of knowledge through the process of time. Through many, many years of accepting knowledge passed down through the generations, and in turn passing on the knowledge to the students with which they have now formed relationships with. Figure 12 captures this with the metaphor of echoing.
The West is the direction from which darkness comes. It is the direction of the unknown, of going within, of dreams, of prayer and meditation. The West is a place of testing, where the will is stretched to its outer limits so that the gift of perseverance may be won. (Bopp et al., 1985, p.53)

Echoing as an iterative pedagogical tool that involves repeating the teaching, in various ways, until it takes root as a learning. To relate this concept to assessment in learning, there must be method in which this ‘taking root’ can be measured. The teacher may be the one doing the repeating, or the learner may repeat the teachings either to themselves or to other learners. This type of repetition is seen in the phenomenon of storytelling and the passing on of knowledge through the oral tradition. In Indigenous Storywork, Archibald (2008) discusses the importance of repetition in the storytelling process and in learning when she passes on the words of Coast Salish Elder, Ellen White. Of Ellen she says,
She reiterated the process of not only intimately knowing a story, including knowing its content, but also of inter-relating with the story to make meaning. When Ellen was asked how she learned to tell stories, she recalled the use of repetition, how she had to repeat the story during food-gathering activities. (p.133)

This ongoing repetition, or echoing back, of a skill helps to more firmly seat it in your mind. Again, as expected within this holistic and interconnected medicine-wheel framework, echoing as a concept connects naturally with the processes of time and relationships. Ellen began the process of learning to be become a storyteller from an early age. When she relates that she, “…had to repeat the story during food-gathering activities” (p.133), and reflects back to this time in her life, I get the impression that the people who cared for her, who had a relationship with her, and who were observing her over time, sensed her innate talent for story-telling. Assessment took place for Ellen over time, as she was asked to echo back her learnings during the course over everyday activities. Archibald goes on to explain how Ellen learned to use this same process to teach children and pass on her own teachings.

Ellen’s use of story repetition is needed in order for one to fully know a story. The children in Ellen’s experience told stories ‘back” to their teachers not only to master the content of the stories but also to show their understanding of them. (p.133)

This repeating back of stories, which helps to demonstrate a child’s understanding of what each story means, serves as an effective method of formative assessment from a few different perspectives. For the storyteller, it can help to discern what message a child has
gathered through the storytelling process. This understanding can help the storyteller edit
the story or the way in which she relates the story to better pass on the understandings.
And from the student, repeating a story back to the storyteller can help to crystallize the
moral, or meaning of the story. I looked to the work of Bower & Barrett (2014) to relate
the phenomenon of the oral tradition and storytelling to the non-Indigenous world.

Stories can enable children to understand their place in the world. They
can bring about a realisation that there are other worlds, cultures,
languages, environments and experiences, which, though unfamiliar to
them, can hold a fascination because of their ‘strangeness’. (p.10)

They summarize their findings on the importance of storytelling in the classroom, saying,

This should not be a tokenistic activity prior to writing; it needs to be a
pedagogy that is embedded in classroom practice so that children are
couraged to find their own oral voice and develop their confidence and
competence by the repeated exploration of narratives. (p.12)

Brendtro et al. (1998) also iterate how important the experience of storytelling was in the
education of Indigenous youth,

Children were taught that wisdom came from listening to and observing
elders. Ceremonies and oral legends transmitted ideals to the younger
generation. Stories were not only used to entertain, but to teach theories of
behavior and ways of perceiving the world. Such lessons became more
meaningful with repetition; the more one listened, the more was revealed.
(p.448)
In my own teaching practice, I assign each post-secondary student to craft their own teaching story over the course of a semester. At the end, each must stand up and ‘teach’ their story to the class. The story must have a purpose and they cannot simply copy from a pre-written narrative. In order to provide an assessment of their efforts, I ask each to submit a short paper outlining their reflections on the process. They must reflect on their feelings while writing the piece, their reflections on the importance of storytelling as a pedagogical tool, as well as how they felt while delivering the story. They must provide me with an understanding of how they feel about their effort. Over the years I have witnessed students produce some amazing work, including stories that have brought us to tears, and stories with multiple props that were produced at the appropriate times. The self-assessment portion of the assignment has provided me with a rich understanding of the learning that they have internalized about the project. My instructor-assessment of the student’s effort is a reflection of their own self-assessment.

Asking Carol about her perceptions of repetition as a pedagogical and assessment tool, she recalled,

In my most of my language classes I have the students participate orally. That means to me that is a confidence builder. The participation and the expectation that you expect them to be able to do this. If you don't do it right away (and volunteer to come up) you're going to be asked to do it. Come up to the board, or you're going to come up to the front and introduce yourself. All this getting feedback from your students helps you understand them, because you can actually see them. It helps them
because now they really have to think about if I got it right, or if they don't, or what they don't know.

Carol’s description of how she runs her language classes, causes me to reflect on whether she is describing repetition or, in fact, demonstration. I feel that they are closely connected but having taken part in a Nuu-chah-nulth language class that she teaches, I have come to the conclusion that she is, in fact, describing the process of echoing. Moreover, she employs echoing in her practice more than any other instructor I have experienced. Every sound, word, and even syllable that she presents to the class must be repeated back to her orally, and if any student is not paying strict attention, she will call them out to repeat what she has just demonstrated. As she described in the quote above, Carol uses this teaching tool to continually assess her students as they move through the material. She asks for constant feedback, to help ensure that he students are effectively absorbing the information that she provides.

In reviewing my interviews with the second and third Nuu-chah-nulth Elders, I was intrigued by their own notions of repetition as a teaching tool. I asked each of them to elaborate on how echoing might work when they are teaching a student. James had this to say,

There is a number of ways to do it, I guess, but mostly it is through observation of their actions and the way that they might explain it (the teaching) back to you.

In this statement, James’ words bring to mind how observation over time partners with echoing to help determine where a student is at in their learning. This perception is reiterated by Ruth when she says,
Through experiential learning through practice, through repetition, that leads to skill. I would say it’s measured by a person’s actions or what you’ve taught them. Gauging whether they are making an effort to learn what you are teaching them, or not. And if they need to learn, then repetition is the best way to help them accumulate their knowledge of what you are trying to teach them. With that repetition there is repetition of how they show whether or not they are learning.

With this observation from Ruth, I visualize a process of formative assessment; with the student echoing back the knowledge, and the teacher responding with either an agreement that they have it correct, or providing adjustments to help the student in their mastery of a skill or concept. This following observation from James reinforces this understanding when he says,

Each time you get together with them, do they remember what you tried teach them? You ask them first, or you can give them a parallel example of what you are trying to teach them, and see if they make that link.

Through requesting his students to echo the learning that he previously provided, James is offering a form of student-teacher formative feedback. Of even greater interest is James’ suggestion of providing a parallel example of the provided knowledge, as successful mental linkages between concepts is an important indicator of effective instruction. As discussed in Phase Two/Chapter Two, I refer back to the literature of Clark (2010), who states that, “Feedback becomes formative when students are provided with scaffolded instruction or thoughtful questioning that served as a prompt for further enquiry, which then closes the gap between their current level of understanding and the
desired learning goal” (p.344). In asking for this reiteration of the learning, James and the other Elders I interviewed are providing experiential examples of the efficacy of this pedagogical and assessment tool.

The previously discussed concepts of time and relationships remain constant through this echoing aspect of learning and assessment through the investment of personal connection and time of the mentor or teacher. The teacher must not only provide daily, weekly, and ongoing instruction over time, but also recollect an ongoing understanding of where their pupils are at in the learning continuum. James relates one way in which he assesses a student’s progress through the provision of confidential knowledge. He makes sure to iterate to his students the importance of keeping some culturally important knowledge secret, and then observes how the students comport themselves in society. He demonstrated this idea in the following recollection,

For instance one of the big tests is confidentiality. I told two of them (his students) different things about what they wanted to learn, and just recently one of my nephews failed that test. He mentioned to someone what we were doing, and even though we are family, it’s a tight circle of people that I teach with.

In this case, the learning was not necessarily about what the Elder told them, but how to handle the knowledge. This brings in concepts of critical thinking and private reflection and adds layers to the instructional process. Assessment was not based on how well the student retained the actual knowledge, but on their discretion in handling these secrets. In these cases, James relates to the concept of assessment, and possibly summative evaluation, when he states that a student may not be ready to continue with this particular
instruction. As discusses in the section about time above, James makes decisions on whether to continue with his instruction based on his ongoing observation and assessment of a student’s willingness to absorb and internalize his teachings.

This recollection by James of the importance of confidentiality in teaching and learning caused me to remember a time when a local Nuu-chah-nulth Elder brought me out on a nature walk, to learn about some of the traditional uses of our local flora. I was warned by the Elder to not discuss what I was learning with anyone other than himself. This Elder related a story of a book author who was brought into confidence by Nuu-chah-nulth and Kwakiutl medicine experts. Despite verbal assurances that the medicinal qualities of each plant were not going to be published, they in fact were. This resulted in an influx of new, and unqualified, people to many areas that were described as being good places to locate certain plants. These areas are generally kept secret, not only for the health and continuing well-being of the plants, but also for the efficacy of the medicine produced from that space. My Elder mentor felt that the land in those areas had a spirit that imbued the medicine with power. Having multitudes of people trampling over the ground reduced the power in the plants so he had to go source out new, un-trampled areas. This experience, he said, has made our local medicine people more leery of sharing information and in teaching new medicine experts. In this way, I see a form of formative feedback happening within our local knowledge holders; they have learned over time to not be as free with providing information. This may be detrimental in the long run as fewer and fewer of our Nuu-chah-nulth people are being entrusted with this local, ecological knowledge, passed down through the ages. Additionally, this fear of losing
control of this cultural knowledge through inopportune sharing may be restrictive to learners who learn best through the process of bouncing ideas off other learners.

