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CRAFTMAKING:
A PEDAGOGY FOR ENVIRONMENTAL AWARENESS

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A thesis submitted to the Faculty of Graduate Studies in
partial fulfillment of the requirements
for the degree
of Doctor of Philosophy

Graduate Programme in Environmental Studies
York University
North York, Ontario

August 2001



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a dissertation submitted to the Faculty of Graduate Studies of York
University in partial fulfillment of the requirements for the degree
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DOCTORATE OF PHILOSOPHY

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Abstract

This dissertation explores craftmaking as a pedagogical approach to environmental awareness. The study commences with an extended narrative of the experiences that shaped the author's understanding of the land and eventually led to her studying craftmaking as a form of environmental education. The ideas of four prominent educators and their craft-based curriculum are interpreted and discussed. A collection of many ideas prevalent in environmental thought discourse is provided and explored in the context of a craft-based curriculum. The ways a craftmaking pedagogy can address the concerns raised by environmental thought advocates, and environmental educators in particular, are emphasized.

The craftmaking pedagogy is then presented. Beginning with a brief overview of the significance of making items useful in human life, questions are raised concerning the way craftmaking experiences shape a person's awareness of the natural locale. The craftmaking pedagogy is presented through a theoretically based map that involves guideposts which are each outlined through definitions, explanations, narrations and suggested teaching activities. This conceptual map is intended to aid craft makers and educators to better identify the aspects of a curriculum that hold the most potential to shape a person's perspective of the natural world. Discussion of interview methodology and analysis are included and associated with the craftmaking pedagogy. A summary of the interviews with craft makers/educators, including indication of significant comments made by each informant, is provided in the appendices. The final chapter provides a conclusion emphasizing the significance of a return to craftmaking experiences in the general population's educational experience.

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To my nieces and nephew, Joanne, Taylor, Jenna and T.J., I want to say how I wish I could have had more time to share with you while I was in southern Ontario, but we did manage to squeeze in some good stories, drumming sessions, shaker making and giant ball bouncing breaks. To my mother I owe a very sincere thank you for storing my library, camping gear and craftmaking tools that have all contributed to the formulation of this PhD. I have never doubted your support in any of my chosen pursuits, including my undertaking of this doctorate. Although at times my acknowledgment may not have been obvious, it was always present and I thank you for all the support you have given me since my toddler years when I first started making things. Very soon all my gear will be out of the house and I promise to vacuum the room when I leave.

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elders in Northwestern Ontario who have been at my side guiding and role modeling this very pedagogy before I was even aware of the seeds they were planting in me. I also want to thank my numerous friends, peers and students who have encouraged me in many ways to complete my PhD work, reminding me that it holds value and deserves to be made available to others. I thank you also for all for the wonderful meals and escapes to northern campfires. To all those who were there to hear my stories or shared with me their tales, please remember you are always welcome at my campfire to tell or hear another.

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Remember

In doubtful times lean on coyote, (I did)

Laugh like a marten is jumping on your belly, (I did)

Aspire to swim with loons again. (I do)

To all the trees that provided me with the fibers to print the numerous drafts and eventually the final edition of this dissertation, I hope you can agree it was all worth while. And finally to my canoe, Instinct, to whom I now return with pole and paddle in hand, for the journey continues but now returns to the water's surface.

Thank you all, Miiqwich, I am full of your offerings.

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Introduction

The story in this study concerns a journey undertaken to discover the conceptual and practical terrain existing between craftmaking and environmental education. Many activities that have brought me personal satisfaction and a sense of belonging in the natural world seemed devalued and unacknowledged in the environmental educational field in which I worked. The study's origin resides in my need to find support, and claim recognition for such craftmaking endeavors.

My experiences of craftmaking have led me to an intense, deeply meaningful sense of belonging to the natural world. In this study I will summarize this perspective as "being of the world" or "being of the land," expressions used synonymously to avoid repetition. I recognize that no one ideal expression exists¹ to describe this relationship with the land. The importance is to aim for a oneness of perspective and being with relation to more-than-human dimensions such as plant, animal and mineral. Many environmental thought philosophers and environmental educators strive to articulate the shift away from the perception that allows individuals and societies to perceive themselves as being separate from nature, and therefore not affected by participation in destructive environmental practices. Expressions of perceived 'being of the world' or of sensing a 'oneness' with the earth tend to come from historical recordings of past

¹ 'Being of the world' is just one way of expressing the perspective of the world offered by craftmaking experiences. Other writers have expressed similar notions. For instance, Morris Berman's idea of participatory consciousness "the experience of self immersed in the world" (*Coming* 35), Neil Evernden's "nature-as-self" (*Social* 101), John Livingston's "quality of wildness" (197), E.O. Wilson's biophilia, "the innate tendency to focus on life and lifelike processes" (1), Edmund Carpenter's description an Inuit's "Love of Life" (204) . . . the list goes on and on. The ability to perceive the world continuously, if not routinely in this manner, is the challenge that many environmentalists and educators ponder, and that this pedagogy addresses.

cultures. This is especially true of people who were not influenced by the process of colonization, introduction of scientific thinking or the industrial and technological revolutions.

Typically these expressions of being of the earth come from people who were still firmly rooted in a strong craftmaking practice. Abram (1996) and Berman (1989) both suggest that a person's sensory-based involvement in the world is what nurtures such a perception. The sensory-based aspects embedded within craftmaking practices also explore other aspects that may define craftmaking as a form of environmental awareness.

In the early chapters of his book Coming to Our Senses, the historian Morris Berman tries to describe the worldview of people existing in medieval times. Later, he explores the motivation behind the need for expression and creativity in people in the western world. Expressions such as my "being of the world," or what Berman calls "participatory consciousness" are described as existing in children's art and "constitute a mode of expression that includes most medieval art, the art of non-Western cultures, and the art of traditional societies. It approximates what we call craft, as opposed to art as such" (322-323). The distinction between art and craft needs delineation to clarify the relevance of the use of the term craft in this work and especially with regard to aspects of environmental awareness.

Defining what we make as art, craft or technology is important to some people due to their social positioning or cultural perspective. It is important for educators to be clear on what is being defined as *craftmaking* and what is being emphasized in the particular definition, or criteria used, to distinguish whether a process is craftmaking. The

following three criteria for defining craftmaking are used throughout this work and should be encouraged, as they lead to environmental awareness. Craftmaking

- 1) in its execution, requires the use of a person's body, especially the hands,
- 2) is useful or functional in that it enables a person to fulfill a human need,
- 3) involves sensory stimulation with material recognized as unaltered and organic.

The presence of all three qualities in an activity is significant because they provide opportunities and necessitate experiences for the maker to attend to the more-than-human world. For instance, the use of a person's body to make a cup provides a visceral connection between the fluidity of human hands and moist clay. The smell of clay invites a person's senses into a web of relationships moving beyond language, images and representations, into the first hand experience of directly relating to the land through its very soil. A person who makes, and then uses a clay mug, becomes involved in a fundamental experience of being in the world. A person using a cup is involved in the essential life-giving act of containing water in order to drink.

Today the terms *art* and *technology* are not as readily associated with providing fundamental, holistic experiences that allow a person to come to know the natural world. Since the European Renaissance, when the term 'art' became associated with "the life of the mind as opposed to the life of the body" (Lucie-Smith 160), intellectual ways of knowing the world have been emphasized. As artists cannot sustain their bodies by eating their paintings or sculpture of food no matter how well they represent the 'intellectual' understanding of food, coming to know the world through artistic practices alone is limited. The fine arts tend to emphasize human use of visual images to create

perceptions of the world. These perceptions tend to encourage understanding which is seldom rooted in fundamental experiences that fulfill needs and sustain life. Similarly, philosophers of technology address the loss of the holistic perspective embedded in tool use by describing various types of technology. Borgmann distinguishes between the processes of making devices and things. He defines a thing as “inseparable from its context, namely, the world” (41). His example of a thing is a hearth in a home which provides a central focus that work and leisure can unfold around. Whereas a device, such as a furnace, involves procuring a commodity and in so doing conceals and shrinks the machine involved (42-43). For example, people in a home seldom attend to, or are aware of the source of heat provided by a house’s furnace. Franklin distinguishes technological items by referring to the degree of holistic or prescribed processes involved. She states that a holistic process is important because it “leaves the individual worker in control of a particular process of creating or doing something” (19). Both Borgmann and Franklin use examples of crafts to describe their respective ‘thing’ and ‘holistic’ processes.²

Of the three terms *craft*, *art* and *technology*, the term *craft* is used to designate that which has best retained some notions of the qualities critical to the practice of making an item that creates a ‘being of the world’ perspective. Contemporary popular views belittle craft, however, for many reasons. Some people dismiss crafts as items made by tedious handwork. Others find crafts limited in aesthetic expression because they must retain function, while still others find crafts simplistic, as they are made out of

² Franklin uses the example of Chinese Bronze work as a holistic technology (18). Borgmann uses many examples from a wheelwright to distinguish between a made item being either a thing or a device (41-48).

materials with little intrinsic value such as wood, fiber and clay. These aspects are the very qualities that craftmakers and environmental educators need to work towards framing in a new way in order to encourage environmental awareness through a making process. For, as will be seen later in this discussion, these qualities are critical if craftmaking is to be a practice that attends to the more-than-human, eventually leading people to a perception of being of the world.

The qualities embedded in a craftmaking curriculum encourage the development of skills and the establishment of practices that other environmental education curricula fail to address. Arts and/or technology generally tend to create experiences that are based in coming to know the world through mediated and second hand information. Fine art education emphasizes people's ability to express themselves by making novel representations of the world dependent upon the sense of sight. An individual's talent for capturing new perspectives of something in images becomes valued at the expense of group projects that involve and mirror communities. For example, paintings that can be readily associated with a specific artist highlight individual achievement and not a community's ability to work together to create ceremonies or buildings that reflect a culture-based relationship with the land, such as a barn raising or a Northwest coast totem pole raising event. Technology education is increasingly defined through a screened image, or a device made out of a highly processed material that has little known connection to an organic form. The term *craft*, in comparison to the terms *art* and *technology*, tends to be associated with the notions of utility, natural material and

handwork.³ These aspects are highlighted and reclaimed as honourable qualities that provide access to the ‘voice’ of the more-than-human world and encourage recognition of limitations.

The term ACID is used to describe the societies commonly referred to as “western,” “modern” and “developed.” ACID represents the “Advanced Competitive Industrial Dominion” (Sætereng 29), and is a preferred term because its ring serves to remind the reader of all that is being corroded away due to a pervasive mindset that places economics and science before people and nature.

In this study, environmental education generally refers to a consciousness moulding experience that encourages a person to attend to the natural world. A blanket toss game serves as a good metaphor to explain this definition. Imagine Inuit hunters of the past needing a way to elevate themselves so they could see distant animals in a flat landscape. The hunters determined that if a few people held the edges of a large hide, one hunter could crawl on top and be tossed into the air to see further. The hunter so tossed not only obtained a new perspective of the world, but also had fun. Recognizing the world in a new way was associated with bringing joy to a person’s life. Environmental education is similar as it is based upon encouraging other people to perceive the world in

³ One of the activities in the teaching section is based upon exploring how these terms have changed in meaning. According to Barnhart’s etymological dictionary, of the three terms — art, craft and technology — craft is the oldest and first emerges in print in 899. At this time, craft’s meaning is associated with power, strength and skill. The term art does not emerge in print until 1250. Art comes from the Latin word *artem* and originally referred to cunning and trickery. After its introduction it was quickly applied in the English language to mean skill in scholarship and learning. By the late 1500s the term craft was no longer used as a verb, and by the early 1600’s the terms ‘technical’ and ‘technic’ became common in regard to the use of skill in a particular subject. The subtle shifts in the way these terms were used parallel changing European worldviews that gave credence to notions of Cartesian thought.

a new, meaningful way that brings satisfaction. A hunter who frequently looks to where animals are most likely to be spotted is like the environmental educator who is seeking ways to bring daily attention to the natural world into a person's perspective.

“Guide,” “teacher,” and “educator” are words that are used interchangeably in reference to the people who do what they think should be done to help others best to get on the blanket, open their eyes and experience the world in a new way. As a teacher is never really in control of another person's learning, it is often beneficial simply to retain a curiosity about the moment. For this reason, many questions are used to frame the ideas that could and often should be raised to encourage other people to consider a perspective of the land.

Like an unsigned craft that emphasizes makers in general instead of specific individuals and leaves few clues as to the gender or race of makers, the English language—with its roots firmly embedded in a soil of exclusion—is limited in its designation properties. When possible, the specific term used by the people discussed to refer to themselves is chosen, such as Anishinabe instead of Ojibway, Chippewa or Indian. “Native” is capitalized to demonstrate respect as is any term denoting a nationality, such as Canadian or Scottish.

The journey taken to explore craftmaking has been circular and spiraling. Frequently an idea or issue has been explored through examining a variety of disciplines, subjects, professions and voices. Each exploratory journey adds a deeper awareness of the complexity and interconnectedness of the initial idea, but still retains some essence of

the initial inquiry. All the seeking of my initial thoughts about a craftmaking pedagogy become substantiated—craftmaking is of significance to environmental educators.

The discussion proceeds as follows. Chapter one describes my own personal experiences that led me to the place of doing graduate level research on a craftmaking pedagogy as a practice of environmental awareness. Chapter two offers an overview of the ideas that have come before my own regarding the development of craftmaking curricula that support environmental awareness. Specifically, the philosophies of four educators who recognized a connection between craftmaking and environmental education are outlined Chapter three explores how craftmaking activities can address the present and future concerns of environmental education. Chapter four provides a detailed overview of a craftmaking pedagogy and the ways it serves as a means of environmental education. Chapter five has two parts. First, I outline the interview methods used in this research, then I analyze the outcomes of the interviews undertaken with a range of people involved in environmental education who integrate various forms of craftmaking activities into their work. Chapter six serves as a conclusion for this study and provides insights on the ways this research can be implemented.

Storytelling is the wrapping paper around the gift. The gift is the oneness, the universal that the story takes us to, provides us, and offers. (Michael Burns, storyteller)

Craftmaking is like storytelling. It also wraps a gift — a gift of being of the world. (Zabe MacEachren, storyteller and craftmaker)

Chapter One:

A Journey: Personal Reflections on Craftmaking

This chapter contains reflections upon my experiences in making items and my journey to explore the ways that making items shape a person's relationship with and understanding of the land. It tells the story of why I came to pursue doctoral research on a pedagogy of craftmaking as a practice of environmental awareness. Descriptions of incidents that shaped my understanding of craftmaking are provided. Some of the ideas I raise will become evident in the pedagogy to be described in Chapter 4, specifically in the craftmaking map and its related guidepost concepts. I also offer here a personal account of a "being of the world" that resulted from immersion in craftmaking experiences. Examples drawn from my years in public school to graduate environmental education courses illustrate what the educational structure both offered and failed to provide. These descriptions of some of the significant craftmaking experiences in my life provide a context for appreciating my own relationship with the land and explain why this topic has fascinated me, eventually leading to graduate level research.

School and Camp Craftmaking Activities

I clearly and fondly remember as a small child taking great pleasure from making things and receiving attention for my efforts. Two particular items stand out: a cardboard typewriter with movable keys and a simulated human body that actually moved because I used elastics to act as muscles and popsicle sticks to serve as bones. During my primary grades, I was aware that I drew well in comparison to most of my fellow classmates who struggled with proportion and the sequencing pattern required to assemble three-dimensional shapes. I also recall being aware of and confused by praise I received for items that demonstrated a lack of practical purpose. For example, in an art class, I was one day involved in painting icicles found nearby on the shore of Lake Ontario.

Afterwards, my classmates and the instructor commented upon our “good” work, while I felt remorse at what I had done. I remember thinking that colouring them had somehow reduced the beauty of the icicles. I also wondered what harm would occur to the lake when the icicle melted and the paint flowed into the water. Even as a grade five student, I could distinguish between praise received for expressive or functional items. My father made useful furniture and my mother sewed for my sisters and me. As a child, I too craved the ability to make useful items worthy of praise for what they offered others instead of shame for the harm they caused. The practical experience I desired requiring the use of my hands to create practical objects never materialized at this time. Instead, I began imagining a relevance for the items I made such as folded paper cups being real carved wooden buckets.

Playing in trees, building forts and attending camp became my favourite childhood memories, but these activities offered only an opportunity of pretending to be the person that I really longed to be: an explorer or Native person living off the land. Days spent outdoors at camp were events I reveled in, something to be soaked up until my imagination was full, packed with events to be recalled when indoors. Although I could not express why, art classes left me feeling incomplete compared to time spent at camp.

Increasingly, I learned to state my preference for outdoor camp-like activities. The camp curriculum, although limiting, did offer a few useful hands-on activities that fed my imagination, such as making and employing items during campfire events. But I never developed the skills to make appropriate shelters or bring home food to support my family. Camp experience at least enabled me to understand that the origin of some items was the natural world. My body knew what it was to haul a log out of the forest to create the council ring which was more than I knew about what went into making my school desk. What I liked at camp was that praise was given to those who earned it through demonstrating some skill or service of value in groups to which they belonged.

The art and crafts and encampment-making program fed my imagination by offering glimpses into experiences that were fulfilling in their relationship with the natural world. I craved such experiences, yet regrettably they never materialized. My friends and I built makeshift shelters in the woods, then at 4:30 all campers went to their houses in the suburbs to spend the night. The value in my attending day camp was that it nurtured an openness toward accepting alternative ways of existing in the world from which my suburban lifestyle sheltered me. My camp experience may have been

romanticized, and falsely labeled "Indian," yet the benefit it offered was the hope that one day I might really get to live this romanticized life that represented something closer to nature than I was presently living.

The outdoor atmosphere I experienced nurtured my imagination because camp was conducive to my recognizing the links between a person's life and the land. I desperately wanted the hanging cooking bucket made out of a garbage bag to be a leather container made from an animal I had hunted. Once another camper and I carpeted our group shelter with freshly picked ferns to make it look nice and clean. The next day we returned to the chore of having to remove all the wilted leaves. Again I felt remorse for my role in harming and wasting something I loved — beautiful fern palms. Still, deep inside me I harboured hope that someday someone would guide me well and I would get to sleep on fresh smelling boughs without any guilt of having done something wrong. Now, I realize that my camp leaders had been incapable of teaching me what I wanted to know as they probably did not know themselves. I would be well into my twenties before I would find someone able to instruct me in the ways of making a bough bed in a sustainable manner.

A few camp activities did offer me some hand skill development. I felt excited as I mastered the various bracelet-weaving techniques. However, using the plastic gimp provided for the activity taught me little about where to find the fiber to make rope, or how to tan a hide to make the leather lacing that I imagined. By making the things I believed First Nations people made, I was unconsciously trying to shape my perspectives of the world to those relationships I perceived Aboriginal people to have with the Earth.

Like many people, I was led by my exposure to the stereotypical media images of Native peoples to believe that Aboriginal people live close to the Earth and therefore I should imitate them so that I, too, could live close to the Earth. Unfortunately, neither camp activities, family life, nor school satisfied my interest in making things or being outdoors, so I turned to studying Aboriginal cultures to satisfy my interests. By making Native crafts from nature, I presumed I would learn to live harmoniously amidst the natural world I loved.

The purchase of a very old, exceptionally well made birch bark basket shifted my interest in craftmaking pursuits towards "nature-based" crafts. The rustic, northwoods character of the basket was genuine and still surpasses any other birch bark basket I have ever seen sold in a gift shop or even a museum. I would frequently gaze at this basket from my bed as I fell asleep. Such casual observations encouraged my imagination to wander freely in association with its Northwood's charm. The basket took on an animated form as I asked it questions and created answers in stories. Who made this basket and what else had this person made? Did the craftmaker also paddle a canoe made from similarly exquisite bark? Where did the craftsperson find such thick birch bark? Over the years while this basket inspired my imagination, my own hands developed craftmaking skills such as knitting, crocheting and embroidery. These craft endeavors left many half-finished projects that collected dust along with my accumulation of campcraft books.

Collecting Native "how-to" books was my next progression towards satisfying my appetite for an outdoor life. I attempted to teach myself, as there was no Elder in my life to teach me, to hand carve bowls or sew leather moccasins. Unfortunately, my schooling

had emphasized reading over experiencing. As I seldom tried to make anything I read about, I was never able to learn directly from the making experience described in these books. Despite having a talented father who could make anything in wood, and a mother who sewed a lot of family clothes, I was unable to access craftmaking experiences that could satisfy my desire to dwell outdoors. Usually learning a craft first required saving my allowance, and second, visiting a store to purchase supplies such as pre-spun yarn and plastic foam for puppets. Reading about crafts allowed my imagination to visit the forests that originally supplied my material needs.¹ Raised in the suburbs, I was frustrated with my limited access to the forests that my books told me I could just roam, in order to harvest supplies for my crafts.

Overall, I learned to be complacent amidst hypocrisy. I became quiet and seldom shared my imaginative world as I was raised in a house full of hand-made antiques valued more for their market value than for any story they might tell of their origin or use. My historic craft texts emphasized worldviews different from the consumer-based world I inhabited where someone owned every tree in the neighbourhood. I nurtured my nature-craft interest increasingly through reading and imagining life amidst the crafts illustrated

¹The extent to which I did this is evident in my once having a dream that informed me I should cut down a tree in the front yard in order to obtain wood to make snowshoe frames. The next morning I examined the tree noticed for the first time that it was the correct species, ash, but decided I should wait, as I could imagine my parents' negative reaction to this desire. I have continued to resist the temptation.

in my books.² Constantly I tried new crafts, participated in family camping vacations, and retreated into my imaginative world, but I never mastered the skills I desired and associated with nature lore.

High School and Undergraduate Experiences of Craftmaking

High school exposed me to making crafts with power tools. My father's skill at closely examining the grain of wood to determine the species eluded me, as I had only been trained to read the labels over storage shelves for such information. In using power machinery for cutting wood or sewing fabric I was never encouraged to take note of natural features in grain or fiber. My grades in woodwork and sewing classes reflected my ability to follow human directions and read blueprints for cabinets and tailored suits. These classes never taught me to "read" through my hands or to follow a trail with my senses. Nor did I recognize why such nature awareness was the critical skill at the root of the learning I hoped to acquire.

While in high school I enrolled in a fine arts course, but again found it too abstract to continue. Only one class in the term involved handling clay and making a three-dimensional item; everything else involved drawing on paper. High school programs offered little freedom to choose the way in which something was made. I would use the items I sewed and made out of wood, yet after graduation, without access

²Some museum artifacts I had viewed also impressed me. I can vividly recall a few carved bowls I saw displayed at the McMichael Canadian Art Collection as a young student. As my friends wandered around the museum looking at paintings, I spent my time in one room focusing on carved wooden bowls, imagining them being used at incredible feasts and ceremonies that honoured the West Coast setting. I imagine myself present and part of the culture that made and used such magnificent animal shaped bowls. I definitely did not want to return to the plain dry walls of a classroom.

to a sewing machine or power tools, I could no longer participate in such activities. These classes did not include experiences involving basic handwork and therefore never exposed nor even encouraged me to use a knife or needle and thread to make something. By the end of high school I wanted to pursue a career that primarily involved outside activities, and preferably dealt with environmental advocacy issues. The thought of pursuing a trade or becoming a professional craft person never occurred to me. My interest in "making" now became relegated to the realm of hobby.

Obtaining my Outdoor Recreation degree at Lakehead University involved taking an outdoor equipment course in which one assignment was to make camping gear. I jumped at the opportunity to make, at long last, a pair of moose-hide mukluks. With their natural tanned leather and traditional design, my completed mukluks stood out amidst everyone else's gortex and poly-coated plastic items. This juxtaposition confused me, as my classmates and instructor did not acknowledge the environmental destruction associated with the plastic material they chose to use. I felt perplexed and alone amidst classmates who expressed their love for the outdoors by embracing the latest gear made of toxic material.

My Exposure to Native Education and its Emphasis on Craftmaking

Luckily, during my first summer as an undergraduate student, I found work as a fishing guide in the north. This position involved, for the first time, meeting and working with First Nations people. Now my stereotypic camp and book-learned images of "Indian" people faded, and my understanding of Anishinabe/First Nations people and their perspectives began to develop. My Anishinabe friendships exposed me to

worldviews different from those I had been raised in as a member of ACID (advance competitive industrial dominion). Their different perspectives of the world were new to me, yet they felt familiar and comfortable. By the summer's end, my Anishinabe friends were urging me to become a teacher and return to teach their children. Encouraged by their comments, I returned to university and enrolled in some Native education courses.

In a Native Arts and Crafts course, I was exposed to the Aboriginal cultures that did not distinguish between art and craft, so I became curious as to why my own culture separated them. This course had a unique pedagogy that created a comfortable setting in which to learn. I felt at home in this class with its informal discussion and holistic curriculum that resulted in useful items. I liked the way I was encouraged to use various parts of my own body to create a pattern for moccasins designed specifically for my feet, without having to conform to a standardized pattern size. Although the course occurred indoors, the smell of moose hide and feel of the birch bark took participants outside. As my hands stitched, I listened to stories that incorporated nature lore. This narrative sharing brought into the room the presence and wisdom of the more-than-human realm that spoke of all things as alive and closer to my being.

Four Experiences That Affected My Understanding of Craftmaking

During my undergraduate years as an outdoor recreation and natural science student I had four cardinal learning experiences that significantly shaped my desire to create a craftmaking pedagogy for environmental education.

1) **The Absence of Attention on Craftmaking Skills**

The first learning experience involved a mandatory solo practicum requiring all students to make something useful. Most people, myself included, tried to carve a spoon. After receiving so many poorly carved utensils, the professor asked those who had cut themselves while using their pocket knives to raise their hand. Many hands shot up which indicated that a basic craftmaking skill was in decline. How could my classmates and I consider ourselves "professional" outdoor recreationalists without knife-carving skills? My pioneering ancestors were more educated in this regard than was I. Reflecting back on this incident, I realize that a person requires a knife with a curved edge to be able to carve the bowl of a spoon. The importance and heritage of crooked knives in the Northwoods region was never raised within my studies. The program did not require proficiency in using a knife, crooked knife or an axe to make something, yet all graduating students were supposed to be competent wilderness travel guides. Why did competency mean the ability to possess gear and not to make or repair gear in the field?

Unofficially, carrying a knife in the bush is considered part of an outdoor person's uniform, yet many outdoor professionals are not competent at using a knife. I started to think that a "well schooled" person should be skilled in the use of both a pen and a knife. I reckoned that a pen was to a person in school what a knife was to a person in the bush. This experience led me to question what else my own and other outdoor-based programs failed to teach a person. My schooling had limited my development of outdoor skills by emphasizing those indoor skills associated with pen, calculator and computer. I felt that

skillful use of a knife demonstrating self-reliance in the bush was deserving of as much importance as the written essays I produced to graduate.

2) Understanding Craftmaking Material

The second significant learning incident involved teaching myself how to make a birchbark basket. Every person living in the northwoods soon becomes aware of the importance of birchbark as it provides the material for so many useful things: cooking containers, lodge coverings, canoes for transportation, tinder for fires and so on. My first basket attempt was easy and successfully completed. I had readily obtained bark from a tree and the found spruce roots for stitching the seams. Three weeks later I returned to the same location with intentions of making a second basket and was surprised when the bark did not readily peel off the tree. Now it felt cemented on. As I gave up trying, I felt despair that the cause of my difficulty eluded me, and I felt remorse at having scarred and injured so many trees in my attempt.

Eventually Anishinabe elders and a birchbark canoe builder shared with me some of the incredible skill, lore and bioregional knowledge that accompanies work with bark. Success depends upon picking in-season and becoming aware of bark quality indicators that make sure efforts are productive. Prayers and offerings inform the plant you will use its skin well and ensure that future supplies will be available. Participants in such acts demonstrated respect for, and understanding of, the tree the Anishinabe people call wiigwaas, and refer to as the "tree of life." I found such nature lore interesting and the kind of information that stayed with me easily compared to lecture notes. Interestingly, all this learning stemmed from my desire to make a simple—birch bark basket.

I had been lucky during my first attempt at gathering bark. Soon future outings into a forest would be accompanied by a new sense of awareness. Birch trees would begin to cry out for me to notice them. This new awareness of birch was in part a result of hearing a legend that explained that a birch tree's smooth white bark had been whipped and scarred by the branches of nearby trees because the birch tree had boasted of its beauty. Knowing this story encouraged me to attend to potential animate qualities existing in the forest.³

Realizing how little I knew about birch trees meant I had a lot to learn about all the trees in the forest. I was becoming aware of the cultural blinders that limited what I could learn and the challenges involved in perceiving beyond their accepted boundaries. Again I questioned what my education had taught and failed to teach me about the outdoors. I had spent countless hours in classrooms training myself in methods of learning those things best taught from a blackboard, but what was the best method to

³ I have also met people who had been raised to believe in such ideas and stories supporting a sense of animism. One summer I worked with an Anishinabe elder who had never gone to school. As a child she was raised by her grandparents in a birch bark lodge. This elder taught our group of campers how to make birch bark baskets. The previous day she led us in putting out tobacco, making prayers to the birch trees, then showed us how to collect the bark. That morning staff informed me that campers had been stealing cookies during the night. Seeking advice, I turned to this elder and asked for her suggestion on what to do. Her reply was the following story.

When I was a child I wondered what would happen if I took something. I asked my grandfather about this and he replied, "Someone always knows when you take something." I went away and thought about this. I couldn't understand who would know if I took something. I went back and asked my grandfather who would know if I took something? And he said, "they'll know, they'll know." As she said this, she reached out and patted a tree as if her actions meant—the trees will know.

Now, I wonder if I could more readily perceive the world as animate if I had been raised like this elder, immersed in the lore and stories that nurtured perceptions of everything as alive and conscious. Making this event all the more poignant was the fact that the previous day everyone present had spoken to birch trees before picking their bark and we worked on our baskets beneath the branches of the campsite trees. Recalling this story always encourages my sense that the nearest trees and other forest beings too are watching me.

learn about the outdoors? So far, the best opportunity to learn the things I desired to learn had arisen from my interest in nature-based craftwork.

3) Awareness of Shifting Perceptions

My third significant learning experience stemmed from my involvement in a dramatic life-threatening incident and the ideas presented in a survival course. Everyone in the course was expected to kill an animal using only bare hands and to struggle to procure fire by friction until at least one person in the class succeeded. This course offered participant experiences built around fulfilling basic human needs. The course instructor focused both on survival skills and survivalist mentality. He made it a point to clearly define basic “schools of thought” pertaining to the approaches writers use to portray wilderness living conditions. There were the “armchair survival writers” who described the easy way to capture food (porcupines) that a hungry person would find in every other tree. Other writers were the “conquering survivalists” who described everything in nature as having fangs and chasing any lost person. The instructor offered his own views as a third option: the bush was neutral; it would neither harm nor protect a person.

A year after learning about these various perspectives, I would reflect upon their merits with respect to my own critical situation. Dehydrated, cold, with little energy to spare and over forty miles still to snowshoe, I found myself getting upset at every slush depression that I walked into. Slush adds an unbearably heavy weight to each snowshoe, thereby requiring me to backtrack and find a new route around each depression. I desperately needed a fire to melt snow to re-hydrate my body, yet each fire making detour

was exhausting and time consuming in the deep powder snow of the forest. I was increasingly cursing the snow conditions. Why could I no longer love this land? Why did it seem to be turning against me? As this negative feeling toward the land grew in me, I thought back to my survival instructor's comments on different perspectives of the land. Feeling so weak and starting to imagine myself dying out there, stuck and frozen in the lake's slush, I would have disagreed with my instructor and his idea that the land was neutral. Then, I quickly withdrew my snowshoe from my initial step into slush and watched my fresh track fill up with water. At that moment my perspective of slush shifted from something negative to positive. I realized that to drink water and quench my thirst, all I had to do was dig down into the slush and create a hole that the water could fill in. A sensation of euphoria accompanied this shift in my perspective.

This concrete experience of attending to the shifting of perceptions of the land greatly influenced my understanding of teaching, learning and developing relationships to the world. The ACID society's paradigm within which I was raised was penetrable; I simply needed to find the "triggers" that shifted a perception. What else could act like a bridge and allow a person to cross over the boundaries between various perceptions of the world: from negative to positive, from dead to animated matter, from commodity to something free, whose own being was of value. Education should expose a person to numerous and varied perceptions of a thing and encourage a person to be comfortable with shifting perceptions.

My shifting perception of slush offered me a sense of confidence in my ability to communicate with the land. I realized that in order to provide for my needs and to learn to

feel part of a place, I was required to embrace my fear and discomfort so that I could attend to other perceptions or notions of what the land might be trying to convey. It was thrilling to sense that the land was teaching me and I suspected this learning was due to maintaining an openness for new perceptions to arise. People's understanding of the land seemed based upon and limited to the ways in which their culture nurtured and exposed those people to various perceptions. I recognized how narrow formal school policies and curriculum can be in this regard. My own ACID-based upbringing limited my identification with the land as a teacher, and instead encouraged me to perceive my relationship to it as an experiment that I could control. I had not been raised to think I could communicate with the land or perceive it as a living entity capable of watching me. These perceptions I had glimpsed only through participating in certain craftmaking activities.

4) The Significance of the Usefulness Embedded in a Craft

The final learning incident I will share also occurred during my winter survival journey. Alone, on the ice, I found myself constantly worrying about a small but very critical item, my snowshoes, because the harness and frame were near breaking. Without usable snowshoes I would not be able to move in the deep snow and I doubted my ability to repair my snowshoes using only my own ingenuity and the materials I possessed in that frozen landscape. Purchasing duct tape, wire and glue for repairs was not a possibility.

At this time, I considered the knowledge embedded in snowshoe construction and repair to be a life preserving issue to me. Again I sadly realized that all my years at school had not prepared me for this moment. My formal education had even hindered my ability

to access this craftmaking knowledge as my learning experiences were entrenched with those perceptions that were of use within the city. I knew how to purchase snowshoes and school lectures provided me with facts and statistics on their synthetic makeup and design features. But could I make or repair snowshoes in the field? Probably not.

Issues concerning my gender, ethnicity or race did not seem to be a major factor in my perception of this event in the moment. The central feature influencing this experience arose from basic needs that all of humanity must address such — I find water, stay warm and find a means to continue traveling. Surviving a death threatening winter travel situation, where maintaining my life was dependent upon my ability to fix a pair of snowshoes, compelled my interest in studying education practices in which a relationship is shaped with the natural world through a person's skill at making items. The way gender, ethnicity and race shape environmental awareness through the craftmaking process is evident, but it is not central to this study. My own experiences have suggested emphasizing the component of a craft that is common to all — need for an item that is functional.

As I tried to make sense of these and other events, I became interested in learning the skills that involved caring for myself when on the land. I wanted to feel the competence accompanying the possession of skills required to make the natural environment a home without any dependencies on store bought purchases. The Outdoor Recreationalist slogan, "Nature is my playground," no longer applied to me. As well, I now realized that no amount of book learning would itself provide these skills to me. I needed to put in my "dirt time" experiencing them.

New Emphases within Craftmaking

I desired to learn the skills that would engender trust that the land would provide for my needs. If I could acquire these skills, I felt that I would have the relationship with the natural world that many Aboriginal people had. Hunting, gathering food and craftmaking seemed to be the skills I should try to acquire. Skills at craftmaking seemed to lead to a good relationship with all aspects of the more-than-human world. The Indigenous ways of learning and knowing nurtured and maintained constant awareness of the land in a person's thoughts. Over the next two decades I continued to live and work among Anishinabe people. I was fortunate to meet many wonderful teachers and elders who shared with me their craftmaking traditions. Although at times there were difficulties being a non-Native person in a position of power within a Native community, most of these concerned classroom teaching responsibilities and not craftmaking experiences. Overall I sensed that Anishinabe people appreciated my interests in their crafts and I felt encouraged to learn the craftmaking traditions of the region. There were occasional comments expressing the need for people to learn their own heritage. Yet, there were many common features residing within the cultures concerning craftmaking and the way each culture demonstrated respect for the land.⁴

As my time in the north passed I tried to avoid relating to the land like a tourist, seeking novelty and memorabilia demonstrating little commitment to a place and having

⁴ An example of this would be the discussion that followed a sweat I once attended. The lodge caretakers told me about a place in Europe where there were indentations in the ground with stone circles about whose origin local people were unsure. Visiting Native elders to the area, upon seeking these features had no difficulty in believing them to be the signs that sweatlodges had existed in these European peoples' past.

no practical reason for engagement. Acquiring food and making crafts immersed my hands in relationships involving more-than-human kin. Constantly I sought stories and ideas on ways to "listen" to the land. I was seeking guidance concerning acquiring material used in designing and shaping suitable camping/living gear. These realizations led me to take what are referred to as "primitive" skills courses and involved learning to live off the land using few if any materials stemming from industrial processes. I set myself the goal of making all my own camping gear.

After completing an alternatively structured graduate program to receive my Masters degree,⁵ I increasingly became critical of the hidden curriculum of public schools that limited the exposure of children to ways of experiencing a learning environment that existed outside and beyond classroom texts. Further, my concerns grew in regards to my own ability to feel comfortable and supportive of the curriculum I was expected to teach as a conventional classroom teacher. I puzzled over why craftwork had become so devalued in society, yet seemed so important to a person's environmental education.

I found some solace in the ideas of deep ecology and started to recognize how craftmaking might be used as a way of bridging practitioner's actions that focused on either deep or shallow approaches to curriculum.⁶ At this time the ideas of deep ecology also offered me a broader understanding of the ways all cultures' perspectives of the land

⁵ I received a Masters of Science with an environmental education emphasis through the National Audubon Expedition Institute. This program required me to live in a consensus community with twenty-two other people as we traveled across North America, camping out each night, and arranging visits with a very wide variety of people and places.

⁶ This concept of the bridge between deep and shallow ecology will be explored further in Chapter Three.

were influenced by and passed on through craftmaking activities. This meant that embedded in the design of all educational programs was both the problem and the solution to addressing environmental concerns. Slowly I began to realize how intrigued I was becoming with the ideas surrounding craftmaking as a form of environmental awareness, and I started to consider pursuing a PhD in this area.

Learning about Cultural Perspectives of the Land through Craftmaking Activities

As I continued to work with First Nations people, I considered myself fortunate because my contact with them promoted my understanding of the ways various perspectives of the land are embedded in craftmaking activities. I began to realize that a culture's perspectives of the land corresponds to its traditional craftmaking activities, and these activities must be experienced to ensure that traditional cultural perspectives of the land are passed on. For example, an Anishinabe teaching assistant informed me that students as part of an activity should not glue birchbark because this act was considered disrespectful to the birch tree. This "lore" related meaningfully to my earlier experiences of feeling remorse at painting icicles and recalled the sensation of feeling the insides of a tree when peeling back its skin. Taking the bark off a birch tree, or removing the hide from a deer is like feeling its life. Such comparative experiences highlight similarities between the skin of other beings and human flesh and the capabilities of feeling. I would not want my own skin to be covered in glue, why would I cover another being's skin with glue? I readily agreed that placing glue on the skin of an animal or tree demonstrates

disrespectful behavior.⁷ Conveying this craft lore meant conveying the cultural perspective that trees and animals should be viewed as live, animate beings, worthy of being treated with the same respect as a person.

This lore of birchbark was only one example of an experience that encouraged me to ponder the ways in which I related to the land through a craftmaking practice. I started to collect similar accounts that other people shared through written passages and orally transmitted stories. I especially sought accounts that somehow seemed to encourage in me a new perspective of the land. As a way of making sense of these experiences I tried to find patterns and connections between them.

Examples of my desire to try to connect the many ideas and stories I was experiencing that seemed to bind craftmaking and various perspectives of the land first arose in small projects I did during my Masters degree. I created an outline of the steps involved in moccasin making and arranged the steps in a circular fashion. It was the recognition and placement of these steps in a circular shape that was, I believe, the first sign of my exploration and creation of the craftmaking map. I pursued this line of inquiry during my first comprehensive areas as a PhD student at York University, and have only made some minor changes to the basic components of the map since first presenting it. The map is based upon exploring the ideas surrounding stages associated with craftmaking that I refer to as "guideposts" and will elaborate upon in Chapter Four. The

⁷ This Anishinabe tradition also extends to rocks as they should not be painted, or even moved. The exception to this is when a person has received guidance to do so through a dream.

next section of this chapter presents some of my experiences that relate to the forming of specific guideposts.

Connecting Experiences to Concepts of Craftmaking Guideposts

a) Developing an Origin Guidepost

Hearing about the tradition of jingle dresses solidified the numerous ideas pertaining to the origin guidepost that basically concerns the questions of why a person pursues the completion of a craft having first imagined it. While in the north I heard an account of the creation story describing the first jingle dress. It was this mythic experience that served as a model for the many Anishinabe women who waited for a specific dream to inform them of the colour and design of dress they should undertake to make. This story recounted a sanctioning practice for a craftmaking activity that served as a cultural way to limit both possessions and the over-harvesting of material. After becoming aware of such sanctioning notions, I began to explore this idea in relationship to other craftmaking activities in cultures around the world.

b) Developing the Harvesting Guidepost

Throughout my own readings and experiences in the north I learned about the offerings and prayers spoken before harvesting a material by many cultures. I enjoyed this cross-cultural similarity among craft makers and recognized that such activities and their underlying beliefs in little "invisible" people, spirits, fairies and memmiigwiishic, reveals some sense that the land is animate and shared by all its inhabitants. These seemingly small rituals speak of a need to "give back" or provide compensation to the land or spirits for any harmful human interactions, or for material that is taken. My experience of

offerings and prayers was that such acts encouraged attendance towards something not seen but recognized as being present—something that is alive.

As I formed the practice of making such gestures, I found myself participating in and thinking about sustainable harvesting practices and their associated concern for the more-than-human world. As an educator I started to pay attention to any similar tradition or cultural belief that led to critical questioning about sustainability and what made such practices more or less readily acceptable.

Usually my Anishinabe friends would put out tobacco before harvesting a material and I would do the same in respect for their tradition. It took some years before this act became comfortable for me and I would do it on my own. At times I found myself questioning whether I was doing something culturally inappropriate when using tobacco as an offering, as this practice and substance was not a part of my own heritage. A few times I was in situations where others raised similar questions. As I shared with people what I knew of the ways similar rituals were performed by various groups, I found these others becoming more at ease. Frequently they recognized something within their own culture that was similar and connected them to the cultural-based ideas that were being identified and shared. Through careful and sensitive examination of another culture, I discovered I actually learned more about my own culture and similar specific acts of intent or inter-cultural wisdom that can be shared and reclaimed through participation in various gestures.⁸

⁸ Examples of various offerings used around the world can be found in the suggested teaching activities for the harvesting guidepost (see Appendix C).

Now to place people at ease, I introduce this idea by sharing the struggles I initially had of participating in such a tradition and my discovery of the ways this concept of “offering” exists in my own and others’ cultural heritage. Typically I list my findings of the cultural ways people have traditionally used to make gestures before harvesting material. This approach directs attention towards people asking them self what type of gesture or offering feels appropriate to them in that situation. Such an orientation also encourages people to question why practices that involve acknowledging the land as alive have disappeared, to explore the values that reside in practicing this tradition and to consider reclaiming these practices in some way.

c) Developing a Returning Back Guidepost

I encountered the idea of returning material back to the land to compost when I once asked for a “scrap” of leather. My instructor replied she had no scraps, just remnants. Her response taught me to consider carefully the power of the spoken word in shaping a person’s perception of something. Now I try to avoid using derogatory word like *scraps* for anything, especially the skin of a creature. Words seem capable of shaping and encouraging an action. Specific chosen words, such as “recyclable item” instead of “garbage” remind a person that nothing should be removed from the natural cycles of—should be placed in a plastic bag in a waste receptacle destined for a dumpsite. By examining many art and craft activity books, even those entitled Ecoart, I realized that most making activities actually produce more items destined for a garbage can. Craftmaking needs to reclaim lore and instill practices that lead to recycling and composting routines in peoples’ lives. I have gone out of my way many times to put all

remaining craftmaking organic material outside on the forest floor, since I first took note of the distinction between "scrap" and "remnant." As an environmental educator I now convey this story and its message to students I teach in craftmaking sessions.

Craftmaking as an Activity of Connection

Over the years I continued to experience craftmaking activities and tried to determine how these various activities and cultural lore shaped perceptions of the world. The many common features that bound craftmaking activities among diverse groups of people intrigued me. I became interested in the manner in which all races, genders, and ethnic groups did craftmaking activities. By actively addressing the commonalities embedded in the craftmaking process, I retained honesty to my own experiences of craftmaking that placed an emphasis on the utility aspect of a craft as required by all people. My need to know how to repair snowshoes was based on my being a citizen of a place, requiring a means to travel in a specific environment, more so than as any human being of a particular heritage or gender. My research and the pedagogy which resulted focuses on the process of creating useful items, and how that usefulness shapes a person's perception of personal relationship to the more-than-human world. I recognize that various social factors work together to shape a person and that person's understanding of the land. My emphasis has been to first understand the factors within the relationship between the human and more-than-human worlds that occurs through the creation of a useful item, and then to address the ways in which this relationship has been affected by social factors.

In tracing my ancestry, I cannot call myself a North American Native or an Aboriginal person, yet through the awareness and guidance I received from contact with Anishinabe cultural ways and through my own human need for making, I have acquired the sense of a living Earth that is similar to that of an Aboriginal person. My animistic view of the land was nurtured through my desire to focus on traditional nature-based craft activities, despite the constant pressure to conform to the science of dead matter. I initially turned to Aboriginal and specifically the Anishinabe⁹ cultural teachings that I found myself most often working within, because they offered me an alternative perspective of the world. Now I recognize that such alternative perspectives were once common in many cultures, including my own Celtic ancestry. Many Anishinabe people have encouraged white people to look into their own heritage to find these common perceptions.¹⁰ Craftmaking interests have enabled me to search for the "triggers" that help me shift from the ACID human-derived notions to land-based perceptions. In reflecting upon craftmaking experiences that have shaped my views of the world, which embrace animate perceptions, I have noticed two kinds of processes. The first pertains to readily accepted participation of an activity that leads to a particular practice or perception. For instance, a large group celebration or a small private ritual can routinely serve to gently,

⁹ Anishinabe is the term used by the people of Northwestern Ontario to refer to themselves. In the past other people have also called them Ojibway or Chippewa. Sometimes the term Anishinabe is also used in their own language to mean a member of the large Algonquin Nation and to some the term is even used to refer to any North American Native person, not just those from their own cultural grouping.

¹⁰ Celtic examples of an animate earth occur in the Scottish story of the land influencing tartan patterning (David Campbell cassette, "Tales from the Fire") and Irish stories of protected groves of reeds that are left alone for the fairy folk (Mary Louise Chown, Winnipeg storyteller). Ron Evans, a Metis storyteller, speaks about the common experiences that all people, of every race, share and that allow everyone to enter a mythological (animated) sense of the world (personal conversation).

and repeatedly, draw people's attention to the more-than-human world. Drawing such attention is also embedded in the structure of a language. Asking for a *greening* branch in comparison to a *green* branch encourages anything with a colour to be performing an action and therefore be recognized as something alive.¹¹

The second kind of process I have noticed in craftmaking experiences are transformational moments. They allude to a sudden strong sense of awareness that confirms perceptions of the world as animate. I previously offered an example of this sense when I said I felt watched by trees in a forest. Another example that was shaped by my many previous craftmaking endeavors and that resulted in my use of the expression "being of the land" merits further elaboration as follows.

Connecting the Experience of Craftmaking to the Expression "Being of the World"

I have watched students break into a spontaneous dance after carving a paddle. I have led traditional voyageur paddle dances across this continent on numerous occasions and participated in canoe ballets for hundreds of people. These were incredible events inspired by the activities of a craft, like the making of a paddle or canoe. Participating in such moments that exhibit a joyful ignition of being, supports the concept that craftmaking can encourage a certain sense of being of the world. Others have expressed

¹¹ This example comes from an Ojibwe language class. The instructor was trying to explain to English speakers the way colours are considered verbs in the Ojibwe language. Later, when I took a Scottish Gaelic class, I learned a similar notion. In Gaelic a person cannot directly say, "this is my house." A better interpretation of a Gaelic passage would mean, "this is the house I am closest to." Upon hearing this translation I immediately thought about the ways language encourages us to consider things as owned or incapable of being owned. This example influenced my understanding of the seeking guidepost when craft makers are encouraged to consider concepts of property ownership regarding sources of material.

this sense, and I myself have experienced numerous deep connections of a place and a craft.

Along a lake shore in northwestern Ontario's Canadian Shield country, I harvested wild rice with my Anishinabe friends. Most people present had just spent the morning "combing" the Earth's hair with knocking sticks, so the wild rice would fall into our canoes. The sky was blue, the sun a warm yellow that matched the aspen and birch leaves overhead. Students had carried, on two sturdy sticks, a heavy black iron cauldron to this location. Two bark lodges were nearby, which elders had made for teaching and interpretation purposes. A fire crackled and heated a pot of water for tea. A few children hunted for an old paddle to use to stir the rice in the huge cauldron. Elders started shooing children away from their play area downwind where the rice shafts would be tossed from a bark-winnowing tray.

Everyone present was joking and teasing each other. Would the old men remember the songs to sing for the young men wearing "dancing on" moccasins? Could the young men dance well enough to break the outer shafts off the wild rice grains? Were the women out of practice, no longer able to paddle the rice to parch it dry? I put down my camera and let my mind loosen from the busyness of trying to capture, in picture format, all the details of my first day of wild-ricing.

I decided just to be with everything happening around me. Moments drifted by as I became saturated in this whole scene. The elder next to me was quietly sitting on the ground, focusing on stitching together a birch bark-winnowing tray. Her working hands

took my thoughts back to the bark basket on my bedroom shelf. My busy mind was softening and I was drifting into being part of this birch forest.

The feel of this experience was important. It was the feel that seemed to hold all the answers to my craftmaking questions including why I was human. I melded into this scene as if stitched onto the skin of the basket being made. Yet, I was not only a basket; I was also the wild rice parching in the cauldron and the golden leaves fluttering over head. My roots could feel the children running around on the ground. I was no longer a mind on two legs taking pictures. I was a birch forest.

As I try to recall my awareness then, it seems very wrapped up in the childhood questions I had asked of an old birch bark basket. Somehow the basket guided me to this exquisitely rich state of being, a feeling of resonance around me, where the birch forest and I were one, breathing through fluttering leaves. I could have remained part of that resonance forever, so alive with creation. Somehow I did fade out of that reality and now I sit typing at the keyboard, trying to recall all of what made that moment possible.

My experience of being a birch forest arose from all my previous craftmaking experiences. My "making" adventures had broadened my ability to perceive the world as a forest of which I was part, because every item I required that day, I was now relatively competent of handling. I gathered the wild rice from the canoe I had made and I taught others how to make paddles and clay pots in which wild rice could have been parched. I could tan a hide and had made the moccasins the dancers were wearing. The previous summer I learned how birch trees were aware of what I did in the forest, and I had made my own winnowing tray.

There was no invisible extension cord powering this experience, no dependency on purchased equipment. Everything was practical and makeable. My body and hands knew so, not just my mind. I was more competent now that I knew how to walk into the forest and return with whatever was needed to make the crafts that this experience depended upon. What did this sense of my competency reflect? Perhaps it was a single gift from the birch trees, in a long line of offerings interwoven with generations of ancestors who traveled and lived in the northwoods.

I had given of myself and in return became fully a part of the dynamics and interrelationships developing that day. I was aware that only minimal basic needs were being met, as there had been no excessive taking. It was like the elder had encouraged, leaving enough wild rice still on the stalks so that the ducks can find food before journeying to their southern home. Human participation seemed sustainable and in friendly relationship with all northwoods residents. I was a neighbour, kin really, to the more-than-human, an integral part of that place, a birch forest full of "trees of life;" I had been full of "being of the world."

When I share this or similar stories of "being of the world," there usually is an eager audience of listeners. Other people relate to such personal stories as they resonate with something deep inside, something that touches a chord with some distant perception of the world inside them. Through sharing stories of craftmaking, I have found that people make connections to each other and to the long chain of events that have shaped relationships with the more-than-human world. It is through better understanding of these relationships that a deeper understanding of ourselves as humans will emerge. One

strength of a craftmaking pedagogy rests in the way each guidepost can be explained through story. This means is better than an analytical discourse that frequently creates distance and separation from everyday actions and understanding.

If educators and nature-thought philosophers frequently suggest that environmental degradation stems from our inability to perceive ourselves as part of nature, then educators must explore ways to create an integrated perception. Seldom do I find practices and curricula that encourage recognition of ourselves as part of nature. My reflections on making in general and on craftmaking experiences specifically have allowed me to understand a range of perceptions of the land: nature as other, nature as self and nature as miracle.¹²

In this chapter I have shared my own personal accounts of various perceptions of the world associated with my craftmaking experience that encourage recognition of my self as part of a very animate world. In this perception the more-than-human has value and is heeded in human decision making processes.¹³ As pedagogy, craftmaking encourages people to walk the talk of being of the land.

The next chapter moves beyond my own craftmaking experiences to add the voices of four influential people who also recognize craftmaking as a practice of environmental awareness. These four voices arose from my search to know what had

¹² Other perceptions of self and nature are addressed in Neil Evernden's writing. This simplification of just three perceptions is outlined in his "Nature in Industrial Society" article.

¹³ This concept is also raised in the Cherokee teaching story *Who Speaks for Wolf*. In this story villagers must decide where they should move their village and throughout their decision making process they forget to heed their ancestral practice of asking wolf's advice. As a result the village is moved to a poor location and famine soon results. A solution is only found when they return to valuing the more-than-human advice wolf is capable of giving.

come before me in regard to a pedagogy that combined craftmaking and environmental education.

Chapter Two:

From the Past: Four Educators and their Ideas on Craftmaking

Many people currently work or have worked in the past at promoting a craft-based education. Among the people whose efforts are best known, few have specifically focused on the connection between craftmaking and environmental education. Rather, most craft-based education efforts have been established with a focus towards economic stimulation, for instance, as a means to promote local cultures for the purposes of tourism. Sometimes recording the way that crafts were traditionally made became part of a school's writing program or an author's chance to encourage and retain self-reliance skills.¹ Little such writing, and few educational programs with economic links to tourism, pertained specifically to my work that explored the relationship between craftmaking experiences and environmental awareness.

Seeking to find the history of craftmaking curricula arising from, or in association with, environmental education did, however, lead to the works of four influential educators: Rudolf Steiner, Mahatma Gandhi, Kurt Hahn and Ernest Thompson Seton. Notably, these four are all men and either from, or educated in, an ACID-based culture. Little relevant information could be found from the voices of women or minority groups, which is undoubtedly a reflection of the restricted roles women and "other" formerly had in shaping formal educational curricula, and of the overwhelming emphasis on written,

¹ An introduction to some of these craft-based writers and educational programs may be made from the following sources and books: William Morris's Selected Writings and Design, Eliot Wigginton, The Foxfire Book and Foxfire Series, Scott Nearing Living the Good Life, Ian McKay In Quest of the Folk, and the John C. Campbell Folk School in North Carolina, <http://www.folkschool.org> .

instead of oral, documentation in dominant cultures. The known work done by women is not addressed in this study because of its limited association with environmental education. That women craftmakers are virtually silent on environmental issues likely results from the political structures that formerly limited their voices rather than from their having nothing relevant to add of knowledge in this area.

The discussion of each educator will involve four sections devoted to the following: the influence of voice; program philosophy; program structure; and program in association with nature study. The ideas of these educators provide some historical context for understanding the ways craftmaking curricula have been effectively used, and could continue, to promote environmental awareness.

Rudolf Steiner (1861-1925) — Waldorf Education

Influence of Voice

Rudolf Steiner of Germany was the founder of what is today known as Waldorf Education. Over 400 schools exist today in some twenty countries and represent one of the best examples of a holistic education program. Waldorf education aims to create learning environments that nurture both faculties of a person: the spiritual and the scientific perceptions. Steiner personally rejected the mind/matter dualism that existed in mainstream society and instead sought integrated and mutually complementary processes in child development. His own education in the sciences as well as the clairvoyant faculty (ability to perceive things beyond normal sensory perception) made him an ideal guide for others who were concerned about the cultural degradation that accompanied

industrialized states,² and who sought alternative educational programs. Steiner identified handwork, also referred to as handicrafts, as a critical component of a child's healthy development in both faculties. One of the many links the handwork program creates in a child's development is a greater awareness of the natural world.

Waldorf education became the elementary and high school pedagogy that arose from Steiner's ideas. The following passage from Steiner clarifies the type of awareness and perception that Waldorf education attempts to nurture in a child.

The capacities by which we gain insights into the higher worlds lie dormant within each of us. Mystics, gnostics, and theosophists have always spoken of a world of soul and spirit that is as real to them as the world we can see with our eyes and touch with our hands. Listening to them, we can say to ourselves at every moment: AI know that I, too, can experience what they talk about, if only I unfold certain forces within me today that lie dormant there." All we need to know is how to begin to develop these faculties for ourselves.

Only those who have already developed such powers for themselves can help us to do this. From the beginning of the human race a form of schooling has always existed in which persons possessing higher faculties guide those who seek to develop these faculties for themselves. Such schooling is called esoteric or mystery schooling and the instruction one receives there is called esoteric or occult teaching . . .