Specifically, the formative assessment benefits of echoing or repeating knowledge applies not only between the teacher and student, but also between student peers. I was fascinated to read in Clutesi’s (1990) Stand Tall My Son about the ongoing learning process of a group of young boys. George Clutesi was a respected Elder, educator and storyteller from the Tseshah’t Tribe of the Nuu-chah-nulth People. Interwoven between the oral stories he recounts in his book, Clutesi talks about teaching in the ‘old ways’, and how knowledge was passed down. Describing the teaching of two young boys by their uncle ‘Cees, Clutesi recounts how “The two boys had been exchanging information of late, about their everyday lives, not with the idea of teaching each other but rather more to review what they had been taught by their elders” (p.63). The boys used each other as sounding boards to reflect on what they had been learning. Clutesi is careful however, to explain that not all of the boy’s teachings were discussed openly when he says, “Though they seemed to discuss everything, there were nevertheless more intimate teachings that were never divulged or discussed. One of these was the practice of taking medicines or tonics” (p.63). In this way the boys are practicing two aspects of learning through Indigenous knowledges; echoing the learnings to peers to help in retention, as well as remembering to practice their confidentiality.

In my interview with Carol, she also brought up the concept of students echoing knowledge between themselves. She uses this as a pedagogical tool in her language lessons, and it builds upon her use of repeating the information back to her as a teacher. She asks her students to work in small groups. Regarding this approach, Carol relates,
If you’ve got a lot of time with the student, repetition is easy. Like you could do it everyday if it's your child or your sister’s child. You've already got a relationship ongoing. But if it's a class that starts, you have to find a way. Repetition also happens in groups. If you have four people in a group, all the four people can contribute their way of understanding so it gives that other student a different angle or perspective. If you have a group of people working together, you'll see things will surface that they can demonstrate to each other and learn together.

In this group work, the students use peer- and self-assessment practices when they practice with each other. They are repeating the knowledge, and therefore helping to seat it more firmly in their brains, but they are also assessing the knowledge of their peers and may correct and/or adjust their understandings as they are revealed.

These aspects of learning and assessment also reflect back to the concepts of front-end protocols related in the time and relationships sections of this chapter. My feeling is that the understanding of proper protocols, and in respecting the confidentiality of some knowledges, leads directly into a discussion of the final aspect of this medicine-wheel framework, demonstration as portrayed in Figure 13.
The North is the place of winter, of white snows that remind us of our elders. It is the dawning place of true wisdom. Here dwell the teachers of intellectual gifts symbolized by the great mountain and sacred lake … The North can also be seen as the direction of completion and fulfillment. Here the traveler learns the lessons of all things that end. (Bopp et al., 1985, p.65)

Although the historic and traditional Nuu-chah-nulth assessment methods I have explored so far are holistic in nature and favour continuous, formative, and life-long learning, there are aspects of summative assessment as well. As outlined in the above quote from *The Sacred Circle* (1985), the topmost quadrant of the medicine wheel represents completion and fulfillment. I interpret this conception as having attained a level of understanding (or training) that is the equivalent of success. Reading Sapir’s
(1939) account of Nootka (Nuu-chah-nulth) life at the turn of the century, he relates a conversation he recorded with Nuu-chah-nulth Elder Tom Sayachapis.

They say that who (just) waits for the right time does not get anything. (He succeeds) only if he has the Wolf Ritual spirit from the start and trains for various little things while growing up …for unerring (aim) when spearing tyee salmon …in getting the red-headed woodpecker in snaring – getting it for tufted head-dress regalia used in training for whale …We have the term ‘changes into a hunter at intervals’ for the reason that we train for everything. (p.187)

The concept of ‘changing into a hunter at intervals’ feels like an accurate representation of the formative assessment process, which may find a natural terminus in summative assessment. The final step, or stage, is the characterization of, we assume, an accomplished hunter. Brendtro et al. (1998) also discuss this end goal of competency when they state, “The goal of Native education was to develop cognitive, physical, social, and spiritual competence” (p.448). This concept can relate to any end-stage in education as well as through the continuation of learning throughout a student’s lifetime. In this way, demonstration from an Indigenous worldview may be viewed as a series of formative assessment processes, punctuated by summative assessment which a student may use as a stepping stone to access the next higher rung on the learning ladder. The intervals outlined in the above quote would be the steps, or stages, along the journey undertaken in becoming proficient. Quite often the successful completion, or demonstration, of these steps is referred to as scaffolding. Carter (2010) provides the following understanding of a scaffolding process when he writes,
If problem-solving strategies are to be reconstructed successfully, then learners must have a strong understanding of the underlying principles of what was learned. In this way, they can recognise novel situations as subtle variations that relate closely to those previously encountered and deploy appropriate strategies to resolve challenges and problems across the course of their lifetime. (p.348)

In support of this statement, I feel that the stages through which a learner journeys, in a traditional Nuu-chah-nulth pedagogy, are holistic and interconnected in nature. Additionally, this statement correlates well with the Indigenous point of view that learning is never relegated to only a certain portion of a human’s life; it is ongoing and lifelong.

In researching Indigenous concepts of mastery, I came across the work of Martin Brokenleg and the Circle of Courage pictured below in Figure 14. Brokenleg first published this work in Brendtro, Brokenleg & Bockern (1998). Together, that team developed a medicine wheel framework which outlines the importance of some of the same ideals that I have uncovered in my own research. Significantly, they discuss the concept of mastery, and how important this concept is in the education of Indigenous youth. Their focus has been on fostering resilience in Aboriginal youth at risk, and as education is a large part of their work, it resonates strongly with my own focus on Indigenous education.
When describing the importance of mastery, Brendtro et al. state, “Competence develops as one masters the environment. Success brings innate satisfaction and a sense of efficacy, while chronic failure stifles motivation” (p.418). I find that these statements reflect the words of the Nuu-chah-nulth cultural experts I interviewed when they discuss the importance of becoming comfortable in the acquisition of knowledge.

In regards to differing types of training or learning, James wished to make it clear that there are differences between what is considered physical, and what may be more emotional or cultural. He stated that,

There is a lot of information on our culture or on working with people that is not really a physical thing. For example, I can teach my son or nephews or my wife or my daughter about how to bend a fishing lure to make it move faster in the water, or to move slower, or with a wider angle of
motion, and that is physical whereas if it’s a cultural teaching like how do you move forward with, let’s say, cultural visitors at hand. Realizing that you have to deal with protocol, with whatever level you have got to deal with it. That’s not really physical, that’s more of a cultural interaction. Like how do you figure if someone has learned hunting safety or any kind of thing. That’s different.

This differentiation between physical and cultural knowledges is important as I feel that it addresses the difference between a more physical connection with the task versus an intellectual one. In my interviews, Ruth had referred to these connections when she discussed working with materials such as cedar. There is a physical aspect, when it comes to feeling the cedar in your hands, but there is a relational or spiritual aspect as well. The cedar has a presence in this world, and we have a presence, together we build a relationship as we learn how to mold the cedar into what we are making. This relationship or connection goes beyond the physical.

As an observation, and part of my own reflective realizations about myself, I can relate here again how I have taken part in the ḥu-kʷana ceremony that Sayachapis refers to as the Wolf Ritual in the above quote from Sapir (1939). This ritual resembles a coming of age ceremony but is more than that as well. There are minimal connections to assessment within this ceremony, other than that it is a beginning of a young Nuu-chah-nulth person’s journey through lifelong learning. As a person goes through the ceremony, and is inducted into the Wolf Clan, they are schooled in the importance and in the sacredness of this knowledge. We cannot reveal what happens during the ceremony, and we are not considered quuʔas, or people, until we have been brought through. This was a
part of the beginning of our training, a cultural training, which was undertaken by the educational leaders in our communities. This training does have an end purpose however, and I have read and experienced this perception throughout my studies. The purpose to training, or providing haahiuupa, was to teach a person how to live right, to become quuʔas (human).

When asked how a person might become to be seen as having mastered a skill or knowledge from a traditional cultural Nuu-chah-nulth point of view, Ruth reflected on the ways in which a mentee develops over time when she related,

So it’s seeing the mentality, the physical example in actions, like someone who is mentoring somebody would just see that as it’s developing in a person, that they are coming to things in a good way. They know how to host in a good way, there’s just those principals that are inherent in their actions, their words, their thoughts, their preparation. Ruth describes a general, all-inclusive demonstration of a collection of learnings that indicate that a person has come to a point where observers might agree that they have mastered the knowledge. However, when asked to relate a more individual or compartmentalized definition of demonstration, Ruth hesitates to quantify the process into one single measurement of assessment. She continued,

I think it’s a processional thing as well, and I don’t know if that’s an actual word, but I use it. So, proficiency is a continuous thing. In the beginning you talked about mastery, and I don’t believe in mastery per se, or whatever that word is.
In this statement, Ruth has expressed a point of view that there may not be a final stage in the learning process, and that assessment may remain formative throughout the learning and teaching process. She continues with the following proclamation,

So, being proficient is kind of, as a mentor or a teacher, watching the level of comfort as the person gains more information, confidence, really understand the material that they are working with. Because the material informs their direction as well. So, if it’s like fishing or preparing fish, or cedar, when they are opening themselves up to that material, that material informs the process. And that material informs proficiency as they connect to the spirit of that material and that opens them up to the wisdom of the ancestors, basically. And speaking of fishing. You learn about that in that time, in that place, at that time of the year. It’s situational – possibly those skills are not transferable.

This reference to the materials, and becoming comfortable, calls to my mind the learning and assessment processes I experienced throughout the years. I feel that sometimes a mark or grade from an instructor is not always necessary to inform me that a learning is complete. I know it is because of my own confidence in the knowledge.

Understanding that the concept of mastery was not sitting well in my interviews with Ruth and with James, I asked a follow-up question to open a new thread of discussion. I asked,

I hear you saying that you are not comfortable with the idea of mastery of knowledge. Can you reflect on ways that we can measure the intake and retention of knowledge? How can we end up with measurable outcomes?
James responded with a description of how practicality is reflected by the students he is endeavouring to teach,

One of the things I always go back to is practicality and common sense. How do people apply that in the learning process? If I had to grade someone, I think I could not just go by the exam that they wrote at the end of the year. I would need to go by my observations of what they learned, seeing how they have absorbed – there are so many things that are learned that are never on the exams. When I was in school sometimes I got extra marks when I needed them, by showing them things that I knew, that maybe they didn’t. Through my life history, I have experiences that I can share. As a teacher, having that ability to observe is important. When I am out and teaching someone how to fish, I can see that they are uncomfortable with how to cast or how to make a lure move in the water. But then they catch a fish, and another one, and another one, and I can observe them getting better.

This observation of a student getting better at a task or concept over time, and then demonstrating their competency by successfully undertaking the task, really emphasizes the connected nature of learning and assessment through the traditional cultural Nuu-chah-nulth lens. This quasi-terminal summative assessment would not be possible without a holistic foundation for the learning of time, relationships, and echoing of the knowledge.
At this point, James refers again to his feelings around the readiness of his students, and how he feels that a person should never receive a summative assessment in which failure is an option. He continued,

I would never tell someone that they fail, I would just not carry on teaching them for a while. Until they come to realize what they need to change to come back. Sometimes they are stuck in a place where they can’t learn what I am teaching. Maybe a few years can pass before they are ready again.

In some cases, James had mentioned that this lack of pre-training would become evident and that the teachings he had planned would be placed on hold, until the learner was more ready. So, regardless of the outcome of his teaching, James will never assess his students as failing to meet their learning outcomes, they have simply not reached that point yet.

This reflection from James resonated with me as I recollect the literature that I have reviewed in Phase One/Chapter One and Phase Two/Chapter Two of this dissertation. In no way does formative assessment need to be linear. Through the concepts of Indian Metaphysics, holistic views on learning, and general systems theory, I have come to a more interconnected and whole view of learning and assessment than I held previous to doing this work. Throughout our interview, James had described in a few different scenarios that sometimes the time is just not right for learning, but that is not a cause to give up. Outside considerations came into effect at various stages, and I am reminded of the early lessons described in the works of George Clutesi (1990), Edward Sapir (1939), Ohiyesa (1911), Jo-Ann Archibald (2008), and Ruth Kirk (1988), along
with the words of the three Elders that I have interviewed. In all of the Indigenous cultures I have studied, the historical traditional way of teaching began when children were very young. The first lessons the children were exposed to were building blocks, or scaffolds, into *how* to learn. They included learning to sit still and listen, or basic instructions on gathering materials, or reminders to acknowledge the spiritual world and those who were elder to them. In more modern Indigenous settings, these basics may not have been laid down at an early age.

I have experienced this particular sentiment many times over the decades in which I have worked in First Nations Education. In *The Sayings of Our First People* (1995), Arthur Nicolaye declares,

> This is something we are forgetting about. We don't go fully into looking after our children that we should be doing. When a child was growing up he was *haahuupt* (taught) so he could grow up to be good. The child was used to these *haahuupačak* (teachings) because it was started on him or her at a really early age. The reason our children nowadays don't listen anymore is because we don't do this to them anymore until they are older. They tell us they don't understand us because we did not start early enough on them. So we need to think of that if we want to bring back our *haahuupačak* (teachings). (p.193)

Keitlah & Foxcroft (1995), editors, and translator Carrie Little (1995), for *The Sayings of Our First People*, concluded during their work with these Elders that, *haahuupa* is much more than a form of teaching, it would seem that *haahuupa* was more like a way of life” (p.83). Importantly, they concluded that,
Parents and grandparents would *haah̓uupa* their children from the beginning of their lives and would continue to *haah̓uupa* throughout their lives - as young boys and girls, as they approach the age where they became men and women, as young men and women, it was especially important to start again to *haah̓uupa* a person when they got to the age when they were becoming an Elder. (p.183)

In this passage we get an understanding of how this ongoing, lifelong method of instruction, beginning when a child was very young and continuing on throughout a person’s lifetime, circles back around on itself. When she states that the *haah̓uupa* starts again when the person is becoming and Elder, it demonstrates how integral the notion of passing down of knowledge is to our people. The person is taught all through the life, and the expectation is that they will continue in the process to teach those who come after.

To connect these understandings with assessment, I recount the words of Earl Smith (1995) in the *Sayings of Our First People* when he states that through the process of *haah̓uupa*, “*haqƛii* (knowledge) means it’s going to be engrained. You’re going to go right to the end; make it part of what *mamalhi* (white people) call their ethics and become part of them” (p.186). From an assessment perspective, I feel that this points to how the learned knowledge is demonstrated through viewing the whole person and who they have become. If they have absorbed the teachings, this becomes a part of their core ethics and ways in which they are in the world. I have come to the understanding that the Elders I have interviewed find it difficult to describe their understandings of a more summative than formative form of assessment. I feel that this is because the perception of ‘doing things the right way’ is such an integral part of being Nuu-chah-nulth that it is hard to
imagine assessing this with any type of measurement. Keitlah & Foxcroft describe in *The Sayings of Our First People* that, “Being *quuʔus* (human) meant being responsible for keeping the teachings alive by passing them on from one generation to the next” (p.28).

In this I perceive that the passing on of knowledge, and exemplifying the tenets expected of a *quuʔus* person, are intrinsic in anyone who identifies as being Nuu-chah-nulth.

These understandings also arose in my interview with Carol, when we discussed her understandings of demonstration and proficiency. She used as an example the seasonal traditions of her family. She recounts how the task of smoking fish is taken on by those in her family who are skilled in this area,

In our family we smoked fish, there was never any conversation about directions. Everybody just knew what they were going to do and almost could read the other person's mind. There's no conversations about ‘you do this’ and ‘you do that’. It's not there, yet it's just automatic.

Over time, and through their relationships, and repetition of tasks, Carol and her family have become so accustomed to the separate tasks in smoking fish that they undertake the job without discussion. In this, Carol’s children and grandchildren are demonstrating their competency with the learning that she has provided. Another Nuu-chah-nulth colleague of mine also related this phenomenon to me in the past, when she said that her children just head off into the bush when it comes to cedar gathering time. She, and her grandmother before her, taught the children from a young age to pull cedar from the tree, gather it into bundles, soak it in buckets and separate the outer bark from the inner. They demonstrate the fact that they have mastered these skills by simply doing the work when it is expected, and without being asked (Lucas, M. personal communication, August 12,
2018). This automatic undertaking of necessary duties relates again to the words of Smith, when he states that the “…knowledge is engrained” (p.186).

**Summary of Findings**

The results from the three interviews I carried out were enlightening, in that they solidified some of my own understandings, while opening my eyes to some connections I had not previously considered. In reflecting on these concepts, and discussing my findings with colleagues, co-instructors and family members, I realize how fundamental these considerations are, and how missing they are from contemporary education. The four basic understandings in traditional Indigenous assessment of time, relationships, echoing, and demonstration contain vast potential for contemporary learning and teaching. Of particular interest to me are the ways in which these ideas may interconnect to contribute to a holistic and balanced model of assessment.

In the final chapter of this dissertation, I’ll pull apart my understandings of time, relationships, echoing, and demonstration and suggest ways in which these concepts may inform contemporary course curriculum.
A Personal Experience of Decolonization: Phase Five

**Action**

Laenui (2000) describes the fifth phase of the decolonization process as *action*. He describes how action may stem from immediate necessity and survival, such as in situations where societies are under attack. An example would be the actions of the Nuu-chah-nulth people in the early 1980’s. When pressed by the Canadian government to engage in treaty making, the fourteen tribes of the Nuu-chah-nulth people came together and amalgamated into a Tribal Council. My grandfather and great-grandfather, as *hawiil* (chiefs) of Toquaht Nation, were instrumental in bringing this self-governance into being. The reason for this coming together was to present a unified front against the formidable power and resources of the Canadian federal and provincial governments. However, action as illustrated by this example is reactive in nature, and does not convey the full meaning that Laenui wishes to convey in his definition of the final phase of his decolonization process. He wishes to express a deeper, proactive, understanding of the word action. He states,

> While the first thought for independence would have been to grab the rifle and March against the colonizer, it seems that the new weapons are dictated by technological development. The fax machine, computer, television, radio, and newspaper are perhaps more effective in executing the long battle plan. (p.158)

Continuing in his thoughts around protecting the ways of life and culture of a colonized people, he relates,
Not only have the methods of executing commitments changed, but also the arenas in which they are carried out are now not as geographically defined as. To speak before a national congress or an appropriate body of the United Nations may be far more effective than to storm a mountain top with in one's homeland in an armed battle. (p.159)

With an eye focused on education in Indigenous settings, I find it very easy to reimagine Laenui’s calls to fight our battles in arenas outside of our traditional territories. In my point of view, it is within our schools that we carry on the fight to retain our culture.

As a past supervisor of the Nuu-chah-nulth Education Workers who hold academic assistant positions within each elementary-secondary school in our local school district, I saw first hand how our Nations are working to preserve our culture and traditions. Tasked with helping our children navigate grade school, they provide cultural support as well as partner with teachers to deliver instruction around Nuu-chah-nulth language and culture. Over more than two decades, I have witnessed changes within the schools and in the school’s relationships with these workers.

When I first worked alongside them in my position as post-secondary counselor, the Nuu-chah-nulth Education Workers were treated quite poorly by the schools and they were fairly universally despondent in our annual education retreat sharing circles. They were tasked with working only with students who identified as being Aboriginal, and more specifically only with the most at-risk First Nation children. Their function in the schools was to be front line workers with children who generally had very poor home lives, and they had very little authority to approach teachers with ideas around cultural activities.
Statistically, Aboriginal children across Canada have low representation in social indicators of good health and wellbeing. They are more likely to live in single-parent homes, or with their grandparents, or especially dishearteningly, in foster care. The Nuu-chah-nulth Education Workers tended to witness first hand these depressing statistics and I witnessed the effects of this in our retreats. These workers displayed some pretty serious symptoms of employment and emotional burn-out. Over time however, I was able to see these workers gain more and more support in the schools, as local and provincial education leadership began to see the benefits of supporting cultural knowledge and learning. Since I first began working in Aboriginal education with the Nuu-chah-nulth Tribal Council in 1995, I have experienced a significant shift in public school educational policy towards good consultation with local First Nations, and the adoption of culturally relevant curricula from the BC Ministry of Education. The Nuu-chah-nulth Education Workers are now integral members of each school’s education team, and run weekly language and culture classes with all students, not just the ones who identify as Aboriginal.