In actuality esoteric or inner knowledge is no different from other kinds of human knowledge and ability. It is a mystery for the average person only to the extent that writing is a mystery for those who have not yet learned to write. Just as, given the right teaching methods, anyone can

² In Steiner's later reflection upon this time he wrote "In the spiritual domain, a new light upon the evolution of humanity was seeking to break through into the knowledge gained during the last third of the nineteenth century. But the spiritual sleep caused by the materialistic interpretation of these acquisitions in knowledge prevented any inkling of this, much less any awareness of it" (Qtd. in Davy 14). Steiner had no desire to set himself up as a spiritual leader, he simply recognized that little guidance was available "to introduce into life the impulses from the world of the spirit" (15). Steiner would spend the final decades of his life trying to articulate and establish activities and curriculum that would allow a means of "spiritual science" to be retained. That is to say that adults would be educated in a manner that allowed them to perceive things in both a scientific and spiritual manner. He recognized "the arts as a crucial bridge for translating spiritual science into social and cultural innovation" (Davy 15). Steiner's concept of Anthroposophy was directed at "nurturing a path of knowledge in freedom and love in action which can meet the deep and pressing needs of our times" (18).

learn to write, so too anyone can become a student of esoteric knowledge and, yes, even a teacher of it, if he or she follows the appropriate path. Ordinary knowledge and ability differ from esoteric knowledge in one respect only. A person may not have the possibility of learning to write because of the cultural conditions or poverty he or she is born into, but no one who seeks sincerely will find any barriers to achieving knowledge and abilities in the higher worlds. (Steiner Renewal i)

Program Philosophy

The basis of Waldorf education comprises the *thinking, feeling* and *willing* aspects of an individual that Steiner described in his notion of the 'three-fold person.' Patricia Livingston, a Waldorf handwork educator explains:

In the mature artist, handwork and crafts become a balanced activity of thinking, feeling and willing. The will is the part of us that is most asleep. Handwork can gently wake up and educate the will starting at an early age. Why is this so important?

The will is ultimately connected to the thinking. It is really the task of every Waldorf teacher to help the children become clear, imaginative thinkers, human beings who can go into any profession or any area of work with new, creative ideas (Renewal 11)

In Waldorf education, handwork demonstrates the blending of the thinking, feeling and willing capacities in a child, yet is also recognized as the activity that blends a person's notions of self and world.

According to Steiner, an educator's role is to ensure that a child makes a smooth developmental progression from play to work, which he considered the imaginative thinking of adults. Through creating attentiveness to the beauty, colour and form existing in the world and through the awakening that results through the use of the hands, handwork forms a bridge between play and work. "The activity of the fingers stirs the senses that connect the child to the world, and his whole life of thought begins to move"

(Livingston Renewal 14). Handwork serves not only as a transition path from play to work, but also between the inner and outer world of a person. “Thinking is encouraged to come from the inner world through the heart to the outward world. Play is recognized as originating from the inner needs of a child, while work is determined from the needs of the outside world” (Livingston Waldorf Schools 125).

Waldorf education recognizes both the practical skills and the personal attributes that are derived simultaneously from craftmaking. For instance, in handwork classes children learn practical skills: building a home, creating their clothing, using and caring for tools and respecting the materials involved in craftmaking. Students initially work in some prescribed manner to develop their skill and will in order to complete a project. Then they are gradually introduced to the idea of creating their own designs that lead to a well made piece of work. “It is a most satisfying experience to make something and see the practical results. This is true confidence building” (Livingston Renewal 11). Students learn to take personal care, demonstrate concern and foster a type of self-reliance and resourcefulness while experiencing achievement with a few simple materials and tools (12). Livingston mentions that such experiences aid students in maintaining interest in a project because they learn the problem-solving “magic trick” An example is the way a rope can be inserted to create a drawstring. The resourcefulness established in craft work is thought to also lead to an overall resourcefulness in solving other problems (12). Children who see the results of their efforts not only gain confidence in themselves but also develop a “why be afraid of the world when one can do so much with so little” outlook (Livingston Schools 126). Handwork is included in the Waldorf curriculum

because it is acknowledged as an activity that stimulates children's inventive powers, thereby increasing creative ability when facing the unknown. Such capacities are recognized as necessary qualities required by adults to live well in the world.

Concentration is also derived from craftmaking. Waldorf education emphasizes knitting in grade one because, as Schwartz expresses, needles are held in both hands and

. . . laterality is immediately established as well as the eye's control over the hand . . . steady controlled hands . . . the power of concentration is aroused — there is no other activity performed by seven or eight year-olds that can evoke such a degree of attentiveness as knitting. This training in concentration will go far in supporting problem-solving abilities in later years (Schwartz 59).

Steiner recognized that the basic elements influencing judgment are the development of sensory skills and perceptual awareness. Livingston explains Steiner's insistence upon

. . . this radical innovation [of handwork and crafts being taught in all the grades] because, he said, handwork and crafts lead to the enhancement of judgment. Judgment comes out of the imaginative forces, working through the heart. It is not the head alone but the whole human being that forms a judgment. Many of the senses are used in handwork — sight, touch, movement, balance, and so on. The senses take in different impressions of the world and join them together to form a judgment. Our hands bring us into a deeper, closer relationship to the world and therefore, to a greater understanding of humanity (Renewal 11).

Livingston acknowledges the sensory stimulation embedded in hand work and states that “much of hand work has to do with waking up, seeing things, and noticing details” (Renewal 11). She relates this idea to recent brain research that has found “that using the hands opens up neurological pathways that would otherwise atrophy. The interrelationship of the hand and eye working together allow more neurological pathways

to function” (Renewal 11). Good judgment seems rooted in the sensory stimulation aroused from touching earth-based material.³

Rudolf Steiner created a holistic based education program that would nurture all aspects of a child and aid their transition into adult life through several pedagogical ideas of which one was through the careful selection of stories that nurtured both the conscious and unconscious world of the child. The “warmth” of the gift of wool, the “magic tales” of learning to spin to create the yarn, and the enchantment of using one’s hands to knit are all aspects carefully woven and skillfully crafted into the handwork lessons at a Waldorf school. They were never explained objectively step by step, but unfolded through stories and questions that guided one’s perception of the world through various stages of awareness. The end result was a holistic impression such as Steiner’s concept that “Thinking is cosmic knitting”: the continuous thread of thinking weaves itself into whole hands and the head? We must call upon the feelings. Color awakens interest, enthusiasm and joy in the child. He should be given the beautiful colors he so eagerly responds to in nature. He must develop a sensitivity toward colors, really observe them, and be aware of how they affect one another. . . The child responds and the activity of the limbs works with the feelings and stimulates the processes of the head. It should be a harmonious rhythmical activity. The child must begin to be conscious. He counts his stitches; he must know when one is missing. . . . such things slowly bring the child out of his unconscious world. (Livingston, Schools 127)

The emphasis on shifting from the conscious to the unconscious world also indirectly explains why Waldorf education tends to incorporate lessons based upon creating functional in comparison to abstract items. Schwartz elaborates in Waldorf Schools by stating that the functional items are used and thereby convey and embed a sense of value in the creation process as,

³ Schwartz provides an interesting example of this when she relates the origin of the game of chess and the mathematical approach of algebra to have occurred around the same time knitting seems to have been developed. Schwartz states "It is significant that the most intellectual of games and the most thought-out approach to numerical problems accompanied the development of knitting. It was as though a new degree of adeptness in the hand had to go side by side with newly discovered capacities in the head" (Schwartz Waldorf Education 58).

. . . we cannot underestimate the self-esteem and joy that arises in the child as the result of having made something practical and beautiful - something which has arisen as the result of a skill that has been learned. In an age when children are too often passive consumers, who, as Oscar Wilde once said, “know the price of everything and the value of nothing,” learning to knit can be a powerful way of bringing meaning into a child’s life. (59)

Program Structure

The Waldorf handwork program is sequentially designed to consider a child’s physical, mental and spiritual growth patterns. The program starts in kindergarten where children play with wool and other simple natural materials that allow them to nourish their imaginative skills. The care and patience that they will someday use in handwork is role modeled by their teachers.

The sense of order, form, color and beauty in dealing with the materials of the world is expressed by the kindergarten child in the care with which he sets the table, chooses a mat to go under the candle . . . learning a real craft draws them away too soon from this imaginative world. . . . better to imitate the adult knitting than . . . to learn to do one or two things with threads. (Livingston Schools 127)

The teacher creates an environment that allows children to imitate acts that demonstrate to them a sense of reverence for the natural world and the hand-made items that surround them.

In grade one, the handwork curriculum involves learning to knit which corresponds to the intellectual development that is starting to take hold. This activity fully embraces Steiner’s notion that “thinking is cosmic knitting.” The handicraft teacher of a Waldorf school unravels with the students the mystery in the gift of wool from the sheep to the many magical tales of spinning yarn, to the actual completion of a knitted recorder

case by the end of the year.⁴ Grade two will introduce the child to crocheting geometric shapes. Grade three is based upon the completion of a carefully designed hand-stitched pouch and a home study unit that actively engages the child in measuring the world and comparing

. . . how people around the world build their houses in accordance with climate and available materials. . . . we talk about how the whole earth is a home, the rock foundation providing a solid flooring, the vaulted sky a roof overhead. We consider how each of us lives in his own body as in a house, with the sense organs in the head for windows and doors through which to communicate with the world. (Berlin Schools 130)

Beyond grade four, a series of woodworking and more elaborate knitting and sewing projects are continued until the child reaches high school where craft skills in different materials, such as metal work, unfold.

In grade eight, students are introduced to the historical changes that the industrial revolution created in society, so that by grade nine they will be better able to respect the complex machinery they begin to use. Historical social analysis is integrated into the decision making process encountered through practical skill work. “Steiner considered it absolutely essential that each man, who, for example, uses a streetcar, know what happens technically so that he really understands how such motion can be accomplished” (Martin Will 182). Steiner believed that to learn about a culture one must immerse oneself in that culture. So by tenth grade students would be experiencing the “Practical

⁴ This knitted case will accompany the child throughout the rest of their elementary school years as if a reminder of all the earlier lessons associated with knitting and as a reminder to how even small hands when dedicated to a task can accomplish wonderful things.

Life Studies” that enable their culture to exist, such as mechanics, spinning, weaving, soap making, surveying, etc.

Program in Association with Nature Study

Waldorf Education Handcraft program is designed to impart to a child the confidence and skill to live well, with joy and in harmony with all the other creatures of the world. Berlin describes the successful result of a home-building unit in which grade three students create a small building:

It engenders gratitude, both to the natural world and to our fellow men for their services, and respect for materials and human skills. It also allows confidence to grow. At the end of our studies, one third grade boy went home to tell his mother, “If I had the materials now, I could build you a house!” (131)

At a Waldorf school, craft material is as organic and natural as possible. Even the crayons are made with beeswax, so the child becomes comfortable with the smell and feel of natural based material. As Livingston states, “the gifts of nature fill our handwork lessons and create an opportunity to involve the children in the world of ecology and social interaction” (Renewal 12). As part of the handicraft lesson, students “learn of the sources of these materials, about the natural dyes used to color them, and how human beings have contributed to their development and to their use. Respect and reverence are fostered for all we receive and for how humankind and nature work together”(12).

Livingston (“Importance” 10-13) summarizes how Waldorf philosophy, through the use of handwork, creates perspectives capable of dealing with today’s social and ecological environment.

In a first grade, as the children use their beautiful wool, one can talk about the sheep. At the Rudolf Steiner School in Great Barrington, Massachusetts, there is a sheep farm. Many children pass the farm daily and watch the sheep gradually grow heavy with wool. Then suddenly one day they see the sheep — rather shocking experience, but an opportunity to discuss how generously the sheep give their wool for our scarves, and also to talk about the craftsmen who spin it into yarn for us. First-grade children know from the fairy tales how “magical” spinning is and still retain a feeling of wonder about spinning straw into gold. One can also speak about the trees from which our wooden needles are made. The children learn to value and not waste these gifts. Conversations such as these continue into the upper grades, changing according to the age of the children, the crafts they are learning, and the materials they are using. At the appropriate time modern technology will also be discussed.

All this helps the children make a real connection to their surroundings, closing a gap created by a modern world in which everything appears out of stores in a somewhat abstract way, made out of unimaginable materials which seem worthless and easily disposable. The children see so much waste! Through the handwork classes they gain a realistic knowledge of and reverence for the world of nature, and become aware of the ecological problems that arise in our modern world. We need to encourage new perspectives and foster a real social consciousness. (Renewal 12-13)

Waldorf handwork enables students to create perspectives of themselves as functioning citizens of the world, consciously aware of their relationship with the natural entities they rely upon. “Children who learn while they are young to make practical things by hand in an artistic way, and for the benefit of others as well as themselves, will not be strangers to life or to other people when they are older. They will be able to form their lives and their relationships in a social and artistic way, so that their lives are thereby enriched” (qtd. in Livingston Schools 128). Livingston relates to the Waldorf handwork program and Steiner’s notion of what causes estrangement:

Making things, using material from nature, makes one aware of all that the world has to give. For this reason it is important that the child be given natural fibers to work with. He should develop respect and

appreciation for the earth out of which grows the cotton that magically becomes a pot holder, wonder for the trees that give him his knitting needles, and great love for the sheep whose warm fleece becomes the wool he knits into his soft scarf. These are the seeds for understanding all that man and nature can do together and how human beings depend on one another. In this way, a true social impulse is born . . . When a child makes something he can use or wear, such as a pair of socks, and makes a connection with something that would otherwise remain outside his conscious experience, he again becomes closer to the outside world and makes a step toward wholeness. It is a problem of our times that people feel cut off from their surroundings. To know how the ordinary things we use in life come into being makes one less of a stranger in one's environment. (Schools 126)

Waldorf education offers an excellent example of a craftmaking curriculum that can span a child's school years.

Mahatma Gandhi (1869-1948) — Popular Education

Influence of Voice

Mohandas K Gandhi had a vision that was based upon the importance of labour, and particularly craft labour, for all people. His work provides important examples of an effective popular education approach as millions of people were influenced by his ideas. Gandhi's expression and practice of his vision enabled him to become a moral authority within India, capable of leading the masses of people towards an independent and more self-reliant state. He is best known for his guidance in creating a non-violent revolution in India in mid-20th century. He acquired the name Mahatma or "great soul" from the people who recognized his ability to employ the use of civil disobedience, combined with daily acts of labour such as weaving, shoemaking and gardening, into a satisfying and fulfilling life. This life of contentment he aimed to make accessible not just to some, but to all.

Through restoring the notion of dignity in labour, Gandhi demonstrated “the advantage of practicing ethics over preaching them, the satisfaction of country life and crafts, the nobility of traditional art, and the value of simplicity as against extravagance” (McLaughlin 24). Gandhi’s life-changing realization that led to his understanding of the importance of craftmaking came when he read Unto This Last by Ruskin.⁵ This book clarified for him how labour, such as gardening and craft work, creates an economic theory that can be rooted in love and justice for all.⁶ Ruskin was a poet, art critic and writer who concentrated on the Amoral basis of any true economics” and “criticized the economic thinking of his day that emphasized material wealth at the expense of social welfare” (Smith 119).

Gandhi’s search for love and justice was motivated by his constant seeking of practices that best reflected his convictions. He wanted his life actions to express his understanding and genuine religion. He did not believe that religion could be separated from other things in life such as economics.⁷ His handicraft movement was economically and politically motivated, not aesthetically motivated as the Arts and Craft movement was. Gandhi’s emphasis gained a wider influence because of its relevance to the

⁵ Ruskin’s writings were also very influential for Tolstoy and William Morris. William Morris later founded a company that led to the revival of craft work in England and encouraged the creation of the Arts and Craft Movement first in Europe, then later in North America and even in Japan.

⁶ Gandhi wrote that he understood the teachings of Unto This Last to be: “1. That the good of the individual is contained in the good of all. 2. That a lawyer’s work has the same value as the barber’s in as much as all have the same right of earning their livelihood from their work. 3. That a life of labour, i.e., the life of the tiller of the soil and the craftsman is the life worth living” (Payne, 147). McLaughlin writes “Many ideas helped to shape Gandhi; many experiences led to his fundamental life-choices. Yet his first reading of Ruskin was unquestionably one of the most crucial: “it brought about,” he said, “an instantaneous and practical transformation of soul-force as a substitute for physical force; he was the chief source of Gandhi’s economic ideas; but above all, his readings changed Gandhi as a person” (15).

conditions in India (McLaughlin 114). Gandhi could motivate social justice acts because his own acts were based upon accurate knowledge of the world of appearances, such as the reality that the masses of people were starving. He fasted because it fit with his morals on non-violence. He handcrafted all that he needed because it reflected his moral beliefs concerning the dignity of labour for all. He realized that whenever he took something, whether to fulfill a want or need, he was actually taking from others. Because he did not desire to take from the millions of poor in his country, he chose a lifestyle in which he took as little as possible. His actions and morals melded to make him truly a spokesperson for the poorest of the poor. He modeled a life in which material wants were reduced in order to find happiness. Gandhi refers to Ruskin in his advocacy of poverty and writes of the ideal Indian governor “Plain living and high thinking must be his motto, not to adorn his entrance but to be exemplified in daily life” (McLaughlin 86).

Program Philosophy

Gandhi believed that all education should be craft-centered and taught “scientifically,” meaning that a successful program would derive from training both the body and the intellect. At the same time a restructuring of society towards the elimination of class divisions would result. Gandhi, who worked in the context of Indian society where the majority of people were poor and illiterate, did not think that the primary goal of education should be literacy. He thought that the “emphasis on literacy and book learning made the child a passive spectator instead of an active participant” (Leys and

⁷ Gandhi's autobiography was called The Stories of My Experiments with Truth. It is aptly named because his reference to truth was based upon his sensory-based understanding of the world around him.

Rao 48). Gandhi instead outlined how learning a rural handicraft would create the ideal villager because stimulating the senses helped to develop a child's intellectual thoughts of the world. Secondly, he demonstrated that rural handicraft education would provide a means for all children to earn a livelihood and pay for their schooling. Gandhi believed that "craft is the only medium through which the whole education of the body, the mind, and soul develops" (50).

Gandhi understood that a holistic education could only be achieved when the curricular structure was relevant and practical to the daily acts of a villager: lessons had to be economically linked to the villager's well being. He wrote in My View of Education- Object of Basic Education,

The object of basic education is the physical, intellectual and moral development of the children through the medium of a handicraft. But I hold that any scheme, which is sound from the education point of view, and is efficiently managed is bound to be sound economically. For instance, we can teach our children to make clay toys that are to be destroyed afterwards. That, too will develop their intellect. But it will neglect a very important moral principle, viz., that human labour and material should never be used in a wasteful or unproductive way. The emphasis laid on the principle of spending every minute of one's life usefully is the best education for citizenship and incidentally makes basic education self-sufficient. (114)

Gandhi discussed how village Arithmetic, village Geography, village History etc. as well as reading and writing could be taught to children using handicraft labour as the central pivot (115). By teaching lessons based upon what is done daily by a villager, Gandhi demonstrated a holistic education that linked all aspects of an — physical, intellectual and spiritual well — the economics of the village and nation. In Gandhi's words:

This education is meant to transform village children into model villagers. It is principally designed from them. . . .Basic education links the children, whether of the cities or the villages, to all that is best and lasting in India. It develops both the body and the mind, and keeps the child rooted to the soil with a glorious vision of the future in the realization of which he or she begins to take his or her share from the very commencement of his or her career in school. (Views 113)

Gandhi made apparent the link between economics and ethics by focusing on the importance of daily participation in craftmaking by all. Through forming a craft-based educational structure, Gandhi addressed how the means must be in accord with the end desires. He explained that if all people supported themselves through labour, then the resulting work must benefit all and not just a few: an item was worthy of being made if it served to provide labour for the masses so they could fulfill their basic needs. The cloth woven in Britain by large machines robbed the masses in India of dignified labour because the resulting finer fabric could only be afforded by a few in India. Gandhi arranged a boycott of British woven textiles and designed handlooms so they were affordable by the masses and would allow everyone the opportunity to spin the cloth that they required to live.

Gandhi only promoted concepts of beauty that could be had by all, including the poorest of the poor. Perceiving the world as a poor person provided the ‘truth’ Gandhi was constantly seeking. When addressing a young student who asked him “How is it that many intelligent and eminent men, who love and admire you, hold that you ruled out of the scheme of national regeneration, all considerations of Art?” (Desai Four 173). To this question on whether healing and national systems of social change can be obtained through support of artistic-based projects Gandhi replied:

There are two aspects, the outward and the inward. It is purely a matter of emphasis with me. The outward has no meaning to me at all except in so far as it helps the inward. All true Art is the expression of the soul. The outward forms have value only in so far as they are the expression of the inner spirit of man . . . I know that many call themselves artist in whose works there is absolutely no trace of the soul's upward urge and unrest . . . All true Art must help the soul to realize its inner self. In my own case I find that I can do entirely without external forms in my soul's realization. I can claim, therefore, that there is truly sufficient Art in my life, though you might not see what you call works of Art about me. My room may have blank walls; and I may even dispense with the roof, so that I may gaze out upon the starry heavens overhead that stretch in an unending expanse of beauty. What conscious Art of man can give me the scene that opens before me when I look up to the sky above with all its shining stars?" (qtd. in Desai 173-174)

Gandhi's philosophy centred on learning a village craft such as spinning that reflected a metaphor for life's truths. Gandhi writes

The spinning wheel is a symbol not of commercial war but of commercial peace. It bears not a message of ill will towards the nations of earth but of goodwill and self-help. It will not need the protection of a great military power threatening a world's peace and exploiting its resources, but it needs the religious determination of millions to spin their yarn in their own homes as today they cook their food in their own homes. I may deserve the curses of posterity for many mistakes of omission and commission, but I am confident of earning the blessing for suggesting a revival of the spinning wheel. I stake my all on it. For every revolution of the wheel spins peace, goodwill and love. (qtd. in Lauzier 1999)

Program Structure

'Education of the heart' was Gandhi's term for a pedagogy that emphasized learning and teaching in a practical and holistic manner, including moral and spiritual education as well as physical and intellectual training. Gandhi believed that an education of the heart was best done through learning a craft. An additional benefit to learning a craft was that it allowed a people to be self-supporting for their whole life. Gandhi

believed people could teach only those principles that they truly embodied and hence he perfected the practices of civil disobedience and non-violence. Others, like Thoreau and Ruskin, only wrote about civil disobedience and non-violent forms of protest but did not practice them. He also embodied his craft philosophy by first teaching himself how to spin and to make sandals. He could then expect others to demonstrate the importance of labour. Gandhi role-modeled his philosophy of education in the way he discussed issues rather than lecturing and by doing what was considered low caste craft work. His way of teaching simply became his daily demonstration of the exemplary morals he embraced.

Gandhi understood that the use of the senses was very important to childhood learning: “A child begins to learn immediately after its birth, but mostly through the eyes and ears or through the senses” (Views 57). Further, he appreciated that craftmaking activities involved a sensory education. When asked why he gave equal importance to the acquisition of knowledge and the learning of craftwork at the same time Gandhi responded,

Literacy, i.e., learning of books, acquisition of intellectual knowledge and useful manual work in various crafts are not different though they may seem so. Effort to separate them and break the link that binds them together, results in the misuse of knowledge. . . indeed, if a comparison has to be made between the two, the first place will have to be given to manual work, for a child does not use his intelligence first but his hands and feet. Gradually, he learns to use his eyes and ears and begins to understand things only when he is four or five year of age. But this does not mean that with greater power of understanding he can neglect his body. If he does so he will destroy both the body and the mind. The intellect finds its expression in action by the body. (Views 55-56)

For Gandhi, lessons were based upon “learning to use in the right way all one’s sense-organs, including the mind” (71). The intellectual development arose from the use of the

senses involved in a craft education taught with scientific overtones and theory. Gandhi's craft education had an additional benefit in that it provided a practical skill for children to learn to support themselves.

Gandhi was very persistent in his suggestion that all education be self-supporting.

He did not like the idea of state aid or exacted fees from students at either the elementary or university level. He suggested that students should do remunerative work to pay for their schooling and that this training should be compulsory, starting at a young age with the learning of a handicraft (59). Gandhi outlined a program that he believed would lead to state self-sufficiency if what was taught in elementary technological education was similar to what is taught in present adult education courses (McLaughlin 122). Gandhi recognized that his "appeal to the consumer for responsibility and simplicity" (123) could be addressed through emphasizing the importance of a craft education:

. . . the highest development of the mind and the soul is possible under such a system of education. Only every handicraft has to be taught not merely mechanically as is done to-day but scientifically, i.e., the child should know the why and the wherefore of every process. I am not writing this without some confidence, because it has the backing of experience. This method is being adopted, more or less completely, wherever spinning is being taught to workers. I have myself taught sandal-making and even spinning on these lines with good result. This method does not exclude a knowledge of History and Geography. But I find that this is best taught by transmitting such general information by word of mouth. One imparts ten times as much in this manner as by reading and writing. The signs of the alphabet may be taught later, when the pupil has learnt to distinguish wheat from chaff and when he has somewhat developed his or her tastes. . . This means all-round economy. Of course, the pupil learns mathematics whilst he is learning his handicraft . . . If all collegians were all of a sudden to forget their knowledge, the loss sustained by the sudden lapse of the memory of say a few lacs of collegians, would be as nothing compared to

the loss that the nation has sustained and is sustaining through the ocean of darkness that surrounds three hundred millions. The measure of illiteracy is no adequate measure of the prevailing ignorance among the millions of villagers . . . I would revolutionize college education and relate it to national necessities. (Views 96)

His educational revolution was based upon his call to others to “go to the villages and bury yourselves there, not as master or benefactors, but as their humble servants. Let them know what to do and how to change their modes of living from your daily conduct and way of living” (qtd. in Lauzier 1999).

Program in Association with Nature Study

Gandhi wrote mostly with reference to the millions of starving people in India. Yet, some of his remarks illuminate his understanding of the connection between human actions and the natural environment, for instance: “I needed the solitude of Sevagram. It has been my experience that I can draw my inspiration only from my natural — surroundings in which I live” (qtd. in Desai At 404).

In his continual striving for “Truth,” Gandhi used no time to write on anything that could be construed as an abstraction or that did not directly address the starving millions of India.⁸ By encouraging people to trace everything to its source he promoted making connections within a larger context. Gandhi understood how industrial production

⁸ Much of what is known about Gandhi’s views on concepts of art and beauty come from a recording of a conversation he had with a student. In this conversation Gandhi mentions that in his mind Jesus was a “supreme artist because he saw and expressed Truth.” When also referring to Muhammad he adds “. . . both of them strove first for Truth, therefore the grace of expression naturally came in. Yet neither Jesus nor Muhammad wrote on Art. That is the Truth and Beauty I crave for, live for, and would die for.” Gandhi summarizes his conversation with the student with “the millions we cannot give that training to acquire a perception of Beauty in such a way as to see Truth in it. Show them Truth first and they will see Beauty afterwards. . . whatever can be useful to those starving millions is beautiful to my mind. Let us give today first the vital things of life, and all the graces and ornaments of life will follow” (Homer 180-181).

methods fostered living on stolen wealth (Views 70), and he argued against doing so: “The spinning wheel is the reviving draught for the millions of our dying countrymen and countrywomen. Why should I, who have no need to work for food, spin? may be the question asked. Because I am eating what does not belong to me. I am living on the spoliation of my country men. Trace the course of every piece that finds its way into your pocket, and you will realize the truth of what I write” (qtd. in Homer 229).

Gandhi's ideas emphasize the importance of the link between the way an item is made and the economic system that everyone including craftmakers live within. When discussing wealth and life, Gandhi quoted the following passage from Ruskin:

THERE IS NO WEALTH BUT LIFE: That country is the richest which nourishes the greatest number of noble and happy human beings; that man is richest who, having perfected the functions of his own life to the utmost, has also the widest helpful influence, both personal, and by means of possessions, over the lives of others. (McLaughlin 27)

Gandhi believed that the elementary necessities of life, land on which to produce food and the materials required to make crafts, should remain in the control of the masses (Leys and Rao 55). “These should be freely available to all as God’s air and water are or ought to be; they should not be made a vehicle of traffic for the exploitation of others” (qtd. in Leys and Rao 55). His economic concerns addressed the strife that can result when access to land and material become limited to only a few.

Gandhi recognized that a leader above all else should be selfless (McLaughlin 48). His notion of “selfless” had wide implications for the whole world, not just financially poor humans. Gandhi’s strict vegetarianism and his denunciation of material possessions demonstrate his non-violence approach to all others. His emphasis on craft education and

craft labour were rooted in his desire to do the least harm possible to the more-than-human world.

Gandhi believed that a leader became a leader through selfless awareness and that such a capability led to “leaders because they are the leading servants of their masses’ esteem” and not their own self desires (McLaughlin 48). Gandhi’s notion of service began with the individual but ended with a concept of the world. In reference to Gandhi, McLaughlin states:

As the individual’s influence depends on self-sacrifice for the group, so, he thought, the nation’s influence depends on service to the world: “the individual sacrifices himself for the community, the community for the district, the district for the province, the province for the nation, the nation for the world” (48-49).

Kurt Hahn (1886-1974) — Experiential Education

Influence of Voice

Kurt Hahn played a significant role in founding many educational programs initially in England, Germany and Scotland, and later around the world. His programs typically were based upon expedition and adventure learning.⁹ His educational concepts are highly regarded and formed the foundation of the experiential education movement. Less is known about his personal emphasis on craft projects. He regarded craft projects as important educational experiences that encouraged the development of qualities

⁹ Institutions and programs Hahn helped to found are Salem (Peace) School, Germany; Gordonstoun School, Scotland; the County Badge System, United Kingdom, which later became the Duke of Edinburgh Award Scheme; International; Outward Bound, International; Atlantic College, Wales; Pacific College, British Columbia, Canada; and the Round Square Conference, International (Richards iv).

pertaining to what he called “active citizenship.” Hahn himself emphasized the implementation of craft-based projects in his many exceptional education programs.

Educational Philosophy

Hahn’s educational ideas were inspired by his quest to find activities for youth that could develop the “moral equivalency to war”¹⁰ (Richards 88). Of the activities he considered in order to achieve this end, he highly approved of sending students to work with skilled master-crafters, thereby compelling them to develop what he called “grande passion” through the undertaking of a major craft. In students’ school reports, Hahn ensured that teachers made comments about their pupils with respect to areas that he considered more important than academic grades, including public spirit, a sense of justice and skill in craft work¹¹ (Flavin 15). Hahn’s concept of education was simple: it was to develop a person to be righteous, vigilant and an active citizen who had a sense of duty to his fellow person and to God (13). To Hahn, craftmaking aided children in these endeavours.

Hahn adapted his educational ideas from many sources, such as Plato and the public school system, as he believed there was merit in taking good ideas from wherever he could find them. Hahn frequently stated, “In education, as in medicine, you must harvest the wisdom of a thousand years (qtd. in Richards 13). He would accompany this

¹⁰ The concept ‘moral equivalent to war’ was introduced by William James who wrote and spoke about war time life saving experiences and how there was no equivalent to them during peaceful times.

¹¹ Other qualities he included were the faculty of precise evidence, the power to do what one thinks is right in the face of skepticism, boredom or danger (e.g., exhaustion, a hostile public opinion, the shim of the moment), imagination, the power of organization (Richards 14).

statement with the question, “Would you want your appendix taken out by a doctor in the most original way possible?” (13). He believed that originality was not to be emphasized or recognized as a sign of a good education, especially if it drew attention to an individual rather than to the community within which the new idea was to serve. Hahn believed that good education was about creating good citizens, not flamboyant individuals. Hahn recognized that craft education served the community whereas art education encouraged originality, flamboyance and expression of an ego.¹²

Hahn developed some of his educational goals through his contact with Prince Max of Baden, the last Imperial chancellor of Germany. Hahn conveyed the prince’s response to his plan to open an English-type school in his castle.

Your Boarding school *is only justified if it gives health to the district*, I do not want the craftsmen to come into this Castle and teach in our atmosphere; I want you to *send the boys to the craftsmen* of the surrounding — carpenter, the blacksmith, the wheelwright, the wood-carver, the sculptor, the engineer and the locksmith. You will find *that the good artisan has a greater horror of unfinished work than the school master*. (qtd. by Richards 14; emphasis added)

¹² Flavin, describes a story that punctuated Hahn’s dislike for many of the qualities typically associated with ‘the arts’ and alludes to Hahn’s personal teaching style. A student who described himself as having a great deal of acting talent and was determined to become an actor, was asked by Hahn to explain what he had chosen to do with his life. The student replied he wanted to act because he thought he would be good at it. Hahn’s then pleaded with the student not to do this. When the young man asked Hahn why not? Hahn replied that it would ruin him because he was vain and flamboyant. That he would go to Hollywood and that would be the end of him. When next the student asked Hahn what he thought he should do, Hahn replied without hesitation. ‘You must take a piece of wood and saw through it carefully and well and when you hit a nail you must start again, without complaint.’ After a long walk and thought on this reply, the student realized there was much truth in Hahn’s response: he had little humility, craftsmanship bored him and he had no patience. From then on, he was determined to show Hahn that he could do better. He never did venture into a career in acting. At the age of twenty he painfully took up weaving and continued to do this craft all his life. Two decades later he met up with Hahn again and after giving Hahn a tour of his home and lovely garden, he commented to Hahn that his earlier remarks to him had been good and that he did become a weaver. To his astonishment, even after 20 years, Hahn was to answer ‘Yes, but a very flamboyant one’ (Flavin, 72).

The areas that Hahn emphasized were active citizenship, learning through experience, the “learning pasture” and the social declines of a diseased society.

Hahn frequently spoke about six social “declines” or “diseases” which occurred in his society, one of which was the decline of skill and care due to the weakened tradition of craftsmanship. When explaining this decline, Hahn told the story of a boy who produced a very shoddy piece of work. Hahn said to this boy, “Now this is really awful. Aren’t you ashamed of yourself?” The boy grinned and replied, “It’s the genius of the British race to muddle through!” The reply deeply bothered Hahn because he realized that in the boy’s innermost heart he believed that he had contributed to the genius of his race (Richards 21). Hahn’s numerous recountings of this story reflect how he at some level linked good craftmaking skill with the roots of civilizations — the genius of a people.

Hahn posited six indicators of social decline, namely: the decline of skill and care due to the weakened condition of craftsmanship and the decline of imagination, self-discipline, memory, compassion and physical fitness. Only one of which explicitly relates to craft in society, though others can be indirectly related to craftmaking. The decline of fitness is not just due to modern transportation but to the increase of power tools available to many people who traditionally used labour intensive hand tools. The decline of initiative and enterprise may also be related to the ease and proliferation with which materials and commodities have become available in the modern world. The incentive to make our own items is removed when the item can be readily purchased inexpensively. The decline of compassion is due to both the haste of society and distance created between maker and the user of an item. Hahn, who was very dedicated to the widespread

education of first aid as it emphasized the fellowship of serving other people, would have sought means to support today's sweat-shop labourers and improve working conditions for all people. His emphasis on service projects frequently included encouraging youth to build something to support or serve the local people.

Hahn was also well aware of how narrow the educational development of children had become due to the confines of a classroom and the pressure resulting from examinations. Hahn thought these things interrupted what he liked to call "a pasture for learning" (Richards 16). Hahn and Nold, the man with whom he worked closely in the development of the Outward Bound program, understood the structures which "pre-empted the experiential concept of education." Nold goes on to explain the apparent lack of holistic education that led to the notions of experiential education:

Traditionally, a boy learned alongside his father and a girl alongside her mother, an apprentice alongside the craftsman. It was not only skills that were learned but a spectrum of attitudes about the adult world. With the growth of literacy and the power of the written word came the artificial structure of the classroom, with its narrow emphasis on book learning. (qtd. in Richard 123)

Hahn and Nold sought a harmonious whole curriculum in all their programs. They both liked the idea of youth acquiring a more well-rounded encyclopedic type of knowledge which they felt was best accomplished with *learning by doing*. This basic idea would later form the cornerstone of the experiential education movement. Hahn and Nold emphasized that the experiential element was necessary if a sense of active citizenship or true morality in a person was to be achieved. They believed that a whole curriculum resulted only through experiences that blended the rational (reason), the spiritual

(passion) and the appetite (concupiscence) that aimed to satisfy the bodily desires for a harmonized whole¹³ (Richards 52-62). Hahn's emphasis on craft projects reflected the importance of the holistic aspect a craftmaking experience involves. Hahn implicitly recognized that craftmaking skills must be demonstrated and cannot be understood merely through book learning.

Hahn realized that craft project work provided something for a child that the growing emphasis on organized games and the sports 'industry' did not.¹⁴ In 1934 Hahn said:

We find the boy and girl of six hardly ever bored by the empty hours. We find them forever dreaming, planning, building, discovering, asking, singing and making-believe. Then suddenly all that stops together. The child home for the holidays does not know what to do with himself. Why? Organized games have begun too early. They do not necessarily damage the dreamer who takes refuge from the games in a safe and secret corner of his own. They damage the boy athlete who is thrilled by his football experiences and lured away from his own creative passions till one day they are no longer capable of revival. (qtd. by Flavin 18)

Hahn preferred the interest maintained from childhood into adulthood that craft activities and camping skills provided. By comparison he thought that sports ended after graduation.

¹³ It is interesting to note that the first North American Outward Bound school in Colorado made some assumptions that were not prevalent in the European counterparts, i.e. that man was part of nature; that urban industrial society failed to meet the natural needs of the hunter, the nomad and the adventurer; that man had yet to learn to live in harmony with the benefits of industry; that there was need to have an extended transition from youth to adulthood (Richards 124). North America's Outward Bound program would come to emphasize and lead the development of concepts of adventure activities as a means to greater education.

¹⁴ He also emphasized organized games instead of team sports, yet restricted the amount of time spent on such activities in order for youth to be given an opportunity for self-discovery through their project work and/or their 'grande passion.'

Kurt Hahn demonstrated an unwavering commitment to using craftmaking experiences as a means to develop personal skill, commitment, patience, and a love of nature, good moral character and most importantly a sense of active citizenship. His prevailing interest in practical experiences that rooted a person to the idea of serving others and their community implicitly acknowledged an emphasis on the functionality of craft work rather than the contrivances of art,¹⁵ though such a preference was never made explicit in his writings. It is unfortunate that Hahn did not commit more of his thoughts to paper in order to clarify his commitment to the use of craftmaking as an effective holistic form of educational experience that could include learning “through” nature. What remains of Kurt Hahn’s legacy is his exceptional understanding of the importance that *an experience* has for learning.

Program Structure

Hahn’s prophylactic cure for all the declines was what he called “experience-therapy” (qtd. in Richards 191). The involvement in craft apprenticeships and the completion of a craft-based project was the experience many students were both internally and externally *compelled* to have.¹⁶ Hahn clearly acknowledged the difference between forcing people into opinions and compelling them into experience. He stated

¹⁵ Flavin is one of the few authors who cared to speculate on Hahn and the educational values that he attached to craft. Flavin stated that the first value was to gain confidence from mastering things one was not naturally good at and the other was to discover a lifelong passionate hobby or career (71).

¹⁶ Hahn criticized the already well established Boy Scout organization’s inability to clearly address specific social declines or promote beneficial learning experience. To Hahn, the Boy Scout program was a system of standards and badges that did not *compel* the youth into experiences and therefore would not aid them in developing self motivation and a sense of duty (Richards, 100). Hahn thought a compelling quality was mandatory in order to address the social declines.

“We believe that it is the sin of the soul to force the young into opinions, but we consider it culpable neglect not to impel every youngster into health-giving experiences — of their inclinations” (qtd. in Richards 148). Craft projects frequently became part of the pursuit of what Hahn referred to as a “grande passion.” Grand passions were a major endeavor that youth were compelled to have. They were long term individually directed learning projects taken around or shortly after the age of puberty such as repairing sea vessels for use as rescue boats and building lighthouses.

Hahn usually saw craftmaking experiences incorporated into the curriculum through project work. He believed that a job of skill required a substantial degree of patience and he recognized that project work encouraged patience over the lust for quick results that other grading and educational methods encouraged. He believed that projects and research revealed hidden reserves of energy, determination, will and other such positive characteristics (Richard 39). Each student was required to select and pursue a project through to excellence. Success was determined by the tenacity in completing the pursuit and not just by a finite level of resulting excellence. (22). Hahn believed that hobbies were not given enough dignity nor a place of importance in the curriculum (36).

Despite Hahn’s own lack of craft skill he firmly believed in sending the bookworm to the workshop and having the practical child develop their power of logical thought (Richards 69).¹⁷ Hahn’s admiration for the skill of craft people is what probably encouraged him to send so many students to workshops to be tutored directly from

¹⁷ Hahn called himself “mechanically illiterate” and would have been incapable of the simplest task in a wood or metal-working shop (Miner and Bolt 56).

masters who demonstrated very fine skill and care in their work. He wanted the students to recognize and respect the ‘skill’ a craft person develops in order to fulfill and serve their communities’ needs.

Whether Hahn directly recognized completing a *grande passion* as an experience of “equivalency to war” is not evident. Hahn probably associated the ability to create the hunting implement, or shape the required tool that ensures community survival, to the “genius” role that allows civilization to flourish. The ‘active citizenship’, which Hahn sought to develop in youth, was demonstrated by those craftmakers whose skill served the needs of a greater entity — a person’s community.

Program in Association with Nature Study

Hahn not only compelled students into learning a craft; he also compelled students to spend time alone outdoors. He used this solo experience as a means for a person to attune to nature and ultimately to the world. Mandatory individual projects and long individual walks in silence were a part of Hahn’s earlier educational programs and today this emphasis exists in the three day solos that Outward Bound participants take. Hahn believed his programs existed not to train youth to be mountaineers or to have careers at sea but to be active citizens. The object was the strengthening of the individual through contact with the forces of nature. Hahn was interested in the “means and not the — people rather than techniques” (Richards 112). He always raised this point by emphasizing specific words in his speeches such as not “training **for** the sea” but as training **through** the sea” (Richards 88). Hahn’s emphasis on *through* the sea, or *through* the mountain, better conveys a holistic perspective, or an immersion of *being of* the world

rather than separate from the world, or an ability to draw strength and understanding through the more-than-human world.

Ernest Thompson Seton (1860-1946) — Youth Movements

Influence of Voice

Ernest Thompson Seton's well known writing and popular youth groups established him as one of the earliest environmental educators. Seton initiated a successful youth movement based upon woodcraft as a means of nature study. His program was the precursor to the Boy Scouts Association (BSA) that today is known as Scouts and exists around the world.¹⁸ The design of his original youth program, The League of Indians, drew from his training in academic institutes, his successful artistic career and his independent training as a biologist and naturalist. Seton was a pious pantheist and a well known international writer of animal stories¹⁹ (vii).

Wadland²⁰ described Seton's work as a "vanguard of a more sophisticated modern intellectual movement devoted to developing what Aldo Leopold would eventually express as an 'ecological conscience' and a 'land ethic'" (vii).

¹⁸ Seton was the first Chief Scout of the Boy Scouts of America, but he was later ousted from the organization due to personal disagreements. Baden-Powell received recognition as the founder of the Boy Scout organization despite Seton's struggle to be recognized for his early work. Seton stated, and critics later affirmed, that Baden-Powell originally obtained most of his ideas from an unpublished manuscript of Seton's that he was sent (Wadland viii).

¹⁹ Wild Animals I have Known is considered one of his more popular books and a nature study classic because it was one of the first books published that addressed the individual personalities of animals. He also produced a respectable number of scientific publications in mammalogy and ornithology such as the classic The Life-Histories of Northern Animals (Wadland viii).

²⁰ Wadland's comments on Seton are particularly insightful and directly pertain to this study because his dissertation was not an "institutional biography" of the man as are most other resource books on Seton. Instead, Wadland uses Seton's work as a way of addressing the changes in ecology and technology that

Seton's work with youth started after he discovered some local boys were vandalizing his property in reaction to a fence he had erected. To deal with this problem he constructed a council ring on his property, and invited the local boys he suspected of causing the damage to visit. At the council ring he entertained the boys with stories that would inspire them to take up the woodcraft activities he would later write about. The tribal councils that resulted soon became very popular. Knowledge of Seton's work spread and created connections for him with publishers wishing to capitalize on the void of youth activities. He published a regular column in Ladies Home Journal²¹ that was directed at "appealing in all its contents to boys in their relation to outdoor subjects" (Wadland 334). These regular articles contributed to the launch of what was to become America's largest organized youth movement. Seton's writing provided a comprehensive outline of his tribal councils, popular activities, personal interest in nature study and his understanding of child psychology.

The Boy Scout Organization resulted when Baden-Powell's work with youth in Britain, Seton's "Leagues of Indians" in the United States, and some other organized youth groups in North America joined under the term "Boy Scouts." After the amalgamation in 1910, Seton left the organization when he realized that some fundamental differences in philosophies would never be resolved to his satisfaction. His

were occurring during Seton's life to outline the struggle one man encountered in attempting to address these changes. Wadland recognizes how Seton's curriculum on craftmaking was used as a medium to support the Nature Study philosophy on which he based his youth programs.

²¹ This magazine had the largest distribution of any magazine in North America at the time.

original ideas became both absorbed and modified by the organization. The following chart outlines some differences.

BSA	Seton's Woodcraft Indians
-under adult leadership	-under peer youth leadership
-uniforms	-individually designed outfits
-oaths of allegiance to God, country, flag	-allegiance only to laws of nature
-African rituals and modified drills	-North American Indian rituals
-designed to appeal to parents	-designed specifically for youth to see themselves as citizens of biotic communities
-socialization within existing class structure	-socialization based upon natural local features
-badges	-coups
-troops	-tribes
-Nation states	-Nations as conceived by Indians
-scout or pioneer as figurehead	-Indian as figurehead
-nationalist slant preparation for military duty	-pacifist slant

As the Boy Scout Movement increased in size, the political pressures mounted and limited Seton's influence. In Britain many people recognized the value in Seton's work and used his ideas to set up the Woodcraft Folk Movement, which was a "deliberate alternative to Baden-Powell's imperially inspired Boy Scouts." Paul Greenhalgh describes how this movement

. . . developed a craft ethic that had little use for art . . . [was] a primary influence on a generation of parents who wished to educate their children following ecologically sound, humanist principles . . . [combined] socialism with a love of nature and the vernacular . . . in effect, simply [made] use of the idea of craft as it had been formed thirty years earlier, without recourse to the element of decorative art . . . the Woodcraft movement was a huge international presence amongst children's organizations. It still is. (37)

After Seton officially left the Boy Scout organization he established the College of Indian Wisdom in Santa Fe and published a small journal entitled The Totem Board.

It is important to note that Seton wrote what could be considered the first environmental education book and that it depended significantly on a craft-making curriculum. In the late 1800s when he was writing, there was public concern expressed that something was changing in children. Restlessness and a sense of boredom that might lead to inappropriate behavior were noted, changes that were believed to be a result of increasing urbanization and decreasing contact with nature.

Seton's curricular work was directed at the physiological changes that resulted from children being raised in environments offering limited direct contact with the natural world. He sought activities that would provide alternative models and perspectives to youth who were surrounded by the increasing industrialization processes and the common trend towards the notion of Western civilization as progress. He wanted for himself, as well as for the youth of his time, a way to learn about and live within the more-than-human world in a sustainable manner, and these ways became known as his "woodcraft" ideas.

Program Philosophy

Seton's philosophy was based upon maximizing a child's ability to relate to the natural world in a caring and compassionate manner and upon children playing and living — thus imagining themselves — in a constant relationship with nature. In his philosophy, children would learn through their play and through their instinctual connection with nature, rather than through the alienation of formal schooling. He believed that for the

educational process to go beyond the development of human reason alone, there needed to be a greater acceptance of animal instinct. He detested the increasing emphasis on indoor-based science that permeated the new botany books of his time. Wadland notes that Seton believed children must obtain their ideas about nature from nature and not from books:

Within his organization he aspired to amalgamate all this primary interest, conveying, in an artistic way, a scientific comprehension of man's [sic] place in nature. For him, education demanded an understanding of the human need for a true community, of evolution as the major source of change, of the persistence of instinct despite reason, and of the superficiality of technological progress. He tended to view the school as a socializing agency committed to a number of biological untenable propositions. The Woodcraft Indians were supposed to become a body of critical youth, challenging accepted values and suggesting constructive alternatives. With these thoughts in mind Seton emphasized the importance of individual craftsmanship, openly defended pacifism and fostered the spirit and letter of socialist democracy by allowing boys to govern themselves in small groups. (458-459)

Seton recognized that the full development of a man²² was not about strength; power and virility, but of striving to achieve a human consciousness that included aspects of spirit, mind and body (356). Seton understood that play, and especially craftmaking, was an important process in a child's learning because it encouraged "a kind of ecological karma" based upon a balance and harmony with nature (355).

²² The word "man" is used here as this was the term Seton used, but his writing and outlook towards women of this time was incredibly progressive. His "Woodcraft Manual for Girls" encouraged young women to perform to the very high standards he also imparted in his boy's manuals. For example, canoeing, axe work, long distant running were all activities deemed appropriate for women. He had a special degree in "Women's Power in History" that women even today would find hard to achieve. In his boy's manual he also encouraged young men to perform tasks that were considered "women's work." His first wife, Grace Gallatin Seton-Thompson wrote *A Woman Tenderfoot* in 1900 and encouraged women to go camping. Her book preceded Seton's first book by three years and his campcraft manuals by twelve. Her independence was also evident in the way she kept her maiden name and later became well known for her books on travel.

Seton acknowledged that learning to make a craft served as a recapitulation of the honourable achievements various cultures had made. As Native American cultures were so readily recognized as cultures in tune with balancing their relationship with nature, learning to make their cultural artifacts was considered to be especially important. Made items created a feeling “of community, not only among the young people, but between them and their natural environment” (Wadland 360). In 1904 Seton wrote,

No one can comprehend the nature and purpose of a wheel in some complex machine by study of that wheel alone. He must consider the whole machine, and especially the parts nearest to that particular wheel. Man, therefore, seeking to know himself, must fail utterly, unless he remember that he is only a part of the great machine of the universe. He must therefore study the other wheels, that is, the life forms about him, which are parts of his environment and offspring of the same creative power as himself. (qtd. in Wadland 360)

Wadland explains Seton’s reasoning as follows:

The use of firearms, for example, was altogether forbidden. “The gun stands for little skill, irresistible force supplied from an outside source, overwhelming unfair odds, and sure death to the victim.” The bow and arrow, on the other hand, could be manufactured from accessible natural materials. The bow is silent and it sends the arrow with exactly the same power that the bowman’s arm puts into it.” It keeps the odds, as between animal and man, fair, and demands as much skill in the shooting as in the making. It stands for all that is clever and fine in woodcraft.” (qtd. in Wadland 359-360)

Seton chose the Native American as a role model in his programs not to advocate a return to wilderness living conditions or as an abandonment of western civilization, but as an attempt “to demonstrate the value of those human cultures which acknowledged their limitations within nature” (Wadland 457). Today Seton’s work is criticized as it

encourages a pan-Indian perspective²³, yet Wadland mentions that Seton's obscuring of tribal diversities was probably due to his recognition of underlying racial unity in the woodcraft activities he encouraged (368). "He denied the Pragmatists' view of man as the measure of all things . . . [He] loved the individual; but he loved the community more. And the community was not simply man, but man and all other species" (352). To promote this end, he viewed and encouraged others to view "the Indian as the first American [who was also] an exemplary socialist whose greatest virtues emerged spontaneously from a spiritual union with the land" (453). Although some of Seton's work could be considered part of the Victorian romanticism prevalent in his time, he spent much of his life trying to find recognition for Native and other cultural groupings that demonstrated close connections to the land. He wanted these connections to be valued and aimed to have them acknowledged by choosing the people who best demonstrated them for recognition as ideal role models.²⁴ Seton added his own

²³ Seton's work also has the potential to be dismissed as it is partially characteristic of the time in which he wrote when the life of Native people tended to romanticize. Seton's language and work does reflect the period in which he lived, yet his work stands out and could be considered radical or at least alternative and forefront in his ideas for the period in which he wrote.

²⁴ Seton thought that the ideal role-model for a youth should be the 'noble North American Indian.' He argued that nobility was measured by an "ability to acknowledge and to live within nature's biological laws" (qtd. in Wadland viii). Other leaders argued that the best role model image for youth were soldiers, pioneers, frontier person, military scout, etc.

understanding of Native spiritualism to Hall's ideas of capitulation²⁵ so that the ideas "afforded a glimpse of man equating himself with nature" (337). Wadland also describes Seton's notions that,

Because wood craft implied an organic interaction between man and the land, the Indian was a logical model for the child. . . . A heroic figure, at once attuned to his environment and a believer in the necessity of ritual, the Indian was "picturesque," possessed of noble instincts, an ideal. "By all the evidence at hand, his was a better system , a better thought. . . He, more than any type I know, is the stuff that fires our highest dreams of manhood." (356)

Program Structure

Seton believed that an ecological perspective of the world would be acquired and carried throughout people's lifetime if children were given the opportunities to explore the subtleties of woodcraft (353). His idea of woodcraft comprised three areas. The first encouraged athletic proficiency measured against a person's own individual standards or ability to perform in their local natural surroundings. The second area focused on teaching skills of self-sufficiency in the wilderness. The third area was based upon craftsmanship and a familiarity with survival techniques. Wadland describes Seton's woodcraft as encouraging "an ecological relationship between the child and his environment,

²⁵ Seton's woodcraft curriculum was based upon his own personal interest in nature study and his knowledge of child psychology that followed many of Stanley Hall's insights. Hall suggested that "children would wholly mature only if they were encouraged to relive the history of the human race" (Wadland 335). Wadland explains Hall's ideas, based upon Hall's book *Adolescence*, a book with which Seton was familiar. "Biology alone could not meet the new pedagogical task which wanted less discussion of structure and more about habitat, food supply, migration, folklore, myth and literature. Education must be "full of the spirit of the field naturalist, observer and lover;" and it must, above all, be rescued from professors and science teachers who had "lost contact with the nature and needs of childhood and youth" (336). For Seton, nature was the sum of its diversities and these warranted a child's primary attention. They did not need to be simplified to give a false impression about unity (351).

demonstrating that man's survival in the future need not be based upon the extinction of other species (Wadland 379).

Woodcraft, as its name implied, meant craftsmanship. This, for Seton, was the essence of independence, individuality and resourcefulness. "Probably nothing is sadder, "he wrote," than to go into a home where everything is bought ready prepared; . . . [where] no brain or pride has gone into the making." No society could legitimately argue in defense of individualism if its individuals did not know "the pleasure of workmanship, the joy that comes from things made well by [one's] own hands." The wilderness demanded nothing less than absolute skill. It was the place where "life is made worth while, not by the few great moments, but by the making of the daily life . . . full of meaning." (Wadland 379)

Seton's woodcraft manual provides stories, and describes nature lore acquired through activities. It also lists songs, games and dances, and offers field-guide type information (in an era before nature field-guides existed), accompanied by step-by-step sketches and illustrations.

The program was based upon trying to obtain degrees and coups²⁶ in specific areas of woodcraft. For instance to obtain a "Camp Craftsman" degree, Seton outlines twenty-two listed activities of which a person was required to complete fifteen. These tasks ranged from patching a garment to building a log cabin (Manual 363). The degree structure encouraged co-operation among members of a tribe and stressed group glory in comparison to individual accomplishments. The established standards encouraged a "frame of mind which recognized value in all forms of achievements, but particularly in those which reflected an intimacy with land" (Wadland 361). The program designed with

coup and degree levels encouraged mastery of skill, but also emphasized participation, as he viewed participation as a key or what he referred to as a “law of biology” (362).

Seton recognized the power of the peer group, so his program encouraged youth to work cooperatively in an honourable and fair manner. This structure of accountability ultimately encouraged laws that were “aimed squarely at the protection of, and respect for the wilderness and its inhabitants, man or beast . . . Quite literally, the laws of the Seton Indians were the laws of the land” (345).²⁷ Seton wanted youth to understand the various ways powers could be used for the good of the group. Subdued conditions of the land itself identified an imbalance in the relationship between people and the environment. The woodcraft way encouraged an ecologically balanced setting.

Seton’s writing was full of stories and nature lore that worked as metaphors and aided children’s understanding of environmental complexity, while also being educationally entertaining. For instance, he did not like the idea of a uniform, so he encouraged children to design and make their own regalia, yet each child had to be prepared to explain the significance of all designs. Seton could explain his council fire at various levels, but declared its ultimate aim was to lead “men to think about the Great Mystery over all” (qtd. by Wadland 345). Seton used symbolism from cultures around the world, especially when the symbol attuned a child to nature (358).

²⁶ For example, Seton outlines a “canoeman coup” and a “grand coup.” *“Canoeman. Single paddle a canoe on dead water. Spill the canoe and get into her again, and bale her alone counts as a coup. A Grand Coup, spill, right, and bale the canoe alone, three times in succession, and have run a rapid that falls six feet in 200 yards”* (Seton *Woodcraft Manual for Girls* 336).

²⁷ Because Seton viewed the Indian as the first American, an exemplary socialist whose greatest virtues emerged spontaneously from a spiritual union with the land, he strove to create a democratic governing structure within the League of Woodland Indians that reflected the political network of various tribes (453).

Program in Association with Nature Study

Only a true democracy that included a “fundamental intimacy with nature’s ways” would satisfy Seton’s notion of governance in his woodcraft program (Wadland 354). Seton understood the importance of diversity and how “wild nature was the womb of democracy” (Wadland 378). He was aware that the increasing public dependency on commercially produced technology was dramatically affecting society and the human understanding of themselves in relationship with nature (453). He felt that all social reform or understanding of progress had to include the natural environment (349). The governing structure for his woodcraft program was intended to create “nothing less than total participation” because in order to view nature as a whole, individuals should have “assembled that whole from its diverse parts, avoiding simplistic generalizations” (374).

Seton himself was an expert tracker. The diversity of skill that good tracking demanded was evident in Seton’s own writing. He integrated in his manuals of woodcraft many approaches on a subject in order to create a fuller understanding. Wadland describes Seton’s holistic perception of nature:

For Seton nature was the sum of its diversities and these warranted a child’s primary attention. They did not need to be simplified to give a false impression about unity The past could not be a rival of the present because the past lived in the present. The animal, the Indian and the wilderness, he argued, are within us all and must be obeyed. In proportion as we subdue each, or all, of these, believing them to be external to ourselves, we contribute not to our social progress but to our extinction (351).

Seton writes of his intimate relationship with nature: “A tree has always been a blessed and a glorious thing to me. Often I feel the axe chopping into my own soul when I see it laid to some splendid tree” (qtd. in Wadland 375).

Seton’s first children’s book, Two Little Savages 1903, is a fictional tale of two boys, yet in another sense it is also autobiographical because it describes the childhood Seton lived, imagined living, and that he wanted other youth to have the opportunity to experience. Wadland writes of Seton’s book that although it contained the predictable Victorian piety of the time, “it speaks to a conception of wilderness; it speaks to Indians; above all it speaks of and to children . . . but it is brought to the service of an ecological end — that of reuniting man or rather child, with his environment” (338). Wadland describes this book about two young boys trying to learn the rituals of various Indian tribes:

The text is broken by diagrams and detailed explanations, showing the young reader how to build a teepee, how to arrange a council fire, how to make a bow and arrows. The emphasis in each case is on both the craftsmanship of the object and the diversity of its origins While the tale itself remains important, it is adroitly juggled in a way that allows the author to teach and to philosophize . . . instructs the boys in the making of an Indian drum. Once the reader has been taken through a step by step demonstration of its construction, Caleb begins to beat the drum and to chant. Both boys are so mesmerized by the sound that “their savage instincts seemed to revive.” Soon they are both dancing round the singing drummer.

But above all it worked on Yan. As he pranced around in step his whole nature seemed to respond; he felt himself a part of that dance. It was in himself; it thrilled him through and through and sent his blood exulting. He would gladly have given up all the White-man’s “glorious gains” to live with the feeling called up by that Indian drum.

Seton continues to weave the Indian and nature study themes together, creating a sense of their mutual interdependence. By the end of the book

Indian, animal, child and wilderness have been combined in purest innocence. (338-339)

Seton's writing captures the oneness that is the basis of his woodcraft and this study's craftmaking. Written almost 100 years ago, the work reflects both his relationship of being in the world, and the ways a similar relationship can be fostered within children through a craft-based curriculum. His work directly supports a craftmaking pedagogy by demonstrating what kind of experiences and understandings of the world should be aimed for when designing practical educational craftmaking experiences.

Uncovering the work of these four educators was very satisfying as their comments confirmed many of my own experiences pertaining to the importance of craftmaking as a pedagogy for environmental awareness. Steiner's work in particular broadened my understanding of the way small aspects of a craftmaking activity, role-modeled by an instructor, can nurture a sense of an animate world. His emphasis on using handicrafts to encourage children's sense of will, and Hahn's use of projects and 'grande passions' to encourage people's understanding of their reserves of energy, determination and commitment, were the values these two educators stated were derived from craftmaking experiences. Fully understanding Steiner's work requires a commitment to studying his ideas and becoming familiar with his use of language and this unfortunately has made his work less approachable for many teachers. Hahn would have better supported craftmaking curricula if he could have committed more of his ideas to paper to be understood after his death. Although I had only had a little exposure to Seton's work previous to this study, it felt most familiar because it emphasized my own interest in

seeking and participating in practices that aid a person to feel deeply connected with the land and to make those practices part of one's own life. His woodcraft manuals will remain an inspiration in my efforts to establish a craftmaking pedagogy for the present.

All of these educators emphasize the functionality of craft and not the flamboyant (as Hahn termed it) self expression that arises in many art forms. Gandhi, more than the others, has provided me with the more profound ideas on how deeply the acts involved in craftmaking can affect a person's understanding of the world. I have found myself at many times recalling his address to the question I too am asked as to why a person should support craft work instead of the artistic endeavours associated with concepts of beauty and supposedly beneficial to the spiritual well being of a person. His reply was brilliant as it was given in his typical sense of role-modeling. He did not directly discard the idea of art, but instead emphasized the beauty residing in the natural world. His answer encouraged a people to "train" themselves to be fully satisfied with the beauty of the natural world around them so that there would be no desire to make items that ultimately take from the more-than-human world in order to fulfill some human notion of beauty. This is why I stress the utility component of a craft and encourage concepts of beauty to be blended into the items of necessity that are required daily by a person.

These educators' ideas seemed to reinforce most of the craftmaking pedagogy that I had already been focused on. Their expressions and stories of craftmaking provided reassurance to what previously had seemed like my own isolated thoughts and interests in a craftmaking pedagogy as a form of environmental awareness.

The following chapter introduces many concerns, issues and approaches that environmental education is facing today. The discussion looks ahead, towards the future, and so addresses and envisions the ways a craftmaking pedagogy can aid in contemporary environmental education.

Chapter Three:

Looking Ahead: Craftmaking as Environmental Education

A craftmaking pedagogy encourages a perception of being of the world seldom validated today. Yet many environmental thought writers and environmental educators recognize the establishment of this kind of perception as critical to dealing with the environmental issues of today. Such a perception allows humans to recognize themselves as part of nature, rendering any act that harms nature as harmful to themselves.

Craftmaking promotes the perception of being of the world, and historically the majority of humans have shared this perception when they made crafts essential to their existence. This chapter will provide a brief overview of the various ways a craftmaking pedagogy can serve as a bridge between understanding many ideas being discussed in environmental education today and the practices of perceiving the world they encourage. Craftmaking demands learning ways of knowing through attending to certain experiences and perceptions, and hence it has much to offer environmental education.

In order to explain the value of a craftmaking pedagogy in serving the needs of environmental education, this chapter has three sections. The first explores four central concerns in environmental education and the potential contributions of craftmaking practices to their understanding. The second outlines various conceptual issues inherent in environmental education and explores their fruitful synthesis through a craftmaking curriculum. The third section addresses four common approaches in environmental education programs, each aimed at encouraging new worldviews and perceptions of

nature not consistently fostered within ACID-based societies. An exploration of the position of craftmaking in each curricula approach suggests that a craftmaking pedagogy is a way that encompasses all these approaches.

I. FOUR CONCERNS OF ENVIRONMENTAL EDUCATION

Four key issues of concern for environmental educators today are: awareness of curricula that encourages a perceptual divide between nature and humans; difficulties inherent in the structure of the formal education system; the lack of good praxis in environmental education; and an imbalance in favour of theoretical knowing as opposed to knowing derived from practical /bodily based experience. Craftmaking practices are a means to address each of these concerns.

1) The Perceptual Divide Between Nature and Humans

The perceptual division of self from nature, arising in various ways such as anthropocentrism and experiential separation, is particularly troubling to environmental educators today. When a people identify themselves as able to control nature, they perceive themselves to be unaffected by damage done to the more-than-human. The many explanations¹ for the occurrence of this perceived separation of self from nature and for its perpetuation and increase through distorted representation are of less importance here. Of concern is the failure of environmental educational curricula to overcome the

¹ For elaboration refer to the work of Neil Evernden, John Livingston and David Abram listed in the references.

perceptual division. The current tendency within environmental education is to portray humans as apart from nature through activities that emphasize recording and studying nature. Such activities encourage objectification and the sense that humans can control nature. This produces an education that lessens the possibility for tangible land-based curricula that meld perceptions of self and nature. Curriculum activities instead tend to lead to perceptions of nature as something that should not be touched or interacted with and as something that can be controlled. Neil Evernden writes extensively in this area² and offers some hope for environmental education when he refers to actual experiences encountered within a world of increasing abstraction:

. . . an understanding of nature that is genuinely compatible with our own experience of it rather than an abstract conception of it B we know pigeons and sunsets but only believe in ecosystems . . . to believe in Descartes we had to withdraw ourselves and our senses from the understanding of nature altogether . . . We have become victims of the “fallacy of misplaced concertinas” which requires that we regard our abstractions about nature as actual objects of nature, while simultaneously dismissing as trivial or as “projections” our actual experiences of nature. . . . but experience cannot be entirely suffocated by belief, and even extensive schooling cannot remove all vestiges of the direct experience of a nature from which we are not withdrawn and in which the “laws of nature” do not always apply. (“Nature” 191)

Evernden encourages the quest for the wonder and miracle of experience with nature (“Nature”192) that are not easily expressed. He calls upon those who can express this

² There are a number of other well known educators that also write about this concern. For instance, Bowers writes “the difficult way of understanding the individual as part of an ecology where the old hierarchy of man over nature disappears, is the environmental crisis that is now beginning to disrupt our tacit patterns” (159). David Orr, in explaining what can be learned in older notions of virtue found in antiquity states “I am referring to the sense that one’s self is inseparable and inexplicable from that of a larger community which is part of an understandable cosmos. . . .virtues once implied actions that were harmonious in a larger commonwealth. I think it is no accident that the root for religion and for ecology similarly imply relatedness” (Ecological 182).

experience differently to break the “crust of convention” (Social Creation 132) thereby promoting environmental education curricula rooted in “actual experiences of nature.” A craftmaking pedagogy is just that—it is based upon breaking the crust of conventional expression in order to convey the wonder-full experience of the world. A completed craft, of use and beauty, exists because of a miracle—namely, the more-than-human material blending with the human body in an act of creation. The mystery ever-present in the creation of nature is the mystery also present in the ability to create and use a craft. As craft cannot be easily associated with either side of the culture/nature divide, craftmaking serves as a curriculum that crosses a bridge of perceptions. One side of this perceptual bridge consists of understanding the human role in making; the other of understanding the more-than-human role in creation. It is only from the middle of the bridge, as through the practice of craft making, that a greater whole—the blending of both perceptions—occurs. Craftmaking experiences can serve as significant events within an educational curriculum that provide individuals with the opportunity to immerse themselves and acquire a deeper knowledge of nature. These experiences allow people to directly attend to their relationship with the land with less socially constructed emphasis on how to interpret the experiences.

2) Difficulties Inherent in the Structure of the Formal Education System

Creating perceptions of nature based upon direct experience of the more-than-human world rather than on artificial representations is challenging within a formal education system usually referred to as “schooling.” The monitoring aspect of schools

originated as training institutions molding children into placid factory workers capable of denying the realities and inequalities of their lives by not only limiting the experiences, but also the descriptions of these experiences through constraining their means of expression. The most acceptable modes were those endorsed by the reigning “facts” and theories, the scientific and economic agenda of the time (Burke & Ornstein 205).

David Orr argues that school systems and educational buildings limit human perceptions because curriculum, school structures and classroom settings confine teachers. He states that the “way learning occurs is as important as the outcome, architecture is crystallized pedagogy” (Earth in Mind 14). The mere notion that so much education goes on “inside” classes, buildings and structures that preserve distance from the living processes of the more-than-human world reflects the degree to which the educational systems are based upon isolating humans from actual experiences with the land. Orr claims that there is a “problem of education, rather than problems in education” (Earth 6). He notes that contemporary educational systems are unable to produce graduates who demonstrate an understanding of living in harmony with the land through their daily acts. In constructing his argument Orr draws upon Aldo Leopold’s environmental ethics:

. . . in Aldo Leopold’s words, does the graduate know that “he is only a cog in an ecological mechanism? That if he will work with that mechanism his mental wealth and his material wealth can expand indefinitely? But that if he refuses to work with it, it will ultimately grind him to dust”? And Leopold asked, “If education does not teach us these things, then what is education for?” (Earth 15)

Graduates who are able to live well within ecological systems can only emerge from education systems as well as actual school buildings that are designed to mimic the blending of culture and land systems that students can understand. Environmental educators are questioning whether this mimicking and blending occurs, as well as considering what changes are needed to achieve these ends. “The problem, then, is how to bring about a striving for harmony with land among a people many of whom have forgotten there is any such thing as land, among whom education and culture have become almost synonymous with “landlessness” (Leopold 210). Craftmaking serves as a microcosm through which to address the larger design concerns embedded in the educational system that Leopold and others are emphasizing.

By participating in various craftmaking experiences at different stages of life, a person is, in effect, engaging in personal learning that resonates with the local ecology to produce a harmony between nature and human interaction.³ In this sense the structure of an educational system could be reflective of the understanding accumulated through individual acts of craftmaking that bridge as well as model systems where nature and culture are designed to mesh and be perceived as one. In commenting upon Native education, Lee Maracle expresses the lack of good education resulting from the failure to center learning upon the practice of craft making:

When our grandmothers sent their children to school it was with self-sufficiency and mastery over the production of new things in mind. They did not realize that we would never be taught to create iron-cooking pots from the ore of the earth. Our third generation is being educated in the

³ The lessons obtained from learning the same craft at different stages in one’s life is evident in the children’s book Grandmother Five Baskets by Lisa Larrabee listed in the references.

European system and our children know less about the production of the stuff of life than did our grandmothers. Schools have shown themselves to be ideological processing plants, turning out young people who cannot produce the means to sustain themselves, but who are full of the ideological nonsense of European culture. (Maracle, 88)

In her criticism, Maracle directly claims that craftmaking should form the basis of education and that ideologies should reflect the relationship of items to the total workings of the natural locale. Placing craftmaking at the core of an educational/school structure makes certain that practices and theories are examined constantly to ensure that they sustain life in the best manner possible.

Maintaining craftmaking as the very focus of the educational system and structuring lessons that encourage an exploration of the world through learning a craft together establish a practice that prevents education from drifting off into the world of abstract ideas while losing sight of concrete existence. When Gandhi stakes his all on the spinning wheel, he outlines how everything important to human existence can be examined and related through the perceptions acquired in craft making. Orr makes a similar claim when he states that:

farms did what no other institution has ever done as well. They taught directly, and sometimes painfully, the relationship between our daily bread and soil, rainfall, animals, biological diversity, and natural cycles, which is to say land stewardship. They also taught the importance of the human qualities of husbandry, patience, hardwork, self-reliance, practical skill, and thrift. However imperfectly, farms served as a reality check on human possibilities in nature that urban societies presently lack. (Earth 117)

David Orr is currently trying to develop a model environmental education center that mimics the local area and whose sustainability is measured through monitoring the energy required to build and run it as opposed to what it is capable of producing. As part of their

education at the site, students will be expected to acquire the requisite skills to furnish the center. The challenges of the average environmental education program are to create a means to overcome the confines of the hegemonic educational system such as classroom structure, disciplines, limited natural space, bells, schedules and other things associated with factory life. One way to meet this challenge is to return to curricular programming based upon learning a craft holistically. Examples from the past of guild work, farm life and traditional activities of hunting and gathering societies offer models for holistic craft-based learning. Such examples have significantly informed the craftmaking pedagogy that will be presented in the next chapter.

3) Poor Praxis Reflected in Environmental Education Curricula

Environmental educators are expressing a lack of good praxis in today's curricula. Effectively what is expressed in theory is not reflected in the practice that results from the curriculum. There appears to be limited established means and few attempts to critique curricula to ensure the outcome moves beyond a mere label such as being "environmentally-based," to instilling the desired outcomes. An example comes from adventure education, which is often associated with environmental education. Having children participate in a high ropes course may raise their perceptions in psychological terms such as coping with fear. The activities, however, are less likely to raise a general perception of trees and their connection with human life, or of the actual trees used to

support the high rope course.⁴ Too often environmental education curricula involving easy-to-mark paper tasks, done indoors so they cannot blow away, are devoid of any meaningful engagement with the land. Having students learn about pollution by picking up litter and then asking them to draw a picture of themselves picking up the litter, really only creates more pollution, as most pictures eventually are discarded. Likewise, programs using the rhetoric of concepts of sustainability may only expose students to one small perspective of this abstract concept and thereby obscure the debates involved in various perspectives of a complex idea.⁵ The bridging of theory and practice in good praxis is a challenge to environmental educators as it requires a desire to constantly use personal and group reflection to insure that desired outcomes are being met and not just stated.

Environmental educators are just beginning to articulate the theoretical bases of their concerns and the actions that can be taken to address these concerns in a meaningful manner. Too often there is a lack of useful curricula that blend the theories expressed and the actions required to live this theory. For instance, craft is described as another pillar of the *Outward Bound* (OB) organization, yet craft work is rarely ever part of an OB

⁴ This is frequently a concern of the Outward Bound program. One of the four pillars of this program is environmental awareness, yet there is a large percentage of activities that encourage a participant to challenge the forces of nature in order to come to know their personal limitations and not necessarily become more aware of local environmental concerns. Norwegian proponents of an open air, or Friluftsliv philosophy, view many North American programs in a similar respect in that they do not encourage participants to live with and in nature but separately in a challenging / against nature manner (Pendleton 104).

⁵ Bob Jickling's article "Why I Don't Want My Children To Be Educated for Sustainable Development" gives further details on the problems associated with trying to provide an environmental education based upon an abstract concept such as 'sustainability' (5-8).

program. Likewise, many summer camps are based upon a philosophy of teaching campers to care for the earth, while their camp craft program frequently requires the use of non-renewable and toxic material. The industrial processes and resulting pollution resulting from the creation of plastic beads, glue, varnish and gimp are seldom acknowledged in the decision to use them to create camp memorabilia as part a program activity. This is a contradiction between theory and practice.

The challenge for educators is to create curricula that encourage people to seek the fit between their ideas and their practice or, in other words, to match their talk and their walk. Bowers states that “the challenge for educators will be to assess whether the curricula they teach contribute to the myths of progress and an anthropocentric universe or to sustainable balanced living” (190). A craftmaking pedagogy encourages analyzing one’s own experience and the reflective processes that challenge the complacency of the myths of perception and the hypocrisy of ACID society. Embedded in the craftmaking process is the practice of constantly attending to one’s own direct perceptions and bodily awareness. The practice of leaving an offering before harvesting a plant ensures that an individual takes a moment to become self consciously aware and centered so as to be more open to perceiving the plant in new ways that recognize it as a fellow living organism. The habit of questioning what to do with any remaining items from the craftmaking process encourages a practice of awareness, attending to and mimicking the closed loop systems of the more-than-human world. In craftmaking there is no one constant practice or theoretical way of doing something, but rather constant questioning of the ways to make something in relationship to the more-than-human world. This

constant openness to pondering the more-than-human world is what ensures that craftmaking is based upon good praxis which in turn promotes wise education.

4) An imbalance in favor of theoretical knowing

There is concern among environmental educators that knowledge based upon specific types of knowing is currently neither validated nor recognized. Some ways of knowing are disappearing at an alarming rate, with the result that craftmaking associated with such ways is either also disappearing or becoming impractical as a means of making a living.⁶ Increasing the emphasis on bodily knowing, even if it is difficult to describe or test, ensures that all kinds of knowing are validated and valued.⁷ Orr refers to the early work of the well known educational philosopher, Alfred North Whitehead, in explaining why environmental education requires more bodily based experiences that include a practical, meaningful engagement with the natural world:

“The mediocrity of the learned world,” he wrote in 1929, could be traced to its “exclusive association of learning with book-learning” real education requires “first-hand knowledge,” . . . [an] intimate connection between the mind and “material creative activity.” (Earth 28)

Craftmaking requires both mental and bodily knowledge and therefore promotes the melding and balancing of many ways of knowing.

⁶ An example is the family design traditionally made by twisting two strands of a snow lacing together in specific locations while lacing an attikamik snowshoe. Many people in Labrador are presently unable to comprehend the way to weave a snowshoe let alone attempt to include a design in the lacing pattern.

⁷ Burke and Ornstein provide some specific occurrences in early schools of Europe. They write “It was not considered socially safe for working-class boys to become involved in mathematical theory itself, so only arithmetic tables were taught” (205).

If more people were to have experiences that honoured diverse ways of knowing the consumer market might support more holistic values for hand-crafted items. For instance, a basket-maker might be paid at a rate equivalent to other professionals.⁸ As many social inequalities arise from valorizing certain kinds of knowledge or work above others, craftmaking might have particular utility in breaking down discriminatory systems of understanding. This is due to the virtue of craftmaking processes validating diverse ways of knowing. In short, the surgeon might value the craftmaker's skill that can achieve the sharpness required of their tools as much as the craftmaker values the surgeon's skill.

II. CONCEPTUAL ISSUES RAISED IN ENVIRONMENTAL EDUCATION

The various conceptual issues in environmental thought have led to a diversity of environmental educational programs. As each program encourages different perceptions of the land, difficulties arise for teachers who, with a limited understanding of all these differences, must choose among programs such as Earth Education, Adventure Education, Heritage-based re-enacting, Ecology programs etc., and often limited schedules or budgets become the deciding criteria. Craftmaking experiences can readily be adapted to fit many programs and centres, and therefore can more readily encourage various perspectives.

A skilled craftmaker constantly shifts from one perception to another, attending

⁸ An example of this alternative value based system identified through a craft-based education resulted from a conversation with a cooper at Black Creek Pioneer Village. He explained that in the past it was usually specialized craft people or guild workers who earned higher wages than doctors and lawyers, because their knowledge and skill was recognized as more valuable to society.

to the perception that provides the knowing required in that moment. In so doing the craftmaker must learn and demonstrate the ability to shift a focus while still retaining an ability to “shuffle through” and balance the wide range of perceptions that inform the craftmaking process. For instance, while carving wood for snowshoes, a craftmaker might attend at one moment to the subtle nuances of the wood grain, which in turn encourage the recalling of past weather patterns that might have created the growing conditions for similar useful wood grains in other trees. Other recollections during the craftmaking process might lead to memories of past snowshoe travels on crusty snow that required a specific curvature at the front of the snowshoe to aid buoyancy that inform future travels in similar conditions, and so on. Somehow a craftmaker learns to juggle this constant shifting of perceptions to produce a completed craft. Craftmaking experiences unquestionably aid the makers in becoming perceptual bridge builders.

The metaphor of building and crossing a bridge is useful in explaining craftmaking because a bridge is built between two points, each holding different perspectives of the world. These can join in the middle to create a new and integrated perspective. The questions that arise from the decision-making process involved in environmental education are conducive to bridge-building, for it is open-ended and therefore invites new perspectives or alternative ways of knowing.

Some conceptual frameworks for which craftmaking is particularly effective as a bridge of understanding include local and global perspectives; work and play perspectives; past, present and future perspectives; personal and political perspectives; perspectives of shallow and deep ecology, and holistic and specialized perspectives.

Frequently presented in opposition, these various perspectives can require distinctly different approaches, yet a craftmaking pedagogy enables access to them all.

Local and Global Perspectives

Environmental educators are just as likely to raise awareness about global concerns such as climate change, as about very local specific issues. The phrase “think globally, act locally” expresses this potential range of vision. Those educators whose focus is on large social and global issues express a need to recognize a big picture. They support teaching about such things as Gaia, or the concept of a living earth, and the challenges of preserving local autonomy in the globalization of market places. Those who prefer to focus on regional issues might express a concern that the earth as a whole is too vast for an individual to grasp and that social and ecological cycles are best maintained when addressed through community groups living bioregionally. Such advocates argue that a more bioregional approach should form the basis of an environmental education curriculum. Craft making is, however, able to address both local and global perspectives on an issue since it occurs around the world, yet involves distinctively local acts and regional differences.

A genuine appreciation for a global perspective is attainable through a craftmaking pedagogy that first focuses on appreciating all the regional features pertinent to a craftmaking technique. This example of specific local understanding can then be placed into a larger context that integrates numerous examples of such local knowledge and common features of the market that have influenced the way things are made. With

respect to basketry, for instance, participants in the pedagogy must become aware of the relatively basic needs of humans to have containers in which to hold and carry materials.

Then, through the act of seeking material from which to make a basket, they will encounter the local constraints on this making; namely, that there are only certain kinds of material suitable for basketry in the area. These materials may lend themselves to only particular styles of containers made using given techniques.

To give a specific example, in northern bioregions there are no long reeds of the types that enable efficient basket weaving. Other materials such as birch bark are common but require different techniques and produce distinctly different results when crafted into baskets. As learners discover the unique gifts within their own locale, they are better able to reflect upon their own processes of making and compare them to similar and diverse features exhibited in baskets from other regions. By understanding the complexity of their own basket-making traditions, they are better able to fully understand the skill and beauty within a diversity of craftmaking tradition. As well, they can better appreciate the ways the pressures of globalization have effected village craftmaking processes around the world. Through understanding their own situation in relation to others, they are best able to respect the complexity of traditions and market forces residing within a global context of basketry. By valuing this diversified whole, individuals learn to appreciate the global situation, while avoiding the impersonal act of collecting baskets from relative strangers around the world. Rather, they develop a sense of belonging within a particular bioregion through empowering themselves in a unique regional craftmaking tradition that reflects a good relationship with the specific locale.

Work and Leisure Perspectives

In seeking to understand the purpose of life, humans typically ponder the role of work and the freedom from work that may be termed *play*. Humans have always worked to survive. As technology permitted time free from work — that is, time for play or leisure — people could pursue other activities not necessarily directly linked to their survival. In these circumstances, society could encourage work through offering incentives of release someday or for some time spent distant from the need to work. The motivation for work, as understood in an industrialized context, increasingly became the desire for free weekends, a long retirement, an earned vacation, or the acquisition of ‘technology’ to make the work easier or do it entirely instead. Most recently consumer forces and a market driven society direct people to work in order to consume. There is an association between freedom from work or perceptions of demanding work and wild places, or places linked with wilderness. It is as if the tasks humans spend most of their days doing, namely work, were disconnected from their inner-most being and identity. For most people work, and its direct result — that is, consumption — disassociates humans from connections to pristine natural areas. It is possible through craftmaking to forge relationships that bridge human needs for work with their desires to exist “freely” in the world.

To have a sense of “being of the land,” individuals must feel competent in their own self-sufficiency and have faith that the land will provide what is necessary for survival. In former times, numerous craftmaking and food acquiring experiences

nurtured this sense of proficiency and trust. These experiences were also a means to acquire accumulated cultural knowledge of past generations, while living sustainably in a region. Arguably, in the absence of such experiences, a person might never develop an adequate relationship with the more-than-human necessary to develop a sustainable way of life.⁹

Craftmaking bridges notions of work and play because it offers opportunities to develop trust in one's ability to make what is needed for existence. As individuals learn to trust their ability, they also learn to trust the land. Rather than developing a need to escape from its bounds, they become comfortable with their work and their craftmaking relationship with the land. Wendell Berry writes about both work and freedom in The Hidden Wound:

Our present idea of freedom is only the freedom to do as we please: to sell ourselves for a high salary, a home in the suburbs, and idle weekends. But that is a freedom dependent upon affluence, which is in truth dependent upon the rapid consumption of exhaustible supplies. The other kind of freedom is the freedom to take care of others and ourselves. (qtd. in Gablik 168).

Craftmaking is work that provides people with the ability to live satisfactory and happy lives amidst crafts. This ability ultimately nurtures a sense of freedom and purpose. That human life will go on in a sustainable and healthy manner.

A craftmaking practice involves exploring and coming to understand the sense of freedom involved in taking care of ourselves within the context of greater community

⁹ Gablik expands upon artist's general desire to escape the bounds of moral constraints. Her argument is built upon eco-artist Christo's comment that "The work of art is a scream of freedom" (Enchantment 169).

involvement. For instance, learning to knit a sweater through the experiences associated with raising sheep, dyeing the wool, then wearing the knitted garment. This experience teaches people to care for themselves in a manner extending beyond the ability to earn money and purchase desired commodities. Any individual who acquires wool to make a sweater directly from the farmer who raised the sheep becomes part of a network involving local farmers, and the land that maintains the sheep. Subsequent handling of the wool through carding and spinning requires that the individual accesses and masters traditional methods, thereby entering into a community of makers who pass on the knowledge. Working with the wool encourages a connection to the sensual qualities of different sheep's wool and raises questions about the natural sources of these differences. This has the effect of drawing the individual back to the land. Dyeing the wool similarly requires the new maker to learn about local plants, the colours they provide and the limits on the colour range in their locale B all rooted in the land. The maker of this sweater differs significantly from the person who purchases a similar garment from a store in terms of interconnectedness through the community of humans and the more-than-human directly associated with ways to keep warm.

Different ways of acquiring something produces different sorts of freedom as Wendell Berry's passage indicates. Ultimately, living within the network just described results in the sort of freedom Berry associates with his second definition. It is not the type of freedom derived from the elimination of work through affluence, or participation in leisure pursuits. A person finds a deeper freedom through craftmaking and the learning it involves which develops personal confidence through knowing how to work with the land

as part of a network that supports all within. This freedom is evident in the image described by Dolores LaChapelle of a happy family group wandering confidently with limited but sufficient possessions.¹⁰

Past, Present, Future

Environmental educators must deal with many people who dwell upon memories of the past or visions of the future, while struggling to appreciate the present for what it has to offer. For instance, some people like to explore the land through constant heritage re-enacting, while others concentrate on designing things for the future, always with a mind-set on developing the better alternative, or renewable energy technology. Once again, craftmaking can serve as a bridge because it trains people to focus on the present moment, while retaining some understanding drawn from the past and directed toward the future (at least minimally, in terms of finishing the product). Ancestral knowledge comes to the contemporary craftmaker through a long line of tradition traceable to direct experience with the land and motivated by a desire to serve future needs.

James Hillman addresses this relationship of past, present and future in discussing the craft of making fish hooks. The craft is interwoven with past and future events that inform the making:

. . . but if something happened in the soul of these people that can reach the animals, that would be the best thing of all, because these animals have done so much for us for thousands of years. They've brought us food,

¹⁰ LaChapelle described the importance of this image in detail in her opening remarks at her 1994 "Way of the Mountain" deep ecology workshop. The picture she referred to can be found in Grahame Clark's The Stone Age Hunters (93).

they've brought us dances, they've brought us wisdom , and they brought us technical skills. Who taught us to make a halibut hook? See, this is the way people think, "Oh boy, some smart guy named Joe Jones, he invented the hook so that we could catch halibut more quickly this way than that way. What a good idea." So we call it the Joe Jones hook.

But originally , the people who lived with halibut and whose life depended on them watched the halibut, and it taught them how to make the hook. So we owe to the halibut for the instrument to catch it "They taught us those things. We owe them so — tried to point out again and again that the animals come in our dreams as guides, helpers, and saviors; as teachers, again. We still are inflated to think we're saving them, but they may be teaching us about saving. (qtd. in White 126)

The environmental educator today confronts a problematic mindset in potential learners. For many people in contemporary ACID society, the past is irrelevant in that it seems to offer no insight into modern dilemmas. Meanwhile, they are compelled forward by business, commerce, and consumption into a future for which they lack vision. There is evident widespread dissatisfaction and a breathless inability to draw personal fulfillment from the moment. Craftmaking is an excellent tool to raise awareness and potentially alter this mindset not only through the knowledge of making, but also through the stories that take us to the place our memories originate. Craftmaking necessarily values the past, while also drawing people toward the vision of socially designed communities that are sustained through craftmaking traditions. These give rise to community living processes that are satisfying to those who participate in them.¹¹ Both the past and the future therefore help influence the actual moment a craft maker's hands focus upon an item. This renders craftmaking a practice that encourages people to attend

¹¹ Many craft-based schools or guilds have started small and grown towards a vision that involves the dynamics that support a community and all its functions, such as gardening and celebrating. An example of this is the Rochester Folk Art Guild.

to the present in a manner that serves to connect them from the past into the future especially through the more-than-human aspects of the material used.

Personal and Political Perspectives

Some environmental educators attempt to induce change at a political level so that it can trickle down to the individuals involved. Others emphasize the importance of personal change in the hope that personal transformations will accumulate, resulting in change to the political structure. These are two different perspectives, among others showing how social change occurs. Craftmaking involves appreciating the interconnectedness of both personal and political acts. The life of Mohandas Karamchand Gandhi (Mahatma Gandhi) serves as perhaps the most significant 20th-century example of the impact personal craftmaking can have on a complex ecologically-based political system.

Gandhi realized that the personal and political changes he sought required accessible symbols to be effectively communicated with the common person. He chose two symbols from humble village crafts to reflect his vision of change: sandal making and spinning. Spinning,¹² in particular, symbolized engagement with personal daily acts that, when performed by many people, would eventually force political change. Yet for Gandhi the daily practice of spinning also guided and nurtured a larger cosmological view of the world. Gandhi's ability to effect both personal and political transformation resided

¹² Gandhi stated "The spinning wheel should become the symbol of India's revitalization, and the wearing of khadi (homespun, hand-woven cloth) a gesture of the nation's rejection of economic and political imperialism . . ." (qtd. in Broomsfield 86).

in his application of three outstanding attributes: a political awareness that focused on creating change; a charismatic nature that inspired changes in the behavior of the people, and a pedagogical mindset that committed him to role-modeling. Through spinning, — most influential Indian of his — and politically embraced craftmaking as a creative force of transformation.

Gandhi's political awareness directed him to expose the political discontent of the people resulting from the erosion of basic human rights and abilities to perform life sustaining personal acts, such as clothing and feeding themselves.¹³ He recognized the hypocrisy in a political system that encouraged mass production that profited only a few, instead of production by the many people that provided profit to the many who participated.¹⁴ (Broomfield 194).

Gandhi used his cultural presence to radiate a vision to the people: their daily acts mattered; craftmaking could empower them and bring satisfaction to their lives. He encouraged the formation of popular grassroots education networks, which flourished and induced behavioral changes in the people that could not be ignored. The acts of civil disobedience by large numbers of people directed attention towards the laws they were breaking. By participating in daily acts of spinning , attention was directed at the political policies that created a loss of labour, resulting in the starvation of many people in India's

¹³ Another example was the rebellion Gandhi created to address a regime that would place a tax on its poor colonial population for a basic life sustaining substance: salt.

¹⁴ Broomfield describes how "Gandhi insisted that Congress demonstrate its concern for the welfare of the poor by adopting a program of economic rehabilitation by encouraging congress members to go into the villages and personally set up cottage industries" (186).

population. As a result of such acts, done by large numbers of people, the political authorities were effectively forced to examine their political inadequacies and to initiate policy change.

Gandhi spun, wove, and wore the cloth he crafted and thereby communicated many messages through his daily acts. First, the average person was empowered to make changes of personal, as well as cultural and global significance. Second, regional economies could achieve self-sufficiency through the revival of village crafts.¹⁵ Third, educators could be especially effective as role models of craft making. Fourth, the way items are made is important and must be directly experienced, because craftmaking links individuals to the greater cosmological spinning of the world.¹⁶ Gandhi worked as an environmental educator who created an understanding that through craftmaking, personal acts and political systems interrelate and influence each other.

Shallow and Deep Ecological Perspectives

Craftmaking is an ideal activity to explore the links between shallow and deep ecology.¹⁷ Arne Naess, who first coined the terms, describes these two ideas of ecology:

¹⁵ Gandhi was inspired by the writings of Ruskin, as was William Morris, the founder of the Arts and Crafts Revival. But Gandhi was able to use the revival of village handicrafts as an economic factor, while for William Morris and Ruskin it remained only an esthetic influence, remaining always the work of a few, for the few. Gandhi had none of Ruskin's or Morris's interests in beautiful objects, or in self-improvement for its own sake. Emphasis on handicrafts served as a means of easing the transition to industrialization rather than a permanent solution.

¹⁶ Through spinning Gandhi participated in what he referred to as "a sense of active embracing of universal altruism" (Broomfield 184).

¹⁷ The ability of craftmaking to link the conceptual split between deep and shallow ecology is addressed in this section. Other ecologically-based philosophies, such as eco-feminism, describe a relationship with the world that is not based upon this split and instead are based upon a total relational view.

The Shallow Ecology Movement:

Fight against pollution and resource depletion. Central objective: the health and affluence of people in the developed countries.

The Deep Ecology Movement:

Rejection of the man-in-environment image in favor of the *relational, total-field image*. Organisms as knots in the biospherical net or field of intrinsic relations. (120)

In presenting the idea of deep ecology to a North American audience, Bill Devall expanded upon Naess's definition as follows:

What I call Deep Ecology . . . is premised on a gestalt of person-in-nature. The person is not above or outside of nature. The person is part of creation ongoing. The person cares for and about nature, shows reverence toward and respect for nonhuman nature, loves and lives with nonhuman nature, is a person in the "earth household" and "lets being be," lets nonhuman nature follow separate evolutionary destinies. Deep Ecology, unlike reform environmentalism, is not just a pragmatic, short-term social movement with a goal like stopping nuclear power or cleaning up the waterways. Deep Ecology first attempts to question and present alternatives to conventional ways of thinking in the West. (128)

The craftmaking process continually raises questions such as what colours to use, how deep to cut, when to stop carving, where to harvest the necessary material? This questioning process incorporates perspectives from both deep ecology and shallow ecology. Following on the question about accessing material, a craftmaker might also question concepts of property relations and wonder what gave rise to the idea that plants, trees and land can be owned, bought and sold. In an "attempt to question and present alternatives to conventional ways of thinking," a craftmaker might recall the changes in thinking that eventually led to the abolition of human slavery, or the loss of the notion of commonly held land. Such questioning can encourage some people to establish practices that are more acceptable to deep ecological understanding and might result in communes

being established, or places where many people have access to the land but no one person is considered the “owner.” As discussed by Beittel, a craft guild could potentially join together to restore and care for a specific area and in exchange have consistent access for harvesting or celebratory practices (30).

All aspects of craftmaking are encouraged to be critically examined and questioned, which helps instill the notion of deep ecology. Simultaneously, there are individual acts in the craftmaking process that might at first glance be seen as shallow, but scrutiny reveals to be acts that inspire courage to seek alternative ways of looking at the world, inherent in the deep ecological perspective. Re-using remnants of craft material is an excellent example. Craftmaking is then a process that supports both the actions associated with shallow ecology and the understanding of the philosophical underpinnings of deep ecology.

Holistic and Specialized Perspectives

Craftmaking encourages people to come to understand the experiences of life through exposing them to both specialized knowledge and a holistic perspective. In modern times, human activities are increasingly fragmented with the result that people feel overwhelmed and detached from experiences that, through participation, can provide meaning in their lives. Without experiences that make connections between their personal and public lives, people are left unfulfilled. “It can be argued that schooling contributes to atomization and alienation. We divide our curriculum into subjects, then the subjects into units, which, in many cases, are not related to each other” (Miller 2). Many aspects of

contemporary society support this idea of specialists and specialized knowledge, yet as this trend increases, people experience a loss: the “connection between our inner being and the universe” (Miller 2). This dualistic approach leads “to the separation, even alienation, between our psyche and material world” (Miller 2), and gives rise to the need for curricula that can promote holistic education. Craftmaking readily bridges both the specialist and holistic aspects of education, because it offers participants a way to connect with themselves as well as with the more-than-human. In summarizing holistic education, John Miller writes:

At this school we care about kids. We care about their academic work and we want them see the unity of knowledge. In other words, we want to let students see how subjects relate to one another and to the students themselves. . . Most of all, we care about the students’ being. We realize that the final contribution that they make to this planet will be from the deepest part of their being and not from the skills we teach them. We can try to foster the spiritual growth of the student by working on ourselves as teachers to become more conscious and caring. By working on ourselves, we hope to foster in our students a deep sense of connectedness within themselves and to other beings on this planet. (139)

Craftmaking allows for focusing on the procedures and types of knowledge most readily identified with one discipline, while encouraging connections to other disciplines. For instance, a person might realize concepts of geography through trying to determine the best locale to seek reeds, and understand concepts of math through estimating the amount of reeds needed. The holistic connections between the craftmaker and the more-than-human come into play when learning a craft becomes the window to recognizing the importance of the more-than-human material and the multi-disciplined way it can be perceived.

For instance, I once overheard two students talking while they sanded the paddles they had each just completed carving. One student said to the other, "Imagine, these paddles were once one of those boards" and he pointed to some remaining boards on the ground. The other student responded with, "these paddles were once one of those trees," and he pointed to the nearby forest. Even though this grade seven paddle carving activity could be considered only a specific carpentry lesson, it clearly allowed students to recognize and make a connection to the more-than-human world that provided them with their materials. Would such a connection have been realized to the extent needed to spark this conversation if the boys had only been asked to list on paper all the things made out of wood products? This same paddle carving class included another student who told me she just felt like dancing with her paddle. A few moments later, I witnessed this student cradle in her arms the newly carved paddle as she moved down a path to the shoreline with the paddle as if it were a dancing partner. Something very deep and holistic, in that it combined many ways of knowing, must have been at work in the paddle carving experience to have created such a spontaneous response. Yet the actual step-by-step process of craftmaking does involve the use of very specialized types of knowledge. Embedded in the craftmaking process is the need to shift focus constantly from a specific, more direct perspective to a larger, more holistic one.

III. PROMINENT APPROACHES IN ENVIRONMENTAL CURRICULA

This section addresses four prominent approaches in environmental education curricula which are aimed at encouraging a recognition of new worldviews and

perceptions of nature not typically acknowledged within the learners' cultural perspective. These four approaches include questioning cultural understanding, reviving spirituality in education, studying and imitating indigenous practices, and increasing sensory-based awareness. The role craftmaking plays in each of these approaches will be highlighted.

Questioning Cultural Authority

An authoritative voice exists within any curriculum and merits critical examination. Questioning the authority behind cultural practices that shape environmental education curricula exposes what David Bower calls 'cultural myths,' such as the notion that all progress and technology are good or neutral. Bower writes,

As we attempt to resolve the sources of inequity within society, in basic human rights, in living personally and socially meaningful lives, and in the use of our national wealth, it will be necessary to frame the solutions in terms of cultural values and practices that will not contribute further to the overuse of nonrenewable resources and the pollution of the environment . . . Like other political reforms that bring more people into the modern, consumer-oriented society . . . where cultural demands exceed the sustaining capacities of natural systems . . . We need to begin to evolve, as cultures, into new directions that do not involve the need of individuals endlessly to pursue conveniences and personal meaning through consumerism. This means that many of our guiding ideals will need to undergo change, particularly as the extent and immediacy of our collective environmental situations rises into conscious awareness. (156)

The appropriateness of an environmental curriculum resides in the cultural authority forming the curriculum to reflect upon its own parameters as an authoritative power.

The craftmaking process encourages craft makers to interrogate authoritarian voices in their culture. For instance, a boat builder who is not able to gather craft material from a nearby area due to the establishment of a park, might become the first

voice of concern about park policies that limit local self-sufficiency on land previously held in trust for all citizens. Likewise, a craft guild might decide to become an active force in ensuring their own craftmaking supplies are harvested in a sustainable manner. Craft makers must also learn to trust their own voices in light of the authority of a practice, and in so doing they learn to question the “experts.” They are informed by the voices represented in the long-standing traditions that encourage a recording of significant changes in process and a reflection upon whether the changes are beneficial for future generations. It bears consideration why and how such voices have become silenced.

The craftmaking practices of any culture serve as an effective means to explore that culture’s changing understanding of the land evident in the transformation of traditional craftmaking that encourages sustainability.¹⁸ Often the specific actions involved in craftmaking practices are the very ways that demonstrate a culture’s perception of their relationship to the world. People may glibly mouth their cultural traditions of ‘respecting the earth,’ or claim to think of the earth as their mother, yet if words are not matched by appropriate actions, the cultural practice becomes hypocritical. Frequently, cultures have instilled respectful or animistic notions of the earth through craftmaking processes in which they are embedded. When these practices are no longer encouraged, the perceptions they promoted recede in the culture. This pattern is clearly evident in contemporary culture where easy access to industrial technologies embedded

¹⁸ Hill’s outlines in Weaving New Worlds, the way settlement and colonization changed the features of a landscape altering available material and in turn altering the way Cherokee people made baskets.

with all its alienating and destructive potential, replaces the slower, but more meaningful craftmaking experiences that once encouraged a sense of oneness with the land.

There are many craftmaking traditions that are themselves practices giving rise to, and reflecting, a culture's perceptions of the world. For example, frequently told stories may recount certain clusters of reeds which are identified as fairy groves and should therefore be left alone. These narratives are then examples of craftmaking traditions that ensure the sustainable use of materials. While guaranteeing that some reeds persist to re-seed future supplies, the stories also instill a sense of magic or animism about the existence of little people, thereby making the world more special. Such lore leads cultural members to recognize craftmaking as a valuable creative act extant when the world is perceived as a special place to be.

A culture's craftmaking offers a way to understand practices that shape cultural concepts of the land through tangible experiences. For example, the many eco-based projects encouraged in schools, such as the use of recyclable items to make a picture. These activities do not perpetuate the lore that promotes sustainability. Rather this eco-art curriculum encourages a 'cultural myth' of environmental friendliness while merely delaying the route material eventually takes before it ends up in the dump. Craftmaking curricula, on the other hand, should create critical thinking and raise questions around certain cultural traditions that ask whether what is being made actually does support expressed claims of helping the earth. The making of crafts encourages both maintaining and reclaiming cultural practices that allow the items people surround themselves with to truly reflect the values they require for respecting the earth.

Craftmaking aids in transforming culture. Today, with such easy access to powerful technology and abundant pre-processed commodities, to make something by hand is a subversive act. It represents resistance to being a part of domesticated culture. Craftmaking encourages self-reliance and the formation of relationships to the land in a manner that acknowledges relationship with the environment. Craftmaking inspires the acquisition of skills that distinguish humans from their 'wild' forebears. In his essay "Cultured or Crabbed," Gary Snyder clarifies this notion by drawing metaphors. He associates *cultured* with "well-fertilized" and applies the term to a person raised in a neighborhood that remains rooted in a region's natural systems. He describes as being *crabbed* a person who has left the cultivated stock and strayed back into the woods to regain some sense of the wild (48).

It comes again to an understanding of the subtle but critical difference of meaning between the terms *nature* and *wild*. Nature is the subject, they say, of science. Nature can be deeply probed, as in microbiology. The wild is not to be made subject or object in this manner; to be approached it must be admitted from within, as a quality intrinsic to who we are. Nature is ultimately in no way endangered; wilderness is. The wild is indestructible, but we might not *see* the wild.

A culture of wilderness starts somewhere in this terrain. Civilization is part of — egos play in the fields of the — takes place in the — culture is rooted in the primitive and the — body is a vertebrate mammal — our souls are out in the wilderness.(49)

Craftmaking is directed at learning to deconstruct cultural patterns and recognize hypocritical practices in order to establish new ways that encourage human and natural systems to be maintained as one. Craftmaking practices that encourage a sense of being

of the world ultimately deconstruct 'cultural myths' while encouraging feral practices that inform a wild-based cultural identity.

Reviving Spirituality in Education

To revivify a sense of oneness or being of the world, many environmental-thought advocates are encouraging an infusion of spirituality in educational practices.

Environmental-thought writers allude to the elimination of personal encounters with death from daily life, connecting the absence of experience with immortality to a lack of spiritual fulfillment. Generally members of ACID society no longer harvest their own sources of food and material, as a result, they do not make a connection to their personal roles in needing to kill plants and animals to survive — an educational experience from which human spirituality arises. Paul Shepard comments on the educational importance of experiencing death:

The internal structure of plants and animals must also be seen. Squeamishness about taking creatures apart, so often encountered among today's youth, is a measure of the extent to which parents and society try to isolate themselves and their children from life. Those who cannot stand the sight of intestines, blood, or death have been cruelly removed from reality. The claim that they are sensitive or that they are passionately devoted to the living whole animal is a self-deception masking fear. The idea that only exteriors or whole animals are suitable for study is nonsense. When approached with an appropriate sense of wonder and discovery, of gratitude to and respect for the dead creature, dissection of hunted game is an excursion into new — therefore into new realms of the mind. It is appropriate, moreover, that the organism be eaten (if edible) after dissection. Assimilation is a suitable expression of love. (268)

The making of crafts can allow a person to have experiences that raise questions about death and therefore encourage spiritual development. Craft makers can be guided

through the experience of acknowledging what more-than-human forms they are taking in order to make something as well as what they are giving birth to or creating through honouring the making process. Craftmaking encourages spiritual knowing through actual participation in killing the more-than-human, especially when such deaths are understood and appreciated from perspectives that promote awareness of interconnected dependency of human and more-than-human life. For instance, killing plants may have diverse impacts on the fauna depending upon the harvesting technique. Food sources might be eliminated and protective sheltering areas destroyed, or harvesting could have the alternative effect such as encouraging new growth to feed and shelter animals.

The acknowledging of death and the honouring of what is given life through craftmaking work together to support a person's spiritual development. Personally harvesting craft making material offers the direct experience through which perceptions can be raised and meaning acknowledged regarding the most appropriate manner of taking life in order to support human existence. Honouring and celebrating what is made in various ways offers an opportunity, at the conscious level, to publicly acknowledge the necessity of taking life to support human existence. At the unconscious level the opportunity is afforded, of expressing the interconnectedness of all life. From the prayers, rituals and offerings of the harvesting practices of craftmaking, to the dances, songs and celebrations of the ceremonies traditionally performed to honouring the abilities of craft makers, a wide range of acknowledgment is offered to the more-than-human's role in making crafts possible. Continual participation in such forms of acknowledgment encourage a sense of being of the world.

Public expressions of spirituality are significant in forming a spiritual-based sense of reciprocity, or in acknowledging the need for the more-than-human to support human life. Jack Turner comments upon these ideas with reference to Gary Snyder's book The Practice of the Wild:

To fully accept our wildness we must embody it, we must take up residence in a biological order; to become whole we must live as part of a larger system of plant and animal communities governed by reciprocity. The acid test is this: to see yourself as food. "To acknowledge that each of us at the table will eventually be part of the meal is not just being 'realistic.' It is allowing the sacred to enter and accepting the sacramental aspect of our shaky temporary personal being." (45)

Craftmaking activities provide participants with the direct experience of taking more-than-human life. They also offer guidance to understanding the ways of respectfully playing a role in these "larger systems of plant and animal communities governed by reciprocity."

The environmental education that results from a craftmaking pedagogy challenges our conscience to understand death by learning the interdependency between giving and taking life. It can also encourage humans to minimize their role in the taking of more-than-human lives. Only a sense of spiritual understanding can guide human actions in this regard to create a path of faith and respect in the course of taking lives to sustain life. There is no absolute substantiation for any other perspective. In conversation with Jonathan White, Richard Nelson discusses why he hunts deer, an animal he deeply loves:

RN: When we kill an animal, that death is in a sense our own death. We look at it and we can't help but see our own mortality. The death of a warm-blooded, furry animal is particularly vivid and poignant, I don't

think anyone can take an animal's life without projecting themselves into it.

JW: You talk about the Koyukon sense of respect, which encourages awareness of and direct participation in the cycles of life and death. Yet many in our culture are not only physically removed from this cycle but have developed the perverse notion that any kind of death is wrong.

RN: Death is viewed as destruction. We feel we are destroying something when we kill an animal or a fish or a plant, or anything. I think people in the Native American tradition had a better awareness that life is not destroyed, but only passed along. I get a great deal of pleasure from knowing that my body is made in no small measure from deer. I am passionately in love with deer but I also kill them. I appreciate the fact that I am made out of the animal I love. Somewhere, both literally and physically, a deer looks out through my eyes; and some day my body will feed deer, too. Then they will live from me and the whole cycle will come around. We don't own life, we just take its shape and then pass it on. (92)

The making of crafts is therefore a form of participating in the spiritual and material transformation of life.

The educational experiences of a contemporary child include neither the hunting nor butchering of animals, nor the felling of trees and collection of plant material.¹⁹ But craftmaking experiences can provide a safe forum for reintroducing such powerful learning situations into the curriculum. For instance, students in northern Ontario communities where hunting or snaring rabbits is still a possibility should learn to harvest animals and plants all the while raising significant questions such as: Why distinguish between taking the life of a plant and taking that of an animal? Why might an animal, a tree and a person prefer to have a limb neatly and quickly sliced than torn or shredded off? Which form of harvesting prevents needless pain and lessens the possibility of

¹⁹ To these examples could also be added the mining of soils and minerals.

infection? What merit is there in cultural traditions of prayers and offerings directed at consoling an animal or plant at the time of its human-induced death? How can these deaths be perceived and understood through various spiritual beliefs provided through the experiences offered in craft making? Overall, the craftmaking activities encourage coming to some kind of understanding of the life and death cycles in which all human life partakes.

Craftmaking can also be associated with practices of spiritual healing. Matthew Fox, formerly a Catholic priest, comments on how craftmaking works as a rite of passage in fostering a relationship with the natural world. Although referring to the term “art” in a wide sense, Fox states:

In a way, every creative process is a rite of passage. There’s a dying or a letting go involved, and always a rebirth. It’s a daring thing to stand up and say, “AI made this.” The price we pay for that experience of renewal is sometimes small and subtle, but at other times we feel like we may lose everything we are. (qtd. in White 197)

Craftmaking offers a form of experience comparable to a rite of passage that involves a person moving from one state of being to another state of being in the larger world. As in a rite of passage, craftmaking has an initial preparation period involving seeking and harvesting material as well as developing emotional readiness to accept that all the more-than-human materials must die in order to be crafted into something new. Sometimes this stage also involves the careful practicing of individual skills²⁰ in order to

²⁰ For example, even contemporary wood turners accustomed to power tool use require a period of learning to center and practice their body co-ordination in order to use a pump lathe that demands co-ordinating body rhythms in order to pump a peddle to turn wood while carving with a chisel at the same time.

complete a desired task readily. The second stage of a rite of passage requires the crossing through a liminal state by virtue of an orchestrated ritual process comparable in many ways to the structured practices of making a craft. At this point a craftmaker might wonder when the wood used has ceased to be called a tree and can be referred to as a boat. To complete a rite of passage there must be community acknowledgment of the celebrants' new status and ability to transform material so as to provide new life to the more-than-human forms. In craft making, this completion may occur when guild members initially launch a boat or initially recognize fellow members as having proven themselves to be masters.

Different cultures have various traditions safe guarding the stages of rites of passage. Craftmaking can be an outward sign of a rite of passage, for example, during an initiation into a secret society when a person is allowed to make and wear a specific mask. Craftmaking can also be connected to a ritual stage within the rites of passage such as the time a person must make a robe to wear as part of the preparatory stage. Craftmaking is connected to a rite of passage by virtue of a magical aspect, potentially either contagious or homeopathic. For instance, an example of contagious magic in a craft would be to weave human hair into the top rim of a basket made to hold an offering to a totem animal whose message is being sought. Homeopathic magic concerns like unto like. An example of it might be two wooden spoons carved so that they nestle neatly inside one another in order to signify love and a desire to live closely with the person to whom the spoon is given. The like-unto-like is reflected in the close nesting of the spoons aimed for by a carver because closeness is also desired in the couple who possess the

spoons. In transforming the material into a craft, the craftmaker becomes transformed and becomes situated in community in a different way, such as to be recognized as a weaver, blacksmith or wheelwright. This different manner of acknowledging a person can have strong spiritual associations as craftmaking deals with the death and rebirth of the more-than-human material involved, and this cyclical aspect of material reflects an incredibly expanded interconnection of being of the world.

Studying and Imitating Indigenous Practices

Disillusionment with ACID-based cultural practices often leads to fascination with other cultural perspectives. Attempts to capture a closer association with the land can lead to imitation of cultures perceived as having more desirable relationships with the land. The contemporary interest in Indigenous North American ceremonies, art and craft forms offers significant examples. For at least a century, from Ernest Thompson Seton to the present, ACID-based cultures have turned to the indigenous people to learn valuable practices exhibited by traditional Native cultures with a long term history of sustainable existence in a specific area. Environmental education practices based upon such imitation frequently result in issues concerning cultural appropriation. Studying and imitating other cultures demands great care, for as Bower states:

. . . the more spiritual forms of knowledge, which are primarily ways of understanding relationships, cannot be directly borrowed; nor can they be reduced to techniques that can be superimposed on fundamentally different cultural root metaphors for understanding reality. But they can serve as guides for understanding the various cultural languages especially suited for communicating across generations and between species. In

rediscovering these languages, we might have a better sense of the changes we need to make in our approaches to formal education. (205)

One of the 'languages' that tends to be an acceptable intercultural mechanism is craftmaking, since the making of craft has existed in all cultures. Generally, craft people like to learn new processes and share techniques so craft makers tend to willingly share ideas even with visitors. As all cultures have had practices of making, the sharing or transferring of specific ways from one culture to another was traditionally a mutually beneficial means of communicating. As well, craftmaking can be a means of retaining an openness to other perspectives on the way to make and thereby to perceive the world. An example would be the blending of the Native birch bark canoe with the French Canadian voyageur culture, which resulted in the classic story *La Chasse-Galérie*, the tale of the flying canoe sterned by the devil.²¹ This tale resonates with a shared sense of humanity existing within and between two different cultures.

Orr states that an important part of environmental education is the studying of other cultures because they offer a tantalizing glimpse of the ways cultures can be linked to nature through ritual, myth and social organization (Ecological 7). Studying the ways something is made in another culture and the stories associated with these new crafts in the "studied" culture, can allow the practices of relating to the land to be more meaningful. To avoid issues of cultural appropriation it is critical to create the space in a culture to determine what is important and should be shared with other cultures. Consequently, the relationship will not be understood merely through the perspective of a

²¹ For a full English account of this French Canadian tale see Edith Fowke's Folktales of French Canada.

visitor in a culture, but rather through a person trying to make an area their home through the crafts that stem from, and are best designed for, the home region.