The work I have witnessed in our local schools exemplifies Laenui’s two versions of action, according to his *Processes of Decolonization* (2000). At first, our Nuu-chah-nulth Education workers were placed in the schools in an attempt to address urgent issues which were a result of the multi-generational effects of colonization. These effects include working with the results of general low socio-economic standing and the related issues around poverty, as well as with the multi-generational dysfunctional family effects of residential school. Over time, a paradigm shift has occurred, and with it came a shift
from being reactive in our work with children, to being proactive in setting up supports for both learning and with cultural awareness for all children.

My own personal shift towards Laenui’s concept of action has also come about through experiencing these events, as well as in being a student in college and university. I was a young Nuu-chah-nulth woman who was disconnected from her culture from a young age. My mother’s experiences in residential school and in the racism she experienced as a young First Nations person coloured my upbringing. I came to know my culture later in life than I would have liked, as my mother came back to her family after moving away to marry my non-First Nations father. After working my way through my career and along my educational path, I have come to identify much more strongly as Nuu-chah-nulth than I did in my youth. This realization has solidified into my own form of action, as I have recently enrolled in a Nuu-chah-nulth language class and I am actively pursuing my goal to speak my language fluently.
Chapter Five:

Discussion, Implications, and Recommendations

Chapter Overview

In this final chapter I review this journey and discuss how these findings may inform the wider field of contemporary instructional practice. In doing this I appreciate again the concept of heshook-ish-tsawalk, everything is connected. I am a post-secondary instructor, and I am Nuu-chah-nulth. I have naturally been employing many of the assessment and evaluation methods brought to light through my research, but I am humbled by the knowledge of many generations that my interviews revealed. In analyzing my own conceptions of Nuu-chah-nulth culture and teachings, and in uncovering new understandings through my interviews, my hope is that this work will adhere to the Nuu-chah-nulth ideology of ṃiisaak (respect). I wish for this knowledge to be used in a good way; to improve cultural competence and awareness, and to improve the success of all learners.

Initially, I decided to pursue graduate work in order to investigate ways in which I could become more authentic in my role as an Indigenous instructor. It had been suggested to me, since I first began as a part-time sessional in our small program, how important it was that I was a part of the teaching faculty. Promoting an Aboriginal focus was a key component of our local offering, and providing an Aboriginal instructor was one strategy that the college utilized in fulfilling this mandate. Over time, however, it became clear to me that simply employing Aboriginal instructors is not enough, and does not represent authentic indigenization. This study, and the accompanying revelations
through graduate level course work, has affirmed for me the need to more fully realize what a genuine Aboriginal (or Indigenous) focus means. In examining the considerations of researchers such as Ermine, Deloria, Battiste, and Wildcat, I have become convinced that contemporary post-secondary education should include aspects of Indigenous ways of knowing and being as integral and inclusive parts of a collective whole. Including one or two Aboriginal instructors does not adequately meet Indigenization benchmarks. We must dig deeper and more thoroughly investigate the ideals of program Indigenization.

To complete this study I have carefully reviewed past and present literature, and utilizing Indigenous research methods looked into current understandings around Indigenous ways of knowing and being. Through interviews with Nuu-chah-nulth Elders, archival work, and in a self-study type examination of my own personal journey in Aboriginal education, I have unearthed and brought to light significant insights into Indigenous teaching and assessment methods. The Elders I interviewed were carefully selected to provide a wide range of experience and to appropriately represent the three geographical regions of the Nuu-chah-nulth territory. The archival information I accessed was gathered by individuals committed to preserving the important words of our Nuu-chah-nulth cultural experts. Coworkers and colleagues encouraged me on this journey by sharing their own personal stories around integrating Indigenous content into contemporary post-secondary course curriculum.

**Why is there a need to unearth these methods in the first place?**

As we gather from our recorded history, Canadian Indian Residential Schools date back to the 1870’s – and British and French missionaries and colonists disrupted the lifestyles and educational systems of First Nations people in North America beginning
long before that. Our way of life as First Nations people was uprooted and with that, our traditional methods of passing down knowledge, and of ensuring that the knowledge has been absorbed. Through the processes of social interference, disease, genocide, and drastic changes to how First Nations people were educated and educated themselves, historical traditional teaching methods were almost wiped out and lost. As recorded in the Summary of the Final Report of the Truth and Reconciliation Commission of Canada (2015),

The destructive impacts of residential schools, the Indian Act, and the Crown’s failure to keep its Treaty promises have damaged the relationship between Aboriginal and non-Aboriginal peoples. The most significant damage is to the trust that has been broken between the Crown and Aboriginal peoples. That broken trust must be repaired. The vision that led to that breach in trust must be replaced with a new vision for Canada; one that fully embraces Aboriginal peoples’ right to self-determination within, and in partnership with, a viable Canadian sovereignty. (p.238)

The First Nations people of North America were and remain a resilient people, and our cultures have survived, but only in the fringes of the dominant society and in the memories and teachings of our Elders. These methods and understandings of Indigenous pedagogies, both in teaching and in assessment of learning, must be brought to light as there are important knowledges to reacquire.

**Guiding Questions**

In undertaking this study, my work was guided by the following three questions:
1. What is the traditional pedagogy of the Nuu-chah-nulth and what practices are used by the Nuu-chah-nulth to assess proficiency in various areas?

2. Through reflection on past and current experience with education, assessment, and the Indigenization of contemporary post-secondary courses, how can my own experiences shine light on the challenge of authentic Indigenization?

3. How may these findings inform contemporary teaching practices and assessment processes, especially in those programs that advertise an Aboriginal or indigenized focus?

In discovering some answers to these questions, this dissertation is a contribution to the ongoing effort to address the wrongdoings of the past by colonial and Canadian society. Through the use of first-person accounts of Nuu-chah-nulth Elders recorded through face-to-face interviews, and in exploring an self-study type account of this researcher’s own educational experience, this study serves to emphasize the importance of historical traditional Indigenous knowledges around teaching and assessment.

**Implications and Recommendations - Authentic Use of Traditional Knowledges in the Classroom**

Traditional Native American child-rearing philosophies provide a powerful alternative in education and youth development. These approaches challenge both the European cultural heritage of child pedagogy and the narrow perspectives of many current psychological
Theories. Refined over 15,000 years of civilization and preserved in oral traditions, this knowledge is little known outside the 200 tribal languages that cradle the Native Indian cultures of North America. (Brendtro, Brokenleg & Bockern, 1998, p.401)

**Themes**

The results of this study emphasize the connected nature of teaching, learning and assessment. As demonstrated in Figure 8 above (reproduced below), assessment from the Nuu-chah-nulth worldview perceives concepts of time, relationships, echoing, and demonstration connecting naturally and holistically into a whole.

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Two years ago, I was tasked with indigenizing the curriculum for the education assistant program in which I teach, so I reached out to local cultural experts and colleagues who had experience with indigenization in other areas of our institution. After going through that process and now having completed this dissertation, I offer the following thoughts to
others interested in the indigenization of assessment practice within the post-secondary realm.

**Time and ḥaḥuupa: The ongoing process of teaching and learning**

As an instructor I am well aware of our limitations when it comes to time. In a general sense, we interact with students over one or two semesters, with an average class running over fourteen weeks. During this time, we will have contact with our students for approximately three hours per week. As revealed in my study, from an Indigenous worldview assessment through observation of learners is a process that happens over the full lifespan of the learner. Traditionally and historically, community members observe students in both passive and active aspects of the student’s life beginning when they are very young. The Nuu-chah-nulth People refer to this observation and attention to the educational and cultural growth of community members as ḥaḥuupa, an ongoing form of teaching. This teaching does not have an end, and it is important to recount that ḥaḥuupa is used to prepare an individual, whether for the beginnings of a person’s life, in their skill development as youth and adults, and for their transition into becoming an Elder themselves. Arthur Nicolaye, a past Nuu-chah-nulth Elder, explains in *The Sayings of Our First People* (1995) that,

> This is what my father did to me. I was 40 years old when my father was alive yet. Even then he would haḥuupa me, telling me how I should be. He would tell me someday I would be the one to be saying these things. It is so now, as you can see. (p.186)
This type of life-long observation and teaching is a natural part of Nuu-chah-nulth ways of being in the world, but is not practical in the post-secondary instructional arena. However, observation over time must still be an essential part of the contemporary academic assessment process.

In a contemporary classroom, instructor observation and assessment of a student’s progress is quite often captured as participation. Participation tends to be a catch-all method of evaluation in contemporary course evaluation, and is often partnered with attendance. While undergoing the indigenization of curriculum for my institution, I was reminded that a mark may not be assigned for attendance, and I must adequately justify any marks attributed to participation. In discussions with colleagues at my current institution, it is felt that participation grades are susceptible to challenge by students unhappy with their final marks. Many of us feel however, that if properly executed, participation is a valid form of assessment. And as Schinske & Tanner (2010) declare, “…constructing a grading system that rewards students for participation and effort has been shown to stimulate student interest in improvement” (p.163). With this in mind, I suggested some alternate forms of student assessment in the courses within my instructional program.