Increased Sensory-based Awareness

ACID-based society today tends to validate theoretical and abstract constructs, and to discourage the rich sensory-based experiences that environmental educators recognize as necessary to the development of alternative perspectives of the world, such as being of the world. Sensory-based learning experiences are critical to supporting a perception of being of the world because sensory-determined understanding comes from both within and outside a person in the place where humans and the more-than-human world merge.

Environmental-thought advocates variously describe the concept of sensory derived knowledge. David Abram sees sensory experience as an old link to the traditional if not primordial participatory mode of perception with the world. He states that, in contrast, today's attunement to the local earth is thwarted by an ever-increasing intercourse with human-derived signs. As such, signs become a barrage and there is a danger that people will come to believe that their "breathing bodies really inhabit these abstractions" (267). It is possible that these ephemeral entities will be defended and not the actual places that physically sustain us.

Only when we slip beneath the exclusively human logic continually imposed upon the earth do we catch sight of this other, older logic at work in the world. Only as we come close to our senses, and begin to trust, once again, the nuanced intelligence of our sensing bodies, do we begin to notice and respond to the subtle logos of the land. (267)

In criticizing today's emphasis on the visual world and abstract perceptions, Paul Shepard describes the way sensory skills work to encourage different types of perceptions that, in turn, lead to other kinds of knowing:

The visual and abstract perception of the world has usurped other sensory modes and forms of communication. The metaphors for cognition are all spatial and visual, reducing things to surfaces and abstractions.

Sound is concerned with interiority, because the interior of the musical instrument, like the human lung, is the source. Touch is the final recognition and affirmation of external reality, of self and not-self. Smell is the interpenetration of self and environment at a molecular level far more encompassing and eventful than eating and being eaten. These are the — with the — the traditional hunting culture. Because of sound the universe is a dynamic, event-filled place, never static, never wholly storable. The icon, the fixed idea, motionless objects as nature, are all replaced by active being, the noun-verb oneness of events. (276)

Abram illuminates another aspect of this sensory-based concept by outlining the ways that knowing, derived from sensual experience, is a prerequisite for achieving a sense of an animate earth, or of being of the world.

There is an intimate reciprocity to the senses; as we touch the bark of a tree, we feel the tree touching us; as we lend our ears to the local sounds and ally our nose to the seasonal scents, the terrain gradually tunes us in turn. The senses, that is, are the primary way that the earth has of informing our thoughts and of guiding our actions. Huge centralized programs, global initiatives, and other "top down" solutions will never suffice to restore and protect the health of the animate earth. *For it is only at the scale of our direct, sensory interactions with the land around us that we can appropriately notice and respond to the immediate needs of the living world.* (268)

As a pedagogy, craftmaking is unique because it cannot be separated easily from the basic sensory-based knowing that informs it. Craft makers derive understanding from direct experiences that centre upon the sensory capabilities of their bodies as they interact with the land. The relationship humans share with the more-than-human world is

confirmed through the physical act of craft making. The sensory-based learning experiences obtained through craftmaking are especially significant since general educational curricula offer a decreasing number of sensory-dependent learning opportunities.

Throughout history the need for crafts has ensured that humans develop and exercise their sensory capabilities. If the need for items of utility is met through purchases of readily available commodities, then the opportunity to be informed sensually through craftmaking is reduced. In the pre-industrial past, the need for craft provided the impetus for processes involving sensory exploratory activities that reinforced humans' sense of the land as animate. While it is not possible to claim a contemporary *need* for the products of making due to existence of industrial processes, there is a strong argument for retaining the *making processes* and their contingent sensory-based experiences. Substituting simulated sensory-based experiences serves little purpose beyond intermittent sensory arousal. As an example the blindfold walk that many students do at outdoor education centers may provide them with the opportunity to feel and smell the bark and branches in trees, but it serves little purpose beyond being a sensory-based exercise. In craftmaking, the same senses that are involved in noticing a tree are extended further, as a person delves into the experience of cutting through wood grain with a saw and knife in order to carve a bowl. This is like Gandhi's insistence that education be based upon performing a craftmaking activity in order to maintain practical roots in experiences that allow people a way to provide for themselves and pay for their education.

Craftmaking confirms personal sensory-derived perceptions that resonate with other people's perceptions of their surroundings, ultimately supporting a more pervasive and shared notion of being of the world. This involvement of personal perceptions in craftmaking produces a sense of "embodied knowing" quite different from the more impersonal reason-based ways of knowing. The following personal account illustrates the potential for empowerment through embodied knowing.

I was walking along a path in a wilderness designated area in the southwest, when I immediately became aware that something was hurting. It was as if a nearby creature had called for help, thereby interrupting my thoughts and capturing my attention. Immediately I stopped walking directly on the path and started looking around as if for an injured person or whatever had "cried" out. A few moments later I noticed that my hands had been touching every tree I had wandered around. I had been caressing the trunks of a small grove of trees. It was then that I noticed the needless scars on most of the trees. Axe blazes were all over the trunks seemingly for no apparent reason. An immense sadness came over me as I must have empathized with the trees' pain. I found the whole experience strange and exciting. Somehow the trees had called out to me and I had heard and heeded their call for empathy. I can only describe it as having some kind of deep body sense, like a sixth or intuitive sense.²²

In Reconnecting with Nature, Michael Cohen describes over fifty sensitivities²³ such as the sense of hunger and thirst, the sense of fear, death or attack and the sense of colour and moods associated with colour. This list of sensitivities confirms the breadth of possibilities for sensory-based ways of knowing. It may be critical to encourage such experiences in the formative younger years, before the window of opportunity for

²² This narration is an account of an experience I had in Sabino Canyon in 1999 and is recounted as if I was telling it to an audience.

²³ He groups these senses into radiation, feeling, chemical and mental. Two examples are space, or proximity sense, and sense of weather changes.

developing such awareness and intelligence closes. Many educators outline the importance of establishing diverse learning experiences in these formative years; many even caution against introducing children to abstract symbols too soon as doing so may alter their development in ways not yet fully understood such as Rudolf Steiner in Waldorf education. Paul Shepard (1998) proposes critical experiences that should occur in childhood and the ages when abstract symbols should be introduced. Of craftmaking Shepard writes,

Every child should become as expert as his nature allows in the use of his — gathering and preparation of materials, and in making useful objects from wood, stone, clay, leather, paper, bone, metal, and other materials with hand tools. . . . The child's relationship to art is a difficult matter. The child should be protected from cultural relativism and culture-bug adults. Before twelve he should draw, dance, make music, weave, sew, mimic, sculpt, and make pots, but he should be insulated from art history and works of great artists and never go to museums. (269)

Craftmaking is evidently an experience in which the land teaches each individual directly through personal contact and affirmation of the senses. Affirming sensory-derived knowing is then at the heart of a craftmaking curriculum.

Even the products of craftmaking promote sensory-based experiences as a way of coming to know the world. A comparison between a hand-carved item on the one hand, and a purchased object on the other, serves as an illustration. People using a hand-crafted spoon which they carved, continues in their relationship with the land that began with the tree before the spoon was made. The sensory-based relationship between people and the tree that provided the spoon, surfaces for the craftmaker through the experience of having carved the spoon, and for the user in recalling memories of the spoon's creation and use.

This depth of appreciation stands in stark contrast to a person's understanding of a purchased spoon that contains little memory of a given tree, wood grain, smell of carvings, specific maker, and so on. The person who only knows a spoon as a commodity can develop limited, and often distorted, awareness of the process of constructing the spoon and its cultural value beyond its commercial value. Any sensory-based understanding of a purchased spoon is eclipsed by constructs such as the label it bears or its listed price.

Environmental educators seek more curricula that create sensory-informed knowledge, especially as long periods of time being enclosed indoors has limited people's stimulation and interest in sensory awareness, typically in exchange for novelty in human-derived constructs. Sensory stimulation is the communication that exists between the outside world of ourselves, and the world inside. All natural craft material — even when brought indoors to make something — affirms the use of a diversity of senses in creating knowledge. A typical paper-derived curriculum only demands altering representations, such as in math and writing exercises. Craftmaking offers children exposure to the raw forms of materials from which all the items they need to survive and all the ways of understanding those items, originate. Craftmaking allows a person to come to know the world in a manner that goes beyond language-based and representational format.²⁴ For

²⁴ Michael Cohen outlines an interesting experiment in which to demonstrate how the emphasis on reading has influenced our ability to sense things. He writes down various colours but in an ink of another colour. He then asks people to tell him the colour of the ink. Most people find they more readily attend to the colour indicated by the letters and not the ink. This exercise demonstrates the way our emphasis on literacy has weakened our ability to attend to and learn from our other senses (92).

example, sheep are no longer simply a picture in a book, but become the feel of fiber and lanolin on the hands. The smell of wet wool can then become a trigger in the future for memories of experiences on a sheep farm, motions involved in learning to knit, and so on. Such sensory-based experiences are more difficult to misrepresent as every person attends to his or her sensory perception in an individually distinct and direct manner.

Learning through a craftmaking curriculum places people in the position of having to use their own senses in order to determine their perceptions. Through observing the qualities of the material they are shaping, they can recognize similarities and differences between the material and their own bodies. For instance, frequently a green sapling will bend like our own arm. Knots on the stem limit bending direction similar to the way our elbows and wrists can bend but only in a certain way. Ultimately, craft makers learn to affirm the value of their own bodies as they also affirm the unique qualities of the more-than-human material that they handle.

In a craftmaking pedagogy, a sensory-based form of dialogue is employed to merge the material and the craft maker. Abram explains that,

to directly perceive any phenomenon is to enter into relation with it, to feel oneself in a living interaction with another being. To define the phenomenon as an inert object, to deny the ability of a tree to inform and even instruct one's awareness, is to have turned one's senses away from that phenomenon. It is to ponder the tree from outside of its world, or, rather, from outside of the world in which both oneself and the tree are active participants. (117)

Craftmaking provides a unique educational opportunity to use what humans know best and most intimately — their own senses — to learn about the world. Contemporary environmental education curricula have increasingly and unknowingly shifted towards

being about impersonal and abstract, albeit human, constructs through representations and ideology. For instance, sustainable harvesting limitations are today validated through records of mathematically-based representations of forest size and stream velocity. Formerly, this validation of limitations had come from embodied knowing through repeated experiences of feeling a bent branch just before it breaks, or a clay wall just before it topples. Craftmaking allows the craft materials themselves to become the teachers. Most educational practices have limited the richness and intensity of sensual experiences by confining learning, first to indoor environments, and second to a strong visual emphasis on reading and writing. A craftmaking pedagogy enables sensually-derived information to return to our educational programs, while providing a practical context in which to offer environmental education.

The challenge environmental education currently faces is to encourage sensory-based experiences that can promote understanding of the world and are practical to human existence. Unfortunately, few curricular activities are able to achieve these ends. While sensory-based activities do exist in curricula, they seldom provide a practical experience through which to use the senses. Therefore, many Earth Education activities such as blind nature walks by no means fully use a person's sensory capacities. Validation of sensory-based abilities comes with use of these capacities, and the greatest validation involves the use of the senses that offers something of worth back to the community. Children who are encouraged to engage their senses in an activity, but then find themselves never needing to apply their sensory capacities in that particular way, again do not gain validation for using their senses. Completing a craft involving the use of the

senses in the making process, however, validates their skill of learning through trusting their sensory capabilities. Curricula that function as isolated sensory-based experiences, but are not readily associated with the skills involved in daily life practices should be reduced in contemporary education. The practical, sensory-dependent skills of craftmaking that direct a person's attention towards forming a practical relationship with the more-than-human world, should be increased to promote greater environmental awareness.

Sensory-based awareness can also be encouraged and experienced through stories. Over long periods of time innumerable individuals have accumulated knowledge of craftmaking through direct experiences using their senses. This type of knowledge is not, however, readily preserved in any stagnant forms such as writing. Rather, because it is flexible and lacks clear boundaries, it is best preserved simply through role modeling craftmaking practices and conveying the ideas of craftmaking through other flexible modes of communication, such as story telling. Stories about craftmaking often preserve the accumulated knowledge regarding the sensory lessons offered by given plants or animals. For instance, the *Kalevala*, a well known collection of folk traditions of Finland, was compiled into one larger story by Elias Lönnrot. It includes examples of people perceiving trees as animate beings that could and should be "listened" to in order to inform the craftmaking process.

He comes upon an aspen three fathom high.
 He wanted to touch the aspen, to chop down the tree with his ax.
 Speaking the aspen say, chatters with its tongue:
 "What, man, do you want of me? Whatever do you desire?"
 The lad Sampsa, Spirit of Arable, he, indeed, uttered these words:

‘That indeed for Vainamoninen, ship’s timber for the singer.’
 The aspen spoke rather oddly, the hundred-branched tree was able to say:
 “A leaky boat will come of me and a sinking sort of vessel.
 I am hollow in the lower part of my trunk; three times this summer
 a grub ate my heart, a maggot ravished my root.” (96)

This narrative, fostering the perception of a tree as a living being capable of communicating with humans, instills in people the sense that they can communicate across the species divide. Repeated hearing of such descriptions encourages craft makers to ‘listen’ through their senses to the lessons of a tree. Abram offers an understanding of the recording of sensory-wisdom accumulated through the ages in stories.

. . . the diverse properties of particular animals, plants, and places can be preserved only by being woven into stories, into vital tales wherein the specific characteristics of the plant are made evident through a narrated series of events and interactions. Stories like rhymed poems or songs, readily incorporate themselves into our felt experience; the shifts of action echo and resonate our own encounters. In hearing or telling the story we vicariously *live* it, and the travails of its characters embed themselves into our own flesh. (120)

When the actual sensual experience of craftmaking is not available, the next best thing is to recall the stories from the past that were based in the sensory-derived lessons, and that convey the wisdom learned by craftmaking ancestors. By narrating an appropriate story the teller also prompts “recall of the accumulated cultural knowledge regarding that entity and its relation to the human community” (Abram 121). This cultural knowledge comes from the sensory communication between humans and the more-than-human world throughout time. ACID culture has increasingly devalued the use of the body, or senses, since the Enlightenment valuing of the rational over emotional ways of communicating. Concentrating on the sensory involvement in craftmaking and

communicated through stories, is a way of promoting greater use of the senses in cultures that have tended to devalue sensory-based activities and ways of knowing.

Symbols that are frequently present in crafts work in a fashion similar to storytelling in that they serve as mnemonic devices for sensory-based cultural knowledge. LaChapelle provides some examples: the “eyes” placed on Inuit clothing and the prevalent shape of the “eyes” in West Coast carvings encapsulate the idea that the land is capable of watching humans who therefore need to be respectful (White 179). The designs that are part of a craft, or are placed on a craft, should whenever possible exist not only for the sake of aesthetics alone, but should also serve as mnemonic devices that recall some culturally-determined wisdom.

The richness of craftmaking as a pedagogy rests in the fact that it ensures some level of sensory stimulation. Through an individual’s sensory stimulation comes the opportunity to know the world by direct experience, which is the best means to validate the senses supporting the experience of embodied knowing. Repeated validation of such knowing encourages an understanding of the world based upon personal perceptions within a particular set of cultural values. Craftmaking encourages sensory-stimulated knowledge that the world is a very sensual place. The basis for understanding and perceiving the world as one immense living being derives from humans’ own senses that arouse concepts of animism and the assurance that many things other than humans are alive on the land. This affirmation leads to an understanding of being of the world. The sensory-dependent practical aspect of craftmaking provides a curriculum that can form the basis of this affirmation of being of the world.

The ultimate goal of implementing a craftmaking pedagogy is to create the confidence among humans to make full use of their sensual capabilities in providing for their own needs, without depending upon advanced representational technology systems. By encouraging craftmaking experiences as a means of coming to know the world, environmental educators can offer a rich sensory confidence that provides a secure sense of being, familiar and comfortable with the perception of being of the world.

The next chapter will address the following question: why is craftmaking a pedagogy for shaping a person's understanding of the world. This chapter can be adapted to meet the needs of educational instructors, teachers, wilderness guides, camp counselors or any craftmaker as they explore the relationship with the land that is shaped through aspects of craftmaking.

Chapter Four:

Craftmaking Experiences: A Pedagogy for Establishing a Relationship of 'Being of' the Natural Environment

Introduction

Fulfilling basic needs by making items is a fundamental experience that both individuals and cultures have used to define, to distinguish and to provide meaning for themselves as humans. It is ironic that the process of making items, and in some cultures the perpetual desire for novel items, is often associated with the cause of environmental devastation so severe that many individuals believe it may ultimately lead to human extermination on Earth. It would appear, however, that some processes of making an item aid, while other processes hinder, a person's attendance to an eco-centric based relationship with the world.¹

This study in general and this chapter in particular address how and why craftmaking serves as an integral part of environmental education by establishing a practice that offers fulfillment in learning about the natural world. As ACID cultures become increasingly dependent upon material acquisition and innovative technological growth, it is critical to begin questioning the various making practices that shape people's perspectives of the land. Environmental education needs to consider the ways in which these perceptions are molded through interactions with craft material, especially in light of the ways all material ultimately comes from the land. More needs to be understood

¹ This expression means that the land or ecological cycles of the world are routinely considered in decision-making processes and personal daily acts.

with the regard to the ways personal experiences of collecting, shaping and using material inform any individual's perspective of being in the world. Any understanding of making-practices should be transparent or apparent, so as to blend theory and action, as well as the spiritual and material world. As the previous chapters have demonstrated, craftmaking offers environmental education curricula a holistic design that bridges many schisms and immerses people in a way of living in the world so they can perceive themselves as part of it all. This discussion reveals the way making items can create situations that encourage a relationship of 'being of' this world to develop.

People are drawn to making activities with an expectation that they will enjoy a peaceful, hands-on, gratifying kind of experience. For many people in this era craftmaking resonates with some sense of country, back to the land or folk appeal. Yet today's craftmaking market and the experience it offers the maker seem, upon close scrutiny, to be part of an experience that only partially fulfills initial desires. These experiences may lead a person into an unhealthy addictive frenzy of continually making items they may not need or really want, but that will superficially placate a deeper dissatisfaction and longing. Contemporary making activities have become consumer-based and shallow. Their capacity for developing connections with the natural world and producing an understanding of 'being of' the world have decreased. In industrial-based cultures, the opportunity to experience various perspectives of the world through making activities has diminished. This chapter will clarify and explain the practices craftmaking can provide if approached as a pedagogy for establishing an ability to perceive oneself as being of the natural environment.

Contemporary people have a choice: either to support the creation of made items that reflect a human-centred, intellectually-based experience (while frequently supporting energy-intensive industries,) or to make items that encourage a person to attend to living humanely within a web of relationships. By learning to attend to a web of more-than-human presence(s), we humans consistently recall the ways our existence ultimately depends upon the 'non-human' world. This pedagogy explores the reasons craftmaking practices are preferable to other forms of environmental education curricula because of their potential to encourage a relationship of 'being of' the land. This study contends overall that craftmaking experiences, effectively reflected upon, serve as good environmental education by at least encouraging people to keep 'the earth in mind,' and at best encouraging them to attend to the more-than-human world of which they are a part.

Environmental educators need to explore the fundamental aspects of craftmaking activities that make them the core of a pedagogy designed to establish a relationship of being of the natural world. An understanding of the various and changing definition of terms pertaining to making activities and items allows educators to critically discuss the way the prevalence and use of a term embeds people in various relationships with the natural world (refer to comments on terms raised in the introduction). This chapter considers the aims and objectives for a craftmaking pedagogy and includes a description of a craftmaking model that can be used by individual craftmakers and craft instructors in order to enrich their craftmaking curricula. This model is based upon describing guideposts through the use of stated purposes, teaching experiences and narrations. The

final portion of the chapter will consider the physical, practical and holistic qualities embedded in craftmaking experiences. Additionally, how these qualities contribute to a person's understanding of the land, and ultimately lead to a relationship of "being of" the natural environment is discussed.

Objectives and Aims of a Craftmaking Curriculum

AIMS

The following aims outline the overall purpose attempted in a craftmaking pedagogy. They arose from the accumulated ideas presented in the research and experiences undertaken, and then outlined, in the previous three chapters. These general aims should be kept in mind as the direction targeted by educators or guides when planning specific craftmaking curricula. A list of objectives then follow that provide more practical, tangible examples of what can be sought to develop curricula that will address these aims.

THE GENERAL AIM OF CRAFTMAKING CURRICULA SHOULD BE TO DEVELOP WITHIN LEARNERS:

- the confidence and patience to imagine, initiate and complete a craft through the demonstration of bodily-based skill and care;
- a person's ability to attend to the features of the natural setting required to locate and harvest material in a sustainable manner;
- an attendance to the specific qualities of a chosen material in order to design and construct a suitable item that can fulfill an intended purpose;
- the skill and confidence that the land will reveal and provide the necessary material in order to maintain life and that learners will be able to fashion suitable craft items whether working alone or cooperating in a group;

- the ability to comprehend the ways in which making processes have been and are continually affected by developments such as the Industrial Revolution and the introduction of new materials and new techniques etc.;
- the ability to recognize the impact these processes have upon the natural integrity and health of an area's ecosystem, as well as human practices of sustainability;
- the ability to comprehend the way the local natural environment shapes and fulfills our needs for survival;
- practical learning experiences and metaphors of these experiences in our conscious and unconscious memory, directed towards creating awareness of the world as an animate entity;
- a sense of joy in using one's own body and expanding the limits of one's sensory ability to know.

OBJECTIVES

The following is a list of objectives to be considered by a person when designing craftmaking curriculum. The objectives have been grouped according to their general focus: the first ones are designed to encourage a sensory awareness and embodied knowing. The second set is oriented to developing an awareness of, and respect for, the land, and the third set to helping people reconsider what they need to survive.

The following set of objectives are designed to encourage sensory awareness and embodied knowing.

PARTICIPANTS IN A CRAFTMAKING CURRICULUM SHOULD:

- have the opportunity to work with a variety of unaltered, unprocessed materials originating from local animal, plant and mineral sources such as raw skins, whole logs, local clay;
- observe and acknowledge a wide variety of practices detailing the finding of specific quality craft material. For example, the best time of year to harvest material may have indicators to look for, such as opened seeds, or the first full moon after the ice break-up of a lake. Specific terrain features for finding high quality sources of material

might be spruce growing alone in a swamp that has un-obstructive roots that can be easily pulled up, or the best bark may come from birch trees growing in close proximity to balsam and spruce;

- prepare materials with due attention drawn towards the role the four elements of water, air, fire, earth play in this preparation. For example, notice the amount of moisture required or the pace of drying desired. Consider when heat should be used to transform the material or more sand added to dry material and create a thicker consistency.
- notice and articulate what specific qualities of materials are most desired to make various crafts, for example, specific features on trees can indicate the quality of the material used such as the size of the growth rings;
- acknowledge the degree of bodily skill necessary in order to complete a craft. For example, what competency level is required with regard to handling a knife during various carving procedures;
- demonstrate the skill and technical ability to make something without the use (or with limited use) of power tools;
- acknowledge the ways bodily states of comfort are maintained or abused when engaging in repetitive tasks. For example, notice if humming, chanting or music aids a person to find the correct pressure to carve hardwood, or reduces tension being held in the body;
- reflect upon the processes of group chanting or singing while craftmaking to eliminate the desire to complete a craft as quickly as possible, or within a certain time period. Question the ways concentrating on the repetitive motions of craftmaking restrains, alters, or aids the enjoyment of participating, and what else the rhythm brings to a craftmaker;
- compare the experience of decorating a completed form to the experience of both designing and making the form and its decorations. From such experiences, compare and articulate the relationship to the natural environment that decorating and different craftmaking processes offer the craftmaker;
- engage in very practical experiences that allow a person to recognize, through the completion of a craft, a direct connection to their own immediate comfort and/or short term survival. For example, in order to have a fire, a person must first make a fireboard to obtain fire by friction to stay dry and warm. After one experiences the

shift from being cold and wet to warm and dry due to the creation of a fire, a fire board will take on new significance;

- be able to describe the place of origin of most purchased material and to identify suitable local substitute material;
- specifically shape an item to fit a person's own body size and /or special needs. For example, clothing, knife handle adapted to personal hand size, a shoe built for a certain person from their foot-tracing and not a standard size pattern, a snowshoe adapted to a specific travel terrain, etc.;
- learn a craft through the process of simply witnessing another adult make a similar craft. Minimal emphasis on dialogue should occur, though the participant could aid the adult by holding material, passing tools etc.;
- recognize, appreciate and support the degree of skill a master craft person can demonstrate.

This next set of objectives is designed to instill a sense of respect for the land and an openness to new ways of perceiving the land, especially those relationships based upon recognizing the land as an animate entity similar to one's self.

PARTICIPANTS IN A CRAFTMAKING CURRICULUM SHOULD:

- witness other adults, such as elders and teachers; demonstrate in various manners a sense of care and respect for the life forms they are harvesting for craftmaking activities;
- involve themselves in direct experiences seeking and gathering craftmaking material. For instance, a person should routinely visit a local area to regularly monitor the area in order to ascertain restorative growth and the impact of the harvesting practice they undertake there;
- be required to harvest both plant and animal sources of craft material;
- demonstrate a sense of compassion and appreciation for the life form(s) they harvest and be able to express this appreciation;
- explain and demonstrate a sense of awareness and care for following the harvesting procedures necessary to ensure the future existence of the material. For example, only harvesting a material in the appropriate season to minimize damage and ensure good quality material; possibly limiting or rotating harvesting areas; altering quantity and

technique of procuring methods in order to ensure the future supplies and not just present market demands;

- demonstrate their ability to recognize the many uses for one item, or what one item can afford another creature. For example, a forked stick can be used as a tong or hook, a branch can afford a bird a perch etc.;
- reflect upon the effects working in different settings has on the craftmaker and the ways this effect may alter a person's understanding of the significance of the experience. For instance, what role does being indoors or outdoors, under fluorescent lighting, by flowing water, in a noisy area, in a cluttered or confined space, etc. play in a person's construction of meaning in regards to the significance of a craft;
- participate in the experience of making something in a holistic fashion, (where the person is in control and engaged in all aspects of the process) and compare it to a prescriptive making experience where a person is only required to design a diagram for a craft and nothing else;
- get involved themselves in some community-based events that highlight the use of hand-made items, for instance, participation in a traditional barn raising event;
- acknowledge and demonstrate the least harmful manner in which to dispose of all material left over from the craftmaking process.

The final set of objectives is designed to emphasize practical experiences and the reflective process which help a person to distinguish between needs and wants, and that encourage self-restraint and self-reliance.

PARTICIPANTS IN A CRAFTMAKING CURRICULUM SHOULD:

- over the course of their education, be actively involved in experiences of craftmaking that expose them to the need to:
 - a) imagine and create their own toy(s);
 - b) obtain or prepare food for consumption using a self-made item such as a knife, digging stick, hunting implement, pot, spoon etc.;
 - c) provide warmth for themselves or others, through the making of fire and/or a shelter;
 - d) construct clothing suitable for wearing in the local natural environment;
 - e) create a carrying appendage such as a bag, pot, basket, tumpline;
 - f) create a means of transportation that extends their own walking capabilities such as snowshoes, a wheel cart, toboggan, skis, boat;

- g) make and use various forms of cordage such as babiche (cut rawhide), sinew, spun yarn, or twisted rope;
- create and adequately use a sharp-edge tool such as a knife, awl, chisel or needle;
- tell a story about the creation of an item, explain how its introduction affected society, altered history and influenced an individual's experience of the world;
- listen to stories that express the origin, importance, or animate and spiritual aspects of specific crafts;
- have the experience of bartering, and then trading, with another person craft items each person has made.

A Craftmaking Pedagogical Map

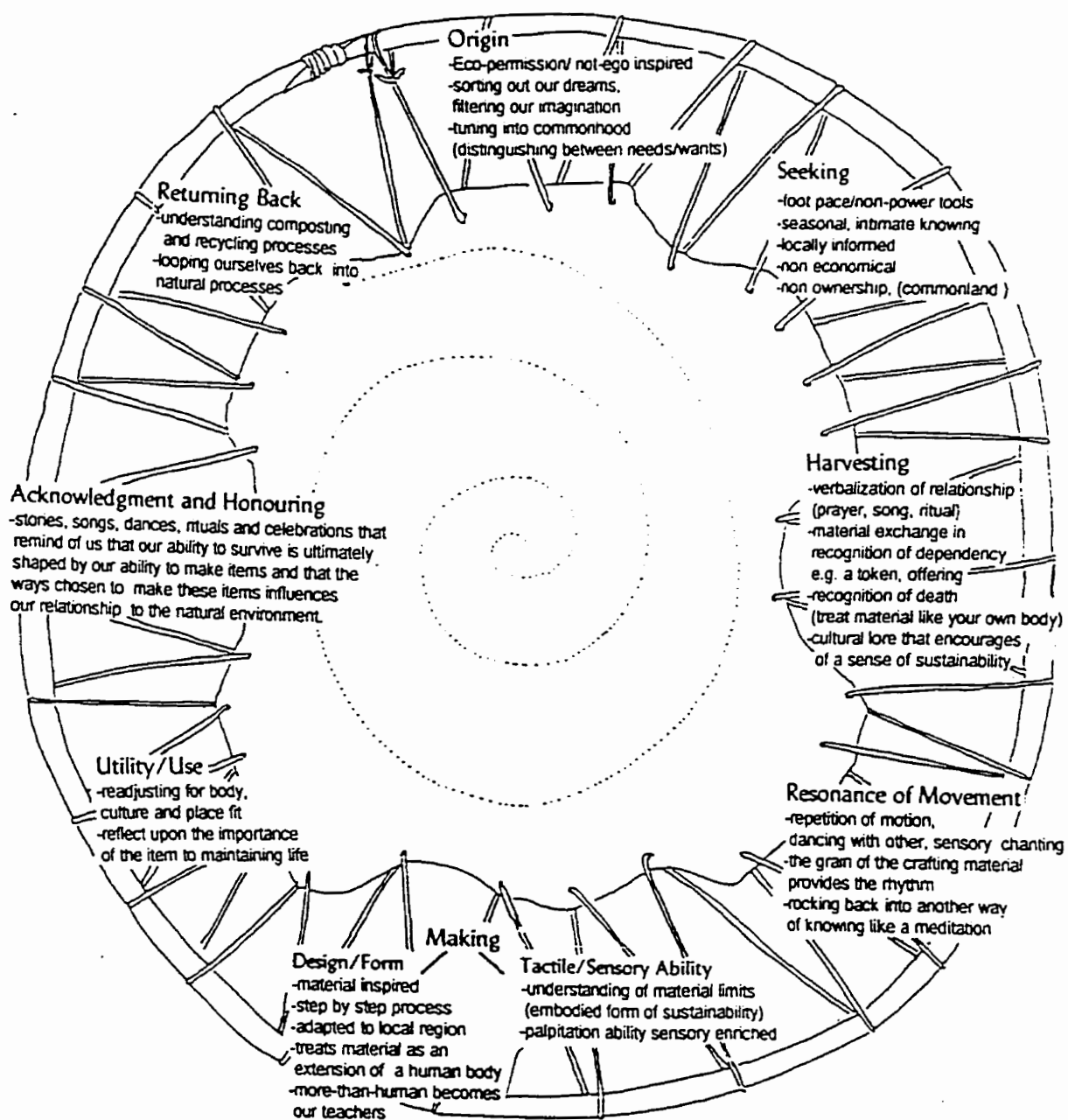
What follows is a theoretically-based map that can be used by both an individual craftmaker and craftmaking guides who desire to explore and deepen their own and other's perceptions of the natural environment through craftmaking activities. This map is derived from personal reflection such as those elaborated upon in chapter one and upon the accumulation of ideas explored through research on craftmaking. Many of the ideas raised in the previous three chapters will surface throughout the model. Eight main exploratory bases are used to describe the stages, generally referred to as guideposts, of craftmaking. The terms associated with the eight guideposts are origin, seeking, harvesting, resonance of movement, making, utility/use, acknowledgment and honouring and returning back. A craftmaker or craftmaking guide can apply the map to any process of making in order to evaluate the activity for the meaning it can impart and adapt it into a craftmaking curriculum. The map outlines guideposts which can be used by a person to navigate around and through typical perceptions of the land held by people raised in

ACID societies. The guideposts can also be used by a person as reference points that encourage exploration into new perspectives of ecological awareness seldom encouraged in ACID societies. Ultimately the map directs people on the ways that stages of craftmaking provide various opportunities to relate and attend to the natural world. These opportunities will eventually help a person feel a part of this world.

A person using the map should consider each guidepost on the map as a stage in the craftmaking process that should be carefully considered and explored. The ideas associated with each guidepost call upon people to pause, ponder and reflect upon the various experiences involved in making an item, and how they establish relationships with the more-than-human world. Stories, mini-activities, questions and other teaching tools associated with each guidepost are outlined and become part of the “bag of tricks” craftmaking guides can draw upon to enrich and deepen the craftmaking process for themselves as well as others. These tricks can be ‘sprinkled’ or purposely planned into craftmaking activities as deemed best in order to encourage others to attend to and make new connections to the natural world. The ideas and activities of each guidepost exist to make craftmaking a transparent process that encourages participants to better understand their relationship to the more-than-human. This world ultimately provides the material from which humans find the beauty and satisfaction of their needs.

Figure 1 is the map that summarizes the craftmaking process and briefly outlines each guidepost. Every guidepost is more fully explained in the following section of this

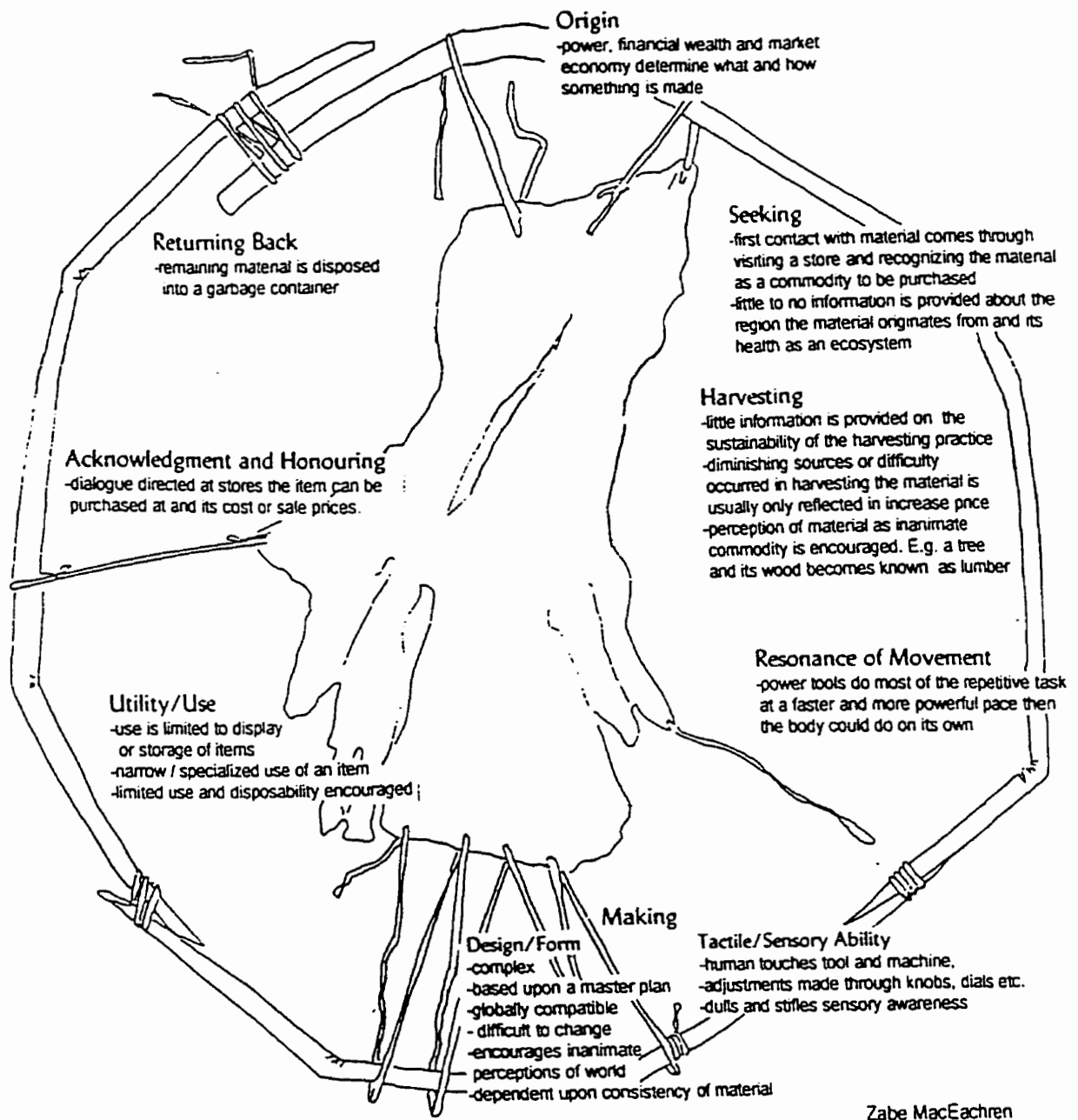
FIGURE 1



Zabe MacEachren

Craft Making Map

FIGURE 2



Acid Society's Process of Making Items and Commodities

chapter through a defining statement and guidepost questions. Suggested teaching activities and sample narrations for each guidepost are offered in Appendices B and C.

These various explanations about and for using the guideposts make up a resource package that a craftmaking guide can draw from in adapting their own ideas and activities to best suit the needs of a given circumstance. Questions and suggested teaching experiences should always be adapted to specific social contexts, age groups or craft activities, so they are relevant and understandable to the participants. Each craftmaking guide should have an overall awareness of the perceptions nurtured at each stage or guidepost, for a simple impromptu question asked at the right moment may create a great discussion that better encourages new perspectives than a well planned but rigid activity.² Likewise having a large repertoire of stories that pertain to craftmaking guideposts allows a person choices to draw from in order to be an effective communicator, especially in encouraging a variety of perspectives and not just one statement. When time does not allow the telling of a full story, the reading of a small passage, such as the sample narrations provided in Appendix B, may be an appropriate strategy for a guide to take in order to help people feel more relaxed and open to perceiving things in new ways. It is important to remember that the transference of the intended story's message may be

² For example, during a lecture I became aware of how a large group of students were about to enter a woodlot to cut a stem each from a live tree. I realized that doing so could be very destructive if done incorrectly and that some direction was necessary. Most students were probably not aware that a jagged cut on a tree leaves it open to bug infestation. At the last moment I asked them to consider making the cut in the same manner that they would want a limb from their own body harvested: "quick and neatly cut," I asked, "or shredded and torn off?" Many of the reflection papers the students later wrote commented upon how these statements had engendered considerations new to them and greatly influenced their experience by making the harvesting of a tree part a more potent and dynamic interaction between two living beings, themselves and the tree.

acknowledged or reflected upon sometime later in a participant's life. When this connection arises within an individual of its own accord it is usually a significant, more deeply moving event than if the participant had been told about the connection.

Craftmaking guides must use their own judgment and intuition when deciding how to incorporate the ideas of each guidepost into their lessons.

Figure 2 provides a map to show the process items are generally made in ACID societies. This map is useful in comparing craftmaking to item making and in explaining how the broader range of perceptions, which are represented by the strands stretching the hide to the frame, are frequently loose or even non-existent. Guides can use this map when they want to emphasize how craftmaking involves ancient experiences that once shaped people's perceptions of the land,³ but may have been dramatically altered by the implications of social forces like the demands by new political and economic agendas. When compared to the first, this second map highlights what is least and most experienced by people. This knowledge helps to emphasize the importance of creating

³ In his book *Coming to Our Senses*, Morris Berman outlines how many Europeans in the middle ages had a participatory consciousness with the world. As the experience of craftmaking was more prevalent in the general population at this time, it is interesting to note and question how the loss of these craftmaking experiences affected and accompanied the loss of the notion of participatory consciousness.

activities that allow participants to experience all the guideposts and especially those that are practically non-existent in environmental education curricula today.⁴

If experiences outlined at the guideposts are typically absent or lacking a strong presence in a person's education, there necessarily are limitations and shortcomings in a curriculum. For instance, by acquiring craftmaking material only through store purchases, a person develops an understanding of the world limited to a consumer-based perspective. The elimination of first hand experiences gathering materials directly from the land in order to fulfill daily needs does not help one come to appreciate a personal place in the world.⁵ Without the experience of harvesting material directly from their original sources, humans' relationships with the more-than-human world become based upon monetary value alone, which is reinforced by a consumer society. Ideally, numerous craftmaking experiences throughout a person's life, should be made accessible to

⁴ At an Ontario Society for Environmental Educators (OSEE) conference, a session on schoolyard naturalization was interrupted frequently by a few teachers. These teachers kept asking the presenter to address the fact that students did not want any more of their schoolyard naturalized. They raised the concern that, for students, schoolyard naturalization increasingly meant they lost their play area as they were not allowed to interact with the sensitive naturalized sections for fear of damaging them. When I later talked to these teachers about the increasing presumption that nature is a place that humans are never to interact directly, they seemed perplexed, as they thought that what they were supposed to be teaching was a "take only pictures, leave only footprints" relationship to the world. I proposed, to their surprise, that they might consider planting trees and specific bushes that students could later harvest for material from which to make things. When I continued to explain how this process could be worked into lessons on learning how to plant and harvest sustainable amounts each year over a long period of time, I gave the example of a grade eight class harvesting a tree on the school ground each year in order to do a wood working project. I added, however, that this same class was to also plant enough trees so that future grade eight classes would also have enough to harvest to complete their projects. As I continued to explain this idea, the teachers began to appreciate that their students had limited meaningful interactions with a naturalized area, especially meaningful interactions that would allow students to make connections between the natural world and the amount of materials they consumed in their school lives. Eventually, the teachers began to appreciate that the next step in the naturalization process would be to provide students with a meaningful way to engage with the area, which could be done with craftmaking. As few children ever directly harvest their own material, for something this experience could be an excellent way to begin.

⁵ Paul Shepard discusses this idea in *The Tender Carnivore and the Sacred Game*.

everyone. This structure offered by the guideposts would enable a person to explore and benefit from a range of ideas and more holistic perspectives. At the same time people would be able to improve their craftmaking skills, resulting in both the development of a sense of self-reliance in knowing what to do in order to care for themselves and a confidence in their relationship with the land. Individuals thereby learn to trust that the land will provide them with what ever they need to survive. Encouraging experiences at each guidepost ultimately offer the ecological, spiritual, moral, ethical and holistic understandings that are increasingly lacking in modern school curricula.⁶

See Appendix C for a diagram illustrating the ways that engagement, interaction, and reciprocation of craftmaking experiences lead to a relationship with the land. The guideposts are arranged as they unfold naturally, meaning that the first guidepost deals with the origin that inspired the creation of an item. Guideposts that teach the ideas of seeking, finding and harvesting materials then follow. These guideposts suggest first-hand ways to engage with the land. Tactile engagement with materials of the land is emphasized, compared to other environmental education activities that may base engagement with the land on more intellectual-based activities. The subsequent guideposts emphasize processes of interaction with the land, such as the resonance of motions, design, tactile stimulation and use of a crafted item. The final guideposts pertain to the ways humans celebrate their ability to make things and respect the unique qualities

⁶ These terms can be defined as follows: ecological—concerning the relationship between organisms and the land; spiritual—belief and/or faith in an essence, without a material body of both a human and more-than-human form; moral—concern with a good or bad, right or wrong acceptance; ethical—relating to the conduct associated with moral concerns; holistic—addressing the whole instead of the divisive qualities of an experience.

of the material used, by ensuring remnants remain part of the natural processes. A sense of reciprocity with the land is evident in the final guideposts. All of these guidepost activities and perceptions overlap and are interconnected. Craftmaking is based on a combination of engaging, interacting and reciprocating experiences that immerse a person in a unified perspective of a relationship with the land.

The goal of craftmaking, and the purpose of this map, is to learn to revel in asking questions and marveling at the perspectives offered through craftmaking. Finding answers becomes secondary to the joy and wonder that comes from being able to make a craft. The guideposts help a person to perceive the marvelous; they aid in recognizing how making a craft is like opening a door to the many relationships that connect people to the more-than-human world. Experiencing and fully exploring the purposes associated with each guidepost becomes the means to finding joy and marveling at the place of humans in the world. The guideposts encourage a person to engage in the intangible processes that can only be fleetingly grasped and humbly acknowledged amidst the incredible web of connections that occur between human existence and the material world.

Ideally, participants should be exposed to all the guideposts through many different craftmaking experiences over a long period, namely, through their whole life. They do not need to visit each guidepost in any particular order, although the order set out might be best; but they should experience the perspectives of the various guideposts frequently enough to provide them with the feeling that they are moving ever deeper into relationship with the earthy material of the world. To remain open to the notion of reclaiming (or the potential to recognize the animate qualities of organic things on Earth),

human beings need practices that make them aware of the qualities of these materials. Continually participating in the sensual components of craftmaking leads people to recognize themselves as also part of the earthy material necessary for craftmaking and, ultimately, promotes connections to the processes of earth and the more-than-human world.

The craftmaking map helps a person to experience craftmaking in a fundamental way just as many people in the past have. The dotted spiral on the map interior serves as a reminder that craftmaking learning experiences orient people to the whole, the place, the center of all relationships of being in the world, while encouraging and intensifying the presence of sentient-base experiences.

GUIDEPOSTS

Origin

This guidepost requires attention to what it is that informs whether to proceed with making something or not. It encourages listening to the inner voice, or intrinsic quality within that guides the decision whether or not to proceed to make or even to acquire a craft item. Ultimately it requires distinction between basic needs and wants, and consideration of the impact that the creation an item has on an individual, a community and the more-than-human world.

Origin: Guidepost Questions to Consider

- How does one learn to distinguish between wants and needs?
- How can one prioritize the material items one engages with in one's life, based upon the item's ability to sustain human life or the life of other organisms?
- In what ways can one question, attune to and value what it is that informs and guides the ability to limit material possessions in one's life?
- Why or why not should activities that encourage creativity, yet involve material that impact negatively on the environment be considered worthy of pursuit?
- What are the implications of items made because they have been imagined as opposed to those made because they fulfill a basic need?
- Who has and determines the rights in society pertaining to what can be made and by whom? What influences are involved in the determination?
- How should the impact involved in creating various items be monitored and made available? Who should do this?
- How does a person justify the creation of something that may benefit an individual but impact negatively on the group? For example, a person painting a scene of clean water by rinsing their paintbrushes with cleaning solvent in a sink or drain ultimately pollutes the water we all depend upon.
- How can a person describe and validate what it is that informs them whether they should proceed with making something or not? For example, some cultures require an individual to receive permission before making or possessing specific crafts such as a drum. This sense of permission may come in various forms depending upon cultural traditions, such as guild initiations or dreams.
- What do various cultures encourage people to attend to when determining whether they should pursue to completion any idea for making something? For example, does one complete a craft simply because they know it will sell well? Does one choose to make or purchase a local craft because of its minimal environmental impact, or because of the social network one chooses to support? Does one make an item because of a dream of one's own or another that prompts the making?
- Has our technological ability to make something been matched by an object?
- To what degree have people become so preoccupied with *how* to accomplish something better or more efficiently, that they have forgotten to consider *why* they should, or should not attempt to make the item in the first place?

Seeking

This guidepost addresses the experience of traveling on the land, seeking material suitable for making crafts. These experiences encourage attunement to the smaller details

and finer nuances that people can be aware of when traveling upon the land. It calls upon participants to search continually to learn about the local environment in order to better understand their relationship with the land, or the source of craftmaking materials and the role that removing specific material from the ecosystem may play within the larger ecological relationships of the region.

Seeking: Guidepost Questions to Consider

- What features of our local landscape such as elevation, soil conditions, weather, season must we attend to, so appropriate craftmaking material can be located?
- What do we miss learning about material when we only encounter its packaged, purchased commodity form?
- How does the speed at which we travel alter our ability to notice features of the local landscape?
- How would having a practical reason for traveling on the land alter our experience of the land as we travel upon it?
- Compare the time we travel on the land seeking a particular craft material compare to the time we travel for recreational purposes? How do these different experiences influence our perspective of the land?
- What can we learn about a locale when we regularly visit the land to forage for material?
- How can frequent trips to an area to find supplies encourage a sense of stewardship for that area and/or an ability to monitor the area's health? Could we for instance learn to notice the impact that previous acts of harvesting have on the landscape, or the changing availability of a species due to other implications that affect the area.
- What has shaped our sense of property as well as ownership of land and what is in the ground?
- Do we believe that things like land, trees, animals can be owned? If so, what does it mean to own another living thing? What social patterns promote and challenge these beliefs?
- In what ways may having experiences of only purchasing craftmaking material limit our perceptions to commodities and hinder our understanding of the material's original state? For example, does "wood" become known as "lumber" or as part of a living forest?
- How does a price tag on material influence our valuing of that material?
- How does the difficulty, or the ease of accessibility influence our value, care and use of the material procured?

Harvesting

This guidepost explores the method chosen and the acknowledgment provided during the actual moment of taking another life form in order to obtain material to make a craft. It requires students to consider consciously their personal role and how directly experiencing taking the life of another being can influence their understanding of the world.

Harvesting: Guidepost Questions to Consider

- In what ways do we recognize the plant, animal and minerals we harvest as having some living, sensate, animated or spiritual quality?
- With what terms do we express our perspectives of harvesting? What are the differences in the tones of these terms? For instance, resource extraction, killing, managing, controlling, material, harvesting, culling etc.
- How does the direct personal experience of harvesting material affect our sense of compassion, empathy or increase our understanding of our dependency on that material?
- How does our perception of the sensate potential of our material influence our harvesting methods? For example, do we cut a limb from a tree in the same manner we would like to have our own limbs removed?
- In what ways do we acknowledge the sentience of material through verbal expression such as a love song or prayer offered for another being—a-more-than-human-being?
- What understanding is promoted through performing a ritual or giving an offering during harvesting acts?
- How might direct experiences of having to procure our own materials alter our consumer habits?
- What traditions and community practices influence our understanding of how to harvest sustainably from an area? For example, do we have an elder or someone who can guide and inform our collection and harvesting practice?
- What practices shape long term traditional gathering activities?
- What problems may arise from using computer-generated models of sustainable harvesting limits?

Resonance of Motion

This guidepost concerns the sense of awareness of the physical rhythms and the perceptions that result from the repetitive moments involved in making something. It requires consideration of the importance the physical presence and experience of resonance in craftmaking play in human evolutionary and cognitive development.

Resonance of Motion - Guidepost Questions to Consider

- To what extent are we encouraged to experience repetitive motions as boring, tedious tasks, or as pleasant moments similar to meditation?
- What factors such as production demands, skill or background music—influences the pace of our repetitive craftmaking motions? E.g. production demands, skill, background music.
- In what ways do we seek repetition to soften our busy minds and/or to recall a soothing, rocking, relaxed state like that of water?
- How might rhythm connect us to rhythmic events in the natural world like waves upon a beach?
- Have our hands been stimulated and exercised so as to become familiar and sensitive to the subtle qualities, grains, textures, and rhythms embedded in handling various craftmaking material? What, for example, is the difference in the subtle nuances of carving hard as compared to softwood.

Making

This guidepost deals with exploring the potential and learning the necessary, tactile and body-dependent forms of communication a specific material or craftmaking experience requires. The guidepost encourages participants to explore their sensory capabilities and the non-verbal understanding that they can acquire through their bodily awareness.

Making - Guidepost Questions to Consider

- To what extent is the outcome influenced by the concept of a master blueprint or the qualities of the materials touched?
- In what ways are we encouraged to 'listen' to and 'hear' the material in order to make a craft?
- In what ways does the material become our teacher?
- What are our hands capable of knowing about the material through touch and our body through sensing?
- What are the boundaries between the material's body and our own body? For example, when we bend a branch, where does our body and the branch's body begin and end?
- How do we perceive the material's limitations as well as its potential?
- How does the locale in which the craft is to be used influence the desired form? For example, how were snowshoe designs traditionally determined by knowledge that blended the user's body size, the terrain in which the snowshoes would typically be worn and the region's average snow conditions.

Utility / Use

This guidepost deals with the factors involved in balancing beauty and function in an item. It asks why utility and aesthetics are not always combined when creating an item, especially in a world where the limitations of material extraction are increasingly being recognized.

Utility / Use - Guidepost Questions to Consider

- Will the item made find use merely as decoration, something to be displayed and observed, or will it continue to engage the person with the natural environment? For example, what is the potential of a picture of canoeing as opposed to an actual paddle come to hold two different potentials for coming to understand canoeing, canoes, water, wilderness etc.
- To what extent does the aesthetic or spiritual quality of a craft influence its form?
- To what extent is a spiritual or religious item deemed of use or necessity for human survival? What needs does it respond to and how can these needs be fulfilled in other ways?

Acknowledgment and Honouring

This guidepost concerns the cultural ways humans express their dependency upon both their own ability to make items required for their survival and the numerous relationships they engage in while acquiring craft material. Acknowledgment and celebration can take a wide range of forms, ranging from quiet individual thoughts and actions to large community-based events.

Acknowledgment and Honouring - Guidepost Questions to Consider

- What is our participation in and knowledge of traditional celebrations that use crafted items, or in some manner honour the skill of our body to make crafts? Examples for discussion might include, Gaelic songs sung when the woven cloth comes off the loom, Hopi basket dance and drum dances of woodland Native cultures, etc.
- How does using hand-made items in ceremonies deepen the intent of the ritual or custom?
- What is the difference between receiving a hand-made gift and acquiring a purchased commodity?
- Why is telling stories about the creation of crafts important?

Returning Back

This guidepost pertains to the actions performed to acknowledge understanding of the ecological cycles of materials on Earth. It asks participants to question the harm or benefits their creations ultimately do to other living organisms and the ways humans can best minimize their impact so as to create a healthy sustainable system within which all creatures can live. It asks whether human practices of disposal are visible, healthy and capable of providing for long term survival of all living organisms.

Returning Back - Guidepost Questions to Consider

- In what ways do we perceive material left over from the making process? For instance, as resources, scraps, remnants, debris, litter, etc.
- What informs us as to what to do and where to place our remaining craftmaking materials? For instance, how frequently do we read and follow the labels for information on appropriate disposal practices?
- What are consequences of placing material remaining from the craftmaking process in a garbage can, drain, vacant lot, or recycling bin? What other choices do we have?
- In what ways are we encouraged to hold ourselves accountable for the impact of our disposal practices?
- In what ways are we encouraged to be better stewards or citizens of the place from which our craft material originates?

Significance of Craftmaking

Craftmaking enables people to perceive themselves as being of the world rather than separate from it in part as a result of four qualities embedded in craftmaking processes: physical dependency, functional emphasis, practical process and holistic perspective. As these qualities are not always apparent in most environmental educational curricula, a craftmaking pedagogy holds potential to alter perceptions toward a new awareness of the world. These qualities, briefly explained here, have consistently arisen throughout the previous chapters and will continue to arise as significant issues of craftmaking again in the voices of interviewed informants as they elaborate upon their own practices.

1) Physical Dependency

Craftmaking depends upon the craftmaker's body relating to the body of the more-than-human world, usually referred to as craft material. If craft is defined as

‘demonstrated knowledge,’⁷ then making a craft can be understood as demonstrating what the body knows in regard to the more-than-human world. Craftmaking involves a kinesthetic learning process that is dependent upon not only craftmaking skill, but also attending to the material qualities of the craft. This connection to the natural world through the senses leads to notions of embodied knowing. The feel of a branch being bent into a hoop reflects an individual’s ability to know what can be sensed and therefore learned from a tree.

2) **Functional Emphasis**

Notions of empathy and awareness of the limitations of materials arise through increasing identification of the similar qualities between craftmaking material and a craftmaker’s own body. Tensions then arise as craftmakers desire not to harm any body, their own or the more-than-human, while also knowing that material from the more-than-human world is necessary to create needed items. To alleviate this tension craftmakers aim to make items that can serve as many uses as possible at all times to avoid demonstrating misuse or excessive use of the land’s offerings. Items whose main purpose serve only as a means for human expression can be perceived as wasteful practices that abuse the land’s offerings simply to fulfill human derived concepts of aesthetics.

⁷ Throughout the chapter “What is Craft Knowledge?” in The Art of the Maker, Peter Dormer refers to craft as a demonstrated knowledge (10-24).

Respect for material is best expressed when a made item is recognized as both beautiful and useful.⁸ A craftmaker can honour the beauty of more-than-human forms by retaining the features embedded in the original material and highlighting the beauty of these features so the form is readily associated with the more-than-human world. In ACID society people tend to be conditioned to recognize beauty as something humans add to a clean white surface such as paper, or drywall. It is not recognized as part of the original more-than-human material that was initially destroyed and altered to provide the uniform textures people are educated to value. Through craftmaking a person can develop a skill and appreciation for items that combine concepts of beauty with functionality. They thereby demonstrate an aesthetic and perspective that best demonstrates a thorough and respectful use of any material taken from the more-than-human world.

3) Practical Process of Learning

Teachers are most effective when they allow educational practices to be based upon practical experience that naturally unfold the questions leading to an exploration of issues and lessons on a desired topic. Because craftmaking activities can range from small to large, from simple to complex they are an effective way to add a practical experiential component to the learning process. This is why Gandhi chose to educate students through village crafts. He realized that such a craft-based education would provide both the basic

⁸ William Morris who is considered to have initiated the Arts and Craft Movement of the 1860s is well known for having stated, "have nothing in your home that you do not recognize to be either beautiful or useful." Bold is placed on the *or* because this pedagogy suggests that to demonstrate an awareness of the more-than-human world Morris should have stated *beautiful and useful*. Many of his ideas seem to be hypocritical and add to the confusion between distinguishing items of art and craft. The term craft is emphasized in this paper because, more so than art or technology, it still retains notions of both beauty and utility in balance. One suggested teaching activity in Appendix C attempts to clarify this distinction.

skills of how to support one self while also receiving exposure to the ideas of “higher” education.