In submitting six indigenized course proposals to our education council for review, I was given the opportunity to review my college’s current evaluation schemes and policies and then negotiate for a relatively high grade percentage allocation to demonstrated competencies. I itemized these competencies as engagement in talking circles, student feedback on class demonstrations, and oral reflection on course content. My intention was that none of these were to be submitted in writing by the student, but that we as instructors would maintain records of these observations through the use of a
participation rubric. After some discussion, my proposals were accepted with demonstrated competencies assigned as twenty-five to forty percent of each student’s individual grade. However, in researching scholars such as Schneider & Hutt (2014), and Fu, Hopper & Sanford (2018) for this dissertation, I feel that it is time to not only argue for alternate options for participation grades, but to discuss the requirements for assigning grades at all.

Schneider & Hutt (2014) maintain that,

Grading remains a central feature of nearly every student’s school experience. As such, it can be easy to perceive grades as both fixed and inevitable—without origin or evolution. And the effect of this is that despite their limitations, grades are often accepted quite uncritically by all parties involved. (p.202)

Schneider & Hutt continue in their 2014 article to review the history of North American contemporary grading processes, beginning with observations of early systems in Europe and the Americas. These early systems were remarkably individualized compared to modern assessment and evaluation practice. Citing Kaestle (1983), they alarmingly refer to the Lancasterian ‘monitorial’ model in which students competed fiercely with one other, and were physically placed in the classroom according to their rankings. The most advanced enjoyed seats near the front of the class and those who performed less well would sit nearer the back (p.205). Following these early attempts to quantify learning, educational institutions moved to push for more efficient and widely-accepted methods to rank student performance. Standardization, and a move away from individualized assessment and evaluation then became the focus of the evolution of educational grading.
A standardized system of A to F grades has become the accepted norm in both elementary-secondary and post-secondary educational institutions in North America, as well as in most of the world. In a cyclical progression however, more and more researchers are looking again to renewed holistic and student-centered methods in which to measure student success.

Fu, Hopper & Sanford (2018) recently analyzed and reviewed British Columbia’s newly launched K-12 curriculum. In their analysis they discuss how, “Key in this new curriculum is the intent for reporting student learning to enable all students to chart personalized ongoing success through school by making curriculum and assessment more coherently interconnected (p.263). Describing ways in which a shift may occur from traditional standards-based evaluation to more student-centred methods, they state,

A key feature of standard-based grading is to distinguish the product, process and progress of student learning and report them separately.

…student learning should be assessed using both competency-based and performance-based approaches. Student ability to perform and complete certain tasks, such as digital literacy skills, can be captured by evidences of them doing these tasks. These evidences can then be compared with standards that are established as benchmarks to indicate student success in learning. (p.272)

This statement fits in with my discussion of the importance of time, and with the forming of relationships. Students would be observed by their instructors as they completed these tasks. Through each instructor forming a relationship with each student, inferences could be made over time regarding a student’s learning and progress.
In practice, my involvement in teaching these newly indigenized courses has been a learning experience. I realized in my first semester with the new curriculum that I simply did not have enough instructional time in a week to review each student’s progress with them individually. I had optimistically set up appointments within class time to meet with each student to go over their self-evaluation of their work. My initial plan to spend ten minutes with each student quickly escalated as each of them were thrilled to share their insights with me one-on-one, and each interview was thirty minutes or more. What was evident however, was the student’s high level of engagement with the material we were covering. I had not previously experienced this same energy from the students when the course assessment was undertaken in a more formal manner. I have modified my observational methods since that first semester, and will continue to modify my instructional methods to best meet the needs of my students while maintaining the authenticity of our Indigenous focus.

**Relationships: ḥačatakíń čawaak (we all one/related)**

Through my interviews with three Nuu-chah-nulth Elders, I was made even more aware of the importance of relationships in the learning and assessment process than I had previously been. Ruth had some advice for any instructor who wants to teach a group of students. She says,

> There needs to be a ceremony to begin a new group of students, in a college setting. We need to honour their life experience and what they bring to the classroom. In the short time that they are students it is hard to tell where they come from. Doing a grounding piece is so important. Acknowledging the wealth of knowledge in a room full of people.
Ruth brings up an important understanding here, and it relates closely with the concept of time in the holistic assessment model. We as instructors in post-secondary settings have such a relatively short amount of time to get to know our students. I have always had an understanding that relationships are important in the learning process, as I can look back through my own history to see that I consistently performed better in classes where I had a connection with the instructor. In this study, these connections are looked at more implicitly in Chapter Two/Phase Two through the works of Shields, Noddings, Cajete, Battiste, and in Chapter Five/Phase Five in an analysis of the words of the Nuu-chah-nulth Elders.

James also had some advice to share for instructors of post-secondary classes. He advised,

When you put people together almost culturally, they should introduce themselves as where they come from and what are their connections. This helps to cement those ties. Then they work together and build each other up.

This relationship building in the first hours of a course is integral to establishing a connected bond in the classroom. In the first few years of my instructional practice, I had been trained to implement ice-breakers and round-table introductions for my new students. I have learned over time however, that a more in-depth set of introductions in the beginning of a course is beneficial.

Through my work in indigenizing courses and in through the course of this study, I have adapted my early interactions with students to more fully draw out their connections. We begin each semester with a talking circle, rather than a simple round of
introductions. I lead them with guiding questions about where they live, but also where do they feel that they come from. I ask them to reflect on where their ancestors come from, and if they know whose traditional territory in which they reside. In a relatively short time, the students in my classes look to me as an instructor and their fellow students as connected parts of their educational journey. I feel very strongly that I must develop a relationship of mutual respect with my students in order to be authentic in my indigenous instructional methods.

The Nuu-chah-nulth view of teacher and student resembles the relationship we view today as a mentor-apprentice relationship. In my interviews, Ruth had indicated to me that she was uncomfortable with the term mastery where it relates to assessment, and this was commented on by my academic supervisor. This comment led me to the following excerpt from the First People’s Cultural Council (2018),

Note: The Master-Apprentice Program has been re-named the Mentor-Apprentice Program. While this method of language learning is still known internationally as 'Master-Apprentice', the term 'Mentor' more closely reflects the mentorship role of the fluent speaker in the First Peoples' Cultural Council's Mentor-Apprentice Program. The name change does not indicate any changes to the program itself. (www.fpcc.ca)

Cultural experts in other areas of British Columbia had expressed similar objections to the term mastery, so the program underwent a name change. However, the concept of matching language experts with apprentices and facilitating more than three hundred hours per year of immersion language learning has been extremely successful. From the FPCC website (2018),
This is a one-on-one language immersion program. A "mentor" (a fluent speaker of a language) is paired with an "apprentice" (learner). The mentor and apprentice spend 300 hours per year together doing everyday activities using the language at all times. In this program, learners become more fluent, which is especially valuable for languages where only a couple of fluent speakers are left. (Mentor-Apprentice Program Guide, p. 3)

In this example, the educational outcomes are directly supported by a close relationship between a mentor and an apprentice. In our daily practice as instructors, our students also benefit from an enhanced connection with us. When we interact with students, and facilitate discussion between students in the classroom, we are fostering engagement through connections. Students who feel engaged seem to contribute more fully in the classroom, and this can be reflected in observational assessment rubrics.

**Echoing: naʔataḥʔi wawaayiis ?aʔaquumithas (Listen and Repeat)**

This study explored the concept of echoing in Chapter Five/Phase Five, and I suggested that echoing may be something that comes from the instructor, between the student and the instructor, or even between the students and each other. Echoing from an Indigenous point of view is a method of formative assessment wherein the knowledge is repeated to more firmly seat it in a student’s mind. Reflection on the student’s part is also a form of echoing, as they internalize the knowledge through examining their own reactions to the knowledge. Examples used in this study include the repetition of oral teaching stories over time, beginning when a child was young and continuing throughout their growth. Also, a student learns the art of storytelling through repetition of the story to
her teachers. Students may repeat the knowledge back to their teacher, or they may discuss it between themselves, as a reflective tool in knowledge attainment.

In reflecting on my own journey through this study of indigenization, I recall attending the S’TENISTOLW Indigenous Education Conference hosted at Camosun College in 2017. I signed up for a workshop in which a scholar from the Wilfrid Laurier University (WLU) Master of Social Work - Indigenous Field of Study presented on holistic evaluation. The ideas they presented were intriguing. WLU offers a series of modules for Indigenous educators and in Module Five, they relate the following understanding of holistic evaluation (2018).

The Indigenous Field of Study engages each student in a holistic evaluation which is done in circle, orally and with teachers and Elders to foster transformation. In this module participants will learn about the role and value of engaging students in a wholistic evaluation process with faculty, Elders and critical self-reflection. Participants will experience a wholistic evaluation themselves. This module is a process of learning to provide and receive wholistic feedback using a circle methodology. (www.wlu.ca)

The following photos illustrated in Figures 15 and 16 are handout that were given to the participants of WLU’s workshop at the 2017 Indigenous Education Conference. The presenter related that students in certain classes in the WLU Master of Social Work – Indigenous Field of Study evaluate themselves with their instructor through this reflective process. Please note that the presenters and handout material use the term wholistic in place of holistic.
Figure 15. Student Wholistic Feedback Form – WLU presentation

S’TENISTOLW Conference 2017
The examples above outline a medicine-wheel approach to self-reflection and sharing. They ask the student to assess themselves on their self-understandings from the spiritual, emotional, mental and physical points of view.

In my own practice, I continually draw on the concept of echoing when I ask my students to reflect on their reactions to the course material. Students are asked to take part in a full-class discussion, or I facilitate break-out groups which then report back to the full class. Students are rarely asked to simply sit and listen to me as I have felt, even prior to my work in indigenization that a discussion of key topics is the best way to learn. In one of my courses, I ask my students to use the medicine-wheel wellness map provided
by the First Nations Health Authority (2018) to provide me with a weekly understanding of their current self-perceptions of wellness. This wellness map is illustrated in Figure 17.