Teaching through a craftmaking process provides a means to explore theoretical discussions by first establishing a reason to learn, and second by drawing out of the activity the implications (social, political and economic) that affect the activity. For instance, in deciding how to acquire craft material a student, when well guided, can explore many social and environmental issues pertaining to concepts of land ownership. When such explorations are undertaken merely as exercises, the students may lack motivation and show less development of transference skills. That is, students may learn to understand theory, yet seldom understand how to use it in a practical situation. Students complete craftmaking lessons with an end product that is useful and the practical skills concerning decision making processes that can be applied to other activities in their lives. This is why Kurt Hahn encouraged experiential learning.

4) Holistic Perspective

The inner knowing of the self, the outer knowing of the more-than-human and the relationship between these two kinds of knowing are honoured as human hands and more-than-human material intermingle in the craftmaking activity. For a craftmaker, this inner and outer way of knowing shape a holistic perspective of the world.

Craftmaking experiences defy easy separation into school subjects, as craftmaking can bridge schisms between disciplines. Craftmakers are encouraged to see themselves extending into the world of the more-than-human to receive the gifts they need to survive, as they increasingly recognize their own humility at being unable to survive without these

gifts. The process of making crafts continually confirms what the more-than-human world offers humans. In appreciation for these gifts, craftmakers offer back demonstrations of reverence and constraint for what is taken. Craftmakers' notions of themselves become extended as they increasingly recognize that their life relies upon the more-than-human forms. This is holism at its best.

Rationale

What is significant about craftmaking is that it serves as a practice for developing environmental awareness through specific skills and practical applications. As stated earlier in this chapter, other curricula are based on simulated and contrived activities, leaving people without the skills to fulfill their own daily needs.⁹ This rationale for a craftmaking pedagogy has generally gone unnoticed in environmental education.

Through the fundamental experience of craftmaking, people are able to live and discover who they are. When people lose craftmaking experiences, they lose something incredibly ancient and incredibly wise – they lose the guidance of the more-than-humans. Craftmaking experiences serve humanity by returning education to a learning process based upon the acquisition of relevant skills and direct experiences relating with, and learning from, the more-than-human.

The feature that distinguishes this pedagogy from other environmental education curricula is that it teaches people to recognize that they need items in order to live. Furthermore, it emphasizes that the processes of acquiring and specifically making items

⁹ For elaboration see the Conovers description of the decreasing skills of wilderness travelers (160).

play a significant role in shaping their perspective of the world. Educators attending to aspects of this craftmaking pedagogy can therefore be effective in altering individuals' perspectives of the world.

The following chapter draws from the voices of people working today in the field that intersects environmental education and craftmaking. Further support for a craftmaking pedagogy comes from their ideas and experiences.

Chapter Five:

Craftmakers doing Environmental Education

This chapter has two parts. The first part explains interview methods and the second part provides an analysis of the interviews. It is suggested that the interview summaries (provided in Appendices G H I) be read at this point, or after completing the interview methods, so they are familiar before reading the interview analysis.

Part One — Interview Methods

This research involved interviewing thirteen people to gather accounts that inform the articulation of craftmaking as a pedagogy for environmental awareness. Interviews were selected as a way to do qualitative research that would allow me to meet other people who had similar interests and learn from their experiences and narrations concerning the field of craftmaking and environmental education. As craftmaking is not an established or recognized area associated with environmental education, doing interviews would allow me to begin to assess the field according to its size and the situations of people who are working and interested in this area. The questions shaping the interview (Appendix F) focus on the relationship to the land obtained through craftmaking and the links between craftmaking and environmental education.

Selection of Informants

Informants were selected based on their “expertise” in an area intersecting craftmaking and environmental awareness, and through their collective representation of

a wide continuum of approaches to this topic. Among them, the informants covered a breadth of craftmaking knowledge that ranged from professional makers and educators to non-professional people passionately involved in disseminating environmental awareness through craftmaking; from the academically trained to those informally trained through hands-on life experiences; from indoor work settings to alternative and outdoor work settings; from people widely known and published to people only locally known. All informants talked from a position that mingled both intellectual and somatic knowledge of actual craftmaking experiences.

The interview candidates were selected for their ability to demonstrate knowledge of both a specific craftmaking process and any ecological awareness that might be embedded in that process. The potential pool of informants developed through a few sources: some candidates I had previously known and worked with, others came to my attention initially through their public lectures or published work, still others were identified only after I canvassed colleagues and friends for suggestions.

There was a concerted effort made to seek craftmakers who spanned a wide variety of craftmaking practices that pertained to the traveling and camping traditions of the Canadian Shield region. The processes discussed by the informants included the making of knives, paddles, toboggans, kites, canoes, leather mukluks, birchbark containers, split ash baskets, canoe poles, woven silk cloth, shelters, fire sticks, clay pots, cordage and wooden utensils.

A total of twelve interviews were conducted with thirteen informants. A married couple, Alexandra and Garrett Conover, were interviewed together. Three of these

interviews have not, however, been included in the analysis for various reasons. One informant was not recorded and my notes on her interview did not seem complete enough to use as data, and another informant was not an “expert” or craftmaker herself, but an enthusiastic children’s volunteer. A third person I asked to participate refused a formal interview, but willingly talked for a full day to me. In his small wooden home in Maine, I listened to him expound upon his choice to live a life of poverty based upon his understanding of the role craftmaking plays in a local economy and his commitment to the principles by which Gandhi chose to live. This man made all his clothing and possessions by hand. Bartering with only the wooden spoons he carved and his garden produce, he devoted himself to a life immersed in craftmaking. He asked not to be included in this study because he felt that an academic institution would not be able to reflect his ideas accurately. He merits recognition here for his role modeling of the determination and values required to live an existence based upon a complete faith in craftmaking. Subsequent to our meeting, many of my daily thoughts and struggles with this research have recalled this man and his ideas surrounding a life lived without hypocrisy through craftmaking.

The final analysis included six men and four women. One was a woman of First Nation descent while five other informants credited learning their skills directly from people of First Nations and from people of colour. The imbalance away from women and people of colour in this study must be acknowledged, but should not be interpreted as skewing the results for two reasons: the authorial voice is not only female but also is strongly influenced by eight years of living among and twenty years of contact and work

with Anishinabe people. Second, the focus here does not involve a racial or gender analysis of craftmaking.

The interviews took place between May 19th, 1999 and May 17th, 2000. Each informant was contacted usually by phone, followed up with a letter confirming a date for the interview, and including a copy of the permission form and major questions that would frame the discussion (See Appendix D-F). Each interview was conducted in a place suggested by the informant as most convenient, to put them at ease during the interview. Two road trips to the United States yielded four interviews. Typically, each interview consisted of three parts. Part one involved an introductory chat with any of the informants I had not previously met, followed by tours of the places associated with their involvement in crafts. These spaces were quite different for each. For one informant it was a workspace, for another a school, another involved a conservation center, and lastly, the place where a few of the informants resided. Prior to the actual interviews, any questions or concerns of the informants were addressed and their signed consent obtained. The second part of the interview centered around the open ended-questions previously distributed to the informants. All interviews included in the analysis were tape-recorded. Part three of each interview focused on the craftmaking map (see Figure 1). The informant was first shown this map then offered descriptions of each guidepost and subsequently encouraged to respond with relevant personal examples, criticism, elaborations and other offerings.

On completion of the interview, I thanked informants and gave them some hand-parched wild rice. In most instances there were subsequent phone conversations and

occasional visits to craftmaking workshops mentioned during the interviews. Examples of these were a kite making workshop, an undergraduate spoon carving course and a winter camping expedition in Algonquin Park. There is ongoing conversation and exchange with many of these informants, and with some I have had specific follow up for clarifications. Several informants have asked for access to this study and upon its completion will receive a copy.

To record the interviews, I used ninety-minute cassette tapes and a small Sony TCM-S67V recorder. Before transcribing, I listened to each cassette in its entirety. Next, on second playing I prepared an index, including a table of contents of discussed material in five-minute segments. A third run through the cassette was necessary to permit the transcribing of pertinent passages I deemed most useful for analysis and my writing informants summaries. I made use of my field and interview notes, as well as copies of informant publications in preparing these summaries. All tapes, transcriptions, interview notes, slides and copies of any informant's publications remain in my possession.

Editing of Results

Appendix I provides summaries of each interview. Generally, the summary begins with a description of the context and of the informant noting his/her particular association with craftmaking and environmental education. Next follows each informant's responses and comments, arranged not chronologically, but rather to best reflect each individual's ideas, or to describe the program in which each was involved. In this manner, informant's responses to the craftmaking model are woven into the overall presentation of their

comments. The informants' comments that pertain to their own relationship with the land is then described, related to the sense of being of the world and then concluded.

Light editing of recorded passages was necessary to allow for easy reading, but changes were kept very minimal to ensure that meaning was not altered. For instance, I have eliminated numerous *ands* as in the following example:

“ . . . and around here the best bark is in amongst evergreen and balsam and spruce”

becomes

“Around here the best bark is in amongst evergreen: balsam and spruce.”

I have replaced *it* and *that* with their referents in square brackets []. For example,

“You learn a lot about how trees grow when you do that rather than when you are just sawing wood”

becomes

“You learn a lot about how trees grow when you [split wood] rather than when you are just sawing wood.”

To provide further context for statements, I have also included in square brackets additional words and comments, references to parts of the conversation previously mentioned, and descriptions of informant's gestures. Throughout, I have endeavored to preserve the informants' own words, message and tone as much as possible. Fully knowing that craftmaking is a skill better demonstrated than explained, I have tried to reflect in the summaries my genuine appreciation of the informant's efforts to articulate their ideas and beliefs. All informants offered distinct ways of expressing their

relationship to the world shaped through craftmaking experiences. Collectively they have enabled me in giving voice to craftmaking as a pedagogy for environmental awareness.

The goal of this research was to examine cultural norms of making items and to describe a craftmaking pedagogy that serves to increase environmental awareness. If research must start with a problem,¹ then this thesis explores the problem of the lack of support for craftmaking curricula in environmental education. My informants offered many narrations that serve to reveal the major significance of craftmaking to people's achieving a better understanding of themselves as residing within the world. Such narrations are not acknowledged, or often go unheeded in environmental-based curricula. I purposely have sought these accounts of learning and teaching through craftmaking to uncover their connection to developing environmental awareness. Using *story* as a term that blends intellectual and intuitive knowing, my research has asked: what has been and could in the future be the story of "making" in environmental education? Emphasizing heuristic inquiry, this research led to a discovery of what might be called 'an embodied theory of doing,' as it included intellectual analysis and periods of reflection to ponder what unfolded as I participated in craftmaking activities.

Two overriding questions shaped the interviews. First, in what ways does/can making something engage and shape a person's relationship with the environment? And second, in what ways can craftmaking education serve the concerns of environmental education and vice versa? (as also stated in Appendix F). The interviews were powerful

learning experiences. I gleaned from each interview valuable insights and new understandings. Yet, as an educator and researcher, I retained a perspective of critical reflection through which I realized that, given another opportunity, I would handle aspects of the interview differently.

Reflections on the Process

I would change the order of the interview questions so that those dealing with defining terminology would come earlier and in so doing would lay down a clearer common ground for communicating. As many informants did limit their use of technology, a new approach to this topic could be one concerned with the ways craftmaking experiences influence a person's ability to approach and embrace technology in their lives. Many people and educators realize the necessity to limit the presence of technology in our lives in order to reduce environmental impact. However, few educators know ways to instill acts of restraint regarding the use of technology.

In another instance, I would place less emphasis on trying to ask questions in various ways to obtain an informant's own manner of expressing 'being of the world.' My own academic struggles to validate craftmaking as a form of environmental education had conditioned me to seek an expression of a connection to the world brought on through craftmaking experiences. In hindsight I have learned to take some time before the interview to relax and keep an open mind in order to best hear the ideas the

¹ Bob Henderson quotes Michael Polanyi as stating "It is commonplace that all research must start from a problem. Research can be successful only if the problem is good. . . . For to see a problem is to see something that is hidden (44).

informant offers. A few comments in my methods class by the instructor which concerned memorizing all your questions had me actively reviewing all my questions before an interview, so I might not have to constantly refer to a sheet of paper. It was only after completing most of the interviews that I felt I was not dependent upon the question sheet. I would seek to draw out the process involved in craftmaking with questions such as, what aspect of the making process has taught the informant most about the natural world? In what ways does craftmaking place humans in relationship to the world? In what way do people dwell in a place through craftmaking? Can craftmaking shape a person's self-understanding and if so, how? The first question that mentioned "ingredients" might be switched to "what is worth doing in craftmaking and why?"

In the future I would alter the means of receiving feedback on the craftmaking model so that I could just ask questions about each guidepost. In hindsight, I realized that presenting it as a model probably made informants reluctant to comment upon it. I might instead ask them to talk about any connection they had between a story, or storytelling, and craftmaking. I would also consider describing the model as a work-in-progress, a map for meanderers, or a recipe that required a lot of personal adaptation. As a result I could describe the guideposts and present the whole model in a manner more conducive to commentary and constructive criticism from the informants. Asking questions based upon each guidepost would probably have prove more insightful than first explaining a guidepost and then asking for feedback on it. It would be better to define the inquiry more authentically as a process of shaping a craftmaking pedagogy rather than of responding to an established practice.

It is quite likely that I would have learned a lot simply by asking informants about their own ways of teaching and learning craftmaking. In particular, I would have collected practical tips on ways of addressing the teaching of traditional craftmaking today—this is a modern day representation of the age-old practice of sharing craftmaking knowledge. These ‘teaching tips’ are clearly needed, as indicated in the many conversations I have had with educators following my conference presentations on craftmaking. Craftmakers today want to know how to best teach large groups. They want to know what stories pertain to craftmaking and how to find and share these stories. Teachers feel at a loss in not knowing how to access supplies directly from the land. They seek to share ideas on ways to use ceremonies and rituals authentically in their craftmaking sessions. The informants’ diverse backgrounds and teaching strategies offered an exceptional, but largely untapped, resource for portable teaching lessons and means of presentations. A few questions about their best teaching situations or learning experience would have begun to create a resource list concerning the best practices of craftmakers.

My interviews are replete with beautiful descriptions of a person being connected with nature while craftmaking, yet they might have included more narrations describing the highlights of teaching craftmaking, if only I had asked for them. This type of narration is especially empowering and doubtless could have strengthened a description of a craftmaking pedagogy.

It took a comment from one informant to make me realize that none of my interview questions dealt with how the informants themselves came to learn best through

craftmaking. Craig McDonald remarked upon the significance of his learning to watch a craftmaker very carefully instead of asking too many questions. He even noted that elders commented that they liked to teach him because he watched well.

Like many a novice interviewer, I overly structured my interviews to explore my preconceived notions, rather than seeking to access the authoritative voices of my informants. Through eliciting their personal experience narratives, I would have tied into their own craft-associated wisdom and been able to apply it to inform my own journey towards a pedagogy of craftmaking.

Self-reflexivity

This research now seems less a product than the attitude of wonder and curiosity with which I was and am able to approach this topic and the interview process. As a craftmaking /environmental educator, I wanted to be able to answer questions and develop my praxis, reasoning and actions through dialogue with, and questioning of, other specialists in this area. As I pursued these goals, I came to realize I myself had thought a lot about craftmaking and its potential to serve environmental education—so much so that at times during the study I was challenged to suspend my own stories and perspectives to ‘listen’ as openly as I could. But listen I did and gladly, too. Overall, this research was approached in a self-reflexive manner that was neither rigid nor formal; instead I sought to enable the informants to share their stories and take me to the place of their learning to be part of the land through their own craftmaking experiences.

Part Two — Interview Analysis

In order to convey many of the insights that my informants offered in regards to a craftmaking pedagogy, this second part of the chapter has been divided into sections. The first section briefly introduces informants and the unique perspectives from which they addressed craftmaking, concluding with an example demonstrating the way various informants' remarks collectively enriched this pedagogy. The second section focuses on the comments informants made pertaining to teaching and craftmaking, while the third outlines what the informants said regarding the craftmaking map. The fourth involves analysis of the philosophical orientations in six themes that arose from the informants' statements. The final section will address what impact the interview process had on me and my evolving thinking. The summaries, if not already read, should now be referred to as they provide further elaboration upon the specific ideas put forward by each informant. This chapter provides an overall analysis of ways the interviews provided support for, and further understanding of, this pedagogy.

Diversity of Informants

A diverse selection of informants provided a wide variety of narrations confirming and elaborating on some of the ideas presented in this pedagogy. The various voices expressed by the informants also encouraged a scrutinizing and highlighting of areas where future research could be directed. An insight into the unique perspectives offered by each informant follows.

Kathy Brunetta, in her experience of teaching handicrafts at a Waldorf school, which is based upon Rudolph Steiner's philosophy of child development, elaborated on

the significance of matching craftmaking activities to a child's developmental stages. More than any other informant, Kathy emphasized through examples the ways that a pedagogy must consider a child's development. Her holistic-based craftmaking curriculum activities enrich the teaching section of this analysis.

Through their work as wilderness travel guides, Alexandra and Garrett Conover have discovered that good guiding entails maintaining practical craftmaking skills. They elaborate upon craftmaking activities that establish relationships where reliance upon the land is apparent, compared to the hidden production process of high-tech wilderness travel equipment. Through acquiring the skills to make their travel equipment such as packs, paddles, knives and axes, the Conovers feel better able to care for themselves and their clients in a wilderness setting for extended periods of time if required.

Bill Copperthwaite and Skye Morrison both brought to this pedagogy a cross-cultural context for understanding craftmaking. Bill offered concepts that approached craftmaking on a broad scale with his ideas of cultural blending, social design and retaining the techniques nomadic people use to do crafts on the land. Skye Morrison offered insights into the reality of earning a living today through the contemporary craftmaking market structure. Her comments connected the environmental awareness of the village women in craft cooperatives in India to kite enthusiasts, North American folk artists and young Canadian college students attempting to enter the contemporary craft market.

James Dina was the only one of the informants who firmly excluded the use of power tools from all stages of his craft activities. In this way, he offered a unique,

traditionally rooted voice of craftmaking. His thoughts on craftmaking seem most similar to those of our distant ancestors who had only their own bodies in relationship to the land from which to draw forth crafts such as basic tools. James' lessons on craftmaking were truly embodied as they were intensely experienced, relying only upon primitive fashioning techniques and his own incredible awareness of the local environment from which to gather all his supplies. His strict reliance upon walking to the sources of all the more-than-human material he used provided him with an ability to discuss concepts of sustainability unlike any other informant. He had experienced first-hand the human impact that the land is able to sustain. James' narrations about craftmaking reflected that his backyard was his bioregion² and teacher.

Allan Foster interprets the natural world to the many uninformed people who visit the Kortright center. He shared the realities of teaching craftmaking today to a large population capable of severely impacting the center's limited land-base. Allan's search for an effective and low impact means to educate visitors led him to pursue a doctorate on storytelling. He aided this pedagogy by outlining the ways storytelling relates to craftmaking, and he drew from his personal craftmaking endeavors and the centre's curriculum which he organizes.

During their childhoods, both Freda McDonald and Kirk Whipper were immersed in craftmaking practices that sprang from the very land upon which they lived and relied.

² The term *bioregion* is employed here because at the 1993 Deep Ecology Institute Summer Conference, Jerry Martina offered an alternative definition. Usually bioregion is simply defined as the area that supports life. Jerry suggested it was "the distance you would walk to see a lover." James walked and paddled to all the places he loved, and these places in turn nurtured and supported his craftmaking interests.

In Freda's case, these practices had been maintained and transferred through many generations of ancestors. These two informants' statements reflect the importance of their childhood experiences that led them both as adults to make a considerable contribution to preserving and passing on craftmaking skills and traditions. Freda's efforts were most evident in her craft classes and interpretive work, and Kirk's were demonstrated through establishing camp leadership programs and founding a canoe collection. Both these individuals offered insights into this pedagogy through sharing stories of their own first-hand contact with sensory based organic materials and accompanying lore that instilled a sense of respect for the land.

Often the informants' different perspectives complemented and served to clarify each others' views, thereby supporting this pedagogy. The comments of Bill, Craig and the Conovers serve as an example. Each outlined a personal emphasis placed on following traditional designs. Bill was fascinated with "cultural blending," which was the place where the interconnection between cultural practices became evident. He sought the innovative moment when an idea arose in a culture concerning new craft designs and procedures. In comparison, the Conovers emphasized the long embedded practices of a region that reflected the ingenuity of blending with the land so well that initially the subtle features of traditional designs may not expose their significance. The Conovers offered the example of the various grips on a Penobscot paddle that suit different water conditions found in the region they traveled. Interestingly, it was Craig McDonald who provided an explanation as to why these two different approaches to learning craftmaking traditions are of value. Craig used the example of the Avery family's discovery of a new,

more efficient snowshoe weaving technique that made a considerable improvement upon an ancient tradition. This innovation is a fine example of cultural blending because the Averys improved upon the Native technique by increasing the tightness possible when weaving the babiche, thereby eliminating the uncomfortable sagging that results in wet conditions. Craig explained that such significant innovations are relatively rare events in history and suggested that when learning a craft, it is always best to attempt at first to learn the wisdom of traditional techniques and designs before focusing on craftmaking experimentation. ‘Reinventing the wheel’ does then not waste a person’s efforts. This range of comments combined to clarify when maintaining traditional techniques should be emphasized and when original thinking and innovation should be encouraged.

Teaching and Craftmaking

All the informants expressed a concern that craftmaking was neither a significant nor an apparent part of a child’s schooling or education today, yet each informant’s explanation of why craftmaking should play a major role in education was brief and lacked details. A few informants mentioned that the importance of craftmaking resided in the development of the hand corresponding with the development of the brain. Other informants emphasized that it was the seeking and harvesting experiences—being on the land and doing practical engaging activities—that moved craftmaking beyond the typical outdoor activity of superficial engagement towards an activity that offered deeper insights into relating to the land. Yet, beyond these brief descriptions, no further elaboration was provided and I suspect this was due to the difficulty of using language to convey this deeper and sensory-based relationship.

The confidence with which informants spoke in support of craftmaking seemed to derive from an inner place of knowing that aided that person's understanding of their relationship to the world. In contrast to this confidence was a difficulty in expressing anything related to the idea of embodied knowing, as comments on this topic only gave rise to meager and infrequent descriptions. The term "embodied knowing" was not part of my questioning and in hindsight I might have raised it with informants and have asked them to define or describe it to the best of their ability. The terms that the informants used might be described collectively as an authority arising from an ineffable, body-derived knowing. Their choice of descriptions included: inner eye, true or hidden knowledge, getting reality, the cerebral development arising from a making development, under the responsibility, special status, intensive woodsmanship experience, gifts of perception, conscious of love and a linkable thing.³ With this inner authority, two informants associated a "scary" connotation due to its lack of societal acceptance. Skye commented on her peers' difficulty in addressing her intellectual ability arising from her "making" traditions. Alexandra mentioned the fear she experienced due to the limited acceptance she encountered in trying to directly seek and harvest material. What is of importance here is the confidence in which people expressed that craftmaking is a significant learning experience, despite their struggle to explain why.

Almost all of the informants voiced encouragement for research studying the combination of craftmaking and environmental education. The informants' keen interest

³ Reference to who made each comment is available in the interview summaries. This chapter analysis will sometimes focus on the collective ideas raised by the informants instead of highlighting individual voices.

in dialoguing in one-on-one interviews raised the idea that more cooperative situations for discussions should be sought. In group situations, a “brainstorming” effort might arise that builds and creates new ways to describe embodied knowing. This opportunity for dialogue was a role fulfilled by the existence of guilds in the past and needs to be revised among present craftmakers. Skye briefly mentioned the lack of students’ ability to work well together on a project. She emphasized that group craftmaking today seems a foreign experience partly because students know little of the interdependence evident in ecological systems. Teaching and studying crafts should reflect the co-operation and interconnection prominent in ecological systems.

James provided a clear explanation of a direct link between the harvesting experience and learning about the concepts of sustainability that will be expanded upon later in this chapter. Of note in this section is the way his description of the land offers the image of the land as a very nurturing, always present, yet stern teacher. To him, only when a person is aware and respectful, will the land provide all the material needed to live. This idea is encapsulated in his comment; “the seasonal rounds provide no extensions.” The seasonal rounds refer to the activities that must be done throughout the year in appropriate periods and places. The “no extensions” expression hints at the cause and effect resulting from not acting in accord with land-derived activities. For instance, if a person misses the season to harvest birchbark, then that person will not be able to make a canoe for another year. This isolated example expresses a way for a person to demonstrate knowledge of the rhythms of the land and act in accord with these rhythms through seasonal based craftmaking tasks. Kathy mentions that a similar idea is supported

in a Waldorf curriculum that nurtures in children a sense of living within the larger earth rhythms. Kathy's comments provided a lot of elaboration and support concerning the issues being explored in association with the "resonance of movement" guidepost.

Waldorf's education has a developed and tested curriculum that could be drawn upon by public educators. The strength of this curriculum was made evident in Kathy's descriptions that frequently referred to the developmental stages of each child and how they are matched by the craftmaking activities of each grade. Her statements "if it comes to the child too early, it cheats them" and "everything in its time—think about the recapitulation of the history of evolution⁴ of human experience," offered deeper insights on what types of craftmaking experiences should be offered to children of various ages. Steiner's educational theories and the established Waldorf handicraft program should be used as a resource for any public educator setting up a craftmaking program.

Kathy worked from an established craft-based curriculum that successfully fulfilled many of the stated objectives of this pedagogy. For instance, the specific objectives of this pedagogy fulfilled by a student completing high school in a Waldorf program are that children should "over the course of their education be actively involved in experiences of craftmaking that expose them to the need to imagine and create their own toy . . . item for preparing food . . . clothing " etc. Also that craftmaking activities should include working with materials originating from animal, plant and mineral

⁴ This idea of recapitulating history also arose in the work of Ernest Thompson Seton. The idea is based upon a person best being able to learn about history not by reading it, but by trying to experience significant moments of it by "re-enacting" those moments through their own experience of them. This idea allows understanding derived through first-hand experience to inform a person's understanding of what has created the context of their own life and cultural practices.

sources. The Waldorf curriculum, its school structure and the contents of the classroom (wall pictures and colour, desks, journals and manipulatives) all work together to create an atmosphere that nurtures craftmaking activities and could be used as a model to be emulated in designing craftmaking programs.

Five interview informants mentioned the importance of a nurturing atmosphere in which to learn crafts. They all made reference to what events existed in their own childhood to create a positive atmosphere for craftmaking activities. Surrounding oneself with crafts that have meaning, and create a story beyond purchasing it at a store is part of what creates a warm atmosphere encouraging craftmaking endeavors. Many informants commented about how their childhood interests in craftmaking carried on into their adulthood. Comments from these informants emphasized the concern that should be taken to ensure the creation of a supportive atmosphere for children making crafts.

I can recall my own warm reaction to walking through the basement workshop of Bill's yurt and then emerging onto the second floor which is full of the handmade crafts he uses daily. Compared to sitting in the middle of the gym floor at a Scouts Beavers program, the urge to make something with my hands was far more apparent in Bill's round wooden yurt. Educators must be aware that the creation of a craftmaking atmosphere and the sensory stimulation provided by the presence of organic material linger within a person and nurture their inner authority well into their adulthood. Kirk's interest in making crafts was so instilled in his childhood that even as a young adult he was capable of ignoring the teasing of others who ridiculed his endeavors at tanning a hide and knowing the season to pick bark. Learning how to stick with a task (or 'will,' to

use a Waldorf phrase) addresses the idea of a “grande passion” in Kurt Hahn’s work while also emphasizing the way a sense of determination can be encouraged through the atmosphere of learning a craft experienced in childhood.

Of particular use for this pedagogy was Bill’s comment emphasizing that educators should be trained to examine a craftmaking technique in order to find a simpler way of mastering it, compared to highlighting the formation of individual styles. His suggestion of striving to simplify techniques is not directly aimed at making things simple, but at encouraging educators to engage more people in hands-on design work, so these skills could then be transferred to more social situations. He emphasized that learning to make a craft from local material teaches basic concepts of design—concepts that can be transferred to social situations and, in so doing, improve life around the world.

I’m suggesting it is a transference in the end to not just designing a better bowl, but to designing a better world. This design faculty that we are working for here needs to be applied to the rest of living. Social design is what all my work is aimed at. (Bill Coperthwaite)

Bill recognizes a connection between people learning to design their own crafts and designing their own education. Because to Bill all education is environmental education, then to learn to design with a concern for nature leads to an education with nature in mind.⁵ This idea ultimately suggests that through craftmaking people become more aware of their relationship to more-than-human and through this emphasis will learn the ways to design a better world.

Responses to Craftmaking Map

Two types of responses were received regarding the craftmaking map. Approximately half of the informants made a considerable effort to respond to each of the guideposts by adding their own insights, ideas and examples. The other informants tended to listen carefully to all the descriptions of the guideposts, then afterwards provided a summary comment that reflected their overall impression. For instance, Alexandra mentioned that it would be nice if each of these guideposts could come with a brief story that defined it. Kathy's comment referred to her impression there would soon be a backlash against the present political agenda for public education and, when this happened, educators would be craving workshops based on what the map had outlined. James and Kirk expressed the most overall enthusiasm for the model and interestingly both of them also mentioned that they liked how it was placed on a hide, a very sensual material.

Although at first I found it a bit disconcerting that some informants did not provide responses to all the individual guideposts, reflecting upon the few responses aided my own understanding of the manner the map may be interpreted and located within education theory as a whole—that is to say, that it is just one of many educational models attempting to express the way people may learn. This map still offers a comprehensive model for craftmaking. As few of the other informants actually work with teachers or craft educators, it is not as applicable to them as it is to myself. The map

⁵ This is the point David Orr makes in his book entitled *Earth in Mind*, yet Orr does not directly refer to the role craftmaking can play in obtaining this accomplishment.

does allow me a unified means by which to present many diverse ideas that all pertain to craftmaking, yet when initially introduced, seem unrelated. The map creates a presentation format in which to discuss craftmaking issues with fellow educators.

The responses received for individual guideposts were supportive. No constructive criticism was offered, just statements suggesting that an informant had had no thoughts or experiences regarding a guidepost, but could perceive that other people might have had such experiences. The importance of the seeking and harvesting guideposts were always clearly restated by any informant who actively sought and gathered supplies personally. Craig's comment pertaining to avoiding repetition due to the stress it can place on a body, and yet his emphasis on using rhythm and variation to endure long periods of repetitive work, clarified and added to the resonance guidepost. Lack of relevant stories was evident in particular around the acknowledgment and honouring ceremonies and the returning back guideposts. Freda and Craig provided some elaboration by explaining the snowshoe dance and the tradition of hanging a deceased person's snowshoes in a tree. James was fascinated with the idea that I had had a traditional Anishinabe launching for the canoe I made when it was first placed in the water. He liked the way this event had encouraged the revival of traditional Native spiritual practices and recognized the importance that such events occur. Freda's comment regarding the returning back guidepost relayed that many such traditions had been lost among her people; she recognized the value of respect conveyed in such lore. Kathy provided an example of trying to use a simple practice, or ritual, in contemporary

craftmaking activities by stating how newly made paddles should actually be dipped in the water and used before they are brought home to ensure they are not just displayed.

The most significant comments I received emphasized the holism of the craftmaking map that was captured by the circular and spiraling design. For instance, Freda's comment that she felt most connected when she was placing her tobacco down on the ground before harvesting a material, clearly linked the engaging and reciprocating aspects of craftmaking. Kathy related the notion of the rhythms in craftmaking being an example of the larger rhythms within the world. She also emphasized that because her teaching is done through role-modeling a sense of reverence her students will better understand holism. These examples provide evidence of a connection between the interacting and reciprocating stages. Allan's reflection on his son's awareness of the beauty of water dripping off paddles in India, to the making of a paddle here in Ontario, link the interaction and engagement stages of craftmaking. Alexandra's remarks reflect the holism aspect of craftmaking best, as she cannot separate any stages of the process from hunting for the material to using the craft: "I don't know what comes first, either pulling the trigger or pulling the moccasins on your feet, but it is all very connected, and you know it viscerally." All of these snippets of conversation combine to emphasize the three encompassing aspects of craftmaking: engaging, interacting and reciprocating. Together the combination creates a deep relationship to the world evident from many informants' descriptions of craftmaking. This deep relationship is best reflected by James Dina.

The final comments James wrote in his book outlining his craftmaking journey are based upon answering his initial questions of who was he and what made him so. His book concludes with his understanding that he was indeed the canoe he made. Through craftmaking, a person can learn to shift perceptions and cross the invisible boundary between concepts of self and concepts concerning being of the world.⁶ With respect to canoe making, a person could be aware one moment of the layers of cells making up birchbark, and then the cells that combine to make up their skin, and recognize the similarities between it and the birch bark skin covering a canoe. Traveling such serendipitous journeys that soften the boundary of self is like asking, where does a spiral begin and where does it end? This idea is conveyed by the very central spiraling aspect of the craftmaking map, and many of the various expressions of being of the world that the informants conveyed, emphasizing experiences at various guideposts.

Philosophical Orientation

Six themes will be used as central points for analyzing the philosophical orientation of the informants' comments. The themes emerged from sitting with the interview summaries and reflecting upon aspects that connected them. They include

⁶ This notion of being able to cross boundaries is significant to understanding the link between craftmaking as storytelling and craftmaking as leading to a sense of being of the world. Since I first heard Anishinabe elders in the north tell students that they must remember that there is more to the world than what they can see, I have been fascinated by any story that leads a person into this invisible world. After my first year completing my Ph.D. work, I published an article that explains the way canoeing and in part, the making of a canoe, allows a person to cross boundaries. The importance of experiencing activities with an openness to crossing the boundary into the invisible world remains present in me and my craftmaking endeavors. For elaboration, see my article "Crossing Boundaries with Instinct."

holistic quality; connection with the land; sustainability; importance of story; sensory learning; and emphasis on utility.

1) Holistic Qualities

Most of the informants somehow alluded to the holistic way that craftmaking unfolds in the learning process. Kirk used the term “original way” to describe the traditional manner in which he addressed woodsmanship skills, which included a strong emphasis on craftmaking to convey a reverence for life. He related that the original way of craftmaking involves the human being asking that if this other animal [or craft material] disappears for a particular reason, could humans also disappear or be affected for the same reason. Freda described being born into a community with traditional learning patterns where she simply learned by wandering beside and imitating her grandmother’s activities. The holistic aspect of learning which interested Bill stemmed from his desire to learn nomadic craftmaking techniques that were not dependent upon elaborate tools and specific workbenches, or specialized training. He wanted to learn the best way to make an item in the field using common tools and material that was readily available.

Skye used the silk dress she purposely wore to the interview to illustrate how understanding the whole process of making something was in decline within the craftmaking process today. Among her craft students, this was a circumstance that greatly affected the manner in which they worked. Two informants, Allan and Alexandra, raised the notion that a spiritual dimension was always prevalent—it simply may not be apparent or is not acknowledged. James explained that the spiritual world

offered a person with a “primitive mind” living in a subsistence society a way to address the failure of technology. He suggests that the decorations placed on a craft were aimed at infusing it with power, making it spiritual.

Kathy’s Waldorf school experience promoted making connections and nurturing a more holistic understanding of the world. The sense of feeling connected to a group was associated with the ability to make something the group required. Craftmaking therefore provided empowerment and a source of pride to an individual who both achieved skill, and could use that skill to serve their group. As Kathy stated, this was the ‘brilliance’ embedded in the process. To achieve this end, Waldorf education has woven a substantive handwork program throughout its structure. All informants relayed that a well—rounded holistic education must allow participants to be involved in craftmaking from start to completion of an item.

2) Connection with the Land

The manners in which all the informants felt connected to the land through their craftmaking activities were distinct and warrant mention. Freda, Kirk and James all mentioned that being on the land, seeking and harvesting material were major sources of their sense of connection. Freda and James both stressed the way these activities tied them into the seasonal cycles and provided concrete examples in which they could develop an understanding of the impact their own harvesting practices had, as well as those of industries. Kirk emphasized that harvesting materials first hand allows a person to recognize material as a gift from the land. James stated that knowing the rarity of a

material, because a person has worked hard finding a source, allows that person to value the material as different from that of a commodity.

Craig's connection to the land came through his need to use his craftmaking skills to do repairs in the field, which again involves searching for suitable materials. The Conovers' connection was based upon an increasing fondness for a region, because a person's individual craftmaking experiences creates a trigger for the later recalling of an affinity to the land. For instance, the noticing of black ash trees anywhere might encourage memories of making split ash baskets. The Conovers also mentioned that specific traditional crafts can make a person feel connected to a shared heritage with a region and other people. Bill emphasized that fostering a sense of connection, a sense of inter-relatedness with the land, came from using his hands in direct contact with the material from the land. Kathy described that connection was made when individuals could see their own making activity as a microcosm of the worldly patterns of making. Skye outlined that a collective experience among a group making something together provided links to the land, as it mimics the interconnection reflected in ecological patterns. Allan's connection to the land came through his recognition of being part of a mystery, because instilled in him as a child was the sense of discovery that the person who split wood was seeing a sight that no one had ever seen before, the inside of a tree.

The informants provided a diversity of styles and stories for a person to understand the ways craftmaking allows a connection to the land to be made. All the perspectives offered, when combined, demonstrate the interconnective net that signifies craftmaking as a means of connecting people to the land in meaningful ways.

3) Sustainability

Concepts of sustainability are diverse, frequently abstract and typically challenging to teach others. James provided clear examples for the manner craftmaking can raise and address issues of sustainability.

Getting the raw materials explains to you just how available they are and just how much you should or shouldn't take. So for me, that affects how many I should or shouldn't take, to make [something] . . . what is a good example . . . O.K. for me going out and harvesting dogbane, you know I need about 30 or 40 stocks for one dogbane bowstring and if I go out into a field of dogbane and there is only 300 stocks there, I am not going to harvest all three hundred as I want to leave some root stock in the ground for next year. Maybe I'll make 2 bowstrings instead of the possible four or five bow [strings] I could have made. So collecting your own material will connect you to their availability if nothing else.

I think always the preciousness or scarcity or demand of the material affects you. When you are the harvester, it affects you even more directly trying not to destroy your source . . . rather than I'll just pay more for these specialty materials . . . rather I just won't take any more in case there won't be enough for next year. Like eating your last ear of corn and knowing there is now no seed stock for the next year . . . that is almost as fundamental a realization, harvesting makes a connection for me.

It does affect how many you make and how careful you are making them, especially if the material is scarce . . . the fact that I have to harvest it sometimes tempers how much product I make. I might make a few, but better basswood cord, rather than turn out a lot of them not so well, or I may substitute material. I think it was absolutely that way in much more subsistent economies, which all primitive economies were. (James Dina)

James makes the point that preserving the environment will only seem important to those people who understand the concept that all raw material comes from the earth. His craftmaking experiences repeatedly allowed him to lift his own 'veil' and make connections so that he constantly considers the future availability of the material that his present decision affects.

Other informants raised related ideas, such as Garrett's frequent use of the term "link-able" that encourages a person to understand the connection between the outcome of a decision and the impact on the land. Craig stated that knowing how rare it is to find quality material and learning to appreciate this material are factors that encourage a person to question why and how features of the landscape have changed due to human forces, thereby affecting the availability of material. James' acute awareness of the limits of harvesting the locale where he lives arises from his self-derived and self-imposed limitations—namely that he walks everywhere for all his craftmaking supplies. His comments raised for me new questions concerning the comparison between the ability of nomadic people, as opposed to sedentary people, to notice the impact of their harvesting in a manner that will lead to concepts of sustainability. In what ways did a change from a nomadic to sedentary cultural existence affect harvesting patterns, craftmaking practices and practices of sustainability? How did widespread colonization and improved means of transportation alter an individual's ability to be aware of sustainable harvesting practices that might also be considered general environmental awareness? How could something like a school yard restoration project with a limited land base readdress this issue? These new questions will be raised again in the final section of this chapter.

4) Importance of story

Over half of the informants discussed the important role storytelling plays in craftmaking and environmental education. As the topic of stories was not raised in any of the questions, this outcome is significant. Skye made comments regarding the importance of story to providing a sense of history that people require in order to create. She

expressed concern that her animation students were “all technique, but no content. It is all motion with no story.” She stressed that, even with craftmaking, it is history or story that allows effective communication to occur. Her point also addresses the present obstacle residing in schools that train us to be technicians and to think about the tools rather than the context in which they are used, or the social implications their use bind us to.

Kirk stressed that the stories we convey to the young are the means by which people share their love for the land and their interest in heritage. Alexandra mentioned that the stories she and Garrett tell on their trips are sensual experiences that allow a person to experience something they may otherwise not encounter in their own lives. Alexandra suggested that telling stories was the next best way to communicate an experience never undertaken by the listener. She contended that by listening to stories she had managed to take shortcuts and learned lessons from others who had physically experienced and learned from things she had not done. This idea is similar to Kathy’s explanation of why Waldorf teachers tell stories instead of reading them. Telling a story allows a teacher to take a listener to the imaginary place of the experience itself, allowing the listener to also experience the lessons of the story. When teachers read a story, the authority of the experience still resides in the book they are dependent upon; in comparison, to tell is to convey from a place of personal understanding, unencumbered by a written text.

Alexandra also emphasized that a lack of understanding occurs when a person only relies on knowing something through a written description. Allan compared his own

doctoral research findings on the importance of storytelling to craftmaking. He emphasized that both storytelling and craftmaking serve to increase a person's awareness of the natural world associated with the activities. Once an introduction has been made, a person feels more at home and attuned to the presence of the more-than-human and, as Allan states, the plants begin to call out to a person to notice them. I have personally experienced this "calling for my attention" as both a craftmaker and a storyteller. When I go for a walk, I constantly feel as if bent branches ask me to notice them to determine what rustic furniture they might be suitable for, and specific plants trigger my memory and start telling me tales. Like stories, craftmaking experiences guide peoples' ability to be aware and eventually attend to the various perceptions of the land humans are capable of having. Kathy's emphasis on storytelling was derived from Rudolph Steiner's philosophy which attempts to nurture the sensory capabilities of a person and the "esoteric qualities" inherent in every child. In different manners, the informants stressed that stories and craftmaking are interdependent and help a person to be aware of and understand the natural world, because they deal with the sensory world and the "designing" aspect of imagination.

5) Sensory Learning

All the informants made reference to the sensory stimulation involved in craft work. Kirk clearly stated that sensory stimulation was essential for environmental education to occur. Most informants noted some material they loved to handle, or some process they enjoyed due to the sensory engagement it provided. Craig said it was the sense of smell, such as wood smoke and various types of wood shavings that triggered his

fond memories of childhood events. James offered precise statements concerning the reasons he loved to get as close as possible to the material he worked with by eliminating tools and activating mechanisms. After listening to all the informants describe their love of the sensual qualities of their craftmaking endeavors, several questions arose. In what ways can learning to attend to the sensory stimulation of a craftmaking activity affect the resulting perspective? What role does sensory stimulation, provided by craftmaking, play in learning and affirming embodied knowing? In what ways does sensory knowing affect the overall- well being of a person?

6) Emphasis on Utility

The importance of making a useful item that has some degree of recognized beauty was emphasized by all the informants, yet to varying degrees and in different manners. For instance, Allan emphasized that admiration for an item comes when a person knows who made it for them, and that this knowledge encourages a person to care for the item. He also suggests that an item's use can simply be in adding beauty to a home. This idea is similar to Kirk's thoughts suggesting that an item has an important ability to affect the mood in a room or convey a spiritual dimension. Kirk stated that the dependency upon a craft's utility is what allowed a person to recognize it ultimately as a gift from the land. Understanding that people required a means of conveyance was what made the canoe so fascinating to him. To Dina, luxury craft work was frequently tied up with spirituality and what fine art attempts to address today, such as adorning something to encourage a spiritual dimension, or act as a mnemonic device for more spiritual-based awareness.

Skye's work at a college teaching craft and design history allows her to definitively state that today "there is no difference between contemporary craft work and fine art" as contemporary craft work is influenced by the same market features and has generally lost any emphasis of being an item of utility. She maintains that the challenge today is to find a market for crafts that resides outside of the religious or tourist classification, such as the general population purchasing more crafts instead of manufactured items in order to support local craft people. Many of the Conovers' comments made reference to the meaning that both a craft and the craftmaking process provide. It was as if the utility of a craft was also a metaphor for a deeper connection associated with the land.

I think anything like that with a cause and effect, like making a perfect knife you use for the rest of your life or a paddle, or a canoe part because you have had an accident—there is always that immediate cause and effect, with no abstraction. You're engaged in the crafting process as its own thing, but the ultimate result is bigger, and it's continuous. It does not stop when you put the final coat of varnish on it. Every time you use that tool, you are part of a full sequence of connections. Take something like a crooked knife, even though you did not make the steel, you shaped it and have a greater connection than if you just went out and bought it. And you learned all these associated skills that go along with it. So it is both a metaphor and a practical item. (Garrett)

Of all the informants, it was Bill who provided the most detailed explanation distinguishing the present differences that exist between fine art and craft, and suggesting why craft holds a more ecologically sustainable connection to the world. His idea was that the "highest art is when things are well made, work well, are beautiful to look at, but also have beauty behind," because they were not made by child labourers or in a manner that destroys the environment. He associates beauty not in the *eye* of the beholder

but in residing in the *mind* of the beholder, or in the ability of a person to recognize greater connections. This statement suggests that various perceptions of the world are attainable and that ACID culture has encouraged only specific notions of beauty/art, while ignoring other notions of beauty/craft.

Personal Impact

This research arose from my own need to understand why the activities that I found most informative and deeply meaningful in shaping my relationship with the natural world—that of craftmaking—were frequently devalued or not recognized in the field of environmental education with which I had long been associated. I sensed that if I could better express the value embedded in the craftmaking process it would be easier to reclaim craftmaking as a worthwhile educational activity, especially in the area of environmental education. My need has found fulfillment through the interview process, been transformed, and taken new directions. Previous to this study, I found little theory or literature on my topic beyond the occasional paragraph in books and journals of various disciplines. By listening to informants share their ideas, I have been able to confirm my own intuitions and ideas as I realized that I was not alone in my own experience of finding value in craftmaking activities.

Conducting the interviews allowed me to rekindle my energy to continue to pursue academic work in this area, especially in regards to the struggle to express the embodied knowing and understanding of sustainability that craftmaking encourages. Alexandra's statement that finally she "was with her tribe" resonated with me for I, too,

can now position myself and know where I belong amidst the numerous educational philosophies, environmental advocacy causes, and contemporary craftmaking opportunities. I prefer to travel with those who not only use, but also make their canoes, tents and camping gear. I especially feel with my tribe when I am with those people who like to make things in a manner that connects them with the land and their heritage. My tribe consists of other people who explore the world through their craftmaking endeavors.

The difficulty I now realize is that this tribe is scattered and in small pockets and therefore does not have a voice that has ever been heard in the academy. Yet, I find hope in a statement I once heard voiced at a deep ecology conference, to the effect that the best type of change comes from those advocates who wear no uniform, are scattered and know best the ways to infiltrate systems and plant seeds of change. Craftmakers need to recognize that kindred craftmakers do exist and their voices should be heard and recognized for the worth they proclaim. I am now dedicated to supporting more publications on this topic, to reduce the isolation many craftmakers might feel and eventually might determine a way to bring various craftmakers together. Interviewing informants has, more than any craftmaking experience, provided the assurance that I am not alone in supporting the need and value of this craftmaking pedagogy for environmental awareness. The following ideas pertain to the areas by which I have been most deeply affected in regards to the comments the informants made.

Conducting individual interviews and listening to the isolated voices of so many talented and intriguing people made me realize that future studies in this area need to occur in a more collective fashion. Like guild workers who share a common bond and

interest, craft educators with environmental interests need more forums in which to share and develop their thoughts in order to derive a body of literature that will in turn provide credence for the worth embedded in craftmaking. Creating groups of crafters that can brainstorm new ways to integrate this pedagogy into the educational experience of the general public is critical, and will better ensure its success. As Skye observed, the cooperative system of making things best reflects the interrelationships evident in the natural systems of the world. A community of fellow craftmakers requires rigorous dialogue that can engage the various ideas of each group member in order to best implement, support and create a quality curriculum. Such cooperative interactions now need to be established.

This research allowed me to realize the importance of being able to define craftmaking in a cultural context. Whereas I readily approach craftmaking with an ecological focus, I have realized that most people are first drawn to craftmaking through a culturally determined lens, which may integrate an ecological consciousness. That is to say, where my interest may first arise from wanting to handle birch wood to learn about it, other people may just desire to use birch because that was done historically when making a specific item. Both approaches have validity and in the end can encourage a deep relationship with the land. An educator needs to keep all the various paths to achieving this common end open and to use the approach best suited to participants' needs.⁷

⁷ Refer to Chet Bowers [Education, Cultural Myths, and the Ecological Crisis](#) for a detailed analysis on using culture as a basis for understanding contemporary environmental education practices.

Previous to the interviews, I had given little thought to the term *design*, its meaning and its role in craftmaking. The term *design* and the relationship between design and story were two new and important ideas that arose in the interview process. Many of Bill's and Skye's comments drew attention to the way the term *design* is used and could be used by educators. Bill highlighted the connection between the skill of designing a craft and designing one's own education, while Skye emphasized the importance of designing a group's craftmaking processes that can reflect ecological systems. Such insights into the term "design," combined with my educational use of storytelling to teach, lead to the recognition of a relationship: that design is to craft as plot is to story.

The complex ideas involved in understanding "appropriate," or ecological design can be encapsulated in the craftmaking process. This allows a craftmaking experience to be an effective means to learn about the decision-making process associated with appropriate and ecological designing, as well as with theoretically-based ideas such as educational policy. Learning to attend to all the choices involved in craftmaking is part of the decision-making process involved in designing a craft. Recognizing options of design allows people to choose options that limit destructive impact on the land. Expressing design through craftmaking is a way to articulate the dynamics of a multi-dimensional issue, especially that of embodied knowing and sustainability. Students' previous experiences bending different types of wood allows them to realize what characteristics each type of wood holds and which wood type would fulfill their needs. Bill made a significant point when he expressed that the more people understand design, the sooner

we will get on with the task of designing a more joyful and sustainable world for all to live in.

A craft educator, to be effective, must recognize the changes that craftmaking has undergone through the ages and how these changes have influenced society. Articulating the impact of these changes on an individual encourages that person to understand the way to shape their learning, so it best leads to a society they envision. Kirk' describes the way he tells people how a plant, which was once harvested, should now be preserved in hopes that it can be harvested again in the future. This a simple example of creating a new vision. Craft books should include more historical analysis that directly link the changes in availability of material to the impact of human activities on the land.⁸ A discussion on knife making led to Bill sharing stories on the way the introduction of iron influenced a culture. After sharing with him the story found in the book, The Knife, which follows events after an iron knife was introduced into an Inuit community, he shared with me a historically recorded account of a trade an Inuit man made. This trade indicated that an iron needle was considered more valuable than an iron knife. Sharing such stories of the importance of a sharp edge, whether on a knife or a needle, helps a person appreciate the craft materials available in their region and the extent people will go to obtain material today. One way of reclaiming the importance and lore of craftmaking that shapes a person's perspective of the land is through the use of stories of the ways crafts have been

⁸ Some examples of this occur in the craft manuals that usually explain pioneer skills. For instance, Roy Underhill in The Wood Wright's Eclectic Workshop, mentions how boat building procedures changed as the availability of large trees decreased in New England (185-186). Drew Langsner in Green Woodworking tells how he cut down all the premium white oak trees on his property to make hayforks, and then had to find another item to build and sell for income (29).

introduced and how their meaning in a culture has changed over time. Many informants shared such tales as they discussed their own passion for making a particular craft.

During the year that I was carrying out the interviews, I also taught a course which involved making a knife and led many workshops that involved learning to make rope. Both of these activities created opportunities to share the importance of craftmaking through reclaiming the story of a particular craft. Fibre and an edge have been the two most sought after items in all of human history. Yet seeking, harvesting and preparing these basic items is usually a totally foreign experience to most people today. They are raised instead, amidst easy access to the commodities of the ACID society market place.

James Burke and Robert Ornstein (1997) offer a historical perspective on the way axemaking and people's ability to create a sharp edge affected the manner in which people think. Their book made frequent reference to the importance of humans acquiring a sharp edge (the axe) and fiber (which is required to make rope for bags to carry items, clothing, bridges and even a noose.):

But whatever the tools, perhaps the most powerful and long-lasting change they brought about was that affecting the behavior of the communities using them. The wizardry of making these artifacts conferred power on the axemakers, and in turn on those who could use the tools to do new things. So in a fundamental schism that would last until modern times, the gift of an axe favored those in a community who were good at handling the new tool and the change it could bring. The winners would be those who found it easy to use their minds like that used in making an axe, in the sequential manner. Through the coming millennia, power would very often flow to this analytic type, who could turn the gifts to cut-and-control advantage. It was as if the axe had generated a kind of artifactual environment, in which those who were best at using technology to shape the world (and those around them) became leaders. (17)

Whereas this excerpt is from the latter part:

As time passed, the ready acceptance of the gifts became a habit that in turn taught us to hold in special regard those who offered them. Axes also conferred power on those few among us who were able to use them to command the community through myth and magic, or their later equivalent, science and technology. . . . the axemakers' gifts have given us the rope with which to hang ourselves. The gifts themselves did nothing to cause an immediate harm or alarm. *But the acceptance of each gift caused a change in the way humans saw their relationship with each other and with nature.* Each time, the extra constraint on our behavior required by the use of the new gift seemed relatively minor and in any case well worth it, for the immediate benefits involved. But cumulatively, the effects would be severe. (257-258). [Emphasis mine]

Burke and Ornstein refer to only one type of gift that craftmaking provides—that of speed and power. What still resides in craftmaking, but is not mentioned as a gift, is the ability to become aware of the land as outlined in this pedagogy. As craftmaking is no longer an activity commonly experienced by people in ACID society, the lessons arising from craftmaking activities have little opportunity to arise and influence a person's understanding of the world. If the education of people again included craftmaking experiences, then the gift of trusting our embodied knowing and desire to tell stories about how the land has taught us and guided our ways, would return.

Hearing the stories of so many other informants who have found meaning and value in craftmaking has reaffirmed my commitment to craftmaking as a pedagogy for environmental awareness. It has been through craftmaking that these informants have maintained a practice that allows them the ability to resist building the noose in which to hang themselves, as Burke and Ornstein suggest. Instead, the informants and I use craftmaking as a means to make a rope, to build a bridge, and find the ways to address the

present environmental concerns of society. Each informant has acknowledged the gifts that modern technologies offer, but have also recognized how these items have changed them. Many informants have chosen and found a way to limit or avoid the specific gifts of speed and power embedded in technology.

Listening to informants discuss the ways they limit the technology in their lives and why they continue to work with their hands amidst an abundance of power tools, raises awareness about the ways that craftmaking is an act of resistance. Many environmental causes could benefit from being associated with an act that represents its cause such as Gandhi's spinning wheel did for him. It is important to clarify why and how, acts of craftmaking offer resistance to ACID society. A critical aspect of craftmaking is that it is a good calming and healing activity. Through the sensory involvement mandatory in craftmaking, the mind must learn to attend to the body, because the senses must be trusted in order to succeed in completing a craft. This offers a reintegration of the mind/body split perpetuated by most education.

Since the industrial revolution first encouraged the formation of large inhuman industrial practices, humans have ceased to recognize the gifts that craftmaking traditionally offered in their lives. In her book The Resurgence of the Real, Charlene Spretnak writes that the Arts and Craft Movement (inspired by Ruskin's writing and established by William Morris) was the largest movement that profoundly resisted modernity (ACID society) by making a non-modern relationship to nature and/or spirituality central to their social vision (134).

The Romantics had raised the alarm about the disintegration in modern society of much that is essential to the full human experience. Fifty years later, when the Arts and Crafts movement arose, the loss was even more extensive . . . but the pioneering figures of the Arts and Crafts movement went far beyond an economic analysis. They dedicated themselves to countering the corrosive effects of modernity by focusing in immediate and accessible ways on work, home, art, nature, vernacular culture, and the unfolding of the person in *relationships* . . . they were dedicated to “holy warfare against the age.” (145, 154)

The leaders of the Arts and Craft movements could not resolve the paradox—that their revolutionary aims resulted in goods that only wealthy people could afford.⁹ Gandhi, however, successfully used craftmaking as an act of resistance against the existing political structures of his time, and for the revival of village life. The informants of this study shared their own craftmaking story of discovering their passion for making in a particular manner. Their tales nurture the benefits derived from craftmaking activities because they provide voices of successful journeys of finding meaning in who they were, and how they were supposed to be relating to the world. Continuing to create ways for craftmakers’ voices to be heard must be encouraged, and I now see this as part of my role as an academic. Makers’ voices need to be nurtured so they can best express the importance of craftmaking and explore how it can best be part of educational programming. Similarly, the recording of the changing meaning and processes of various crafts need to be undertaken in regards to association with ecological systems and influences on human society.

⁹ This is the reason why William Morris’s work did not play a large role in this study, as his work seemed hypocritical to the ideas he promoted through his art and craft work.