![Figure 17. FNHA Wellness Map - http://www.fnha.ca/wellnessContent/Wellness/FNHA_Wellness_Map.pdf](http://www.fnha.ca/wellnessContent/Wellness/FNHA_Wellness_Map.pdf)

I find that this wellness map helps my students visualize their feelings, and understand how the four realms of spiritual, physical, mental and emotional affect their overall feelings around wellness.
Demonstration: Becoming qu’uus - Summative Assessment in the Nuu-chah-nulth Worldview

The final aspect of my medicine-wheel interpretation of the data I gathered is demonstration, but I feel that all four of the aspects – time, relationships, echoing, demonstration – are so interconnected that they may also be seen as a connected whole. From a Nuu-chah-nulth perspective, successfully demonstrating that a skill or concept has been learned generally happens through an experiential process. An animal will be caught, trapped or shot. A song, dance, or cultural activity will be performed. A basket, item of clothing, tool, or canoe will be crafted. Generally however, this is not an end, this is simply an interval along the way.

In The Sayings of Our First People (1995), many of the Elders iterate that the process of haahuupa, lecturing or teaching, is how the Nuu-chah-nulth People become quuʔus (human). The Elders in the community teach the young to become quuʔus over the course of their lifetimes. However, my feeling from reading these sayings is that being quuʔus is more than the summative result of haahuupa over time, it is a state of being. Paul (1995), an Elder from Hesquiaht stated, “Being quuʔus means having ʔiiisak, (respect with caring)” (p.20). This concept embodies the notion of heshook-ish-tsawalk, everything is connected. To have ʔiiisak means that you understand and respect the environment and community in which you live, and with all the people, plants and animals that reside there with you. Haiyupis(1995), an Elder from Ahousaht stated being quuʔus “…means treating people with dignity, respect, friendliness, and using good, kind words to uplift a person's spirit. It meant being hospitable, sharing and helpful - being generous with whatever you have to offer” (p.21). All of these sayings reveal to me
that this end, summative result of being *quuʔus* is an embodiment of a healthy, educated and respectful human being. This holds importance for me as many of the responses I received from the Elders I interviewed and in the sayings from archival study of Nuu-chah-nulth Elders involve this notion of achieving this state.

When I hold this concept in my mind and relate my understandings to assessment in the post-secondary realm, I understand better why the Elders I interviewed found some discomfort in thinking about mastery of a skill or concept. Becoming proficient in a task or ceremony may be difficult to measure, but achieving a state of mind would be nearly impossible to quantify. This more metaphysical understanding of academic success clashes with the dominant society’s understandings. Brendtro et al. (1998) also refer to this notion when they state, “When we ask our college students to list what they believe to be the pre-eminent values in contemporary society, the prominent mainstay is “success” as defined by wealth, power, and materialistic hedonism” (p.397). Despite our efforts to incorporate Indigenous worldviews and values within our contemporary classrooms, most students within my own courses still cling to contemporary grading constructs, and demonstrate anxiety when alternative measurement are suggested. There is evidence however, that the traditional contemporary values around grades-based assessment may be shifting.

In general, concerns around summative assessment occur at multiple levels in contemporary society. Fu, Hopper & Sanford (2018) describe some of these when they state that,

Parents want to know how well their child is doing in order to give them support and track how they are making progress. Students want to learn,
want to do well with their studies and therefore receive feedback through assessment that helps them progress. For administrators of education, at the school, district, ministry and postsecondary levels, the intent is to evaluate student success in order to gauge how the schooling system is doing and to track the progress of student learning across the system.

(p.267)

However, in the main body of their study they assert that, “While traditional reward systems, such as assigning grades, largely reflect a fixed mindset, there are emerging practices that acknowledge and celebrate growth” (p.270). These emerging practices may reflect a more standards-based, competency, and performance focused approach (p.272). Some of these approaches laid out by Fu et al. mesh well with the demonstration quadrant of my research data summary diagram (see Figure 8). For example,

- Student ability to perform and complete certain tasks, such as digital literacy skills, can be captured by evidences of them doing these tasks.
- These evidences can then be compared with standards that are established as benchmarks to indicate student success in learning. (p.272)

This experiential and competency-based assessment strategy mimics the ideals laid out by my Nuu-chah-nulth interview subjects as well as with my own understandings of the passing down of knowledge.

- Students become educated over time, through learning in relationships, and by reflecting and echoing the knowledge. Demonstration through typical institution methods will measure how well they can exhibit their retention of that knowledge. Fully engaging in a holistic Indigenous pedagogy, as demonstrated in the time, relationships, echoing and
demonstration medicine-wheel model, would promote a more transformational absorption of the knowledge.

In my indigenized courses, I have retained midterm and final exams in four of the six course syllabus. As my program articulates throughout the province of BC, we have curricular standards to align with despite our desire to move away from summative assessment. To make these exams more reflective, I have modified the questions to limit memorization and promote independent thought. I offer open-book exams so that students don’t feel pressured to memorize terms and concepts. In two of the six courses, I have introduced higher grade percentages for demonstrated competencies, reflective journaling, group-work, peer-and self-assessment, and skill demonstrations through presentations to the class. While these assessment and evaluation methods feel more authentic to me than asking for research papers or written examinations, I feel that I should more fully integrate indigenous and alternative assessment strategies in future offerings.

Thankfully, current academic thought around summative grades-based systems appear to be changing. Fu et al. (2018) discuss the current grades-based system when they suggest that,

Grading and ranking is often grounded on norm-based criteria that lead to harmful competition among learners, which weighs down on true learning for all and genuine collaborative learning. Therefore, such practices as grading and ranking should be seriously challenged and reconsidered.

(p.274)
I’m reminded again of the work of Bateson (2003), which I outlined in Chapter One/Phase One of this study. Regarding instructional methods that work to transform student thinking through encouragement and strength-based motivation, she said, “Much of the substance of what we teach and test becomes irrelevant; habits of mind do not” (p.1). These philosophies of more formative strategies around assessment, bolstered by Indigenous ways of knowing through the conceptual framework of time, relationships, echoing and demonstration may be the way forward when it comes to contemporary college assessment. Fu et al. recommend “…that tests or examinations be restructured as just a component of an array of teacher led formative and summative assessments developed for and with students” (p.282). In this I wholeheartedly agree.

**Reflecting on Current and Past Research around Indigenization**

I found over the course of this research that my feelings around a lack of authenticity, and even in adequate representation of Indigenous principles, in my post-secondary experience were shared by many. The literature I reviewed in Chapter Two/Phase Two of this study bears testimony to the wide-ranging understanding that generally, post-secondary programs, even those that claim an Indigenous focus, do not adequately embody Indigenous ways of knowing and being. In completing this study, I looked to the work of scholars both in North America as well as in other areas of the world where colonized populations are working to be heard in the political and educational arenas. In an article analyzing Indigenization efforts in New Zealand and Latin America for example, Cupples & Glynn (2014) assert that,

> Given the epistemic underpinnings of coloniality, contemporary struggles for decolonization are waged partly in sites of education, involving not
only a demand for bilingual schools but also the creation of intercultural universities which aim to support political and social struggles with culturally and epistemologically appropriate modes of teaching, learning and research. (p.56)

They continue in their journal article to reflect on the successes of initiatives where grassroots and community organizations have worked to use higher education to empower Indigenous students. They recount that as of 2014 there are many intercultural universities connected with the political and social struggles of marginalized groups burgeoning throughout Latin America (p.58). Similarly, Ragoonaden & Mueller (2017) assert that Culturally Responsive Pedagogy (CRP) at the University of British Columbia campus in the Okanagan region of BC “…has been conceptualized to reflect interconnectivity in a nested system, where all facets of learning link with each other on emotional, social, mental, and physical levels” (p.26). Initiative and studies such as these have done much to champion the cause of contemporary college Indigenization and/or culturally responsive pedagogy.

In 2012, the University of the Fraser Valley (UFV) in Chilliwack BC hosted a gathering to celebrate Indigenizing of the Academy - S’iwas Toti:It Q’ep (Teaching and Learning Together). Thirty-three post-secondary institutions came together to discuss indigenization, and a pdf report was posted online at UFV.ca to chronicle the event. This report declares that,

Indigenizing is about creating an environment where we, as Aboriginal people, do not have to give up part of ourselves in order to take part in academia... where we see ourselves reflected in the everyday life of the
In 2016, Mark Point, a Stó:lō educator and author, who was a major contributor to UFV’s 2012 Indigenizing the Academy celebration, was appointed to Chair of the newly formed Indigenization Committee of the Senate at the UFV. Online in the UFV News Blog columnist Pinton (2016) reported that, “The committee will ensure academic programming at UFV continues to be respectful and relevant to Indigenous peoples’ goals of self-determination and well-being” (UFV Today). A decade ago, Point was instrumental in determining UFV’s path to indigenization through his work on the 2006 Indigenizing the Academy Report. The following diagram in Figure 14 demonstrates the focus of this report, and is an example of how many of Canada’s post-secondary institutions are committed to reconciliation through indigenization.
It is important however, that we do not allow these accomplishments to distract us from the fact that the Canadian government, education systems, and society have generations of mistreatment to account for. Despite these recent attempts at reconciliation, Cupples & Glynn (2014) remind us that educational institutions have long been the sites of alienating environments for Indigenous and Aboriginal people over the centuries (p.57). More specifically, they state that, “In many countries, mainstream society assumes that indigenous peoples are not capable of academic achievement and are better suited to factory or plantation work” (p.58). And that although most universities
are concerned with the question of diversity, historically they have tended to treat indigenous students largely as a population that needs special help, instead of as repositories of Aboriginal epistemes (p.58). As a past First Nations student, an educator in post-secondary studies, and as a person who has worked in Aboriginal education for the past twenty-three years, I too have been witness to the deficit view of Aboriginal people’s intellectual abilities. My colleagues and I have worked hard in our careers to emphasize that our First Nations students may need some accommodations to support their success, but that they are just as capable of academic achievement as their non-First Nations peers.