All the informants' interpretations of art, craft and technology lead to a softening of my desire to define and distinguish between the terms. Skye's comment that this study was adding ecology to the conceptual framework was insightful, and led to a discussion of the meaning of terms. The term used in the early part of this study, *crafting*, was associated by many people with aspects of making frequently criticized as those packaged commodities of the trinket market. The term that best reflects the continuum between art and craft became craftmaking. The term *art* has become so restricted within some circles of critics that it seems better to encourage moral and ecological accountability within those circles than to openly criticize their approach to aesthetics. I have taken to defining "art" as "life lived well amid crafts." This definition allows for the continuum that Skye outlined and the Conovers refer to when they write on the place of an axe in wilderness travel. "Basic knowledge may evolve into craftsmanship, and craftsmanship into art, and artistry into something symbolic of place and being" (103).

Skye's comments about how her students no longer share a "common academic background" from which she can build as a teacher resonated loudly. Many adults seem to have malnourished hand skills and struggle to thread needles, prepare fiber, and hold a knife safely. Yet all these activities are the basic skills from which human life arose. People lack the basic life-skills from which their culture originally developed. These skills are the basic building-blocks that "the genius of being human," to paraphrase Kurt Hahn's expression, relies upon, and that a teacher needs to offer in order to create a platform from which learning can occur. Through doing this research, I found evidence that not only is there a need to find a common language, but there is also a need for

common shared experiences. To implement such common experiences, educational policy must reflect support for craftmaking curricula. Curricula must provide outcomes that will ensure that children obtain basic craftmaking skills at appropriate times in their lives, and educational policies must provide the opportunity and support for such experiences to occur. At both the curriculum and the policy level, Waldorf schooling could provide a resource that would help establish a similar emphasis in the public school system. Depending upon the political climate, this could be a difficult change to implement. However, including private craftmakers and camp counselors informed in ways to more effectively create craftmaking activities based upon environmental awareness, is an important part of the networking system that must be established.

In listening to and sharing stories of individuals being empowered by acts of craftmaking, I identified the need for qualitative research to support the implementation and justification of a craftmaking pedagogy. Informants repeatedly identified the experience of seeking and harvesting materials as critical, and something that should become part of every child's education, especially those raised in an ACID society. That is to say, that at least once in a child's life that person should have the very ancient, and very human experience of walking out onto the land, seeking, harvesting and making some item which they then use. This experience is a critical goal to aim for because, after being raised amidst an abundance of purchased commodities and functionless items, this may be the only experience in a person's life that provides an alternative to a non-commodity perspective of the land. This activity thereby becomes the way the more-than-human world is experienced as offering gifts to support human life. Such experiences

may allow the veil to be lifted and people to recognize that all material comes from the earth and are gifts to be respected, not abused and controlled by humans. Ignoring craftmaking experiences in a child's education may be a critical oversight that leads to an inability for that child to find satisfactory ways to engage, interact and reciprocate with the world and thereby create a relationship with the world. Craftmaking is a means to create a relationship with the world, dependent upon the body's understanding, and not the mind's desire, for commodities. Such a common shared experience must be supported in educational policy, emphasized in curriculum, and reflected upon routinely by teachers.

The informants clearly connect the activity of seeking and harvesting with concepts of sustainability. As this connection is critical to make, it points to the need to find craftmaking activities that provide the lesson of developing sustainable harvesting practices. James' examples were precise, and obtained through his own personal experience. He knew how many dogbane plants he could harvest from an area without diminishing future supplies. Collecting and sharing similar examples of lore, and tips for assuring sustainable harvesting techniques, would be a valuable resource for teachers undertaking harvesting activities with students. As such experiences are foreign to so many people today, they are hesitant to initiate them.

School yard restoration work and naturalized areas are ideal places for collecting sustainable harvesting lore. For instance, if students seeded an area with species that would eventually provide craftmaking material, such as broomcorn—a sorghum that makes durable brooms—students would be able to watch the rate of plant growth, harvest the material, save the seeds, and make brooms. They could then determine the

sustainability levels for the size of the plot, the amount of material it provides for brooms, and so on. These are the types of first-hand experiences required by students so they develop concepts of sustainability within themselves, and not just on mental constructs. Through such experiences, the veil of “do not touch” is removed, and replaced by responsible and meaningful experiences of engaging, interacting and reciprocating with the world.

Saving the seeds to plant the next spring is an act that encourages the recording of yields, so that students can learn about regeneration yields, other factors that effect yields, and growth rates, etc. This can lead to a better overall understanding of sustainability. Such recording could part of a particular class or grade-work at a school. Students, meanwhile, would be learning through direct experience the size of plot that is required to grow so much sorghum to make so many brooms, and to still have enough seeds for another year. A concrete example of sustainability is thus provided to students which they can transfer to other material in their lives. In developing craftmaking curriculum, I am increasingly inspired to pursue a focus on how best to encourage engagement with the land in order to increase students understanding of sustainability in a more tangible manner.

These interviews have created, not only a renewed interest in continuing with this research, but also in making it more practical and specific—namely, writing the detailed curriculum from which educators plan lessons. Most educators have themselves lost craftmaking skills and typically desire to feel competent in a skill before they will undertake to teach others. To promote this, pedagogy workshops are needed for those

who best learn from experience and comprehensive curriculum for those who can only be reached through publications. The written curriculum developed should outline specific craftmaking skills, and be accompanied by description of a pedagogy that emphasizes the environmental awareness that can accompany specific activities, or be generally applied to any craftmaking. The curriculum should be designed to be adaptable to camps, in classrooms, and on wilderness travel trips. The work of the four educators mentioned earlier in Chapter Two could be built upon by making their work more relevant to contemporary education situations, alternative and low-technology approaches, and through the contemporary media available today, such as video and CD. These multimedia forms of communication might also better convey the embodied knowing embedded in craftmaking that is limited through oral and written expression alone. In Ontario, the public school's "artist in the classroom" program should be examined to determine if a similar "craftmaker in the classroom" program could be established that would promote the basis of this pedagogy.

Summarizing — in conducting these interviews, results have confirmed that other people understand that craftmaking experiences can significantly shape a person's relationship with the land. This support seems to have justified the value of the pedagogy and renewed my energy and interest to continue to study craftmaking, but with the newly defined foci that the informants aided in creating. There is a need now to clearly articulate a craftmaking praxis. Key components of such a praxis include embodied knowing, the concepts of sustainability, the relationship between sensory stimulation and cognition, and acts of reciprocity in honouring the more-than-human. Such a theory of craftmaking

must be articulated in order that this pedagogy is recognized within educational systems. The action that must be taken involves, not just writing, but implementing specific craft-based curriculum programs. Also crucial is implementing and evaluating them to ensure that alternative perspectives of the environment are being offered.

Conclusions

The question, why is craftmaking an activity that can shape for a person a deep, meaningful perspective of the world, has been probed through personal narratives, past successful craft-based programs, relevant literature and interviews with experienced practitioners. The answer is as complex as trying to understand why humans have opposable thumbs. Yet the quest to answer such a question draws forth ancient themes that originated in a time when everything made by hand was craft (Lucie-Smith 11) and communication was predominantly oral. The themes arising from this study of craftmaking root people to a heritage that defines the way cultures do things and the cultures ability to address its future. If the essence of most fairy tales is “I’m lost, find me”(Yashinsky 145) then the essence of craftmaking must be “I need it, can I make it?” Yet what people of ACID society need today is not so much a particular item, but a perception of the world that can be derived from making crafts. The story craftmaking tells of relating to the world is not shared through words as much as it is communicated through action; human bodies demonstrating their relationship to the more-than-human world through efforts to make the items needed to survive and live well on the land.

Humans’ ability to live on Earth, let alone live well, is in question. Concern for the environment has increasingly become recognized as a crisis of the survival of the Earth and its natural systems. But a call for the preservation of natural systems is also a call for the survival of our own species. Human fate, more so than just the fate of the planet, is in question, as well as what is required to live well and meaningfully. Deriving

any answers to what can be done to save humans requires recognizing the relationship, the interconnectedness, between nature and humans. Devereux describes what needs to be done

. . . to save ourselves. We need stewardship for our own species. Rather than thinking of healing the Earth, we should be looking to the Earth to heal us. And that is the starting point . . . if we are the disease, then the healing of that ill is the way to save the Earth's environment as we need it to be. It is essential that we not only continue, but redouble our efforts, with practical material activities aimed at ameliorating the symptoms of ecological distress, such as by recycling, controlling our consumption of materials, encouraging ever more environmentally friendly and economical manufacturing and transportation systems, repairing environmental damage, and above all, pressing for constantly increasing ecological awareness on the part of our corporate, financial, and governmental institutions. But none of this effort will reach the "critical mass" necessary to turn our dangerous situation around fully unless we heal the underlying sickness—our relationship with the planet, our *worldview*. This means literally changing how we perceive the world around us. And that requires the alteration of our consciousness. (Re-visioning 17)

The pedagogy presented here proposes a role for craftmaking in altering consciousness, especially towards a sense of oneness of being of the world. Lucie-Smith offers a description of traditional Native American basket-making activities and the ways this craftmaking process relates to the essence of craftmaking:

. . . completely organic, non-commercial economy, with craft skills acquired instinctively and handed down from generation to generation so that the business of making a basket acquired a ceremonial quality, putting the maker at one with nature and its seasons. It represents the . . . ideal towards which many modern craftsmen [sic] aspire. (24-25)

The oneness Lucie-Smith suggests is obtainable through craftmaking Mike Burns describes as the gift that storytelling wraps (refer to opening quote). A craftmaking

pedagogy informs a person how to wrap and unwrap the gift of oneness so that people can alter their consciousness and receive the consciousness of being of the world.

The aim of doing graduate study within an educational system that has increasingly ignored the importance of handwork and embodied knowing, partially resides in an opportunity to reclaim and legitimize the value of the act of making a craft, especially as a way of shaping a person's relationship to the natural world. Like Gandhi staking his all on spinning, I would stake my all on craftmaking as a highly significant, yet frequently missing component of education programs. Getting a Ph.D. in woodcraft lore, as friends have ribbed, would legitimize craftmaking as environmental education within the very education system that has seemingly denied the worth of craftmaking. The literature and insights which interview informants repeatedly and consistently provided, reveal a craftmaking pedagogy to be serious and profound in its intent and its contribution to ecological consciousness. Presentations and workshops on the ideas presented in this pedagogy have received good reviews, as well as providing encouragement and support for making accessible the ideas expressed in this study.

Environmental education programs need to re-address craftmaking activities so that they are no longer scaled down or power-tooled up in order to conveniently fit into limited time slots, meet budget costs or merely increase the "experiential" component of an educational objective. Instead, curriculum needs to be designed so that it provides students with quality craftmaking experience that affirms sensory abilities, embodied knowing and the authority of a visceral understanding of sustainability. This pedagogy outlines what needs to be aimed for in designing a program that can implement a higher

quality of craftmaking skill that nurtures a sensory-based awareness of the land and deepens our engagement, interaction and reciprocity with the world. Specific applications and ways of addressing this pedagogy through various lessons now need to be tried, tested and redefined. The rigorous expectations of this pedagogy effectively shape a person's relationship of oneness. People can change profoundly when craftmaking is central to the curriculum, rather than a brief simplified activity that supplements other subject areas. Craftmaking experiences make the land present in people's worldview and in so doing may best ensure humans' own survival on Earth. The environmental awareness obtained through craftmaking activities encourages people to recognize problems concerning the manner in which humans cease to allow the natural environment into their worldview. In doing so, they can recognize the ways in which we belong to the natural environment and most importantly, how similar humans are to nature. Recognizing this similarity, this being of the world, is the gift that craftmaking experiences bestow.

This study did not so much create a pedagogy of craftmaking for environmental education as re-frame what already existed in a language better suited to modern ACID societies. Many people in the past have seen a need to question the direction humans were moving into the future. Frequently, I have felt the spirit of Rudolf Steiner, Kurt Hahn, Gandhi and Ernest Thompson Seton keeping me company in the long hours of writing. Unless a craftmaking pedagogy is integrated into educational policy however, the vision of the future nurtured in the child of today will continue to be limited and not benefit by the ideas expressed by these influential educators.

Craftmaking allows a person to be a skillful explorer of the physical and cultural world in a process that equally nurtures both body and mind. Lacking in the basic skills of craftmaking, many outdoor explorers of the past, like those students and travelers of the present, frequently returned from their journeys and vacations with stories of self-aggrandizement and conquering. Some visitors to a natural environment typically turn inward to a place of mental being that allows them to deal only with their own emotional worlds and not the tangible landscape they live within. On such journeys a person's body is maintained by the technical support they are able to carry with them. The need for such support usually limits their journeys to brief visits in the wilderness before requiring the need to return to a convenient store to replenish supplies. On the other hand, people who nurture the craftmaking skills that connect themselves with the land are best able to live comfortably in nature without the constant need to retreat to modern commodities.

The Meaders, who made the video [The Great Alaska Wilderness Adventure](#), support this craftmaking pedagogy. This homemade movie is about the couple's homesteading experience in Alaska in the early sixties with their very young son. The Meaders choose to live their life in a manner that involves their need to make most of their own belongings. The following passage pertains to their craftmaking endeavors, describing their changing perceptions of the land, the lessons the land taught them, why they chose to live this way and what perception they acquired in so doing:

We desired the freedom to live independently and in harmony with the earth and its creatures. . . . It was important to get our necessities directly from the land: Our home, food, furnishings, fuel and some clothing. . . . By living with the land in this way we hoped to grow into a new understanding of life. . . . For years we lived in isolation and adapted

our lives to the season as the animals did because we were dependent on these changes for our survival too. . . . We wanted this wilderness to be his [Dion, their son] teacher. . . .In contrast to [us], Dion was never repulsed by anything. He was proud when he could bring home wood for the fire or food for the table and every year he was able to help a little more. Even though he was proud of his catch he often felt sadness for the creature's death. He talked not only to the animals but to the plants, rocks, winds and water because for him everything was alive and conscious. . . .It wasn't easy for me and Fred at first to find satisfaction in this way of life. We had a restless feeling, sometimes the land seemed so empty and we couldn't get enough meaning from the work or wilderness events, but after three years, we felt more at home with this way of life and books took up less of our time.

A new joy and satisfaction came from making the things we needed from the material of the land.. . .[describing killing and cleaning caribou] it was a bloody rather messy job, but a meaningful part of obtaining food first hand and it always reminds us of what living on this earth costs. We use everything we possibly can {caribou hides for sleeping bags}. . . . [referring to picking fireweed shoots in the spring] Like the killing of animals it sometimes is hard for me to pick these young plants; it is such a long winter and they are just beginning their day in the sun. . . .

Almost everything we needed to learn about living in the wilderness, butchering animals, building cabins, tanning hides, we have learned from books. It is a poor trial and error process and takes much longer then learning at the hands of a wise grandmother or grandfather, but it works . . . Dion at the age of seven took me on a ten mile canoe trip. I was amazed at all that he knew, all he had learned by simply paying attention. . . . On winter nights we just spend our time making things . . .exploring the Native skills that help us to live well with this land . . .

I have learned what Dion tried so often to tell us as a child; that there is an awareness, a consciousness, in all things. Not just in the caribou, wolf and hare, but in the rocks, plants, mountains and lake. . . .[Hu]man[s] have another world —their own consciousness. What we need, what challenges us, is to come into relationship with a world that is totally alive . . . and our children can still be our own teachers.

The Meaders come into relationship with a world that is totally alive due to both their craftmaking experiences and their ability to be open to learning from their child. Their son, Dion, through his exposure to a world with the land as teacher, is very capable of perceiving the world in alternative ways to that of people raised in ACID society. His

sense of a living land comes in part because his exposure to commodities has been practically eliminated, while craftmaking has become very necessary. Dion knows little of any world other than the one his family has crafted. Ultimately the video portrays people who come to recognize the animate qualities of the land. They become beings of the world through their experiences that, in part, include reclaiming the processes of allowing the land to teach them directly through craftmaking and related homesteading tasks. In building a life immersed in the crafts, the Meaders become more in tune with the natural processes of the world.

The Meaders demonstrated that humans have a long heritage of shaping their environmental awareness through craftmaking processes and that reclamation of this process, if only in small ways, is possible and a worthwhile pursuit, even in today's ACID society. This pedagogy demonstrates the ways to form a new consciousness through craftmaking. Craftmaking acts of engaging, interacting and reciprocating with the world offer fundamental experiences that have shaped human understanding of the world ever since a person has cracked two rocks together at the dawn of our creation (Dina 153). This pedagogy reclaims ancient wisdom through storytelling that draws from and unites the disciplines of history, philosophy, physical /bodily-based education, science, poetry and other divided and severed subjects. The story—"we need it, can we make it?"—is passed on to listeners who now understand that what we really need is to listen to the land, to heal from acidic cultural making practices, and to create an openness to a consciousness of oneness. Craftmaking activities heal because they acknowledge that humans are a part of and are dependent upon the natural world for survival. Craftmaking

is about learning to become competent in engaging, interacting and reciprocating with the land so that human relationships with the land bring joy and fulfillment in a sustainable manner. The craftmaking pedagogy outlined in this study serves as a means to alter our consciousness, or world view. It should be used well and frequently in today's acidic cultures as it offers hope and faith that humans are kin to the more-than-human, we all hold the potential to be beings of the world.

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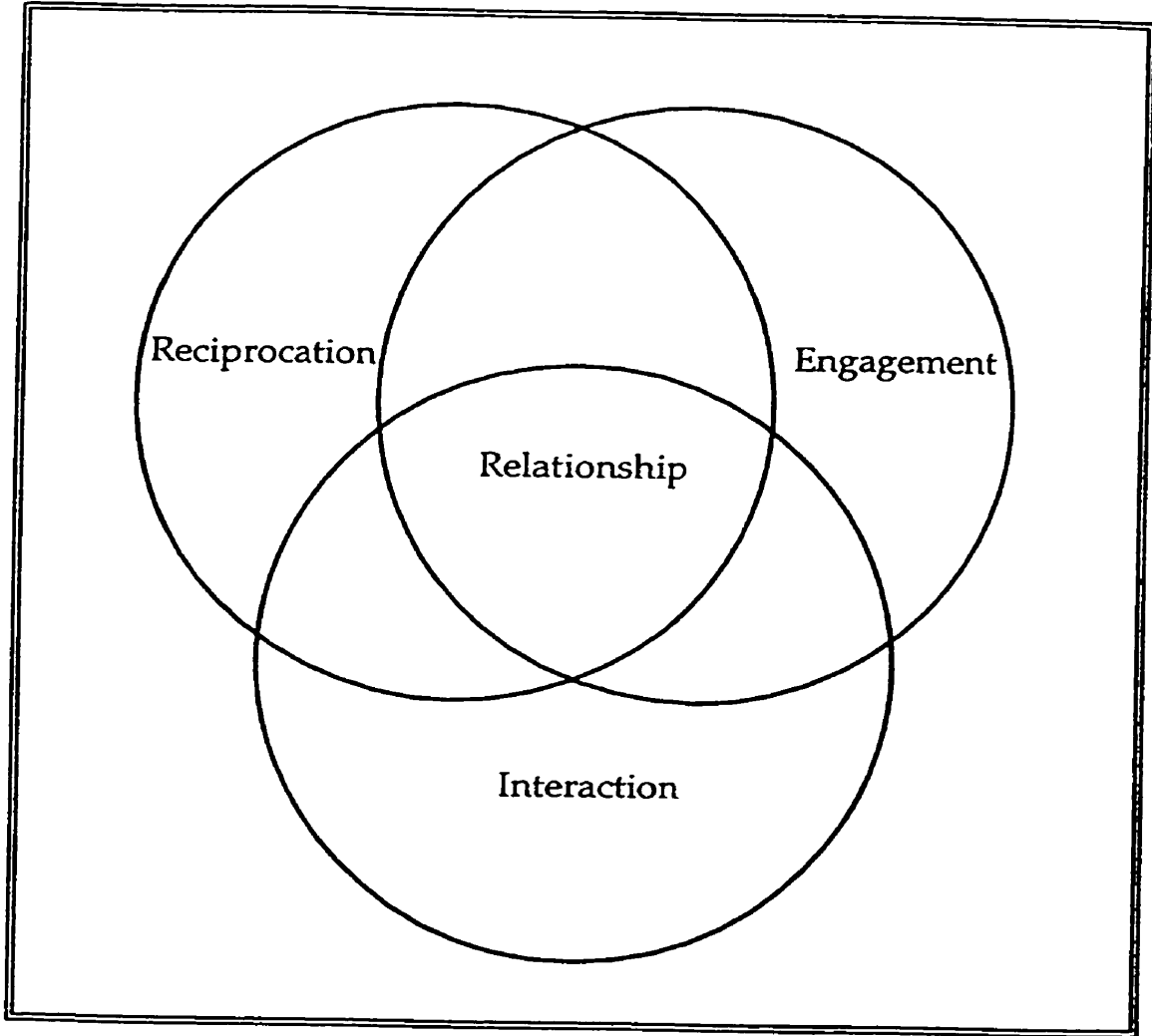
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Appendix A



**Aspects of Craftmaking that Encourage a Deeper Sense
of a Relationship with the Land**

Appendix B

Guidepost Narrations

Narrations can be used in many ways to enhance teaching situations. Selected passages can be read aloud to a group of craftmakers at particular times, such as an opening or closing inspiration before a meeting, to introduce a related activity, as an inspire discussions etc. The following narrations have been arranged according to the guideposts associated with the craftmaking map. They are each accompanied by explanatory notes to provide some context for the literature.

Origin

This narration provides an example of the way even the simple act of making a craft should be accompanied with ethical concerns pertaining to whether it is appropriate to pursue making the conceived craft. It comes from the book The Last Algonquin. I read it when I was in high school and its notion that a person should not necessarily make everything they can conceive had a lasting impression on me. It encouraged me to understand that just because I could, didn't mean I should, make something. It ultimately made me continue to seek other similar values about how and why there might be limitations to the material possessions in our life. The passage is by Theodore Kazimiroff who wrote about his father's experience making a clay pot with Joe Two Trees, an Algonquin Native who lived in a small isolated forested region in New York state where the Bronx is today. Joe Two Trees was similar to the better known Ishi of California. They both were indigenous men who, through various situations in their lives that isolated them from the modern world, had retained the traditional skills of their culture. Joe Two Trees continued to make things according to the ancient skills passed on to him by his parents. When Ted (Sr.) expresses his interest in learning to make a pot, Joe Two Tree discusses the way that he has come to sanction the making of a pot according to his spiritual customs. Awareness of this sanctioning process can serve to raise questions on other similar spiritual practices.

His explanation of a simple pot was astounding. He told me that this making must begin first in the heart, or soul, for that was the place the Maker started all good.

ideas. Once the young thought had opened, like a fruit on its branch, it would follow a natural course to the head. The brain he said was the second stopping place for any plan. It was in the brain that Tchi-Mantou would come during a deep time to help the plan become a workable project. I was told to go home and pray that my pot would be made well, and that once made, it would be full whenever I, or my family, was hungry. I undertook the making of my pot as I had been instructed, and the old man's sincerity made me feel it was really the only course of action I could take. [the next morning] I told Joe I was ready to start the making of my pot. He seemed quite surprised and asked if the Great Spirit had already sent instructions to my hands about the making of a thing so important as a vessel to use in the cooking of His game. He asked me if the Maker himself had told me to start on the path that would end with a new clay pot. I was still a small bit dubious, but I answered that He had. Two Trees told me that to start the pot before the sanction of Tchi-Mantou would be very bad medicine. (9)

Seeking

These narrations are about three different ideas that pertain to seeking materials. The first provides an example of a small group of people harvesting material on publicly owned land. The second pertains to a specific example of a particular perception of being on the land and the land watching back. The third narration offers a description of a connection. It links the quality of material found to the health of the region in which the material was found.

In an age when everything is a packaged commodity that money can buy, digging and preparing a local clay can be a purifying and unifying act. Clay-digging expeditions with students and fellow potters are like celebrations and meaningful rituals. The digging, sorting, checking, bagging, and carrying are activities enjoyed most when shared. Concern for nature and ecology dictates how clay should be removed and how the land should be left; individual potters are not the ravagers that clay-mine companies are, but their rights to land will

be equally questioned. When I remove clay from state lands, for instance, I make only shallow holes, then refill them with earth and fallen branches, so no scars are left behind.

In any case, assuming permission to dig has been granted, and care and concern for the environment are evident, this shared labor leads to the acquisition of a clay with characteristics quite unlike any other. The kind of pottery formed in a particular locale is tied directly to indigenous materials and resources. Re-establishing this tie, when it has been lost, does much toward renewing one's desire for the continuity and newness of a living tradition. The ideal or the possibility of a self-sufficient pottery community is easily kindled by such activities. (Beittel 30)

I wonder about the deeper dimensions of their partnership, whether each tree has a sense of the other. And is there a community among all of these neighboring trees, one that could be comprehended from a human or animal perspective? They've stood for centuries with their boughs touching and their roots tangled within the soil, and I can hardly imagine that they're not aware of each other or interacting in some way beyond the purely physical.

Koyukon people might find these thoughts painfully limited. In their world, trees are aware of whatever happens around them, and like all living things they participate in a constant interchange of power. The elders say that certain kinds of trees have a heightened sensitivity toward humans. For example, Sarah Stevens told me boreal forest spruce possess a benevolent spirit and will protect people who camp under their boughs. Also, in exchange for being treated respectfully, spruce trees supply the logs for cabins and firewood to heat them, elemental human needs where winter temperatures routinely drop to fifty below zero. (Nelson 13)

In recent years, green woodworkers have noticed deterioration in the quality of white oak sapwood used for basket splits and in that of hickory and oaks used for bending. Problems have also been noted by manufacturers of high-speed veneers who shave very thin layers off a rotating log. Growth rates appear to be slowing down in some locations, trees are dying prematurely. The problems seem to begin at higher elevations, which intercept wet weather. White oak basket makers at lower elevations have yet to notice these problems. (Langsner 42)

Harvesting

The first narration provides a description of a method of harvesting which reflects an awareness of notions of sustainability. The second narration describes an Ontario school teacher, Wayland Drew, attempting to introduce to some students to the notion of gesturing to the land by providing a token when gathering material. The third example pertains to a description of tanning a hide and finding suitable wood for bow making. All the narrations highlight the compassion for material that direct participation in the act of harvesting can provide.

From the historic swamps near Makeni, the flax is cut, the knife slicing carefully through a rind-hard base. Trimming cautiously, she ensures that the rito—the youngest, finest shoot that emerges covertly between two larger parent leaves—remains untouched and undamaged. The parent leaves are also respected, for they will keep the youngest warm and ensure the life of the plant. Anyone who comes across the growing flax of a Maori weaver will immediately notice the quaint fanning of cut leaves, growing in a neatly chopped delta shape up from the earth. Often, if the weaver lives nearby, and certainly if the plant flourishes within her own garden, the roots themselves will be fed. Bundles, bound and rotting, are packed about the ground in browsing, spindly piles. These are the offcuts—the threads and thinning extremities, the freckled unscables, the blade spines and residue. Tied together, they are placed within the bosom of the plant, once again.

to ensure its life. . . . A belief firmly held is that these beautiful fountaining leaves can only be picked when they are ready. Grasped resolutely with one hand and turned against itself, the ready *tiekie* will snap off easily. Any resistance from the plant warns off the gatherer - she respects its growing and seeks elsewhere, because *tiekie* that is unready can spoil or split badly, and make one's work worthless. Taking from the plant as the plant offers itself makes the growth and ongoing lifecycles certain, and ensures further access to and use of these precious forest resources. . . . For the future, despite the depletion and abuse of natural resources, we must find hope in the wisdom of the past. The past as it is preserved by the present - such as the work of the weaver of fibres, the woman who cultivates, gathers, recycles, . . . the woman who knows and loves *Papatuanuku* and celebrates the bounty of the earth. This knowledge, if emulated and perpetuated, will serve as our strength and foundation for the times that lie ahead. (Ngahina Te Awekotuku 140)

[He mentioned that] . . . the practice of leaving a token, perhaps tobacco, where you had taken from Nature something that you required. One of the students asked, "Sir, are you suggesting that we really do that?" I told him I wanted him to think about it. I wanted him to decide whether he really needed what he was taking. I wanted him to consider the circular nature of gifts and giving. Most of all, I wanted him to think about his participation in an ultimately mysterious world. The tobacco, I told him, seemed to me a symbol for an invaluable attitude that had stood the test of millennia. (Drew 16)

As I skin an animal, I also like to talk to it, much as I talk to a plant or anything else I'm harvesting or making into a garment or implement. In a physical sense the animal is dead, but to me its spirit is still very much alive. . . . So I talk to the deer as I take off its coat. I thank it for the gift of warmth and protection it is giving me. I feel the

hide. Holding it in my hands gives me a luxurious, reassuring sensation. I feel the thickness of the dermal layers and imagine all the fibers that are going to be fluffed up in the tanning process. I feel the layer of thick, hollow, insulating hair that has kept the deer warm in the coldest of winter snows, and I am awed by its beauty and utility.

Deer, I think, your kind is lucky to have such a beautiful coat to carry on your back and belly all your days. We people are but paupers when it comes to having the things we need to survive. It is too bad we have to take so many things from you and your brothers and sisters, but we have no choice. We are poor survival machines. We rely on you for our warmth and well-being. Deer, I apologize for taking your coat, but I will make it a thing of beauty. And a part of you will live on with me as I bundle myself inside it. (Brown Living 156-157)

Even from a purely utilitarian viewpoint, this kind of communication makes good sense, because it helps you take more care in the construction process. The attitude is not so different from that of the skilled artisan or sculptor who simply loves the smell and texture of the wood he works with, who sits and spends hours examining it, trying to discover the hidden forms within it and hoping that his skill will be up to releasing the spirit of those forms. (Brown Living 123)

Resonance of Movement

The following passages address the potential for repetitive motion as a means to broaden awareness and understanding. They pertain to the pace, rhythm and sense of embodied meditation that craftmaking activities can promote.

By the time you've finished scraping a hide on both sides, you will have had a major workout. This can take hours or even days of intermittent work. All I can say is that it's worth it. Many times while scraping or staking a hide, I find myself falling into a beautiful rhythm that connects me not only to the hide, but to the sun and the soil and the sounds and smells around me. I hear the birds and

the laughing voices of children and friends. I feel the sun working on my own skin. Working a hide, like so many other earth skills, is a rare experience in modern society. It is a chance to forget the self, to let the mind drift and become part of the rhythm of nature. It is a time to forget time and destination. In a sense, it is a kind of meditation, and it can be every bit as profound a mental and spiritual exercise as sitting for an equal number of hours with your legs crossed and your eyes closed, staring at a candle or repeating a mantra. (Brown Living 167)

I believe that, in the quiet, repetitive, hypnotic rhythms of creating crafts, the inner being may emerge in all its quiet beauty. The very rhythms of the knitting needles can become as incantatory as a drumbeat or a Gregorian Chant." (Gordon-Lydon, intro)

Making

The following narration is an excerpt from the book, Green Woodwork, which serves to describe how the basic experience of carving a simple spoon requires a person to pay attention to the interaction and blending of concepts of aesthetics and function. There is an emphasis on paying attention to the wood grain and the fit of the completed craft to the body which will be using it. The author discourages creativity and instead stresses paying attention to the potential lesson a sharp edge, various wood grains and tender hands need to learn, that is to say cuts and injuries. The second narration is taken from a body practitioners' book which explores the tactile capabilities of human hands.

Spoon making is an excellent exercise in carving techniques. You'll learn how to look at objects very carefully from various angles of view and how visual aesthetics relates to the function of an object. Attractive proportions and balance can transform a spoon into a small piece of sculpture. Countless generations of spoon carvers have evolved classic shapes that are hard to

improve on. I advise beginners to copy existing designs before trying personal ideas. If your first spoons are copies, you'll have a chance to practice knife grasps and following the bowl without the distraction of trying to be creative. Well-designed spoons share certain characteristics. They tend to be lightweight and well-balanced, and they do the intended job comfortably. A really fine spoon will be pleasing to observe from any angle. For strength, the leading edge of the bowl, which is end grain, should be comparatively thick. The bottom of the bowl can be very thin. The bowl of an eating spoon should be fairly shallow—it won't feel comfortable in your mouth if it's deep. The area where the bowl joins the stem should have adequate strength. The stem must feel comfortable in all positions in which the spoon will be used. (Langsner 60-61)

Think of how many objects we touch without paying the slightest attention to what we could learn about them through our skin. Like reading braille, palpation is a way of gaining knowledge about the world. Once learned, palpation brings the body alive under your fingertips—bones dance, joints speak, organs reveal, muscles move, fluids flow, the entire body vibrates with life. And, where you do not feel this aliveness, problems are usually found. Through palpation one has the eerie experience of feeling as though you can see through eyes at the end of your fingers. With enough practice, the sensation of touch appears to produce visual images. When you palpate a part of the body, you not only feel it, but also have the sensation of seeing it, even though the body part may actually exist several inches below the skin's surface. I have always supposed that this sensation of "seeing through one's finger" is similar to a skin-sight apparatus. It also demonstrates palpation as a form of somatic imaging. (Ford 89)

Utility/Use

The first narration listed below was on the label beside the rug displayed at the entrance to a hand-hooked rug exhibition at the Museum of Textiles in Toronto. It encourages the reader to recognize the rugs on display as animated items that are happiest when resting on a floor in use. Further, it questions the role of museums and raises concerns pertaining to displaying items originally made for use. The second narration provides a reflection about the greater meaning that can be ascertained from a craft when it is utilized in daily life.

...many books describe the ways we understand (or invent) the past through the physical objects that have survived the trip through history from then to now.

The containers we keep our invented histories in are called museums. Museums are very odd places, and don't have a very long history themselves. What they do is to carefully display Important Things To Be Admired By Strangers.

At night, when the museum is closed, the rugs talk to each other. "Who are all these people coming in here to gawk at us?" they ask. "What are they thinking?" The rugs try to look over their shoulders to see what's on that label on the wall next to them. One says to another, "It's exhausting standing up like this all the time. When do we get to lie down again?" Another sighs, "I just want to go home." But for the old rugs there is no home to go to other than this. Could we get along without museums?
(Museum for Textiles)

I also have a sense of accomplishment. It takes a lot of effort to produce a beautiful piece of buckskin. It's a tremendous workout. It gets me outside and gets my muscles working. As I work the hide, I also add my own essence to it. In sculpting and reshaping it, I give it a part of myself. The finished product represents a beautiful union. It's not just a shirt or a pair of moccasins. It's also a relationship and a rich storehouse of memories.

For me, a rawhide thong holding a blade on an ax or an elegantly fringed buckskin shirt serve as windows into

the universe. They make me realize that deer and other animals serve us in so many different ways. Their flesh goes to nourish and strengthen us. Their hides keep us warm and protected. Their sinew gives power and solidity to our bowstrings and form and function to our clothing. Their bones become extensions of our fingers, allowing us to shape our environment as we are shaped by it.

Not least of all, animals nourish and strengthen us. By eating the flesh of the deer we become part of the deer and the deer becomes part of us. Contributing to that power is the power of the plants that animal has nibbled and the power of the sun, water and air that lifted them up from the soil. Everything we take from an animal contains not only a practical use but a precious connection. In a single piece of buckskin, if you look with your heart, you can see everything from earth and clouds to sunlight and Stratton. For within one thing are contained all things. (Brown Living 182)

Acknowledgment and Honouring

The following historic illustration of a snowshoe dance comes with little explanation, yet it can be used to ponder the reason why a craft—in this case snowshoes—can become the centre point for celebrating something. Accompanying this picture is a transcription from a segment of the National Film Board's movie *Attiuk*, which is about the Montaigne people living on the north shore of the Saint Lawrence River in the winter season.

It is a ritual of the caribou. The caribou gives the leather for the snowshoes, the snowshoes give the caribou to the hunter. The snowshoes, of caribou thong, which is fleet and distant are not enough. A wise old man is charged with the making of drum. The skin is stretched on the fragile cage to capture the magic rhythm. It gives to the tribe the instrument of invocation to bring the hunter and caribou together. The drum as well as the snowshoe is needed for the hunt. All hunting is accomplished first in a dream. The snowshoes obey the drum. Without the remembered rhythm of the drum the pace could not be sustained just like the dancers could not maintain the dance without the drum.

They are possessed by the inner rhythm without which the hunter could not obtain the caribou and that is why the snowshoes obey the drum. (Afrink)



(Catlin 44)

Returning Back

The following narrations demonstrate that both ethical and ecological reasons for choosing to use decomposable and organic material for craftmaking activities has existed within a culture. In this case Richard Nelson discusses the Koyukon culture of Alaska.

It was important to peel the bark in a warm place, he said, because the tree still had life and awareness in it. Stripping the log outside would expose its nakedness to the winter cold and offend its spirit. Later on, when Joe carved pieces of the birch to make snowshoe frames, I tried to help by putting the shavings in a fire. His urgent voice stopped me: "Old timers say we shouldn't burn snowshoe shavings. We put those back in the woods, away from any trails, where nobody will bother them. If we do that, we'll be able to find good birch again next time." (Nelson 56)

I think next of the clearcut and the gray, lichenized stump, remnant of a great tree whose body was taken away and lost to whatever future generations might arise there. For thousands of years, the Native American people also cut trees from this forest, but whatever they used remained here. Generations of houses and canoes, ceremonial poles and paddles, spear shafts and lost arrows rotted back into the place they came from, just as Joe Steven's sled and snowshoes and whittled shavings will do in my own lifetime. (Nelson 59)

Appendix C

Suggested Teaching Activities

The following activities are suggestions for ways of introducing, enriching or aiding experiences and ideas surrounding each guidepost. The activities serve as a resource guide and should be adapted to each setting, specific craft undertaken, learning environment and group context presented to.

Origin

- 1) Place ten items on a tray, five items of which are very useful survival tools and the others, items very artistic but lacking in functional use. Ask participants to classify:
 - a) the items according to what they would pay for them at a store
 - b) their priority if one was living off the land
 - c) their perceived beauty
 - d) their ranking of preference for owning the items
 - e) their own ability to replicate any of these items if they were to have to make them from gathered raw material.

Begin a discussion on any significant or contentious point concerning how these items were classified. Then discuss whether the item that is proposed to be made is considered a need or a want, and the extent to which this distinction affects their lives and the greater community.

- 2) Arrange two spaces or rooms which participants can visit. One space should be filled with all hand made crafts and the other should be filled with abstract art items. Have participants compare the way they feel after observing and being in each space. Expand upon the differences as best as possible. (Note: This activity is modeled after Morris Berman's description of purposefully wandering between a modern art display and a colonial craft exhibit.¹)
- 3) List the items necessary for a typical camping trip. Make another list of the items required for an indefinite stay, in the same area the camping trip was planned.

¹ See the chapter entitled "The Two Faces of Creativity," in Morris Berman's Coming to Our Senses, for elaboration.

Discuss any significant observations and emotions that might be felt regarding the loss of some items (perhaps due to weight such as food) and the introduction of new items (that might be unfamiliar such as axes and knives.) Question participants about the comfort they have in their personal skill at being able to make the needed items using only the materials they could find. Share stories of going camping and forgetting or losing particular items and what could be made or done to replace them. Consider what a person from a non-industrial society would feel in a similar situation.

Seeking

- 1) Bring in a wide range of craft material samples that can be used to point out the subtle differences in quality of the materials. For example, birch bark of different thickness, colour, layer separating capabilities and different size lenticles (bark patterning) could be obtained. Student's attention could be drawn to these various differences through asking them questions concerning what qualities of material are best suited to making specific crafts and what regional landscape features tend to indicate the optimum material growth.
- 2) While walking the land seeking material, ask students questions informally to get them thinking about property relationships. For instance, is there anything in the world that can not be owned? Who might be considered as the first person to own land and how did this ownership come to be? The purpose of this casual conversation is to have students consider what it must have been like to live in a time and place where concepts of land / material ownership and 'permission to harvest' were not necessary before harvesting a material. It asks them to envision the principles of common land formerly existing, such as a persons right to access and take anything truly needed from such places in order to maintain that person's own life, but never to take in excess. Examine the terms that arise in discussing this issue and continue to probe the historical processes that have influenced property; capital, industrialization, commodification consumerism and so on.
- 3) Use the following two exercises, which are designed to create an experience encouraging students to attune their sensory nuances and widen their appreciation of the land as the guide to the craft material they require.
 - a) Ask the students to close their eyes and hold out both their hands. Place a different item in each of their hands. The item should have very different uses. For example a plant that provides fibre but is poisonous and an edible plant that lacks any craft qualities. Without feeling the items, students are then asked to use their sixth sense or otherwise to attune themselves to any information the plant might offer.
 - b) Divide the students into two groups. Inform the first group that they are to separate and take up a position off the path that allows them to see clearly

what passes along the path while they are not fully noticeable. Inform each student of a different topic they are to think about each time the second group of students walk pass them. Topics would include thinking like a tree, concentrating on the ground or concentrating on the people walking by as if seeking to catch their attention but being able to 'yell out' with thoughts alone. After the second group walks by a few times in silence discuss whether any of them happened to notice anyone from the first group and especially any person who was mentally trying to get their attention. Extend the discussion into the realm of other times in the bush when they might have felt like they were being watched and then suddenly realized that they were indeed being watched, but by an animal they just became aware was nearby watching them. Ask them about other childhood games they may have played that encouraged them to strengthen their "sixth sense". Share other personal accounts of times when they might have sensed the land was trying to tell them about something or might even be guiding them to the place they need to go such as the location of a good source of craft material. Richard Nelson's statement (quoted below) could also be shared in this discussion.

- 4) Establish a way to mark and monitor an area for the impact each season of harvesting a material has. For instance, record the location of specific trees where boughs have been harvested. Locate these trees at various times in the future to notice how they have failed in regards to how they were harvested. A craft guild or organization could address the possibility of "purchasing" or forming some sort of stewardship program for harvesting some of the craft material from a designated region. A monitoring program could thereby be established that would allow direct experience of noticing the growth cycles and harvesting impact of specific items.

Harvesting

- 1) Before asking students to harvest any item, share with them a list of the types of things used and in use as offerings from different cultures around the world. For instance, tobacco, matches, cattail pollen and cornmeal are still typical offerings used in various North American Indigenous cultures today; coins and shells are used for this purpose in Siberia; cloth and coins were and still continue to be left at wells in some European countries, in Norway and Scotland some people pour barley beer and toss oatmeal bannock into the ocean yearly to pay tribute to seals and seal skins harvested and the local home-made beer is poured on the ground in specific groves of tree in some African villages today in recognition of the yearly wood harvesting from the grove, etc.

After sharing these examples of offerings, ask participants if they know of any other types of offerings or ritual performed in association with harvesting materials. Encourage a dialogue about the merits of participating in such events. Ask them to consider what in their cultural upbringing has influenced their own perspective and

comfort with making offerings or saying aloud something in recognition of more-than-human life forms. Give students a moment, and if possible some solitude, to consider what feels appropriate to them in regards to expressing thanks or leaving a token in exchange for the life form that is about to be harvested. Perhaps even read to them a relevant poem such as the one entitled 'offering to a cedar tree.'² With older students ask them to ponder how such practices could become more recognized and whether they think this would encourage people in general to perceive the world differently, especially as more sentient and animate. Then tell them that some different forms of offerings will be left out like matches, tobacco etc. and that they are welcome to take and use any of these materials that seems appropriate to them for using as a small offering, symbol or token of appreciation for the life form they are about to harvest. Note: the above experience might work best with older participants who are able to question their own spiritual connection and the degree to which they perceive the land is a living entity with value.

For many people not raised with cultural traditions that include giving offerings or addressing the more-than-human, such activities may seem uncomfortable and threatening as they ask a person to perceive the world as something other than a commodity, as in an item with inherent rights or as an animate being. In ACID society, such perceptions are increasingly discouraged in childhood so by adulthood they are unfamiliar. At a deep ecology retreat, Freeman House, mentioned that children will willingly participate in such events, but young adults may not feel comfortable participating but it is important that they still witness adults participating in such activities.

2) Share with participants examples from Mircea Eliade writings in The Forge and the Crucible passages that show how the cultural loss of perceptions of the land as animate typically corresponded with the elimination of mining taboos. In order for the introduction of large scale mining practices to occur, any cultural belief that supported the notion of the earth as alive (and something that would be wounded if dug into) had to be eliminated. Encourage a discussion about cross-cultural traditions that have been lost or are being revived that support a sense of an animate earth.³

3) Before any harvesting tools such as pruners, shovels or knives are handed out, share with students a description of a scene from the movie Clear-cut, which many viewers find very disturbing yet powerful. In the scene a man (later to be identified as a mythological character) is skinning the leg of the sawmill owner as he winches and screams in pain. The man doing the skinning asks the sawmill owner if he has ever felt this much pain or emotion when he cuts down and peels all the logs his company mills

² See Turner's writing in Plant Technology for elaboration.

³ A specific example of a cross-cultural craft that encourages a sense of an animate earth can be found in Paul Devereux book Re-Visioning the Earth. He describes and compares North American dream catchers to Old Europe's various types of spirit traps (108-109).

process. Question students about whether it is better for a plant to have a limb torn off or carefully cut off to reduce scaring and disease or insect infestation to enter the plant. Next ask the students to consider how they would prefer to have one of their own limbs removed—torn off or neatly and quickly cut. Then proceed to hand out the harvesting tools while mentioning the hope that students will consider these ideas as they gather their own supplies.

4) Brainstorm a list of the words typically used in association with harvesting various life forms, for instance: killing, slaughtering, butchering, dissecting, hunting, gathering, harvesting, collecting, culling, mowing, pruning, sheering, etc. Compare differences between the tone of each word and the material it is typically associated with harvesting. Discuss and raise questions that concern why people may treat animals and plants differently.

5) List the cultural sayings or specific guidance known by a group that pertains to recognizing any form of regulating or limiting the harvesting of material. For instance, what hunting regulations only allow for the taking of a certain sex or age of an animal? What percentage of berries should wild crafters harvest: half, two-thirds or more of the berries available in an area? Does the type of species being harvested influence the amount picked? If the list of guiding principles on how to gather sustainably is small, ask participants to comment upon why such information is not well known. Share ideas of people who could share such old harvesting lore with the general population. Relate this kind of information to concepts of sustainability.

Resonance of Movement

1) When students are working on a repetitive portion of their craft ask them to work in silence for a while and to stay attuned to the effects their actions have on their craftmaking experiences. Then proceed to shake a rattle at various paces as students continue to work on their craft. Have students comment upon the effects the various shaker speeds had on them, which they preferred and discuss what this activity made them realize about the environment they may prefer to work in.

2) Have participants see if they can all work in unison at an established group pace as they continue with a repetitive portion of their craft task. A variation would be simply to chant together as they work or to create a chant that aids the actions involved in repetitive portions of a task. Have students reflect upon their ability to do this and what conclusions they can draw from this activity.

Making

- 1) Have students form pairs and give each student some paper and a long strand of hair. Have one partner place the hair under a sheet of paper while the other, with eyes closed, proceeds to touch lightly the page in order to locate the hair. Keep increasing the difficulty of the exercise by adding more sheets of paper thereby demanding greater sensitivity. Determine through how many sheets a person can consistently find a hair. The pair can then switch tasks. Tell the students that some body practitioners can consistently find a hair under 20 pages of paper. Ask them what other games and activities they have played that encourage them to exercise or fine tune any of their senses.⁴

- 2) Start a discussion about what they think of as a sixth sense. Question them on whether they have ever heard any stories about people sensing death, or feeling like they are being watched. Ask them to consider what “alternative sense(s) are being used and considered at these times. Share with them examples of what some individuals are capable of doing with one of their five senses. If appropriate read aloud some of Michael Cohen’s list of fifty-two senses then ask students to comment upon their experience of these or any other senses they may have of humans learning to limit or expand their sensory ability.

- 3) Have students list the senses used by various craft people. Discuss the influence contact with the four elements (earth, fire, water, air) has on altering the material. For instance a potter must learn to distinguish the ‘ring’ a pot makes to determine how dry it is before proceeding with firing. Likewise a green woodworker listens to the sound a branch makes when it is quickly swung in order to determine how much moisture may be in it. Have students comment upon what it is like attempting to learn these things or if such knowledge is easily conveyed through language.

- 4) Compare the skill and quality of reasoning involved in making items by cultures with no numerical measuring system or manner of representing something in a diagrammatical format. Have the students try to envision the number of steps or sequences a craftmaker would need to keep track of mentally in order to make complex items such as snowshoes, a canoe or kayak when they were not able to write.

⁴ This activity is used by body practitioners to develop their palpation skills. See Ford’s book Healing Waters for more information (89).

Utility / Use

1) If possible bring a collection of items that have a broad range of association with the words art, craft and technology; for example: original paintings; hobby craft which are useful and merely for decoration; a contemporary piece of craft that has no function; folk art pieces; a finely made functional item; a few pieces of electronic based technology, etc. Ask participants to classify these items according to the following categories or to place them along a range within these terms

- a) Art, Craft, Technology
- b) Functional and non-functional
- c) Aesthetically pleasing, ugly
- d) Inspiring, calming
- e) Magnitude of ecological footprint resulting from their creation
- f) consideration taken of the shape and feel of the human body

Have students discuss and compare any interesting results and their individual association with these ideas, particularly those in category A. The teacher can prepare or have the students research historical information on the changing meaning of the terms throughout western history and into the Industrial revolution so an informed discussion can follow. Also try to address why many indigenous cultures do not have terms in their own languages that distinguish between the concepts suggested by the English terms art, craft and technology. Discuss the significance of these ideas and the world view associated with the popular usage of each term.

2) Have participants make a list of all the items they would put into a pack to save if their homes were on fire. Then make a list of all the items they would put into a pack as the only things they would be able to access in order to live off the land in the future. Have participants compare the items they chose to put in each pack and whether they would consider the chosen items as art, craft or technology. Reflect upon any noticeable differences in the contents of the packs and William Morris's words "Let us have nothing in our homes which we do not recognize to be either useful or beautiful."

Acknowledgment and Honouring

1) After a craft is completed but has yet to be tried, create an appropriate "baptizing," "initiation," or "transformation" ceremony to honour the new item. Recall other similar events such as the bottle that is broken on a boat when it is first launched or the small tree traditionally nailed to the roof of a new home. A possible example might be a group of potters could have a potluck to cook and serve their favourite dishes in their newly created pots.

2) Ask students to create an appropriate song, dance, poem or ritual to commemorate the process involved in making a specific craft. Share with students other similar cultural events such as George Catlin's painting of a snowshoe dance (see narration below) or some of the songs sung by weavers as they work.

Returning Back

1) Ask participants what they would call all the unused material left over from their craftmaking process (remnants, scrap, junk, garbage, effluence etc.). Have students discuss where the best place is to put any remaining material, for example, in a compost bucket, recycling bin, contaminated waste receptacle etc. Ask them how they know this and the sources of this knowledge. Then ask them to consider what should be on package labels for purchased items and whether such information is sufficient.

2) Place in front of students a wide variety of materials such as oil, glue, plastic wrap pieces, cleaning solvent, battery acid (weak), hot water, etc. Ask them to question what they have done so far that day that makes them dependent upon any of the materials in front of them. Then have students acknowledge what they used by placing a small drop of each item in their hand. Next inform the students that they should go by themselves to a small nearby creek or natural area and pour this substance out and to reflect upon what they are doing and whether this action was similar to some form of offering or appreciation of the material they use and rely upon. When students return, process the experience by allowing them to discuss how the request and the experience made them feel. A discussion should follow about why industrially dependent cultures tend to hide disposal practices, continue to make items known to be harmful, and have few labeling regulations.

Appendix D

York University
Faculty of Environmental Studies

CONSENT FORM for INTERVIEW PARTICIPANT

RESEARCHER: Zabe MacEachren

RESEARCH SUPERVISOR:

STUDY TITLE: Crafting- As a Practice for Environmental Education

Purpose of the Interview: This interview is being conducted as part of my PHD dissertation research at the Faculty of Environmental Studies, York University. I am researching the ways crafting experiences shape our relationship with the environment. The purpose of this interview is to gather narrations which reflect the relationship between a crafter and their environment. These interpretations will be used as data for the completion of my dissertation writing.

Conditions for Participation in the Study:

- a) The interview may be audio taped if you agree to this.
- b) You are free to refuse to answer any specific questions.
- c) You are free to withdraw from the interview at any time, and all interview materials will be returned to you if you so request.
- d) This consent form authorizes the researcher to use data from this interview only for the purposes of the research and any reports resulting from it.
- e) If you do not wish your identity to be revealed, your real name will not be used, and information will not be presented in a manner that would allow your identity to become known.
- f) Photographs will only be taken and used with your permission.

Appendix E

Participant Agreement

I, _____ have been fully informed about the proposed study and my role in it. I hereby agree to participate in this study under the foregoing conditions.

I agree / do not agree (circle one) that this interview can be audiotaped.

I agree / do not agree (circle one) that my name can be used in association with this research.

I agree / do not agree (circle one) to be directly quoted for the purpose of this research.

I agree / do not agree (circle one) to having my photograph taken and used in regards to purposes of this research and any presentations ____ publications ____ (check which you do not agree to) resulting from this work.

Additional Comments (if any):

Participant Signature

_____ Date _____

Researcher's Signature

_____ Date _____

Researcher Contact Information:

Zabe MacEachren
 (905) 845-6360
 zabe @ yorku.ca

Appendix F

Zabe MacEachren. PhD student, Faculty of Environmental Studies, York University
 TOPIC: Craft Making as a Practice of Environmental Awareness

QUESTIONS INFORMING THE RESEARCH

1. In what ways does/can making something, engage and shape a person's relationship with the environment?
2. In what ways can crafting education serve the concerns of environmental education and vice versa?

Questions for Interview Participants

1. Can you tell me about your experiences making something, when you feel most connected to nature? What 'ingredients' would you say were significant in allowing for this 'connectedness' to occur?
2. How does your crafting experiences reflect and shape your relationship with the environment?
3. Do you find that your crafting practice influences your understanding of the environment?
4. How do you distinguish between art and craft?
5. How would you describe environmental education?
6. Do you see any relationship between crafting/art education and environmental education? In what ways can crafting education serve the concerns of environmental education? Do you see crafting as a kind of environmental education?
7. Can you describe the various ways you interact with and relate to the land/material through the different aspects of your making process?
8. How would you describe the degree of sensual/intellectual experience that goes on when you are crafting something?
9. Explain how you obtain your materials and designs, and what role this plays in your concept of making and/or your understanding of the place where the materials originate?
10. Tell me about how using/displaying the made item is important for you?
11. Tell me about how you define/describe technology, and how you make choices pertaining to the use of power tools influencing your crafting experiences?
12. Do you think crafting education is significant to a child's/person's development? How so? And do you think making something can aid a person in understanding the world they live in? and or can aid their understanding of the natural world from which their material needs originate and are satisfied?

Appendix G

Informant Biographies

Informant 1 — Kathy Brunetta

Kathy Brunetta works at the Toronto Waldorf School located on Bathurst Street at the north end of Toronto. She presently teaches physical education and English, but in the past she worked as the school's handicraft instructor. As part of her teaching responsibilities, Kathy gives presentations on the Waldorf curriculum and Rudolf Steiner's educational philosophies. She is known in the Toronto region for her support of holistic education practices.

Informants 2 — Alexandra and Garrett Conover

Alexandra and Garrett Conover operate "North Woods Ways" a classic wilderness guiding service out of Willimantic, Maine. Most of the winter camping and canoe trips that they guide are based in Maine, or Labrador. They have both published numerous articles relating to traditional travel skills of the northwoods region. Garrett's first published book was "Beyond the Paddle: Poling, Lining, Portaging and Maneuvering through Ice." Alexandra and Garrett co-authored the well received book "The Winter Wilderness Companion" a reissue of "A Snow Walker's Companion: Winter Trail Skills from the Far North." The Conovers actively participate in wilderness trips as a means to acquire northern travel and living skills among the traditions and cultures of the woods

people of Maine, Quebec and Labrador. They are frequent presenters at wilderness travel and advocacy conferences. Outside Magazine has described the Conovers as one of North America's top wilderness "trail blazers" due to their efforts to acquire and preserve traditional travel skills of the boreal wilderness regions.

Informant 3— Bill Coperthwaite

Bill Coperthwaite lives and works out of the Yurt Foundation in Machiasport, Maine. He was the principle founder of the center whose purpose is to collect traditional folk wisdom from around the world and combine it with modern knowledge to encourage ways of living which are simpler and in more intimate contact with nature. Bill Coperthwaite holds degrees in Art history including a doctorate of philosophy from Harvard University. He has published four articles in MANAS concerning his thoughts on designing healthy societies. He sells the designs for, and has published articles on, his multi-layered wooden Yurts. Presently he works facilitating organizations to build Yurts in a community-based construction process that results in a shared shelter serving community needs.

Informant 4— James Dina

James Dina is an avid primitivist. Using his primitive skills, he built a birch bark canoe using only the stone tools he made and gathering material only from the region surrounding his home that he walks to. After completing the building of the canoe, he paddled from his home near the ocean on the Connecticut River to the headwaters in

Canada. Throughout this journey he also lived off the land gathering food by hand and with the tools he made. He wrote of his account of this experience in Voyage of the Ant. His canoe was named Ant. James Dina is involved in primitive skills groups and presently teaches music. He holds a Masters degree from the Massachusetts Institute of Technology (MIT).

Informant 5— Allan Foster

Allan Foster is the acting supervisor at the Kortright Center for Conservation, one of Canada's largest conversation centers. His position includes organizing many nature-based educational programs. To do this, he draws from his botany and folklore interests. Allan has a strong personal interest in making various items and understands the importance of including such hands-on aspects of craftmaking into the education programs at the Kortright center. He holds two master degrees of which one pertains to the advantage of using folk lore to teach information about plants and animals. His education doctorate elaborated on this work and pertained to the significance of stories in environmental education. Allan frequently presents at environmental education conferences and is known as a nature-based storyteller throughout Ontario.

Informant 6— Craig Mcdonald

Craig Mcdonald is the Outdoor Recreation Specialist for Algonquin Provincial Park. He is best known for his knowledge of traditional winter travel skills. He is considered an expert on traditional snowshoe routes, and has traveled extensively

throughout Canada. Craig acquired his knowledge by interviewing hundreds of Anishinabe elders in order to collect their travel stories and information concerning the way equipment was made, traditional design, winter travel routes and so on. He did this during the decades when skills were dramatically declining due to people no longer maintaining their traditional traplines. He has written short articles about the history and proper use of some of the equipment he makes and sells from his own company Odawban incorporated. Craig is presently writing a book concerning traditional winter travel skills and gear. He has already published a detailed map of the traditional winter travel routes of the Temagami area.

Informant 7— Freda McDonald

Freda McDonald worked for over seventeen years at the Native encampment at Old Fort William in Thunder Bay. She originally applied to be a seamstress there, but was soon shown the way to the one lone wigwam that they had in the encampment. After this experience she recognized that she had found her ideal work location. Under her knowledge and skills the encampment soon furnished many bark lodges full of a diverse amount of Native crafts. Freda has interpreted the Anishinabe culture to thousands of visitors that visit the Fort each year. She was born on the Fort Alexander Reserve in Manitoba where she received many traditional lessons in living and craft skills from her grandmother and great grandmother. For more than twenty-five years Freda has taught craft classes and held workshops for both Native and non-natives students in the Thunder Bay region. There is an article about Freda's work in the May/June 1994 Canadian

Geographic magazine that honours and recognizes her skill and contribution to the Old Fort William, her continual effort to teach and maintain Ojibway Crafts and for the wisdom she has shared with many others.

Informant 8— Skye Morrison

Skye Morrison is a world renowned kite maker and has one kite featured on a Canadian postage stamp. She is the textile studio head at Sheridan College where she teaches Craft and Design History. She holds a Phd in Folklore from the University of Pennsylvania, an MA in Design from Cornell University, and a Diploma in Textiles from Sheridan College. She volunteers with women sewing collectives in India and is a visiting faculty member at the National Institute of Design in India. She has been instrumental in arranging sujuni exhibitions in Canada of which one was held at the Museum for Textiles in Toronto.

Informant 9— Kirk Whipper

Kirk Whipper is best known for starting the worlds largest collection of canoes and the canoe museum where they are now stored in Peterborough, Ontario. Although most of the hundreds of canoes and kayaks that he has collected have originated in Canada, he has traveled around the world in search of any lore associated with small boat construction. He has taught outdoor related courses at the University of Toronto and has played an instrumental role in founding Bark Lake Leadership School, the Ontario

Camping Association and the Ontario Recreational Canoe Association. He was also the owner and director of Camp Kandalore for several decades.

Appendix H

Interview Information

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Place: Sheridan College, Oakville

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9. Kirk Whipper..... 353

Occupation: Retired University of Toronto professor

Date: May 17th, 2000

Place: Kirk's friend's home, Toronto

Documentation: one 90 minute Maxell cassette

Appendix I

Kathy Brunetta

My previous knowledge of Waldorf education had come through a friend who was home-schooled in his elementary years, then attended a Waldorf high school and presently is a Waldorf woodworking teacher. As I had always been discussing education and technology with him to get his unique views, I asked him to suggest someone whom I could interview to get an overview of the handicraft program at a Waldorf school. His reply was Kathy Brunetta, a woman with whom he worked. He had also previously introduced us because she too loved the north and was raised in northwestern Ontario where I had taught.

I interviewed Kathy Brunetta at the Waldorf school. The interview was combined with a tour of the uniquely designed structure and grounds. What amazed me about the interview was Kathy's joyful laughter and genuine thrill at sharing stories and ideas about the Waldorf handicraft program. She seemed to embody the very sense of wonder and reverence she described as an integral part of the handicraft program. She began the interview by briefly describing the philosophy behind Waldorf schooling that is based upon supporting and nurturing the birth of three aspects in a human being: the physical, the introspective and the astro. The astro birth refers to coming through puberty into adulthood. Kathy's was only a cursory description of the philosophy; further explanation could be found in the books dedicated to describing these three aspects in great detail.

The Waldorf handicraft program is an integral part of the school curriculum. It is emphasized as much as reading and writing are in the public school curriculum. In conveying Kathy's ideas on the philosophy of the Waldorf handicraft program, I have outlined some of the activities students are expected to complete at each grade level as Kathy described them to me. Descriptions of the concepts these activities speak to follow afterwards.

Kindergarten - This grade focuses on replicating home life and is based upon the idea that play is the work of a child. The Waldorf school uses unique toys and structures that encourage a child to "complete something with their imaginations." For instance, dolls' faces were featureless and thus encouraged the child to imagine the dolls' expressions. The structure of the room itself was designed to readily blend the inside and outside world, large windows and doors connected the warm orangy-pink walls inside to the garden outside. All handled items in the room were made out of natural materials. Un-spun wool, in particular, was very prevalent and frequently fondled as children used it as a toy item. They also learned finger knitting accompanied by the saying "The little bird goes into the hole and grabs the worm and wraps it around."

Grade One - Using needles and colourful wool, students spend the whole year knitting a recorder case. Students complete this project during two lessons a week for the whole year. In their other school classes students learn form drawing, which is believed to be a precursor to writing and reading. The Waldorf teaching of drawing calls for a lot of physical movement on the part of the students. The result is that, "by the time they need to do it on the page they have in a sense memorized it [the sense of the movement]

in a mental picture.” In this grade, each student uses crayons made of beeswax because they have a rich colour, nice smell and warm touch to them.

Grade two - Students crochet a wash-cloth that is used to wash their desk throughout their school years.

Grade three - Students are involved in numerous activities requiring them to measure the world in order to make things pertaining to sheltering , clothing and feeding themselves. They knit a hat and, if time remains, perhaps crochet a desk seat cushion. Each class builds a small shelter for some portion of the school ground. The shelters I saw ranged from log forts and cobb structures with coloured glass windows to tree houses and gazebos.

Grade four - Students begin a handwork project that emphasizes principles of design. Usually it is a pin-cushion with a cross-stitch design on top. This cushion takes a full year to complete.

Grade five - Waldorf students begin a wood-working program while still continuing with handwork projects. Handwork curriculum includes learning to knit a pair of socks and making a handwork bag to hold their handwork projects while learning to use a sewing machine. The woodwork project involves using only a rasp to make a holder from a block of wood.

Grade Six - The handicraft project at this level is knitting mitts. The woodwork project is carving a spoon from a block of wood using only a rasp and a gouge.

Grade seven - The handicraft project is a knitted scarf, or simple sewing project. The woodwork project involves making a spoon out of only a piece of wood, a rasp and a gouge.

Grade eight - The handiwork project involves learning to lay out and cut out a pattern for a simple piece of clothing. The woodwork project involves making a bowl.

Grade nine - The handwork project involves weaving a basket. The woodwork project involves carving a seat and making a spool.

Grade ten - The handwork project involves designing and creating a woven soft sculpture. In wood work a carved wooden frame might be completed. Metal work in copper is also introduced in this grade and usually involves making a bowl.

Grade eleven - In the woodwork and handicraft class students begin to work on their own “masterpieces” which are such things as guitars and graduation outfits. Metal work class involves working with silver.

Grade twelve - The students continue with their masterpiece work, and in the metal work class gold is used.

After my tour of all the classes I asked Kathy to elaborate on a few terms and ideas she repeatedly used and emphasized throughout the interview. To her, *design* involved conscious intention like the design of the cross-stitch. Whereas *form*, she said, is basic truth, such as “We are human and we are upright.”

There is a re-creation of the truth in human form in everything that we do. Everything is a microcosm of the world or as in a human being. We recreate the form of this ourselves as human beings in just about

everything we do. Look at the soft sculpture and the form of the hat. Look how it needs to be on the head for the truth of that convex and concave [form to occur].

Her elaboration on this truth touched on the concepts I associate with “being of the world.”

I asked Kathy to elaborate on the ways Waldorf education incorporates technology into its educational ideas. She outlined that “technology fits in when you are ready to use it as a servant of [hu]mankind . . . if it comes to the child too early it cheats them.” She then offered some examples of the ways so many electrical things seduce a child but do not allow them to understand the ways a product is a result of human thinking. For instance, she described the abundance of electrical appliances people use today without any concept of the ways they work or even an ability to open the appliance to learn the way it is made in order to repair it. Students are encouraged to understand technology through the way it is made and the social impact this creation process is embedded in.

In the Waldorf handicraft program the moral and social responsibility embedded in the technology is made apparent gradually through the craftmaking projects. Kathy clarified that technology should involve a sense of ownership, respect and accountability that should not be taken for granted. She wanted students to “understand the labour and skill involved” in any technology. She felt this was conveyed to students in such instances as when they reflected upon their efforts making a recorder case and the realization that occurred when such a thing was made by a six-year-old. She mentioned that if students had learned how to use “a knitting machine it would be a different

experience.” To Kathy, every single stitch experienced in knitting imbues a moral quality and teaches a child how to earn the source of their labour. She considered it wonderful to have power machinery and sewing machines available, but she thought they should be used by people “only after they have already learned to stitch by hand, carve by hand,” and so on. Students can use the tools to assist them in their work only after they already know how to do the work without them. Computers were not introduced and used until grade nine, after the history of the industrial revolution was introduced in grade eight. The Waldorf philosophy recognizes that children at this development stage are becoming “world citizens, ready to launch themselves into another kind of life.” Kathy summarized that the curriculum had “everything in its time—think about the recapitulation of the history of evolution of human experience.”

Role modeling is a basic and critical teaching technique used at the Waldorf school. Teachers are expected to be constantly improving themselves because an artificial mood of reverence and wonder can make an older child recoil. What is role modeled must be genuine and true to the teacher as well. For instance, stories are told rather than read in a Waldorf school. A teacher reading would be role modeling a person who did not know something through personal experience and therefore had to depend upon a book’s telling. Whereas a person who could tell a story without referring to a book would know the tale because they would have experienced it through their imagination. The teacher’s imagination would be able to recall the place and stories events and in so doing take the listeners through their own imagination to those same

places and events in the story. The ability to imagine is linked to a student's sensory awareness and perception of the world. She described the goal as leading

. . . them through training the observation of the senses in order to find the truth in what is there, or maybe to find a question that is unanswerable, or that they can still think of. That is awe-inspiring. There is wonder in this, and I need to wonder about it. So where it might have more of a feeling quality in a younger child, it has a more thinking quality in an older child. Can you get the truth seeker in the emerging adolescent to find the right question to their own observation? We don't teach somebody out of the theory, but we try to lead them through experiments and the sense of observation that somebody would have gone through themselves to find the theory so they can get their own [theories]. Then we say, oh so you know Einstein thought the same thing when he did his experiment and there are still questions about it. Nothing is finished. This is what Galileo did. So what can you see? Did you see what Galileo saw? Because if you don't, your observations are as accurate as anybody else's opinions. Look out there. What do you think is going on? What do you think that is all about? You don't teach a finished product, you teach a process. How do you enable a child to figure it out for themselves that builds confidence and security in their own ability. . .

Kathy also emphasized that the sense of reverence and gratitude for everything, all the gifts of the land, was better taught through role modeling a sense of this reverence than through talking about it alone. Kathy outlined that this reverence was role modeled through the teachers actions and included an emphasis on touching natural items and completing the whole process of a craft. Her example touched upon the ways role modeling started in kindergarten with the emphasis being demonstrated of the gift of wool from sheep, and continues into grade one with the gift of the wax in crayons from the bees. The opportunity to go out into the forest and cut the whole tree down and start with a log to make your own stool encouraged students to experience and recognize the whole process so " by the end of grade twelve they can do this with everything, every

single thing.” They would be able to answer questions like “how did you get here, where did you come from?” Ultimately they would understand items and treat them with respect because they understood their role and value in the world. “What a gift for a kid,” Kathy concluded.

Woven through out many of Kathy’s description of Waldorf handicraft curriculum was an emphasis on repetition and physical movement that encouraged a sense of rhythm. I asked Kathy to elaborate on this.

Repetition is important because it strengthens the etheric body—the life force quality. Your feeding it in a kind of organic rhythmic way. We live in an anti-rhythmic time. So we say to our parents, it serves your child to go to bed at the same time and get up at the same time. . . That nourishes the inner-sacristy rhythm of the being. It strengthens, nourishes and trains the organic function of the child—the circulatory system, the digestive system, and if there is adequate rest . . . we go 24 hours a day, 7 days a week without stopping, and the kids are up at all hours . . . Where there is the support of the delicate nature of the child, the repeating of big rhythms, right down to repeating small rhythms. You know we will work with a clapping pattern of skipping or a verse that they are memorizing for a period of four weeks everyday until that pattern grows deeper in a child. Its that repetition that strengthens and builds a supersensitive form that holds them together. Until they get to a point they can handle it. They don’t need to think about the movement any more. There is some kind of movement which is unconscious, like playing a musical instrument. You can’t think through all the steps all the time, or you would never be able to play. Repetition strengthens the art of memory and of perception and ability; it integrates. [Have the child] learn the basics and repeat them and then it goes into some kind of unconscious memory. Then you take them for granted and then master that.

Part of the philosophy of the Waldorf education handwork program is based on giving children adequate experiences that emphasize their own bodily movements and rhythm in the context of the larger seasonal cycles and rhythms of the earth, so that children eventually make connections between the two.

Waldorf curriculum is known for its holistic educational qualities. This concept came up when Kathy mentioned that all students must participate in all aspects of the curriculum, even if they do not demonstrate skill or talent in all areas. Every student must complete the handwork projects. She explained this emphasis by using the example of geniuses tending to be out of balance. In Waldorf education the whole person is educated in comparison to just parts. She also connected this idea to the present public education's curriculum emphasis.

We have the holy sacred cows of reading, mathematics and now mathematics and science or technology. And that is great, but there is a whole other out there that involves imagination, enthusiasm, balance—good for humanity and truth seeking. Where is the freedom in that? Where is the wholeness? That is what Waldorf education does it looks at wholeness.

During the discussion on the craftmaking model, Kathy added many insightful descriptions and examples about the importance of various craftmaking stages. She explained that the seeking stage “comes out of really observing.” She connected an awareness of the world to an awareness of natural and seasonal rhythms in the world. She emphasized that this awareness relied upon and was instilled through a dependency on practice and routine.

You know when to pick because you have watched already and you have to trust your own observations, your own knowledge. Like, if you don't watch a plant you don't know when or where to collect it, so if you are not already engaged in that recognition of seeing, knowing and understanding you would have missed it. You would also have to discipline yourself to get there. This is again the idea of integrating the three soul qualities. You could have endless ambition and incredible brilliance . . . but if you do not have the discipline in yourself to follow through, you will . . . [not succeed.]

After providing descriptions of the harvesting guideposts activities and **types** of offerings used around the world, Kathy responded with “What a wonderful gesture.” She then continued by elaborating on this idea. “You are also bringing consciousness to the relationship . . . treatment here like your own body—that is very nice.” She then returned to the concept of teaching through role modeling that occurs in a Waldorf school. “We try not to talk about it and intellectualize all this and say it. We try to demonstrate it. So as teachers we try to work on ourselves.” She explained how “teaching by example” is what mattered to her.

You can talk your head off, but to teach it you must live it to the children. Older [students] are ready to discuss it . . . and to question it and challenge it. To young children in particular it is demonstrated—not explained much . . . They learn that when you cut the branch—it is a moment of truth . . . all you have to do is say “watch me” and cut the branch to thank the tree.

The connection between harvesting respectfully and teaching by role modeling was given a new perspective by Kathy’s suggestion of reversing the roles and having the teacher becoming aware of what the students were doing and possibly learning in order to determine the next curriculum activity.

Students give all the verbal clues. As a teacher I need only be conscious enough to observe them. They will inform me of what is essential and what is non-essential. What is really important is the engagement.

This notion of reflecting upon the type of engagement that occurs through careful observation of the moment and personal actions harmonize with the acknowledgment and honouring stages of the craftmaking model.

As Waldorf education incorporates a lot of ritual and festivals of the year in its curricula, Kathy was again able to offer some interesting insights that aided in describing and connecting the celebration surrounding craft that I outlined to her. She explained the holistic aspects of craftmaking that binds together our choice of actions and expressions. To her, this was a continuation of working on ourselves inwardly so that our outward reflection to the world, or role modeling, demonstrated a sincere engagement with the greater, more-than-human entity.

It is like the cycle of the year. It is like the earth itself or the cosmos, breath in the spring. There is an expressed [Exhalation] an out-breathing, an expanding. We can let go for a little while. Even the earth lets go. Breath out and look at what it pushes through its skin all of a sudden. All of the plants coming to life and the sun is high in the sky and there is nature stories for little children that becomes science in the culture. Then we have to let it start to contract. Pulling breath in when the fall comes. At Christmas time it is like the darkness makes up for the few months of light. The earth may look dead on the outside, but it is powerful on the inside. So there is like a cosmic breath. We experience the awe in beauty. It is important to recognize.

Kathy then connected an example of a celebration activity that she suggested my friend do with his class.

I always thought that when Robert had those kids make those paddles, what he then needed to do was go to Harbourfront. Take their paddles and get in those canoes, rent them for the day. Everyone had to dip those paddles in the water and go somewhere with them—everyone, or else they would not get to take the paddles home.

To Kathy the honouring ceremony, or ritual, was critical to acknowledging what the purpose of making a paddle really centered upon.

Waldorf educators consider woodwork and handicraft lessons to be academic, but “presented artistically.” The handicrafts undertaken are carefully matched to the

physical, emotional and intellectual needs of a child at each grade. For instance, the cross-stitch design introduced in grade four corresponds to the intellectual thought or “aspects of the mind” of a grade four student as this age is starting to develop the ability to concentrate at a deeper level. Much of the emphasis in the handicraft classes is placed upon learning to “train a student’s own organs of perceptions first,” especially before learning to use a tool. Before graduating from high school, a Waldorf student would have completed crafts that involve metals, animals and plant fibers.

In the handicraft room Kathy removed a colourful, nearly completed sock from a handwork bag for me. Listening to her comment, I couldn’t help but appreciate the enthusiasm she held for such a humble craft as a knitted sock. Her reaction made me take note of the incredible sense of wonder and marvel at the world that results from combining material gifts with our own hand skill. Kathy’s reaction particularly demonstrated that she was constantly aware of and ready to express her joy in the human ability to make something.

Wow! Oh, they’re beautiful socks. Oh look, here is a finished sock [a deep breath in and out] Oh look, isn’t that beautiful. Look at that.[a multi-coloured sock - *laughter*] What character!

As I wondered if the students would also have similar enthusiastic outlooks towards the crafts they were doing, I asked Kathy about the students reactions to what they made and whether they actually used the items. “My own kids may not wear them that much, but they love them, and they are proud of them.” She mentioned that some grade eight students will wear the shirt or outfit they made to their graduation, or at least they will display it at the graduation. She describes seeing the grade three children wearing the

hats that they made as “so wonderful. It is beautiful.” She also mentioned how many students in high school still have their recorder case from grade one. The emphasis on long-term craft projects that took consistent effort throughout the year to complete, served an intended purpose in Waldorf education.

The challenge that was part of the complex handwork projects was referred to as a moral lesson by Kathy. High standards of hand work were expected by all students even in the primary grades. For instance, any child that makes a mistake is guided in ripping the yarn back and starting again. The moral teaching or training in the craft work eventually aids the child to come to recognize the fruits of their labour. Kathy emphasized the incredible sense of accomplishment that children have when they complete the case. “There is pride,” she explains, that is seldom achieved in other activities, and this makes what this activity instills “brilliant and big.” The craft activity which is completed each year in a Waldorf education is well thought out and matched to the child’s developmental needs. Progressively more challenging, yet do-able handicrafts are added each year to a student’s curriculum. Their hand-work program is designed to create patience and determination in a child—what Waldorf educators call ‘will.’ Unlike the elementary public school curriculum, Waldorf curriculum discourages the kind of handicraft activity that can be completed in an afternoon alone. Easily done activities do not provide an opportunity to develop a sense of will, nor do they convey the moral lessons associated with more complex handicraft practices.

Kathy outlined the progression of projects that students would be making each year and what learning accompanied each project. She starts by explaining the grade five

wood work project egg candle holder. “They are creating a base, a foundation, a shape with hand tools. They are learning the basics right . . . and this is a kind of centering activity, drilling the hole.” She continues her description holding an example of the type of wood block they initially receive, and a nearly completed grade six student’s spoon. “This is just a block of wood. This is all they get. Here we have the convex and then the concave. Again it is quite centering.” In grade seven they go a step further and “from a block of wood they carve a bowl.” When they have finished this progression they will have “progressed from a rasp, to a saw and a rasp, to a rasp and gouge.” Then in grade eight they “get a hunk of wood, split it and carve a seat stool.” I asked if students ever actually cut trees to directly obtain their wood and was pleased to hear that each class does cut wood and stores it to dry for upcoming classes.

Learning to center was a significant outcome of the Waldorf handicraft program. Kathy referred to a student’s need to learn to center and how this centering process is part of craftmaking. Kathy elaborated upon the centering aspect of a handicraft by referring to the baskets students make in grade nine. The physical motions involved in basket work aid a person to develop centering skills because basketry requires balancing and making all the sides symmetrical. At the time a student does basketry, they are entering a personal development stage involving emotional turmoil. According to Waldorf educational philosophy, they are going through their astro-birth and it is as if they are “being tossed about in a sea or ocean.” Making a basket is considered “a tough thing,” with the challenging part being able to keep the basket all centered and symmetrical.

Experiencing the centering skills required in basketry is carefully matched to a student's life, so they are experienced at a beneficial period.

The notion of balance also pertains to the division between art and craft that Kathy stated Waldorf education does not recognize. Kathy offered a different perspective on viewing non-utilitarian made items.

abstraction has a place, but again that is more intellectual . . . maybe abstraction is representing something in a language. Non-utilitarian is like non-intellectual thought expressed. You don't have to have a verbal description of it, or an explanation. It is like living with a thought that does not take the same form as language constricts it to. Non-utilitarian is beyond utilitarian.

To Kathy balancing the social and environmental responsibility was what was important in the handicrafts chosen to be undertaken. She compared ten useful chairs that eventually ended up in the garbage, to one really well-made chair. Her point being was to look at the value system in our culture and not the utilitarian aspect. "Artists should have a moral responsibility. . . I would never condemn art, but I . . . find this self-reflection in some artists appalling." Waldorf education is based on developing the whole person to the extent that they recognize their whole self to be included in a larger notion of self that goes beyond the ego, and includes a social and environmental awareness.

I found myself learning a great deal from Kathy about how to teach. She conveyed, not just ideas pertaining to the context of the Waldorf handicraft program, but she truly role modeled sheer energy and enthusiasm for learning. She was a very sincere and caring person, who deeply believed in her work as a Waldorf handicraft instructor. Kathy described for me her journey from a small town in Northern Ontario, to schools

around the world, and then finally determining she belonged in a Waldorf education program. She believed that there would soon be a backlash in public education and that “schools will be begging for this kind of [craftmaking] workshop” in the future. I think of Kathy as a model craftmaking guide, a person who can set up and deliver craftmaking programs that allow all students to question and find their place in the world through the skill of perceptions they acquire through their holistic experience in craftmaking.

The handicraft program of the Waldorf education curriculum is comprehensive and thorough in its design. It is directed at offering first hand experiences in all the craftmaking guideposts, and through these experiences allows a child to come to know themselves in relationship to the world around them. Waldorf handicraft curriculum is an effective example of a craftmaking program that encourages a being of the world.

Alexandra and Garrett Conover

Garrett and Alexandra Conover run a traditional guiding service out of Maine called North Woods Ways. I first heard of them while doing my Master's in the United States and eventually had the opportunity to meet them, accompanied by a bus full of students. I was impressed with their knowledge and emphasis on 'classic' camping equipment such as cedar canvas canoes, wood stove heated wall tents, crooked knives, hand made wooden paddles and toboggans etc. I called what they did organic camping although I was aware that they do use some synthetic gear when they found it truly advantageous. Knowing how to make the equipment they use to lead wilderness trips is part of their guiding and living philosophy. Repairing and making equipment is part of the skills required to care for their clients and live long term in the bush. This knowledge is both of a personal and professional interest to the Conovers. Their goal has always been to create a lifestyle that will allow them to spend as much time as possible outdoors and provide them with the freedom required to continually seek out Native elders and old time guides who will teach them.

In 1990 and 1991 I apprenticed with the Conover's on two canoe trips and during one fall week when Alexandra was making paddles. During this time I listened to numerous conversations around a campfire and learned of their own apprenticeship with Mick Fahey who was an old Maine guide. Mick Fahey trained and traveled with some of the last East coast Native guides working during the peak decades of travel guiding

before it declined. The interview with both Alexandra and Garrett took place around their wood stove on a very cold winter day.

My first question about when a making experience had made them feel most connected to the world brought an immediate response to Alexandra.

Right off I can think of killing an animal, skinning it later, tanning the hide and then making moccasins which I used to snowshoe in the winter. The fact that I knew that was the animal, that I took its life, was really meaningful. I was very conscious at the time, but it was also an emotional connection with those mukluks, as I was making them, using them, traveling with them, even the moment you pull the trigger you know they are going to be used. You know you are going to eat and you are going to have those things that are very useful or critical to your well being. It is not divorced, it is circular. I don't know what comes first either pulling the trigger or pulling the moccasins on your feet, but it is all very connected and you know it viscerally. (Alexandra)

Garrett continued to expand on this connection which he associated with a very recognizable cause and effect.

I think anything like that with a cause and effect, like making a perfect knife you use for the rest of your life or a paddle or a canoe part because you have had an accident, there is always that immediate cause and effect with no abstraction. You're engaged in the crafting process as its own thing, but the ultimate result is bigger and its continuous. It does not stop when you put the final coat of varnish on it. Every time you use that tool you are part of a full sequence of connections. Take something like a crooked knife, even though you did not make the steel you shaped it and have a greater connection than if you just went out and bought it. And you learned all these associated skills that go along with it. So it is both a metaphor and a practical item. (Garrett)

Alexandra and Garrett seemed to emphasize that the cause and effect understanding that craftmaking provides eventually leads to a consciousness pertaining to ever larger linkages recognized with the land. To the Conovers a key ingredient to creating a relationship with the world that encompassed larger linkages rested in the practical

necessity of a craft's purpose. Reflecting upon a craft's utility seemed a critical component to understanding larger metaphoric or philosophical associations.

A linkage or connection to the land was clearly established through craftmaking in the seeking and harvesting stage. Garrett begins, then Alexandra continues to describe this connection.

The activities involved are totally connected especially if they are in the context of the habitat they will be used in. If you make a toboggan by taking material out of the woods there is nothing better than that. Total necessity and totally local and totally based upon a broad body of skills: tools, finding, steaming, bending, fitting, using. (Garrett)

It develops a strong affection for certain locals. So to this day when I go down the Allagash, Saint John or the West branch [rivers], when I pass a grove where I got a black ash tree from, hauled it out of the woods, pounded it to make some pack baskets. I always look at that grove and feel a fondness. For that is where I got the trees that made part of the basket, so there is a strong personal local bond. (Alexandra)

At this point the interview topic shifted and we started to discuss the ways this fondness for a place, also associated with a hunting and gathering mind, is satisfied in modern activities. Alexandra recalled an acquaintance who loved to shop and who probably used the same kind of seeking skills in her shopping routine. For instance, Alexandra speculated that her friend would know that this particular sale item could be found in the "eighth aisle . . . as if she had a catalogue in her mind and this is the same ability." Alexandra continued to speculate that if all the malls were to disappear, her friend would develop a longing for the malls much like the Penobscots Natives longed for the land and locations they accessed in their traditional travel routines.

. . . just like when the Penobscot would long for the land to come back, I bet this friend would long for the old malls [if they were to disappear]

because that is where she got her things that made her happy I get this same sense when I see a black ash like the one I used on the Saint John river.

Alexandra also explained how even if she had never been to a specific locality before, the sight of familiar things such as tree species she knew through previous craftmaking activities, would kindle a “natural affection for this new locality. “I [start to] wonder will the black ash be as good as before . . . I have no idea whether if a person has only spent money on it and has never made the object would that give her the same spiritual subsidence as my hand made pack basket gives me? maybe it does, I would be intrigued.”

Listening to Alexandra explain this idea brought to Garrett a memory of seeing some Naskapi gloves with a Nike swoosh logo beaded on them. He raised the notion that the desire for specific bought items with certain logos might be more attached to a tribal mind-set than a spiritual mind. Alexandra then raised a concern pertaining to the health of future populations if their hunting gathering mind/skill was only being satisfied through the acquisition of commodities and labels at a store. She compared this concern to the tribal identity arising from direct experiences seeking plants and animals.

I would question deeply whether a persons spiritual growth would be stunted if they could only resonate with a Kmart object or a Nike symbol. . . .will the connection to those symbols be as serving to the human needs over the course of a life time as a connection to what nature provides. That is where I would argue—no way, we will have a mentally ill person by the time they’re are forty-five . . . If they have adopted this Disney world or Nike World of middle America culture, where will they be spiritually in their connectedness with the earth? . . . In my world view humans will not be able to survive if they do not have this connectedness. In that part of the world were humans keep those artificial or human made things as their gods they are not going to survive. . . . I know it gets

spiritual but, it is really hard for me to separate my religion from my intellect. (Alexandra)

The separation from the land caused by a lack of craftmaking experiences was also associated with two images. The first image was that of a divorced family. Alexandra mentioned that we know that divorced human beings wreck havoc on family life in both a physical and spiritual manner so “why wouldn’t that same divorce from the natural world” also create havoc? The havoc wrecked in a culture she associated with removing the “basic building blocks of the natural world.” Connection to the land obtained through practices such as craftmaking are the basic building blocks of our relationship to the natural world.

As the Conover’s discussed craft design, style and what ultimately initiates a new form of a craft, they also conveyed a sense of the way cultural craftmaking traditions are examples the land teaching humans. Garrett begins to explain the way the land shapes what is made for an attentive craftmaker, and then Alexandra adds to this description.

Ultimately something traditional would be the Penobscop style paddle, it came out of here, this landscape. If I make one I am relying on the knowledge of centuries, not just me saying oh the land told me to do it this way. I would not know that much doing it on my own, but you can learn that much if there is a body of history there. I guess ultimately what you do on that landscape is appropriate to that landscape if it comes from it. I don’t know if individually you could get to that point in your life alone. (Garrett)

I think you would have to paddle Maine rivers a whole season long for a number of years before it would occur to you that these rivers go up and down, they are not steady rivers they are shallow, so you really need a tall paddle so that you can have a couple of stations [handles] that you can choke up on that fit very comfortably. You would have a short paddle and long paddle at once and would not have to lug a lot of different paddles

around. That would take a number of years and a bright person to come up with that. (Alexandra)

Garrett also made reference to old guides who probably just faithfully followed traditional craftmaking practices without fully understanding all the reasoning behind a design. Later through constant use of the item they would discover why a specific design feature existed and worked well. Garrett mentioned that in the past innovation was not a pressing concern, nor was there a strong need to invent something new or novel as exists today. Passing on culturally-based ways of doing something, emphasized the knowledge accumulated over a longer period by people attuned to living in a specific area. Such cultural traditions specific to a region did not encourage individual identity to any large degree. Through maintaining cultural ways of making things the accumulated teachings or knowledge of the ways to live sustainably with the local was preserved.

Alexandra pointed out that “techies,” those people who love pouring through equipment magazines and always seem interested in the latest camping innovation, have lost a sense of history. She referred to them as ‘modern storytellers’ who can be entertained by the “cutting edge stuff,” but who are unaware of the meaning existing with stories that have longer more traditional roots. Hers and Garrett’s interest in gear is based upon hearing the older storytellers who can speak on how to make the crafts that aid a person to live in comfort, for a long period of time in a natural setting. Alexandra recognizes techies as “a flash in the pan” with a real goal of just “marketing something” and not helping to refine a tradition. Garrett mentioned that in promoting something they are not deliberately lying. Their equipment may be the best thing for climbing on certain

peaks during certain times of the year. He just questioned why a person would acquire the equipment so they could go to that elevation during those times.

Although the distinction between art and craft was still quite gray to both Alexandra and Garrett they did offer some interesting perspectives on these terms.

My conception of art and craft overlaps pretty seriously. Craft is more toward the practical end of the scale and exquisite craftsmanship becomes art somewhere along the scale. I guess when aesthetic refinements takes it pass were it needs to be for function. For example, an Attikamek snowshoe, I think are far more artistic then a child's pair of spring snowshoes made to be used and abused and perhaps will only last one season. I guess I let it overlap when I don't think there is any difference between decoration that we would say are artistic, but it is spiritual to others, the people making them don't differentiate. They don't differentiate their spiritual life from their practical life. There is no interface like it in our culture. I think if you do something so well . . . it is a jump up from what ever the norm might be, even if it is a very refined norm, I think that becomes art. (Garrett)

When I am making a paddle for someone that I love I can feel myself shifting from craftsmanship, the best job that I can, to something that I would say was a more spiritual feeling that comes out often of loving someone. Or in the case of a museum exhibit when I wanted to do my best, which was love of the craft which I consider artwork. Most of my paddles are not art work, they are good craftsmanship, but I would not call them art. Once your spirit starts to get into it I would say it starts to become art. . . . I've seen something ungainly that is not very good craftsmanship that I would still call art because there is something there that I resonate with as another human being. I support Garrett they can really blend. (Alexandra)

To the Conovers the degree to which a culture distinguishes between spiritual and practical activities plays a role in the way individuals within a culture define what they make.

As the Conover's first interest was being able to work outdoors their definition on environmental education quickly lead to an emphasis on outdoor education and what is

required to make people feel at home in the natural world. Garrett mentioned that environmental education emphasized the sciences and could be experientially integrated into education today, but was not part of the normal public school system twenty years ago. Alexandra's first thought about environmental education was that it was boring and later she added,

Environmental education is foreign to me as it is teaching something a person has little or no connection with. My definition of environmental education is information stuff you can get from computers and from libraries.

Alexandra did continue to expand upon her own love and interest of the outdoors and explained how she views her professional work as a guide.

So I am thinking back to when I was eight and first became conscious of my love. Conscious here of love of the natural world and all I wanted to do was be in it and feel the snow and feel the rain . . . slowly you start using tools not very well and then you start making . . . Garrett and I are a guide service. We're trying to play house in the woods with people so they can pretend it is their home for five days. So we are walking them through what I desperately wanted to do. I wanted to be in the woods, living in there, sleeping in there, waking up in the morning, and going to bed at night in the woods . . . that struggle of always being away from that which you love. So I almost think our twenty years of guiding comes out of that frustrated need to be in the woods in a natural way, trying to share that with other human beings. Yes I realize it is contrived to an extent, we are putting ourselves in a situation . . . where we are out in the woods now and we only have this much food and we only have this much time . . . So we got this little fake universe which you all agree to enter.

Alexandra later described some of the outcomes of their work as guides such as how Garrett and her help people to learn how to,

. . . enter the natural world and shut up. This allows a person's mind to open up and take in stuff and reflect upon things . . . to play pretend that we live naturally in the natural world . . . and people come away from that with what ever they want to come away with; I know I love it.

The aim of the Conover's trips is to have people feel like they were at home in the wilderness for the duration of the time they were guided and to have been exposed to new kinds of conversations.

Garrett mentioned that achieving this kind of comfort in the outdoors through a guiding service allows people the freedom to “think or want a bigger connection’ which leads into them wanting to make something or go looking for materials to make something.

Beginners are intrigued by the how-to, the tools, the practical aspects of what ever you are doing, whether it is paddling or camping. Then as they get better and better and better they are less consumed by that focus and they are more open to stuff coming in from all directions. Then if something resonates with them that is what they want to go after.
(Garrett)

They get intensely excited by the idea that these two humans they are hanging out with have made that pack or knife, repaired the canoe, made the poles and paddle. They are amazed that people can still do that—make a paddle , sew canvas ... it is a strong component of our trips, yet nothing we ever expected. We simply made things because we wanted to.
(Alexandra)

To the Conovers, spending time outdoors was important because it offers a person and especially that of a child, the opportunities to develop their sensory awareness.

Alexandra provided an example when she stated “if you are outdoors by the age of ten, you know what the air smells like before it is going to rain. If you live indoors how could you?” Garret then linked the lost of knowledge in general to an increase in time spent indoors at computer games and eventually to the lost of ability to “know how to learn outdoors.” This estrangement to outdoor life he thought would have huge implications

because people were presented with too much stuff and their imaginations were not developed “in story form like someone playing outside.”

The importance of sensory involvement in craftmaking was highlighted by Alexandra’s examples of the ways her sensory-based experience had informed her about things that her intellectual knowing would have told her otherwise. For instance, through her experience making paddles which requires a lot of handling of wood she has come to know that a board with wide spaced wood grain will weigh more than a board with narrow spaced wood grain, yet this is the opposite of what her intellect would inform her to think. She also stated that people will tell her that wood has been drying for a year, but she has learned to trust her nose which might indicate it has only been drying half a year. Alexandra mentioned that “your eyes seem to be connected with intellect a lot” and “we are train to use our eyes,” yet it is through her craft work that she has learned to train and trust her senses.

The type of sensory-based knowing that comes through craftmaking experience is effectively shared through storytelling. Alexandra outlined in a few examples how a story can stimulate sensory awareness, encourage interest in learning a craft and aids a person to by-pass making the same mistakes as others have made. Stories act as summaries of lessons and as a way of allowing people to pass on and share their personal sensory based knowing.

For a person like myself I would say you have to be stimulated sensually first before your intellect is ever going to get a trick—before letting information into your brain. That is how I operate as I am an experiential type of person. So only speaking for myself and the type of people we guide, I know when their eyes start to sparkle and they start to really listen

to me and Garret that is when we start storytelling. So they are pretending, they are going through what ever experience we are telling them about, so they are fake experiencing something, but it is through someone they know. . . .If one of them says boy I would really like to make a crooked knife after this trip, I don't really know much, but could you help me find a handle? So then we go into the woods and search and search, and we teach them what they need to know intellectually about selecting wood grain, but I can guarantee that person would not have wanted to even make a crooked knife or ask the intellectual questions about that if they had not seen me or Garrett using one around the fire. . . .[or heard it mentioned in a story] . . . So it had to come out of some visceral, sensual connection that is pleasurable or survival oriented. Boy crooked knives are important. Boy I want to know how to make one. . . . I would even add storytelling as a hands on form of experiential education . . . definitely changing you. It can effect you as much as giving a person something to do with their hands. . . some people are so absorbed by them stories. If we all grew up with ESOP fables . . . those kind of things inform and shape your value system when you are a little kid. They are definitely changing you. I would add storytelling . . . hearing that story was an intellectual exercise, but it was a story, so different then just a list of do's and don'ts. . . . I know I have become a better deer hunter from listening to stories from friends who are accomplished hunter. . . don't have to do that mistake . . . storyteller tells you to skip that, this is what is going to happen if you do that . . . [then later you think] good, I did it right, I did what the storyteller told me. (Alexandra)

Alexandra recognized that stories that are based upon acknowledging the importance of a craft and can stimulate interest in learning a craft. Stories are also able to attune people to the sensory awareness involved in craftmaking so as Alexandra states, they can jump steps. The importance of storytelling rests in its ability to effectively communicate the sensory and challenging aspects of craftmaking. Stories best convey the visceral knowledge embedded in craftmaking.

Alexandra also emphasized the actual experience of craftmaking in comparison to the experience of researching and writing about crafts.

I would argue that it can not be done as much intellectually . . . get into a library, research, write -up. . . Lets say you wanted to write up a thesis on the shape of an Indian or crooked knife blade. Now I say this specifically, as it is the very example or turning point in my career and I had my hands slapped because when I was writing all about crooked knife, making time was short. I did not have time to make a blade. I had gotten one from the Hudson Bay company. So I slapped that in [a handle] and thought great. But then I really should finish my treatise on crooked knife making, so I read, read, read, stimulated intellectual talk to old timers. Yah, you get an old file and do this, do that, and took incredible notes, did illustrations, checked with the old timers. Yaa, yaa this is great with the drawing and everything, but then I brought it over and let McFahey look at it. He looked at the handle part, then he looked at the blade part. Have you ever made a blade? I had to say no. He said I knew that. Now look right here at this. He pointed out one of the steps which was critically incorrect . . . it was critical to producing a good crooked knife blade. [I had written my report] based upon what I thought was extremely thorough research . . . and that moment, I remember thinking, never, ever, try to fake it in a lecture. Don't rely on your mind, not because I am stupid or smarter than any one else, but because it does not work that way. You simply have to make things with your hands before you truly understand and you won't understand everything from only doing it once . . . but you definitely will know more than the most educated person who has never attempted the same thing. . . You can be told, told, told on how to do it, but until you go out there and make all those things, everyday. . . unless you just get lucky the first time . . . Basically you are not going to get the right idea unless you make mistakes and do it.

The experience of actually making a craft was clearly a more educational experience for Alexandra than just writing or reading about craftmaking.

Acquiring the ability and skill involved in seeking and gathering material was an important part of the craftmaking experience for Alexandra. She describes the confusion and anxiety she had to overcome in order to succeed in this area.

I can remember making my first axe handle. Mick said well you find a white ash tree—not a blank, but a white ash tree and cut a 4 foot section of it. I can remember thinking I have to cut a tree . . . it seemed like this mountain. How was I going to do this? I'm on Mount Desert Island and it is mostly national park. I am a student. I know a few neighbours. Finally I

had to ask someone who had a lot of land, do you have ash on your land? white ash? . . . Yes, OK, now I can go look for white ash. But I remember looking at those trees and at that point I had only climbed trees I had never cut any of them down. And I remember thinking hmmm it probably should be straight grain, but beyond that I didn't know if I was looking for a 2 foot tree trunk or a 3 inch. I can remember this so vividly, feeling so helpless . . . In the earlier times this was frightening to me. How do I get my materials . . . it was something it seems, that I did not have knowledge of . . . Now a lot of people tell me stories about where and how to get it.

When I asked Alexandra to elaborate on accessing material on land she did not "own" she replied, "now I know how to get away with it." Yet she mentioned when she was younger this was a 'scary thing.'

Even at 22 or what ever I was at that point when I was making that axe handle and was scared because the land was all owned by other humans. I did not have a network there, except through my college community, that ultimately served me. It seemed a small resource base to be drawing from . . . No one was going to have to share it with me. I was either going to have to pay for it or I would have to ask somebody and get permission. Certainly the culture did not always support what I was trying to do here—cutting down a tree—unless you are a logger or guide, no one was going to know what you were doing. We have been so culturalized.

She states upon finding a professor who owned land and would allow her to wander freely and cut what she needed, "I felt like I was with my tribe. There was no explanation for what ever I wanted to do with that tree." The terms Alexandra uses to express her apprehension and later sense of acceptance for this experience are intriguing as they highlight the lost of our recognition of 'hunting and gathering' rights while emphasizing our cultural acceptance of property ownership and patterns emphasizing commodification of nature.

The question concerning displaying and using items brought forth an emphasis on using a craft and the existence of a narrow window of conditions where displaying that craft might be considered.

Displaying stuff, if that is all it does, is kind of not proper . . . for educational purposes or just historical things there might be something I have made that I won't use anymore, or maybe at all, for if it is too good of an example of X to wear it out. If there is a reason to have it as an example I can appreciate the need for a limited amount of displayed stuff in the world, but to me if you make something you have to use it for yourself to get the lesson. (Garrett)

The value for myself [in displayed items] . . . I can remember viewing artifacts in a display, hanging up there lifeless . . . yet as a kid that was so exciting to me. To see an item two feet behind glass that was an actual . . . or what ever it was that had captured my imagination at the time . . . making me want to go home and copy it and make one and wear it . . . and seeing if their was that joy or whatever got me excited . . . displaying is very important from an inspirational point of view, but that isn't the end all. (Alexandra)

Alexandra in regards to the use of hand and electronic tool use, outlined when she decides what to use and what to even purchase. Always in the back of her mind rested a greater realization of the reality of where power comes from.

I do draw a line , but it is such a personal thing. I make about 12 paddles a year . . . not production . . . critical stuff still done by hand. I have a drum sander [and in deciding to get it] I went through all the intellectual, emotional stuff . . . [because I] once had no electricity I knew the immense amount of energy that went into it [carving paddles] because I had made them all by hand. Most of the critical stuff is still done by handwork The band saw and planer are just big dumb tools that get rid of a lot of wood fast. The sander is just cleaning up lines already there . . . so I view them as big dumb work objects just to get some physical labour done for me. I just can't imagine getting good enough with any of these things to do it totally with electrical equipment . . . It was tough getting that sander, how far am I going to go? Then I thought no those are the dummies you need. You need a few big tools.

For me electricity is an associated thing to drowned landscape in Labrador— Hydro feeding Maine grid, feeding central Maine Power, feeding Conovers. So I see drowned landscape when lights are on or I'm using my band saw . . . I see no harm in using that power until it starts robbing yourself of the joy in doing something yourself.

Alexandra expressed an ability to use power tools because she first had learned the way to make items like paddles without power tools. She expressed that her ability to limit her use of power tools stemmed from her constant awareness of the total impact the creation of the power tool produced on the landscape through the demand for hydro.

To Garrett and Alexandra the practical aspect of craftmaking is that the utility potential of a craft allows a craftmaker to make a greater connection to the land. Garrett explains that “it makes it real, not just an exercise . . . if you make something out of context and don't use it, all you learn is how to make something, it does not become a link-able thing.” Garrett's explanation followed Alexandra's description of the whole process of killing an animal and ending up with mukluks which she could then use to travel the land and hunt again. The circular, holistic aspect of craftmaking was described as being “viscerally” felt. The Conover's descriptions were holistic, cyclical and immersive. They provided another way to describe the relationship of existing in the world as being of the world.

Bill Coperthwaite

I met Bill Coperthwaite as a result of a very brief conversation with a friend of a friend who asked me what I was doing in Maine. I quickly sketched out my research interests, to which she said, "you have to meet Bill." When I ask her why she simply told me he carves spoons with school kids. As we pulled out of the driveway she handed me a paper with Bill's address on it and this really peaked my interest in meeting him as he lived at a Yurt Foundation. I wondered what this would have to do with spoon carving. The next day I tracked down directions to Bill's place. Then I hiked the "three miles" down the forest path, forded the beaver flooded creek and eventually emerged upon a clearing in the forest. When I saw the beautiful wooden Yurts I knew I was at the right place.

Bill was inside one of the Yurts carving spoons. I introduced myself and found it very easy to converse with him as we had many similar interests. This first conversation lasted most of the day and included a tour of the place and helping out with some surveying work. I was fascinated by Bill's stories, ideas and the incredible collection of hand made crafts he had accumulated in his travels around the world in search of specifically talented craft people. Six months after my first visit I returned to Bill's home to do a recorded interview with him and a few months after this I joined him at Pennsylvania State University. Here I aided him teach students spoon carving and heard him speak about building Yurts and his democratic crafts ideas.

A friend who knew Bill referred to him as a “Backwood’s Professor” and I think the term held merit. He held a degree in art history and a PhD from Harvard University on research pertaining to Inuit reaction to the re-introduction of museum quality craft specimens made and obtained from their ancestors in the past. Bill had also studied around the world with skilled craft people and worked on various alternative educational programs for youth in different countries that frequently were either based in craftmaking or incorporated craftmaking activities. The Yurt Foundation that he founded was “for the purpose of collecting traditional folk wisdom from around the world and combining it with modern knowledge to encourage ways of living which are simpler and in more intimate contact with nature” (October 2001 Yurt Foundation Calendar). Bill was as fascinated by crafts and making things by hand as I am. He is constantly making things, trying out new techniques and materials and actively researching, recording and writing about his work and ideas.

Bill responded to all my questions, but I have re-arranged his comments to better reflect his own craftmaking terms and ideas. The four concepts that I heard him refer to frequently were democratic crafts, nomadic crafts, social design and cultural blending.

For Bill, democratic crafts is about creating a process of making basic items in a manner that is accessible to everyone, while also resulting in beautiful and effective items. He does not encourage the idea of specialty people that make crafts with specific tools, instead he focuses on reducing the process of production so that it can be replicated by most people and thereby empower them. His vision of democratic crafts emphasizes

more skilled people working as teachers, instead of makers creating items only the wealthy can afford. Bill states,

Designing projects in this way takes as much skill as designing a project no one else can make. Instead of trying to make a bowl that is so elegant you or others can't make it. I think for me, it is more satisfying and just as challenging to design a bowl that anyone can make.

It seems that most of our crafts, from one point of view, are elitist. You keep working and working and getting better and better at it and this eventually separates you from the normal lot of people.

There is a whole difference between selling you a spoon and teaching you to make it. I would like to see more craftsmen get in a situation of earning their money by teaching someone else how to do it rather than doing it for them.

Bill's notion of democratic crafts is based upon creating ways of teaching others to make the crafts they need instead of having to depend upon specially trained people.

The public may not be able to look at that, like this piece of art work that the fancy bowl turners turns out. . . . and say OHHH! that is Bill Coperthwaite's bowl, but there is more internal satisfaction to it. I'm not happy any more making the art piece. But I get a lot of kick out of reducing this bowl one more step.

I have been searching for ways to help more people be more successful, more easily, with their hands in making things of everyday use. . . . [like] the kid who learns spoon and knife making . . . It is not saying you make it so simple that nothing goes on, but making it simple enough so that more people get on board of being good with their hands, and feeling good about it and themselves so they can go onto the next step.

Bill's notion of democratic crafts is to have more people become "competent" with their hands instead of having fewer people capable of making very fine crafts like violins. Bill believes that creating this competency will also create good values in a person because

acquiring competency of the hands is linked to personal developmental and design understanding.

Bill is “interested in a special corner of hand work” he calls “nomadic crafts.” It involves those crafts and craftmaking process that can be done in most settings because they do not require special tools such as planes, bench tools, vises and so on. He offered knitting as a fine example of a nomadic craft and something that should be encouraged to be done in more settings.¹ He thinks of democratic crafts as well made serviceable crafts that can be made in a short period. He offered the example of a bowl that can be turned out in an hour without a lathe. Bill does not necessarily think that nomadic crafts are better, he simply suggests that the process of knowing how to make something using only simple tools and in a relatively quick manner is important because within these making repetitions are embedded types of knowledge and making processes that may be significant in our ability to design a simpler and healthier world.

Bill recognizes a strong connection between the design process that is part of craft work and the interconnection of social patterns that make up society. He believes that learning to work well with the hands through experiences pertaining to understanding the design principles of crafts, ultimately aids people to design healthy social networks. This connection he refers to as social design.

I’m suggesting it is a transference in the end to not just designing a better bowl, but to designing a better world. This design faculty that we are

¹ Bill also demonstrated to me a old type of knitting, nålbinding binding, that was accomplished using only one needle and he found effective as a means of interacting within cultures where there was a language barrier.

working for here needs to be applied to the rest of living. Social design that is what all my work is aimed at.

I am concerned with the development of the balance in the human being that is secure enough within themselves, happy enough in the way they are living, that they don't have to lash out at the world . . . through warfare or violence. . . . may be mentally better able to face some problems.

Bill believes that everyone needs to be trained in the ways of the hands in order to “develop the whole person more if we are ever going to solve our political and social problems.” He offered an example that connected designing bowls to designing our own education.

Like talking to people about how they can shape their own education . . . Education is a do it yourself job. It is not education if someone else shapes it for you. [It is about] help[ing] people move through these steps in designing and shaping a bowl or tool and then designing the way they live and then thinking about how this could go together to design a more stable world. Each stage along the way is fun, but it is no where near as satisfying as when it is part of a bigger picture.

Bill explained that a person's understanding of good social design was developed as they developed their sensitivity through repeated craftmaking experiences that also included a focus upon learning to shape and design a craft. He starts out by stating that a “Nazi could carve a good bowl” for “technology can be used for good or ill” but that

if someone was basically healthy in their sensitivity and concern for the world or a positive leaning person . . . as you shape the bowl . . . I would say by the time you have made 10 bowls you are much more sensitive to the shape or to life. You see things you couldn't see in the beginning. Someone might ask you what do you want to do with this edge. . . . You don't know. You have never been there before. You are still wondering how you are going to get past this blister. Eventually you are beyond that thought and your reflexes are working well, your not nicking yourself as often . . . you know how to keep your blade sharper so it makes a better slice, then a part of you is free to start to think. I wonder if I do this or that. . . .the point is that as you become more familiar with it, with the

tools, the woodwork, the mind becomes more conditioned, familiarity [results]. The mind relaxes enough to start to shape things. Hopefully for me, there is a transference to the rest of the world. You got a creativity developed through making this bowl . . . you just don't stop there but you go on and consider what kind of world do we want? What kind of lifestyle do we want?

Bill acknowledged that familiarity with a “structural understanding allowed you to build a better home” just like it allowed you to understand the “ingredients that will make a good life.” To Bill, the fundamentals of good craft design offered experiences that would ultimately lead to the fundamentals of good social design.

Bill introduced me to the concept of ‘cultural blending.’ He did not really agree with the idea that any person or any culture could take sole credit for any craft idea or design concept. He based this idea on the principle that there was no “pure culture.” All cultures were recognized as a blend of cultures as cultural collisions were going on all the time and had always gone on throughout history as people traveled and shared their ideas, crafts and techniques with each other.

Designs [may seem to] come mostly out of your head, but it is pretty ego centric to think that design comes just out of your head. There is no such thing. The input had to come from many, many people, uncountable numbers [pause] out there [pause] that something you mentioned sticks in my head, but the fact that you mentioned it meant that someone over there, that I never saw or had seen, had spoken to you. So that person is effecting me without my ever knowing them. And that goes back out into millions of peoples, back through the ages. So we just have the privilege, or opportunity to work with some of this stuff. If we are lucky we have an impact in blending this knowledge. Each of us is a mixture of this stuff—cultural blending. If we are lucky to come up with a new concept it really is just a mixture. . . . Design is coming out of my head through all the inputs others had made.

Bill shared details of some of the specific trips he had made into isolated villages to find the path that a craftmaking technique might have traveled as it moved from one area into another. He was fascinated by the way a technique traveled and jumped from culture to culture. In his Yurt on the wall was a beautiful picture of a fish hook that he had found in Alaska. A wonderful example of cultural blending existed on Bill's wall in the picture of a fishhook. At first glance it appeared to have been made by inserting metal hooks into some kind of amber, but Bill informed me it was made out of a plastic toothbrush handle.

Bill spoke on the distinction of art, craft and technology with a clarity and depth that only arises from someone who has given the terms much thought. It was at this time that his formal educational training in art history and his practical experience in craftmaking with people from small villages around the world became apparent.

I majored in art in college, art history actually. I got fascinated by fine arts somehow, but somewhere started to drift away from that. I started to see the beauty in the shape of a spoon itself—instead of the fancy carving on the spoon . . . To me, a painted bent wood box disguises. The bent wood box, properly made in the right proportions, is a lovely thing alone. . . . I'm not against fine art, but the other [his craft concepts] has become so important that I have very little use for art now. . . . The highest art are [is] when things are well made, work well, are beautiful to look at, but also have beauty behind them in the sense that—here is a beautiful object, But was it made by child labour? And does that affect how it looks to you? So if I am making that bowl out of a rare tropical hardwood that is depleting the resource, that is not as beautiful a bowl as if it is from something local here that works well as a bowl.

I grew up with this thing, beauty is in the eye of the beholder and I have come to see more and more of it in the mind of the beholder. The eye is important, but the mind is as well. It is not enough to just have beauty on the surface.

Bill then showed me a crooked knife from the west coast with an intricately carved fish on it. He mentioned that most people noticed this knife first because of the elaborately carved fish on it, but to Bill, the knife was not as good because of the inferior steel in it. Bill's criticism of William Morris and John Ruskin exposed the hypocrisy that frequently exists in the ways people place value on terms like art. Bill states "It is not what you hang on the wall, but the wall itself that is beautiful." He then referred to a chair,

If it is well designed and well made, I find that so rich that I could not possible carve on top. Morris and Ruskin were inconsistent. They were highly decorative. They took linen and wove fantastic patterns on it. I could go along with Morris and Ruskin in the sense of their interest in promoting the hand craft, but my god the wall paper and carpets and hangings curtains. Most of that stuff was for the wealthy . . .

Bill's emphasis on simple crafts that convey beauty in their form was also evident in the wooden Yurt he lived in. He had no items in it that were displayed for the purpose of trying to add beauty to the interior. He embodied what he tried to convey. To him "using was a nice term" and "displaying was an ugly term and was narrowly defined." He quickly pointed out that to "use a bowl was to display it every time you use it." To this concept he connected the idea of role modeling. "Will you display my bowl" or "can I display your bowl" are different things just as "being an example can't be helped" while "living to be an example is unhealthy."

Bill was pleased to hear that someone else was doing research on the educational importance of craftmaking. He thinks more should be done to understand the interrelationship between the mind and the hand, or the way the two aid each other so a person can learn.

In fact people can hardly hold a pen anymore because they are constantly on computers. We are not going to be able to treat people unless we get a chance to develop their hands and mind and body . . . is one of the most neglected things in our whole school system. The most neglected thing is the hand work. We never really understood it fully, the role that handwork plays, the element the hand plays in mental development and understanding of the world. I find it a way to know your world and come in contact with it.