Looking beyond the education of Indigenous persons, to education in Canada for all students regardless of background, Battiste & Youngblood (2000) have asserted,

There are two different that issue here. The first is the right of Indigenous peoples to exercise and transmit their own knowledge and heritage as they see fit. The second is the benefit the Western world can derive from this knowledge and heritage… Not only is it important that Indigenous knowledge and heritage are preserved and enhanced; it is also important that they are recognized as the domain of Indigenous peoples and not subverted by the dominant culture. (p.87)

For decades I have appreciated the work and teachings of Marie Battiste, and I feel pride in knowing that my study helps to demonstrate the benefit of Indigenous people’s knowledge for the Western world. Battiste (1998) has championed concepts pertaining to decolonization since the late 1990’s. She states that,
In the relentless cycles of renewal and reform, Aboriginal peoples are living in an extraordinary time. Aboriginal peoples throughout the world have survived five centuries of the horrors and harsh lessons of colonization. They are emerging with a new consciousness and vision. (p.16)

Increasingly, notions of reconciliation are permeating Canadian governments and society and are being reflected in attempts to indigenize curriculum and assessment. As the TRC (2015) outlines, “Reconciliation must become a way of life” (p.238). In the following sections I will first address the most obvious efforts demonstrated by the Canadian and provincial governments, and then discuss ways in which I feel my own research may inform further endeavours.

**Ninety-Four Calls to Action**

To attempt to address the wide-ranging and lasting legacy of the Canadian Residential School system, in 2007 the Canadian government established the Truth and Reconciliation Commission (TRC). This work of this commission spanned eleven years, including a range of activities such as hosting national face-to-face and webcast events and gathering testimonials from more than 6,500 witnesses. In addition, over five million records were provided to the commission by the Canadian government, which are now housed at the University of Manitoba. The concluding document of this commission outlined ninety-four calls to action which are individual instructions to guide governments, communities, and faith groups down the road to reconciliation. And although these calls to action relate to many diverse issues involving child welfare, language and culture, health, and justice, commission chairman Justice Murray Sinclair
(2015) proclaims that, “Education is the key to reconciliation” (CBC Canada). I feel that this key applies not simply to grade school efforts to increase cultural awareness, but also to education at all levels. In order to meet these challenges, I designed my study to peer beyond the rational and traditional disciplines of academia; to fully engage in the educational pedagogies of Indigenous people.

On the provincial government level, the BC Ministry of Education (2018) has both published the following statement, as well as made good on their promises by producing new curriculum from Kindergarten through Grade 9 - to be implemented by 2019/2020.

Education Calls to Action. The Ministry of Education, with the overarching guidance of numerous Indigenous experts, organizations and Indigenous government representatives to build an education system that serves Indigenous students well.

Call to Action #62

1. Make age-appropriate curriculum on residential schools, Treaties and Aboriginal peoples’ historical and contemporary contributions to Canada, a mandatory education requirement for Kindergarten to Grade 12 students

2. Provide the necessary funding to post-secondary institutions to educate teachers on how to integrate Indigenous knowledge and teaching methods into classrooms
3. Provide the necessary funding to Aboriginal schools to utilize Indigenous knowledge and teaching methods in classrooms

4. Establish senior-level positions in government at the assistant deputy minister level or higher dedicated to Aboriginal content in curriculum

(retrieved from www2.gov.bc.ca August 8, 2018)

Point two of this statement outlines the responsibility of post-secondary institutions to allocate funds for pursuing reconciliation through the integration of Indigenous knowledge and teaching methods in the classroom. I have italicized the section for visibility. This statement by the BC Ministry of Education relates most precisely with the purpose of this study. I currently teach at a small post-secondary institution, and I recently received a paid release from teaching over the past few years to revitalize and indigenize our educational assistant program. Throughout this study, I have reviewed the evolution of indigenizing the program in which I teach, including the challenges I faced along the way.

Reviewing current press releases from post-secondary institutions in British Columbia, it is apparent that many other institutions are also excited to announce their work in Aboriginal education initiatives. For example, in October 2018 Vancouver Island University announced a partnership with several stakeholders to support Aboriginal learners (VIU News), and the University of British Columbia (2018) has announced a partnership with Haida to host graduate students in Community Planning (UBC News). Revitalization of Indigenous languages is another area where BC institutions are enthusiastically supporting and developing educational programs. The University of Victoria’s T’lat’lakul (Trish Rosborough) has been working with a Nuu-chah-nulth post-
graduate scholar, čuucqa (Layla Rorick) in the UVic’s Masters in Indigenous Language Revitalization program. čuucqa describes the atmosphere within that program,

The learning environment that emerged in that introductory time was built around who we are as Indigenous people, as Indigenous scholars, and around who we are as social, cultural, and spiritual people. Since that time we have been guided to conduct scholarly research in ways that we self identify as authentically Indigenous.

These are just a few examples of a wide range of initiatives that institutions across Canada are taking part in. Initiatives such as these provide understanding that our post-secondary institutions have declared that they are willing to integrate Indigenous knowledges, but we must be vigilant in ensuring the authenticity of these attempts.

**Indigenization as Reconciliation**

Bopp, Brown & Robb (2017) recently reiterated Justice Murray Sinclair’s belief that education in Canada is integral to the process of reconciliation and redress for the past wrongdoings of our government. They proclaim that, “Post-secondary institutions are on the front lines of this change process in our country. A very high proportion of colleges and universities have some kind of "Indigenization” strategy which they are either developing or struggling to implement” (p.1). And while they view these Indigenization promises as important and necessary they also warn that, “The problem is that the very nature of the problem of indigenization turns out to be much more complex and difficult than simply implementing a few strategies” (p.3). Battiste and Youngblood (2000) also iterated this concern when they declared that,
Modern society is still looking for and frequently offers one ingredient prescriptions that claim to be panaceas, but there is no cure-all, no educational antibiotic, that can be injected into the state from the outside to cure modern ills … The relationship between indigenous knowledge and Eurocentric knowledge in the educational system must be sensitive to both ways of knowing. (p.92)

At a Canadian post-secondary level, a responsibility has been placed upon us as educators and as designers of curriculum to do our part in working towards this reconciliation.

An illustration of this responsibility comes from a BC post-secondary faculty member. Chung (2016), a long-time instructor and self-proclaimed ally to Indigenous people, writes,

Trauma as it has existed through institutional racism, extermination through law, and many other official and unofficial manifestations of Canada’s system of apartheid will require much more than a focus on Indigenous healing. As the TRC suggests, this is Canada’s issue. The TRC and other organisations, including the United Nations, call for immediate changes to the living conditions and human rights of Indigenous peoples, but they also call for settler communities to initiate a form of self-transformation. (p.405)

Chung goes on in his article to describe how this process of self-transformation in the academic world may at times lead to discomfort and the recognition that change must necessarily accompany this growth. He continues, “…this change may be more than something that can be managed and compartmentalised by the rational and intellectual
traditions of our disciplines as well as the genres of writing and communication we employ” (p.406). Improvisation may play a part, as well as a willingness to collaborate and accept that looking at indigenization from differing points of view may be an answer.

**Reviewing my Preconceived Expectations and Unexpected Findings**

As a member of the Nuu-chah-nulth People, and having grown up knowing that I am an Indigenous person, I have lived a set of experiences that have provided me with a unique viewpoint. Previous to my journey into research, I had never consciously contemplated the traditional historical teaching methods of Indigenous people, but I have always known that storytelling and mentorship was an integral part of my culture. In the house of my grandparents on my mother’s side there were many books on First Nations stories, and artwork depicting these legends surrounded me. I had free access to these bookshelves, and being an avid reader I absorbed many stories from the north-west coast this way. My mother managed my grandparent’s Indian Art Gallery, and I got to know the meanings of the animals and stories by reading the artist’s biographies and artwork write-ups. When I got older, my high-school summer employment was in this gallery and I had to learn the stories and histories to pass them on to customers. My grandfather was *tyee hawiil* (high chief) and there were always people visiting; there were always Elders and important people around. I learned through observation that those Nuu-chah-nulth people who were skilled in an area tended to be in families who were skilled in those areas. An artist might come in to the gallery with his son or daughter, and they would all haggle over prices for pieces of art. Weavers especially passed down their knowledge to their children, and families would come in together to sell us their Cowichan sweaters and hats, or pointy Maquinna hats. Fisherman would go out with uncles and nephews,
and sons. I did not realize how much knowledge I had, however, until I began to reflect on these experiences from an academic perspective.

In coming up with my research questions, I knew that I wanted to look deeper into the concepts of passing down of knowledge through traditional cultural modes. But more specifically, I wanted to investigate the processes of assessment living within these modes. I was aware, through personal reflection and through a review of literature that Indigenous peoples learned and passed on knowledge through more experiential than intellectual methods. There are many studies that have looked into concepts of mentorship and experiential learning, and I had been integrating these methods into my instructional strategies since I first began teaching. Undertaking this study has helped me better understand these methods, but has also opened up my mind to how truly connected learning and assessment should be.

In reviewing the data I gathered from the three Elder interviews and in reading the archived words of past Nuu-chah-nulth cultural experts, the concept of *heshook-ish-tsawalk*, everything is connected, became much more real for me. The data I gathered seemed to flow organically into a resulting holistic medicine-wheel interpretation. It was not a wholly unexpected result, but I was surprised by how elegantly all of my research fit together.

**Summary and conclusion**

The indigenization of curriculum is something that many individuals, groups, and institutions are working on, and there are hundreds of iterations of indigenization processes taking place around the globe. Widdowson (2016) recently presented a paper
on the subject of institutional indigenization at the Annual Meeting of the Canadian Political Science Association University of Calgary where she reported that,

Discussions of university indigenization are complicated by the fact that no one has agreed on a definition. In its invitation to participate in an indigenization workshop, for example, the Canadian Political Science Association’s “Call for Proposals” noted that there are three different meanings of the term: 1) symbolic recognition of indigenous \((sic)\) cultures by universities; 2) the inclusion of indigenous \((sic)\) peoples and content in existing university structures; and 3) “an anti-colonial, antiracist reconstruction of education through revision of curriculum and institutional processes. (p.1)

This statement reflects the current confusing and intertwined perceptions of indigenization in Canada. But I don’t feel that any indigenization process needs to identify itself with just one of these concerns. The process of indigenization at both the elementary-secondary and post-secondary levels are necessary and welcome signs that society, institutions, and the government are interested in achieving reconciliation with the Indigenous populations of the world.

In this study, I have striven to represent indigenization from a First Nations point of view. I have used aspects of my own self-study type journey through education and indigenization, as well as the words of Nuu-chah-nulth Elders themselves. I have studied the over-arching aspects of indigenization for learning, and narrowed my focus to aspects of assessment and evaluation from an Indigenous worldview. The results of my study emphasize the need to understand authentic indigenization from this worldview, and I
have developed a model for assessment integrating time, relationships, echoing and
demonstration to use as a framework for authentic Indigenous assessment and evaluation.
Bibliography


Hare, J. (2016). “All of our responsibility”: Instructor experiences in the teaching of required Indigenous education coursework. Canadian Journal of Native Education. Volume 38, Number 1 (pp. 101-120)


https://doi.org/10.1525/irqr.2013.6.4.559.559

(Wawaach'akuuk YaqwiiʔItq Quuas): The Sayings of Our First People. Theytus
Books. Penticton, B.C.


McIntyre Ltd. Victoria, BC.

Kulchyski, P., McCaskill, D., & Newhouse, D. (1999;2000;) In the words of elders:
Aboriginal cultures in transition. Toronto: University of Toronto Press.

epistemes, and the logic of the gift. Vancouver [B.C.]: UBC Press.

Manitoba Education and Youth. (2003). Integrating Aboriginal Perspectives into
Curricula: A Resource for Curriculum Developers, Teachers, and Administrators.
Available online at
2018.


http://web.camosun.ca/cetl/curriculum-design/learning-about-indigenization

https://doi-org.ezproxy.library.uvic.ca/10.1007/s10464-015-9747-6


Widdowson, F. (2016). “Indigenizing the University” and Political Science: Exploring the Implications for the Discipline. Paper Presented at the Annual Meeting of the


Wilson, S., What is indigenous research methodology? Canadian Journal of Native Education; 2001; 25, 2; ProQuest Central.


Appendices

1. Participant Introduction to the Study and Consent Form
2. Recruitment Request
3. Interview Questions
4. Toquaht Nation Research Acceptance Confirmation
5. University of Victoria Human Research Board Acceptance Confirmation
You are being invited to participate in a study entitled Nuu-chah-nulth Traditional Pedagogy: Shining Light on Authentic Contemporary Assessment Practice that is being conducted by Kelly Johnsen.

Kelly Johnsen is a graduate student in the Department of Education at the University of Victoria and you may contact her if you have further questions by calling (250) 720-6688.

Introduction to the study - Script

As a graduate student, I am required to conduct research as part of the requirements for a doctoral degree in Education: Curriculum Studies. It is being conducted under the supervision of Kathy Sanford, PhD and Trish Rosborough, PhD.

The purpose of this study is to examine traditional, historical, and contemporary Nuu-chah-nulth assessment modes and methods in order to identify key practices and ideologies which may inform current contemporary assessment strategies.

Prospective participants for this research will be selected and approached by Kelly Johnsen, based on her knowledge of, and relationships with, cultural experts and elders in the Toquaht Nation communities. Detailed information regarding informed consent can be found at the top of the enclosed set of interview questions.

There are no known or anticipated risks to you by participating in this research.

Your participation in this research must be completely voluntary. If you do decide to participate, you may withdraw at any time without any consequences or any explanation. If you do withdraw from the study your data will be removed; interview information will be shredded and data removed from the database.

It is anticipated that the results of this study will be shared with others in the following ways: A copy of the finished project will be submitted to the Toquaht Nation, to be kept their document library. A copy of this study will be published by the University of Victoria, and kept in the UVic Education Library, and a final copy will be printed and kept in my own personal home library.

Following the completion of this study, all recorded data will be disposed of by machine shredding of printed documents or notes and electronic deletion of data.

In addition to being able to contact the researcher and supervisor at the above phone numbers, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Associate Vice President, Research HUMAN RESEARCH ETHICS BOARD at the University of Victoria (250-472-4545).

Your signature below indicates that you understand the above conditions of participation in this study and that you have had the opportunity to have your questions answered by the researchers.

Name of Participant ____________________ Signature ____________________ Date ____________

A copy of this consent will be left with you, and a copy will be taken by the researcher.

Revised April 26, 2017
My research objective is to determine what traditional assessment looks like, from a Nuu-chah-nulth perspective and to argue that contemporary assessment practice would benefit from integrating these traditional assessment practices.

1. What is the traditional pedagogy of the Nuu-chah-nulth and what practices are used by the Nuu-chah-nulth to determine proficiency in various areas?

2. Through reflection on past and current experience with education, assessment, and the Indigenization of contemporary post-secondary courses, how can my own experiences shine light on the challenge of authentic Indigenization?

3. How may these findings inform contemporary teaching practice, especially in those programs that advertise an Aboriginal or Indigenized focus?

Recruitment to the study - Script

Most likely in person, but possibly over the phone depending on availability

The purpose of this study is to examine traditional, historical, and contemporary Nuu-chah-nulth assessment modes and methods in order to identify key practices and ideologies which may inform current contemporary assessment strategies.

I have approached you as you are acknowledged as an expert in the area of traditional Nuu-chah-nulth knowledge, and in the transmission of this knowledge to younger generations. I am also contacting ____ and ____ to ask the same questions in an interview.

My hope is that you can help me identify three more possible candidate people that you would consider to be cultural experts in any area of Nuu-chah-nulth traditional teachings.

Each of the people that I interview will be protected by the assurances I laid out in my letter of consent. My research participants will not be identified in my research by name, or by community.

Can you suggest any Elders for me to connect with?

Thank you.
My research objective is to determine what traditional assessment looks like, from a Nuu-chah-nulth perspective and to argue that contemporary assessment practice would benefit from integrating these traditional assessment practices.

1. What is the traditional pedagogy of the Nuu-chah-nulth and what practices are used by the Nuu-chah-nulth to determine proficiency in various areas?

2. Through reflection on past and current experience with education, assessment, and the Indigenization of contemporary post-secondary courses, how can my own experiences shine light on the challenge of authentic Indigenization?

3. How may these findings inform contemporary teaching practice, especially in those programs that advertise an Aboriginal or Indigenized focus?

- This survey is voluntary. All responses will be anonymous and confidential.
- Information gathered through this study will not be used for any other purpose than for .
- Taking part in this interview implies informed consent.
- All gathered data will be destroyed at the completion of the study.

**Interview Questions:**

**Introducing question:**

- I am trying to develop an understanding of assessment from a Nuu-chah-nulth perspective. When I use the word assessment, I mean to demonstrate proficiency of any knowledge that is being transferred from one person to another person. This knowledge can be many different things; carving, cutting fish, learning a song or dance, building a full sized canoe, passing on a story, teaching the medicinal properties of plants, or even passing on knowledge of cultural ceremonies.
- From a cultural perspective, can you tell me how proficiency would be determined?

**Follow up:**

- When a person is learning something, how do you know that they have mastered this skill?
- Can you tell me more about...

**Probing questions:**

- Do you have any examples?
- Can you explain...

**Interpreting questions:**

- Do you mean...
- Is it correct that...
Human Research Ethics  
B202 Administrative Services Building  
Office of Research Services  
University of Victoria  
PO Box 1700 STN CSC  
Victoria, BC V8W 2Y2

November 15, 2016

Re: Kelly Johnsen – Human Research Ethics Application

To whom it may concern,

The intent of this letter is to demonstrate the Toquaht Nation’s support for Kelly Johnsen’s PhD research project. We believe that this project is of great importance for our people, and we are excited to see her finished dissertation.

Toquaht Nation’s traditional territory is located within the region surrounding Barkley Sound on the West Coast of Vancouver Island. Kelly Johnsen is an enrolled citizen of the Toquaht Nation and has requested to conduct interviews with her Elders within our traditional territory. Our Elders are the holders of knowledge, and have generations of experience to share. Our Elders have passed down knowledge for thousands of years, without the use of written language. We support Kelly’s plan to ask our Elders about traditional and historical modes of assessing a student’s knowledge.

With this letter, we acknowledge that Kelly has consulted with our Nation’s government and we provide permission for her to proceed with her research in our territory. We have requested that Kelly provide a bound copy of her completed dissertation for our library.

Thank you,

Anne Mack  
taayii h’awit  
Toquaht Nation
# Certificate of Approval

**Principal Investigator:** Kelly Johnson  
**LMIC Status:** Ph.D. Student  
**LMIC Department:** EBO  
**Supervisor:** Dr. Kathy Sanford

**Project Title:** Nuu-chah-nulth Traditional Pedagogy: Shining Light on Authentic Contemporary Assessment Practice

**Research Team Member:** None

**Declared Project Funding:** None

## Conditions of Approval

This Certificate of Approval is valid for the above terms provided there is no change in the protocol.

**Modifications:**
To make any changes to the approved research procedures in your study, please submit a "Request for Modification" form. You must receive ethics approval before proceeding with your modified protocol.

**Renewals:**
Your ethics approval must be current for the period during which you are recruiting participants or collecting data. To renew your protocol, please submit a "Request for Renewal" form before the expiry date on your certificate. You will be sent an email reminder prompting you to renew your protocol about six weeks before your expiry date.

**Project Closures:**
When you have completed all data collection activities and will have no further contact with participants, please notify the Human Research Ethics Board by submitting a "Notice of Project Completion" form.

## Certification

This certifies that the Uvic Human Research Ethics Board has examined this research protocol and concluded that, in all respects, the proposed research meets the appropriate standards of ethics as outlined by the University of Victoria Research Regulations involving Human Participants.

[Signature]

Dr. Rachel Searle  
Associate Vice-President, Research Operations

**Certificate Issued On:** 26-Apr-17