In reference to an article to a Waldorf publication he had read he states the results from handwork are “it helps in concentration, pattern making, counting, competence and all sorts of things. I just cheered when I read that stuff.” Bill strongly believes that “the hands are very important to the total development of a child. The mind can’t develop in a vacuum cleaner . . . The brain can help the hands and the hands can help the brain, when we put them together.” To emphasize the lost of hand skill in children today he described a European knitting award that pertains to children under five years of age and how the winner had once been a three year old. He also made a comment about the famous architect Frank Lloyd Wright who was known for crediting his mother for giving him square blocks to play with. Bill suggested that if his mother had given him round blocks, Wright may have been able to demonstrate even greater design talent and taken his work in a different direction.

Bill suggested one of the reasons for a lack of emphasis on hand work and physical work in our society today was due to a confusion in regards to child labour.

Hand work and physical work is very important aspects in growing and we have neglected them under very political pressures against child labour. This comes from way over where children are mistreated, but this work is not labour at all. Hand work has been so regulated to play time.

He then quoted an idea of Gary Snyder's that "the biggest trouble with American Society is everyone is trying to get out of work." Bill continued to explain. "work with your hands is only something you can do as an avocation or in play. Work with your hands, serious work, is something our society does not encourage and I think it is a great loss."

A few times Bill referred to the importance of being immersed in a society of hand workers.

One of the important things that is missing is when you have a society when people are around you [working with their hands,] like in a typical Inuit village in Alaska. Everyone worked with their hands. It was just part of the atmosphere. It was a very different thing from learning in classes working in groups. It is important to see healthy people around you. I mean physically and mentally able . . . Hand work was just a part of life . . .

Bill explained that a child just being in the presence of a person doing something a certain way, like a particular body stance or knife hold is significant because decades later, when the child is an adult, there is a subtle memory that may trigger recalling a technique that is critical to completing a craft or solving a design problem.

Craftmaking is a central part to what Bill considers environmental education. He states:

Environmental education is what it is all about. There isn't any education which is not environmental. We got two concepts with one word. Schooling which we call education and then education. Schooling does not have any necessary connection to education at all. E.G. Lincoln had little schooling. The uni-bomber went through the finest schools yet he was very poorly educated. Environmental education use to be about learning about the world outside—the natural world around us. All education, the whole development of the individual, all of it has to be sound and connected, otherwise well, it hasn't been and we are heading

for disaster. So all education is connected to the environment although we may not recognize it.

He then explained how craftmaking in particular was connected to environmental education.

. . . Ear muffs and toy gnomes they sell at Christmas time, to me it is crap. By making a bowl, learning to use their hands, learning to relate to wood and understand the psychics of cutting substances, they are learning to appreciate the beauty and difference of wet, dry and green wood. Hopefully they went to the woods to get this. They are learning about the location of this. If it is done in the right way you are learning to respect the tree that it came from and to appreciate it. By making this common thing that you use everyday you have a feeling of confidence and pride from having made this thing. Ideally it has made you a more secure person . . . through these little increments, a lot of these experiences together, you will help a person gain enough emotional security and confidence in themselves to not have to get their emotional status from putting someone else down. They may be free enough and secure enough to admire this other religion and explore it, find out about it or talk to these people. It will excite them to feel the chance to learn something . . . I find the crafts very, very connected to education—a very important element.

Bill's response to the question concerning when he felt most connected to the land was based upon him being able to locally gather the material he used. The importance of the inclusion of the seeking and harvesting stage was emphasized in many comments that he made.

I am most connected making bowls from local birch. Taking down a birch tree. . . trying to do as much as possible in early spring time so the bark will also peel and I can save it. It is a process of trying to use as much of the tree as possible . . . I don't know what ingredients are necessary to make this connection but what I know is . . . I am getting a tree that I decided would help the forest and will also let me make something out of it that would be useful at the same time . . . The connection is there but under the surface. It is an enjoyable process all the way through"

For Bill, much of the ‘connection’ to the land that was made through the seeking and harvesting stage was based on the opportunity of awareness that these stages provided.

When I am walking through the woods I am not just enjoying the atmosphere of the woods, I’m noticing whether that tree bend would make a good chair or here is some fir that could be cut down for a bridge. Your alert.

Bill continued to outline the way awareness turns into a greater sense of respect and thankfulness, not just for the land that offered the craftmaking materials, but for all that goes into seeking and harvesting materials. He emphasizes making the whole craft process transparent.

The more you learn to make things in a certain way the more you become thankful for the environment or you become aware of the types of tree [present] . . . or what it can become . . . respectful . . . thankful.

Very few people ever get out to areas on the land. This workshop I’m doing, originally we were to go out and seek materials, but it has been shortened down. Now she is asking me to bring materials with me. It would be a whole lot nicer to be able to go out and cut at least some [trees]down. A huge part of it, at least half the time to make a bowl is based in getting material and preparing it. Not sitting in a room making it beautiful. So when someone says they made a spoon and I gave them a spoon block already chopped out . . . they have made a spoon but I have done half of the work.

Bill made reference to the idea that the process of connecting to the world through spoon carving occurs in a very subjective, unconscious manner. “It is not a process that I think about a lot as I am doing it.” When I asked him to describe further the connection or communication with the world that occurs he emphasized that it was more of an awareness of an interrelationship.

I would not use those terms (communication) but there is an interrelationship when you are on the land. It is not like talking trees. I’m

not against this, it is just not what I take part in, but I do find myself apologizing to trees when I cut them down. But that is more like speaking out loud. I try not to waste trees, they are very wonderful material I'm very thankful. They will get their turn when I am eventually buried out there, but it is not a two way conversation.

The cyclical aspect of craftmaking is also apparent in Bill's awareness of the importance of the returning back stage he raised in the passage above. Craftmaking experiences seemed to allow Bill to have a greater awareness of the numerous interrelationships that sustain our life.

Part of my own fascination with many of the craftmaking ideas Bill raised is that they were based upon making the crafts that I was particularly interested. Bill liked to make things out of local northwoods material using simple tools such as knife making, axe making, canoe building, birch bark crafts, footwear etc. I also appreciate the way Bill had designed a simple life style for himself that was based on craftmaking. Most of the things surrounding him in his Yurt home he had made or knew the maker such as his clothing, eating utensils and pocket knife. I found Bill's comments especially interesting because they reflected the logic that would take a person raised on a subsistent farm where he worked with his hands, through his higher education in the area of 'fine art' and back to an emphasis on living simply.

The 'being of the world' that Bill has conveyed to me throughout our conversations is evident in a variety of ways, especially through his fascination with knife making. He looks at technology on a continuum and that the "first person who flaked a knife blade was making technology," "We can't live without technology" he states and his experiments with knife making has informed him of the long history of humans

existing with technology. His numerous knives explain this history. His skill with a knife has allowed him to carve simple wooden spoons by which to pay off over half of his vehicle. His concept of democratic crafts is based upon a holistic way of coming to learn and know the world. This concept includes our human place on and in designing a healthy life through the experiences of the hand and mind developing and working together. Everything that surrounds Bill's life is very much a part of him and has shaped who he is, from the wooden Yurts that reflect the cultural blending of Siberian and Western thought to the people who support his Yurt Foundation and finally to the numerous crafts that he makes and uses daily.

James Dina

I first became aware of James Dina in an article I glanced at in an Outdoor oriented magazine that described a man building a birch bark canoe in which to paddle up the Connecticut River. The article was fascinating to me because I had always wanted to make a birch bark canoe. A few years later I noticed and picked up the book Voyage of the Ant, written by James himself. This book was a description of his quest to discover who he was, and what made him so, beginning with building a canoe from scratch—starting with nothing but his bare hands—and later learning to live off the land as he traveled in the canoe.

My copy of his book quickly became marked and dog-eared from my many readings of it. I fell in love with his descriptions of the land and the wisdom he conveyed of the craftmaking process. Through his direct experience making things from scratch, the raw unprocessed materials of the earth, he was able to express an intimate connection to the gifts that land had offered him in order to complete his quest:

This stone is not like others. It is smooth and shiny. When it is broken, it yields a sharp cutting edge. It is found only in a few places. This makes it valuable. We depend upon it for our lives, and this makes it sacred. (25)

James writing showed evidence of what I refer to as ‘dirt time’—real experience leading to a real lesson learned directly through the living and doing of the basic chores of providing for one’s needs. James had actually lived outdoors directly on the land, acquiring the skills to live as efficiently as possible, and using few, if any, modern conveniences. “The ant” is the name he gave his canoe, for an ant represented to him a

incredibly determined creature for whose work ethic he had a great respect and was similar to the work ethic he had taken in trying to build his canoe. James had chosen to make a canoe by simply walking into the forest with his bare hands and starting by first shaping his own tools. He knew that he could use steel tools to make a birch bark canoe, but questioned what he would learn from such an approach. He writes:

Limiting myself to the tools and materials available to primitive Americans would require me to rediscover ways of thinking and doing that had disappeared centuries ago, and would admit me into the world of the past. The river waited. The canoe would speak for itself when finished. It was my great hope that I could recapture the spirit of those lost times in the process (12).

James writes from and about his desire, not to achieve control but, to interact with the elements of the earth. He describes how the Greek's were the first people to organize and express a human connection to nature through the four "all-embracing categories: fire, air, water and earth"(15). His book, Voyage of The Ant, is the best example of which I am aware of the ways a person can learn about the earth through the process of craftmaking. It seemed only fitting that I interview this man, who both had the experience and could so eloquently express what this experience was about.

On a beautifully warm spring day I drove over the Connecticut River and found my way to James home. I was amazed by the number of bird calls I could hear as I received an initial tour of the area that he travels daily as he works on the craftmaking projects he still is fascinated by. I was pleased to see the dug out canoe his book mentioned would be his next project. The tour included a walk through his local harvesting area, backyard wigwams, the contents of his pack basket he traveled with and

a demonstration of fire by friction. Eventually we settled down to begin the interview.

We talked outside under the same tree that shaded Ant, the canoe he made. In the midst of the interview he repeated to me one of the first things he said upon my arrival. It was as if he wanted to make sure I clearly understood him: “I hate to shop at a store, even if it is a sporting goods store or a gun store . . . I just don’t like stores.” He explained that he preferred to be outdoors whenever possible and to walk around everyday. He said that he also preferred to know exactly where all the material items in his life came from.

In the interview James clarified the ‘crafting business’ from his primitivist technologist perspective:

You take it [craftmaking] from a fundamental level or point of view. Crafting those things reflects how we are going to make a living. That’s the most fundamental definition of craftsmanship and the reason for it, from the primitivist point of view. No luxuries in it. I just want to stay alive, fairly comfortably if possible.

Dina expanded upon his interest in “making things as simply as possible” by associating craftmaking with the educational viewpoint that you need to understand where technology comes from in order to “get a better balance of what technology you need and what technology you don’t. . . . knowing where you have come from is important for adjusting where you are going.” During the interview Dina referred to the interesting talk going on during the year 1963, when he was obtaining a Master’s degree from Massachusetts Institute for Technology. He said “Probably in the 1950s and ‘60s we outran the question, can we make this? The question then became, should we make this?” Similar questions arise in the Origin guidepost of craftmaking, when a person concerns themselves with the ethical implications of determining whether or not to make

something. To James these implications are connected to his fascination with making crafts that are as simple as possible in order to work as little as possible and have more leisure time—“to produce just what you want to use. In other words, being clever instead of industrious.” Such notions pertain not only to the Origin stage of the craftmaking pedagogy, but also relate to some notions of spirituality and art that James also raised.

From his perspective that of making things in the simplest manner possible, in order to obtain the maximum subsistence for the least possible effort, Dina makes a connection to the spiritual and decorative aspects of craftmaking. He states that “decorations were initially part of the spiritual,” they allowed a “spiritual connection” to happen. He continues:

I have entered the spiritual world which may be to a primitive mind a very important part of the subsistent world, because you do not always understand the failure of your subsistence technology . . . I think a lot of primitives would think of things as non functional if they were not decorated the correct way . . . decorating your hunting bow infused it with power of some spirit [like] putting hawk feathers on your arrow instead of turkey feathers . . . So some of the luxury craftsmanship was really tied up more with spirituality.

His explanations about the need for art or decorations lead into his explanation of the ways his own personal need for beauty or art in his life was more readily satisfied by daily walks than by viewing gallery paintings. He needed to see the trees and plants of his locale to satisfy what Dina called his “intellectual feast of needing to see art.” He also satisfied his need, not by simply viewing things, but, by using them. For James, concepts of aesthetics and function were linked and most evident in simple tools.

The most satisfying part of the craftmaking process for James was clearly the quest for materials. He sought only materials to which he could reach by walking, and took only those that he could harvest using his stone tools. Without the use of powerful machinery or transportation beyond his own body's ability James was able to experience the true depth of knowledge associated with the seeking and harvesting stages.

The enjoyment of being outdoors for me is critical actually and when I am outdoors, to be collecting material, it is a focus reason to be outdoors instead of just taking a walk. So I enjoy that woodland stage of a place, just trying to remember a place I have walked or fished or hunted and saying Gees have I seen this before and oh yes. With the birch canoe I remembered an area I had hunted partridge about twenty years earlier that had birch trees about his big (hand gesture) and when I got back, much to my elation they were this big (hand gesture) and in Connecticut!

Getting the raw materials explains to you just how available they are and just how much you should or shouldn't take. So for me that effects how many I should or shouldn't take, to make . . . what is a good example . . . O.K. for me going out and harvesting dogbane , you know I need about 30 or 40 stocks for one dogbane bowstring and if I go out into a field of dogbane and there is only 300 stocks there, I am not going to harvest all three hundred as I want to leave some root stock in the ground for next year. Maybe I'll make 2 bow strings instead of the possible four or five bow I could have made. So collecting your own material will connect you to their availability if nothing else.

I think always the preciousness or scarcity or demand of the material effects you. When you are the harvester it effects you even more directly trying not to destroy your source . . . rather than I'll just pay more for these specialty materials . . . rather I just won't take any more in case their won't be enough for next year. Like eating your last ear of corn and knowing there is now no seed stock for the next year . . . that is almost as fundamental a realization, harvesting makes a connection for me.

It does effect how many you make and how careful you are making them especially if the material is scarce . . . the fact that I have to harvest it sometimes tempers how much product I make. I might make a few but better basswood cord rather than turn out a lot of them not so well, or I may substitute material. I think it was absolutely that way in much more subsistent economies, which all primitive economies were.

James descriptions clearly describes and emphasizes the significance of coming to understand notions of sustainability through the experience of harvesting the more-than-human for craftmaking purposes

His lessons on sustainability through seeking and harvesting experiences ensured that when he lead craftmaking sessions, he took people to the actual places to see where materials had been previously harvested. He thought it was critical to emphasize where things came from. "People will understand better preserving the environment if they see that all real raw material really does come from the earth." James raised concern that so many materials were coming to us as "packaged, more and more, so you just take out the plastic and pop it in the microwave." The lost of connection resulting from the lost of experience associated with he seeking and harvesting stage was summarized in his question "Don't you think we have this kind of veil that comes down between raw material and finished products?"

James affirmed that their was a definite connection between environmental education and craftmaking. He discussed how his view on education was based upon how education was suppose to be about enrichment and this was "why we had art and music and all those other things at school and not just math and science." He stressed how craftmaking could be fit right in as it was based upon a "fundamental perception of the world around us and how we could take technological advantage of it." He linked his ideas by using an example of a question he was frequently asked:

When I build a birch bark canoe, when I harvest birch bark . . . They say does it kill the tree and I say yes it does . . . like those clapboards on your house, They are all dead trees . . . if you were harvesting these clapboards

for your own house and did [use] the local trees and cut them at a local saw mill you knew how big a piece of forest land you had just taken down.

James expressed a clear need to have people directly use their own body's strength to recognize the energy it took to harvest materials. His views emphasize the notions of recapitulation. James encourages people to re-experience what made them who they are by participating in such physical activities that "act as a reminder of where we came from." The point of this he stated was "that old thing about history" that if we "paid attention" then we wouldn't need to bomb anymore.

In describing the ways craftmaking can serve as an environmental education, James' comments highlighted three ideas pertaining to a craftmaking pedagogy. Many of the comments he raised repeatedly referred to the ideas about seasonal awareness, everything being identifiable as something else (particularly a tool) and the intrigue of the sensory stimulation that was part of craftmaking.

Through seeking and harvesting craft materials a craftmaker came to identify with the seasonal cycles and their "inequitably deadline." Dina emphasized that the seasonal patterns that must be attended to during the harvesting process were great teachers as they offered "no extensions" for the seasonal rounds missed and as a result their lessons held the potential for a "devastating" impact. These lessons resulted in the industrious primitive getting them "self into gear soon enough to know that this is when the bark does slip or this is the season for . . . there is no extension for the seasonal laws." James' understanding of the seasonal cycles came through craftmaking practices and was clearly an important aspect leading to notions of feeling part of the locale.

James aimed to instill in his craftmaking sessions the idea that “everything is a tool.” He felt it was important to have people “seeing sticks and stones as real tools, simple nearby tools, not that sophisticated stuff . . . like a car or wristwatch.” James’s love for teaching people to make just a tool, was based upon the ways he saw tools as such “eye openers” for a person to recognize just what could be done with sticks and stones. He felt that education needed to “take these kids from the bottom up” so they would say “look what we made with just a block of stone and some other stuff there.” He found this to be a fulfilling process because so many skills fit into this and that students could now do with their hands what previously had only be learned through a book. Hands-on craftmaking lessons teaching children to be “much more resourceful later in life.”

James’s style of teaching was based upon simply having students observe and be present during craftmaking. Sometimes he asked questions to help participants think and direct their attention to specific ideas. He outlined that in the past a child “probably knew how to make pottery from exposure and a few explanations, from a few questions being asked over a long period of time.” He envisions craftmaking lessons being taught in a very indirect holistic fashion. He added that today “we are much more organized . . . with our pension for science and closure and things like that.”

The importance of sensory stimulation in craftmaking was also described through James’s descriptive examples. In his professional life, he works as a private music teacher and he described how he loved “playing string instruments that I can touch. I absolutely hate playing a keyboard . . .once you push that key, that actuating medium is

all on its own . . . I can't feel that string let alone control it. It is the same with wind instruments." He outlined how he loves "the feel [of] the air coming through." James agreed that you can't explain stresses and fiber strengths when bending wood. He compared these notions of embodied knowing to the parable of ESOP fables. He states that "you can give a lecture on raw material usage and utilization and conservation, but if people are making something from that raw material they are involved in, that they have their hands in it" and this allows people to "get reality." Dina provided an example on the way modern tools such as a chainsaw allowed a person to take a short cut in learning, but that was not particularly distancing from the land. What he considered distancing was when things were no longer a "product of your own hands." And this is what was happening when things were mass produced. With mass production you do not get "as close." He mentioned that he loves clay because he can touch it in comparison to blacksmith work which requires you to mostly handle tools. The sensory stimulation offered through craftmaking practices that involved the use of raw materials preferable gathered in a frequently traveled locale, was one of the critically important aspect of craftmaking that allowed it to be a process of greater connection to the land.

Although James Dina does not refer to the expression "being of the world," he does clearly exhibit a incredibly deep connection to the land which he has obtained through his craftmaking experiences. He concludes his book by referring to his initial quest that set him on his canoe making journey.

I laughed inwardly at the thought that I had come to conquer this river. It had affected me far more than I had affected it. My wake, if it was still on the river, would soon be part of the sea. The headwaters of the

Connecticut were the point of aim, not the goal. I had really come to answer burning questions of identity: who am I? What was it that made me so? As much trouble as it had been, the second had been easier to answer. Being a part of my race's genetic memory wasn't good enough. I wanted it as part of my own conscious memory, reliving in a small way every minute of man's ascent: foraging like a beast in the meadow, cracking two stones together at the dawn of history, preparing for the hunt atop an Ice Age flint mine, planting the first corn and the seeds of civilization, building a boat of birch to carry me against a river that defied time. Each man alive—red, white, or otherwise—is what he is because of these things. I had experienced equal portions of pain and ecstasy in coming to know them; it had been worth every effort. But that other question: *Who?*

A page later in his final lines he responds to his question of who is he?

Once this project had seemed endless. Now I could safely admit things that would have exhausted my strength before. Some forces are too powerful when taken in a single dose; the Connecticut, upstream at least, is one of them. I had needed this silent, stoical ant. Now I could let him go, back away, see him in perspective. For the first time, I could acknowledge who he was. I realized I had known him all along, and known him well. I looked closely, seeing more clearly than ever. And I knew: I was the Ant.

James Dina describes his hard effort to make a canoe starting with only his own hands, his constant paddle strokes taken on the Connecticut river, the canoe and himself, as all part of the same being. He is both the small creature called an ant and a creature that can add ripples to the ocean. His craftmaking experience of canoe building ultimately results in him seeing himself as the very effort required to make a craft such as a canoe. Through his craftmaking experience he bridges his perception of nature and culture and identifies himself as an ant, a canoe, a river journey and ultimately as a 'being of the world.'

Allan Foster

Allan Foster obtained his first degree in botany and has had a strong interest in the folklore of plants for decades. I first became interested in his work through mention of his Master's thesis in Environmental Studies here at York University . It pertained to the use of folk stories to help people learn and remember information about plants. As part of this research he not only told folk stories to students in the Boyer woodlot on campus, but also had students make simple crafts out of found objects. I was aware that he encourages similar hands-on activities at the Kortright conservation center where he has worked for years. Allan believes in both the importance of storytelling and craftmaking as a way to come to learn about Nature. His own Phd. work pertains to the use of storytelling in environmental education programs and his life long interests in plants includes years of making items and teaching craftmaking using plant material. I have heard Allan present at various educational events at the Kortright Center and have taken my own nieces to the session he devised on the popular Harry Potter's children books. At this event everyone made magic wands. To share Allan's ideas I first will describe some of his views on environmental education, then outline Allan's narrations on his own experiences craftmaking that pertain to various stages of the craftmaking model.

Allan, like myself, was surprised upon first entering the Faculty of Environmental Studies (FES) program to understand that the definitions of the environment used in other students work did not include aspects of the natural world. He mentioned the shock in realizing that the FES introductory session at Shadow Lake did not include much time

spent outdoors nor did other students seem interested in visiting the pond on site. The natural world is very present in Allan's life, for him, environmental education meant "education that is *for* the environment." he stressed that the purpose of doing this kind of education was *for* the environment whether to learn something that would aid the natural world or lead to a greater understanding of the natural world. He compared this idea to "environmental recreation which is *using* it. You're in the out of doors, but you are not necessarily learning about the out of doors." Alan uses the environment to teach people about the environment. The constant presence and awareness of animals and plants was an important part of what made up environmental education for Allan.

Allan then compared his use of storytelling to my use of craftmaking in light of environmental education.

I think you and I are on the same wavelength. You make something out of something. I tell a story about it, and then from then on, what ever you use calls to you when you go for a walk. You see an ash tree and you have been involve in bending ash then [it is] like every ash tree calls to you. You notice it. And I think that is how stories work too. You tell a story about a little chicory plant . . . [then every chicory plant you see calls to you] . . . and think about it, if the tree calls to you then it is special to you. You have some sort of relationship to it, even if you used it.

Allan went on to describe that if you know enough stories about these plants or you have made several things out of different material in the forest, eventually the woods will be "talking to you, that is so true. It is so noisy sometimes." Allan described an activity he does with pictures and stories to create an awareness of certain plants. He described the reaction one person gave afterwards. "They are hollering at me and he had never noticed them before." He concludes that environmental education is about obtaining awareness

and the observation skills so things like plants in the natural world will be noticed and will 'yell' at people because "they know them."

Allan using a few different examples expanded upon the type of awareness obtained by craft people who work with wood. Previously he had made reference to split ash basketry where a person repeatedly pounds a log to divide the wood by growth rings, Allan continues,

You learn a lot about how trees grow when you do [split by wood by its grain] rather than when you are just sawing wood. No, when you are sawing wood you're learning a lot about how trees grow too, because you can get quarter cut, round cut, flat cut or veneer cut and you can get all those different grains cut in furniture. But when you are actually pounding the growth rings you learn something about how a tree grows and felt.

Allan also explained this same type of growing awareness by reference to making basswood pieces for whistles that require a person to slip the outer bark off the tree and make a small cut down through only one or two growth rings. He outlined how in the past more people looked at trees in a forest trying to find particular types of bends for particular reasons like making a hockey stick. He described his own realization of the importance of taking a careful look at the bark of a tree in order to determine what was on the inside of the tree because the bark on the outside is a reflection of the tree on the inside.

People who work with wood have an appreciation of trees, a different kind of appreciation, but it's an appreciation of trees. I was horrified one year when I went back to visit a place I once worked and they had built a ropes course with lag bolts and ropes, so that students could climb back and forth between two trees. The one tree that they had lag bolted into was a cherry tree, a black cherry tree which was one of my favourite trees. They ruined it by putting this great big lag bolt through it. The fact that made me so upset was that they didn't even know that it was a black cherry tree.

It was just in the right place to get the rope. It did not matter to them that it was a special tree, alive. I was horrified. So I think people who use wood have an appreciation for different kinds of wood.

Allan mentioned that his own fascination for working with wood was sparked by his mothers comment to him that what was inside the wood his father was splitting was a scene that no one had ever seen before. Allan's interest in plants is constantly conveyed through a strong interest in learning the ways of combining the mysterious, magical references made in folklore stories to the scientific and "how to" knowledge required by a craftmaker.

The following section deals with Allan's comments that add to the craftmaking model. Allan supported an indirect teaching technique that nurtured a sense of mystery and wonder of the natural world. He conveyed this to me through numerous examples starting with his first comment about the origin stage that immediately connected it to the concepts later to be addressed in the ceremonial stage. He stated "that is probably related to giving thanks afterwards. You got permission so you give thanks, you make a sacrifice. That is what my son was getting to with the tobacco and drum." Allan had previously made reference to a drum making workshop his son had attended and a high school project he used the drum at.

They had this fresh skin with meat on it but nobody but my son would touch it. They did this sort of Native ceremony were they buried all the parts . . . made some type of tobacco offering ... for the skin before the skin was made into the drum . . . [Then in an] independent project [in high school] . . . He studied the drum and his partner wrote a poem about the environment. Then the class planted a tree on earth day and he beat the drum and his friend read the poem and his teacher had tears in her eyes. It was one of the best marks he got in high school, just because it was so imaginative and spiritual. You know he was mother earth. . . . The other

thing he did [in his drum making class] which he thought was really strange, but he appreciates it more now, is he had to close his eyes and somebody lead some kind of very short meditation. The colour he saw was to be the colour he was to put on his drum. That is how you decide how to paint it.

Allan understood what I was trying to relay in the origin stage and readily related it to a description of a contemporary example of the ways this kind of awareness was being encouraged in contemporary craftmaking activities.

When describing the seeking stage to Allan he raised the issue of the general public's limited experience in this area.

I lead a hike once with doctors of herbology . . . the incredible thing was that they did not know one plant from the other. They all know the plant only from the gray fluffy stuff in jars. . . . They told me afterwards they had never seen it . . . and said things like I thought it would be bigger.

It can be the same with woodworkers. I would be very surprised if the average wood worker in particular has ever gone for a walk [in the forest]. . . I know a guy who builds pipe organ out of wood and he loves cherry wood. His cabinets are always cherry . . . he knows that wood inside out, but he does not recognize the tree. I think that is probably sadly typical of wood workers.

The description of the harvesting stage brought to Allan the concept of prayer and misconceptions about it. His comments begins with reference to the idea of saying a prayer before harvesting a material.

I think that one of the reasons it is foreign is that the whole concept of prayer is [going through] a real backlash to institutionalized prayer. I got this children's book. It is "Something About My Grandfather." In this book he is taking his grandson for a walk through the woods and he talks about how the trees are praying, and how the birds just sitting there singing are praying, the water moving is a prayer. The thing that got me most was the fact that leaning over and looking a beautiful flower was a prayer. You don't have to be saying anything. You don't have to be thinking anything; it is the act. I think this is a beautiful thing. I love that

book. I love that idea because so often in our society we think you got to stop, this is where you say the pray, this is the pray part you know, however you do it means stopping and doing something else. Whereas in this children's book a prayer is just simply admiring something.

You would never catch my son saying a prayer, but he let something slip out . . . [description of him listening to water drip from paddles while in India and thinking that] "for all the world I was in Algonquin Park." Well for me that is a prayer. You have not voiced it but you have taken the time to [notice or be aware] something else has happened. That is what I really like.

I like your idea here. I think the idea often is you are taking something and you are aware of that. You are acknowledging that whether you voice a prayer or not; it is a prayer.

Allan also raised the various sensitivities and perspectives people have about harvesting, drawing upon his broad range of experiences giving tours at the Kortright Center.

I got into trouble leading a group over here with maple syrup. Maple syrup to me is the most benign use of nature that you can imagine. I mean the trees live for ever. I got a stump of a tree that has been tapped for 80 years giving syrup, giving sap. I don't know who they [the visiting group] had just read recently but they were really down on exploiting the maple tree.

Allan's comments about the use stage referred to the care taken for a craft known to be hand made in comparison to a purchased item. He refers to his favourite craftmaking experience of paddle making to illustrate his point. "No one sticks that paddle in when your pushing off from shore . . . even if you know your father made it . . . that is a difference, a sort of admiration for the final product." In describing a wooden bowl he displays and uses at his home on a coffee table, Allan adds that he recognized that some use of a craft existed in the beauty it added to a home.

Allan readily related to the community celebration stages because when he was a youth he had annually witnessed such an event in Port Stanley. He also presently works in a setting that honours many seasonal celebrations.

In Port Stanley every year I would go and watch the boats. There is an invocation, a blessing [of] the boats and blessing [of] the nets. They work all winter fixing their nets and that type of thing and then they bless them. It is a celebration, really the beginning of the fishing season. But really it is their ability to fish that they are celebrating. Now it is institutionalized. They get some . . . priest or minister . . . the fishermen don't care . . . the roots of the things are natural . . . We put wine on our boats . . . Wine is magic.

During the Maple Syrup Festival forty thousand people will visit us. They don't ask questions about forestry. They are celebrating the coming of spring. There is a connection there with the environment. I think it is just great that they are coming here. They could be watching TV or at Yorkdale Mall, but forty thousand people come here to buy pancakes and go on a walk in the forest. It is a celebration.

Having personally visited the Kortright Centre's Winter Solstice Lantern walk and the Maple Syrup Festival, I appreciate the way all of these events are aimed at keeping the sense of seasonal celebration present and allow participants to do simple crafts associated with each season, such as bees wax candles for the winter solstice. Allan mentioned the challenge he faces dealing with budget cutbacks that limit purchasing materials and the impact of thousands of visitors.

Allan's work in storytelling aided him to recognize a link between the returning back stage to the earlier origin stage. He referred to Joseph Campbell's concept of hero's journey that involves a time of grieving when the spirit quest is over. He said this was like the moment when you realize you have just completed a craft and wonder what will

happen next. “The whole idea of . . . you are not going on a trip but you are making something.” Allan readily identified the storytelling process to the craftmaking process.

Allan’s work at the Kortright Centre allows him to establish programs for the general public that combine his interest in botany, folklore and storytelling. Allan emphasized the creation of opportunities for people to get outside in the forest, ponds and nearby natural areas in order to nurture their awareness of the world around them. Stories, folklore and craftmaking are part of the nurturing process that keeps people in touch with the seasonal cycles and sense of magic that exists in the more-than-human world. Allan has a gentle manner that allows him to design and present environmental education curriculum that kindles some sense of a mystical world where plants and trees “call out to you” based on a previous experience of them.

Craig McDonald

I first met Craig McDonald at the winter camping workshop he held during the mid 1980's. He is known by many outdoor educators as the person who kept traditional winter camping skills alive during the decades when many families were leaving their traditional life on the traplines. Craig actively pursued interviews with these peoples. Many of his informants came from the Temagami area. As the skills declined so did the availability of traditional winter camping gear so Craig also accessed elders who could also teach him how to make the crafts he required to winter camp. Eventually Craig started making gear for others so they too could camp using wall tents with wood stoves. Today his basement has unofficially become known as 'a museum' and many winter travelers, stopping in to pick up a pair of mukluks and o-daw-ban (toboggans) will find themselves leaving hours later after hearing Craig explain the details of many things.

This winter I was fortunate to spend a week hand hauling with Craig and four other men in Algonquin Park where Craig works as an Outdoor Recreation Specialist. Craig entertained us all with tales, many tragic, that illustrated the importance of certain gear or using proper techniques on the winter trails. My interview with Craig started out at his dinner table and ended up in his basement where I examined many of the items he had previously referred to like his hand made birch toboggan.

Craig had a vivid memory of a favourite craftmaking experience. It involved going deep into the woods to an incredibly straight birch tree his friend had previously harvested bark from in the spring of the year. Craig having heard his friend talk about the

incredible quality of this particular birch tree had decided to return with his friend in the late fall to harvest the wood. The day they headed out was the day freeze-up occurred. Knowledge about the challenge and importance of finding good straight wood and knowing the optimum time and season in which to harvest it is what Craig possessed. It is also what etched this experience so clearly in his memory.

I fell a magnificent nett one tree, which is the very best tree, a one in a thousand tree. It exceeded in quality any thing that my friend had in New England . . . He had been walking for over a month to find this tree and was kind of excited the wood would also be used and not be wasted, so he volunteered to go with me. We worked on this piece of wood by splitting it all out with hand tools. This immense log we were able to lay in a cradle and split it down as the ice was forming on the lake. We tried to get this tree down in workable fours. It was perfect because it was the time of year I could bring the wood all down and not worry about it drying up. . . One of things you have to worry about when you are building by hand when it is all done the traditional way with no steaming box is keeping it green and not letting the wood dry out. I had perfect conditions because it was starting to snow. I could pile snow on to protect it. So I have these vivid memories of paddling across the lake with these tremendous loads of wood on the canoe, water sloshing in the bottom of the canoe, breaking ice, working the canoe up on the shore, stashing the wood and later retrieving it by toboggan. The wood was just unreal, the grain does not dehisce more than a quarter on eight feet—absolutely die straight. I don't think I'll ever be able to build something of that quality again as I would never be able to find a piece of wood that good. From that piece of wood I also built some square toe snowshoes with ninety degree turns. This stuff was so perfect and so supple that I could tie knots in it.

The intensity of the labour, the changing weather and most importantly the awareness of the unique opportunity made present because of the extremely rare qualities of the tree, made this a very pleasant memory of immersion in craftmaking for Craig.

Craig liked to make functional crafts since his primary motivation was to use them for travel in the winter season. He described his illustrations accompanying his

notes as “elemental art” that worked to convey “just enough to illustrate ideas” without conveying any additional accretions that might confuse the issue he was trying to address. Craig initially made the birch sled for a trip down the coast of James Bay from Fort Albany to Moosonee. Since this trip he has taken the toboggan hundreds and hundreds of miles.

The seeking, making and using stages were clearly the interesting guideposts that Craig preferred to engage in and that he acknowledges connects him to the land. His job at Algonquin Park allows him to be outside most of the day and this inevitably allows him to be constantly seeking craftmaking material for future projects. Much of his understanding of wood has resulted from his searching experiences and his desire to work mostly with his hands. “Often I go to the woods for my material rather than purchasing it. I will do things by hand and go into the woods and collect, therefore I am in the environment and connected that way. I’ve spent most of my life now in the woods so it is just a reason to spend more time out there.” Craig’s time spent out-of-doors traveling and constantly observing has allowed him to make connections to the particular details about where a plant is located geographically, its growing conditions and therefore its quality. He gave several examples of the importance of being aware of the fine details in a landscape when out-of- doors and the ways this awareness relates to craftmaking and connecting a person to the land.

I see a connection, definitely, like knowing where to find these trees. They don’t grow everywhere, they grow on special sites. You have to know canoe grade quality bark. You can’t find it in amongst poplar around here. The best bark is in amongst evergreen, balsam and spruce. For some reason the birch trees that grow there have a much superior bark.

It is not papery. It does not laminate when you bend it. It does not come apart in layers.

Leatherwood, spiritwood is like rubber, super flexible. A person would walk miles for this stuff. It is strong.

The more searching you do the easier the search becomes, because you get to the point where you are learning certain aspect of the search like where the productive areas are. You learn the habitats. Some are really obvious, like you are not going to find a black ash of any quality on the top of a dry hill. But many others are much more subtle than that.

A lot of your products, especially if you are bending in a traditional way, is limited by the quality of your wood. The more you fool around trying to do it yourself the more ridiculous it is going to be. The search is a large part of it and if you don't do the search properly, you can't come nearly as close on the quality [of the end product.]

The detailed, yet subtle knowledge of the land that comes through constantly traveling on it and paying attention, is a particularly important practice of staying connected for Craig.

The tremendous physical labour and the knowledge of the land accompanying the seeking process has played an important part of Craig's craftmaking experience. He realizes that he has to make crafts such as toboggans out of plastic today, not because they are better toboggans but because the quality of good wood has drastically diminished, plastic tends to be more forgiving of the abuses people place on toboggans due to their ignorance of the skill that goes into making them and the basic care they require. Craig compared this loss of skill and awareness of toboggan construction to the general loss of opportunity to learn from the land. He thought the general style of camping experienced today involved few decision making processes compared to the opportunities that existed in the pass. For instance, he described people just having to look on a map to find a campsite, instead of learning to be aware of the features on the

land that would indicate a good campsite: shelter from the wind, easy shore access, nearby fire wood and so on. Craig outlines the loss of skill when he states the “search pattern was different” in previous decades among campers then today as we make purchases for most of our camping gear we “are getting further away and more disconnected from the land.”

What it means to me building light sleighs is that I can no longer do it. I can't do it today because the wood is no longer good enough. I have to resort to building concrete style sleds because people are only willing to pay a certain amount. The cost of building a hand sleigh with the vertical stanchion legs is virtually triple what it is building the other style . . . It is cheaper and that is where everybody is at. They are rough with their equipment. People don't know how to use the stuff and look after it.

Care comes from when you appreciate the intensive labour involved in it. So if you see a rock or tree coming on the trail you make an effort to control your sled. You have a tendency to be much more careful because you know if you ram your toboggan into a tree like that you're liable to break the hood. For other people I just use the plastic. It is a uniform material. I can get it to a certain standard every time. Birch slides just about as good as plastic. In extremely cold conditions you need mud runner and mud does not cling to plastic.

Craig expresses some regret over the loss of understanding and care that results from this understanding when referring to the advantages of traveling with traditional winter camping gear such as wooden toboggans.

Repairing gear while on the trail serves as a microcosm of the craftmaking process. Craig mentioned that he feels most connected to the land, not when he is using the crafts he has made, but when he needs to repair the crafts he has made on the trail, as that sends him back into the woods looking for supplies and using his knife.

I don't think while I am paddling my canoe, oh that came from the land every time I take a stroke. I lose that connection, but then the connection

is rapidly remade when I break something and I have to go back to a tree to make something. Whereas if I break a piece of plastic the connection is not there. Then you're into something else like welding or something that has nothing to do with the land. It is in the gathering process. You get forced back into gathering things and reconnecting that way. Pulling the sled across the land I'm not as connected unless someone asks me. Normally I am not back into that connection unless I break something, and then I am back into using my knife . . . and having to draw some more wood out of the forest to fix things, making the necessary repairs.

When you are repairing and using the materials [the connection] it is essential. Not so much when you are just using it, such as when paddling. When I have to do reconstruction then it is for sure the connection is there. It is solid. It is much stronger then when you are just traveling. I don't become conscious of that [use and connection of the craft item] until I have to make a repair.

Craig's example emphasizes that a strong connection to the land comes mostly through having a reason to be outside, harvesting materials and working with your hands such as what arises when having to make a repair on a craft.

Both the designs and the learning style Craig chooses to use emphasize trusting traditional Anishinabe cultural ways. He knows that Native based designs "have been used for a long time so they are functional." A good design to him is based mostly on function. He mentioned that he does not "worry about the part they tell me not to worry about such as the hood of a toboggan past a certain height," as some design features deal more with aesthetics than function, like the hood example. According to Craig attempting to alter designs to improve them rarely adds better function and is best only done after mastering the traditional craftmaking process.¹

¹ After mentioning this he outlined an example of an exception. The Avery snowshoe is based upon a new technique to weave that can be made tighter and therefore prevents the webbing from sagging when wet.

You make the assumption that they have been doing it for years and years and the people who have taught them have been doing it for years and years, so they know what they are doing. So at least in the beginning for a long time, the very best you can do is imitate them perfectly. There is no point of doing anything else but imitating them as closely as you can and watching everything that they do, every hand movement, how they hold their knife, how they work it, and how they select things. Just watch it very very closely. It does not have to really be a verbal communication—you watch it. That is the most important thing.

Craig had little desire to alter designs to satisfy any public or aesthetic sense and proudly stated in reference to his toboggans that “the only thing that is not functional on that sled is my name.” As he learned craftmaking mostly from Native people still making traditional gear, he eventually started learn in a traditional manner also which involved watching and asking few questions. Having good observational skills is important for craftmaking when so little can be expressed in words. He comments.

A foreign way to learn now is to watch. Our education system is designed in part . . . [with elements that encourage being] creative to find it out by yourself. Know one ever tells you it is already worked out.

. . . the fellows who have taught me this stuff say you are interesting to show because you don't talk too many questions, but you watch closely.

When building a canoe with Joe Smith I imitated him to the extreme and he was so pleased about this. I was one of the first people who did not ask thirty questions on how to do this process. You just watch and watch and watch until you have the level of knowledge to go out and try it yourself. That is my emphasis. Then after you master this you can go and think about trying something different.

According to Craig “a lot of children are not cerebral, so it is a lot easier to get their brain in gear if you involve their hands.” Thinking involves improving motor skills. He described how a keyboard on a piano allows a person to not just exercise their minds, but also their hands. “I think in the craft business it is the same thing. You are

exercising both, especially with small children. Being involved with your hands is very important. It really helps to stimulate the brain.” Craig mentioned that he had been doing serious woodwork since he was in grade five and six. His experience involved “ a lot of observing others and fiddling around myself, getting frustrated and then going to someone to learn how to do it properly.” Again he stressed that “the strongest element is getting information from people who have done it before . . . a lot of this stuff I have learned in the past is from other people.” At a winter camping conference I heard Craig comment upon his concern that “the state of snowshoe making is collapsing rapidly” as in the way to weave an Attikamek

To keep craftmaking skills alive Craig felt it was important to be actively making crafts and he also acknowledged the benefit that actually doing the craft kept a person in contact with like minded individuals interested in craftmaking. Historically he outlined the role of a craftmaker in a community to be that of a specialist. He mentioned that some people are better product makers than others and that in many communities there would always be specialists such as women who were phenomenal counters and could weave snowshoes amidst many interruptions without ever losing their place. He thought it was important that people develop relationships with each other that were based upon dependency and that took advantage of others individual skills. Some of this dependency was related to accessing knowledgeable people who knew the ways of making things that could save hundred of hours of work building. He lamented the loss in cultures that were not able to pass on many craftmaking skills.

Craig found the questions about power tools and rhythm interesting and added health concerns. His view was that power tools eventually got you into production when you could do some things quickly and they did eliminate part of the repetitive stress on a body.

For me, if I had to do something repetitive I would be careful, because if I had to sustain it I would have to vary it, but I have arthritis all over, otherwise I will fatigue. I try not to have repetition.

The idea of adding rhythm in order to endure repetition was commented upon by Craig. He described a very interesting situation he once observed of an old Inuit women who used rhythm to endure long periods of work tapping with a chisel.

It was very fatiguing work and this women—talk about rhythm. She was using the heart beat rhythm. For different parts she had different beats. What stands out in my mind is this little women, but she absolutely dominated. She had these rhythms /// /// /// you could hear this rhythm all over this place. For another part of this exercise she was going like this /' /' /'. The others that were not doing this were pooped out after just 10 or fifteen minutes. They just could not sustain it, but this women had the rhythm. She was going for long periods, an hour, an hour and a half doing this. What I found interesting in this, was the beats were identical to the beats of the drum of the Innu over in Labrador.

Although Craig mentioned that he had “been able to get into certain motions but not rhythms” at another time in the interview he state that “ I snowshoe to rhythm. I hear rhythm when I snowshoe.” Which may account for how with his arthritic body he can still outdo most younger men when walking on snowshoes.

Craig was concerned about the lack of knowledge that would accompany a person who progressed too quickly from hand tools to power tools. He felt that the vast

experience, initially using just their hands tools to work with wood material, was critical to learning to understand trees and wood grain.

What the mechanical tools do is reduces that type of strain so you can cut corners. But it is helpful to have a thorough knowledge before you do that because with mechanical tools . . . you can create all sorts of stuff that is junk. You have to get to know [material first] like when you are working yellow birch and it is a fast growing one compared to a slow one. By looking at the branches and seeing how everything grows there, you can learn a lot about trees. And you learn a lot of other types of stuff you would not get other wise unless you were doing a craft and I know like any one else who works with wood, you get to know an awful lot about wood and its characteristics . . . The best way to learn it is by using hand tools initially and once you know what it is all about then you can use your power tools. What I mean by this is take for instance the orientation on the grain in an axe handle. With power tools you can cut through it any old way you want to make something, but you wouldn't be making something that can stand up to all the shock of chopping. You still have to orient it properly so that you have to have that knowledge [about wood grain] to start out with one way or another. You have to read about it or be shown, or do a lot of trial and error.

Part of the emphasis Craig placed on initially using hand tools and actually gathering your own materials on the land came from his deep commitment to the importance of the sensory stimulation associated with craftmaking. Touching told a lot to Craig and on our camping trip I saw him repeatedly put pieces of wood to his cheek to determine their moisture content. He also emphasized that many senses and not just touch were involved in craftmaking.

Anybody that works with wood would know the difference between birch wood or cedar wood or maple or ash. They all smell different. When I smell those woods, something goes through my mind . . . like a camper who doesn't have to see the wood. He just smells the smoke and can tell you basically what is burning, pine versus cedar or maple. I strongly believe in this sensory stimulation. This to me, is a very important part in it. Like smell is very important when you are working. It tells you when you need to add water. A lot of things require more or less water. Smell is

important when you are working with babiche. There is a time when you have to pull through the line and if the edges are too dry when you pull them through they break, particularly in moose not so much caribou. Moose is very sensitive. By the smell and by the feel you know when to wet it down. The same with wood.

Craig also mentioned an example of making a drinking cup out of a burl. In this example he describes the importance of following the grain of the wood because “in that type of situation you are totally controlled by the shape right there [in the wood].” To hear an experienced wood worker like Craig referred to the wood as in control and not the craftsman is of significance in that it highlights how through woodwork a craftsman can ease their desire for control. In another part of the discussion he referred to collecting bark to make a repair in a cedar canvas canoe because no tin can was available. In this situation he hinted at the animistic aspect of the material that could be sensed when he stated “you are starting with something that is living, You are not just breaking it down.” On our trip I can recall Craig mentioning how connected he felt to the land when sleeping in a wall tent because he could hear all that was going on around him, even a moose browsing and farting.” The sensory interaction made possible through craftsmanship was critical to Craig in both developing and maintaining his connection to the world.

When seeking comments upon some of the stages of the craftsmanship map Craig offered a few comments and examples that touched upon the spiritual connection of the craftsmanship process. He was aware of offerings like tobacco that were put out for medicines and recognized this as an individualized or family based practice. He was aware of certain acts or practices that had a spiritual and /or a practical basis for

explaining them, yet he maintained that he was mostly interested in the practical explanations. He did acknowledge that many traditions were based upon demonstrating respect. For instance, he described how traditionally the snowshoes of a person, whether broken or not, were hung in a tree when a person passed away. Craig was interested in the spiritual aspects of the crafts he made, but simply did not have the time to record and learn everything the elders spoke on. He was choosing to make the practical aspects of camping in the winter season his expertise.

Craig is one of the most knowledgeable people I have ever encountered about the crafts that traditionally originated in from the need to live and travel in the north woods region. His years spent out-of-doors working, traveling and observing the land are hard to find among many people today. The idea that such an experienced man who loves the outdoors would find craftmaking to be an essential part of his way of forming a connection to the land, points towards craftmaking as a practice of environmental awareness.

Freda McDonald

I consider Freda McDonald to be my first craft instructor. I met her when I took the Native Art and Crafts course at Lakehead University. After having stumbled along trying to teach myself how to make moccasins and mukluks from written directions, it was great to finally have guidance from a skilled person. It was evident that Freda had come from a long Anishinabe tradition of making crafts as a way of life. I was also very impressed with the atmosphere Freda set in the class. As we worked on our own projects she would talk to us about Anishinabe lore and tell us stories. Beyond this classroom setting, I was also able to spend a few days watching Freda at work at Old Fort William. Sitting alongside her as she made birch bark baskets I would try to help by splitting spruce roots. Freda worked at Old Fort William as a historical interpreter and as the director of the Native encampment. Many years after these experiences, I was pleased to come upon an article published about her in "Canadian Geographic." The article was about her craftmaking skill and work at Old Fort William. Although retired, Freda was still very active making things when I tracked her down for an interview at her home in Thunder Bay.

Freda saw a definite link between craftmaking and environmental awareness. I was unaware of the effort that Freda had previously made in trying to initiate craftmaking into school curriculum as a form of environmental education. Freda said,

That is why I did propose that Old Fort William do crafts in [environmental] education. I went to the school board of education to propose that they do the same thing. Then I worked at Lakehead University's Arts and crafts program, but it was not fully satisfying,

because I was not taking students out into the country. . . . I have always said that craft, should be used as an educational tool in the schools, but when I proposed this to the school board they did not listen. I believe that if you want to bring students, or anyone, closer to nature, you should get them out there and show them.

Many times Freda expressed her concern that the part of craft education that linked it to the natural landscape was the experience of seeking and gathering craftmaking supplies.

In response to the trend for of making crafts with purchased material, Freda stated “Yes, they supply you with all kinds of material, but that is not craft. To me a true craft is the learning experience and doing. Those other crafts are not really teaching the true or hidden knowledge.” Freda emphasized that a connection to the land comes from a persons experiences harvesting materials directly. Frieda’s concern for the direction the art and craft course at Lakehead University was heading, was based upon the pressure she received to emphasize writing projects over the making of items and to study the crafts made by Native people around the country instead of just in the Thunder Bay region. She referred to these approaches as being superficial and simply writing about the steps involved in making something. They were connected to her own beliefs and spirit because they were from another region. In summarizing her frustration on this she said “They missed it all together. . . . People are not connected to the environment,” because they are not harvesting their own raw materials for craftmaking.” In elaborating on the importance of experiencing the land gathering supplies Freda stated,

You have to understand. You have to know it. You have to know when things become available... weather, time, season. You are really thinking of your environment if you are doing your crafts right. It’s not like crafts where everything is supplied for you; to me that is not craft. To me craft is going out and getting raw supplies, and learning about nature or the

environment that way . . . People nowadays have lost touch, even our own [Native] people . . . and they don't know [how] to start. They don't know where to begin to relearn things, to improve . . . Not many people go out there and get the raw materials any more either. You have to travel so far now. It is so difficult, farther than we use to have to go because of the abuse of the environment. . . I don't think education can teach a child the significance of the environment. A parent has to teach this for a person to really appreciate and fully understand . . . to live out [on the land] you need tremendous skills. The people in the city, the students, never get [to these natural areas] to understand . . . [Craftmaking] is a way of life. You see it happen everyday of your life, so you can't say a specific time you grow up with it. You're born into it . . . [craftmaking] lays there until you use it . . . In environmental education you don't learn the same things [you do when your living on the land]. [Environmental education] is too superficial. [Campers] are really just out there to enjoy the environment as a service. They are really not working in it. They're really not becoming. [They're way of being on the land] is superficial. It is not involving yourself with the creation.

Despite this last comment, I asked Freda if there was any other activities or ways to move beyond this superficial way of relating to the land; she simply stated, "No."

This holistic view of craftmaking as basic to our understanding of the world was expressed by Freda in her apparent frustration at times with my questions that requested elaborating defining and labeling. She had been raised in an environment at her grandmother's side that immersed her in craftmaking and she had carried this way with her even into the city where she now lived. Craftmaking was just a way of life for her.

This holistic emphasis was evident in her response,

They are both art and craft—you cannot separate the two. I have no definition, just work we do with our hands. I don't mean work as labour. I mean work as a leisure thing. Why do people always want to specify and pull a thing apart and label things? I don't understand that. I do it because I enjoy it, and it is part of me. It is part of thinking of the people who might enjoy [the made craft]. It is a creation . . . the things that I do I enjoy. . . it is just a labour of love. If you want to label it, call it that; I don't care . . . Going out in the environment, studying the environment,

understanding the environment, understanding when supplies become available, the right time and wrong time to collect [the raw material]—it is all involved in that. You can't separate it. If you can't separate it, you can't label it . . . They don't understand [the land]. They just pass through it they really don't get involved. For me I need to go out there to learn. To me at one time it was a way of life—just a natural thing to do, to go out there and get your supplies, your medicine or what ever you need. I can't separate it anyway . . . I like doing all [types of crafts] because they take me out there in the environment and I enjoy the environment. I like learning what I can, like what [material] to pick and choose, take home and make something.

The desire not to separate, or label ideas was evident in Frieda's views on technology as well. She mentioned that she viewed art as the “story of [hu]man[s] and his [their] survival and learning” and that “any art and craft is technology, whether you use power tools or not you are still making things, still using the power of the brain in what you are doing.” In her holistic view that Freda held on craftmaking, a strong emphasis on direct experiences of gathering supplies in order to learn was very evident.

The following comments are the statements that Freda made in response to the craftmaking stages I described to her. Starting with the origin stage she emphasized the idea that survival and culture shaped this for an individual. “You are born into it. It is a natural process. Just go out and get raw materials.” In regards to the seeking stage she mentioned that lack of this direct experience “deprives a person, limiting a person of their education of the environment.” In regards to a concern I raised pertaining to property relations and land ownership she added that it is “difficult to find a place that is not owned.” Yet went on to place the significance of ‘ownership’ back upon the ways the land was still treated.

I'm assimilated enough to understand. I own land and I realize enough that you have to respect other peoples property. From my own perspective it [land ownership] does not bother me. What bothers me is to see the ruin, the devastation of the material. People use it until it is all gone. People need to respect and take care of the environment more.

To Freda the most important idea was the way a landowner, craftmaker or any person demonstrated respect for the land.

Freda provided further examples of two ideas regarding the harvesting stage. She first stressed the importance of learning to harvest in a sustainable fashion.

If you are peeling a tree . . . there is a proper time to harvest the bark. Try to do it out of season and you don't get anywhere cause nature has a course to go through and after it has gone through that period we can't harvest it anymore. It is the rule of the land. We must live according to the rules of the land if you are following true craft . . . Their is a lot of information that is being lost because technology has taken over. Big businesses provides you with all the materials . . . they take the knowledge from you by doing that. It is not you going out there and learning . . . For me, I was always interested in crafts. I love working with my hands . . . following my great grandmother around to see how she did things, asking questions, learning things like how she did the processing of different material.

Second she outlined the importance of demonstrating respect through the practice of leaving a tobacco offering. She explained the significance of offering tobacco as she understood from her Anishinabe heritage.

When I am most connected is when I put my tobacco down, just before I am going to take my raw material and then when I take my raw materials. For then I am out there in the environment taking from the land. We always put our tobacco down before we take anything because that is our way of life. I think to let the creator know we appreciate the provisions. To me its a wonderful world and we have to acknowledge that. When we go out there and take there is an element of spirituality of a lot of different lands. [It is] protection to being careful to taking only what you need. This business today they're killing the environment . . . [The offering] is recognizing. It is an act of faith of putting out your tobacco and

recognizing the provisions that are being provided for you and being thankful for that, but when you are given something already processed you lose that oneness.

Frieda's choice of the word "oneness" is interesting as it clearly links her and the act of taking raw materials to a sense of being of the world. Freda immediately recognized the importance of the healing act associated with the repetitive motions involved in craftmaking. She stated "yes! It is a great healing process working with your hands. We are all given this gift to use the hands, to work, to meditate on what it is for, you imagine who it is for—it is a labour of love."

Freda continued to expand upon the imagination involved in craftmaking in her description of the making stage. Freda responded "you are healing, you are sensing, you are smelling, you are using all your gifts of perceptions." She then agreed with me that such sensory-based experiences do not occur as much with pencil and paper tasks. She elaborated on her own personal craftmaking experience. "For me when I am thinking of making a craft, you have an inner eye, you can almost see the item you wish to make and then the real satisfaction is bringing your inner eye out—an actual finished product that is a beautiful feeling."

When I described the utility stage of craftmaking to Freda I mentioned a student who told me he had never imagined using the paddle he had just completed carving. He had only envisioned displaying it. Her response to this was "I understand this feeling of accomplishment. I always keep my first one . . . It teaches me that you make mistakes . . . it is an example, as you go further and further, then go back to that one . . you see what

you have learned.” When I then asked Freda if she uses everything she makes she replied “Oh ya, I use it always.”

Freda elaborated upon my example of the snowshoe dance as an example of a community celebration that was based upon a craft. She explained that the “snowshoe dance was a traditional dance that we use snowshoes for celebration of the first snowfall, for the coming of snow because it is a time for hunting and trapping.” Freda offered no further specific examples of such celebrations, but at this point in our conversation she touched her chest by her heart and said “I know here, but I can’t put it in words...it is right here... I could speak it in Anishinabe.” It seemed as if the bond between the land formed through craftmaking and expressed through celebrations held very deep significance for Freda.

In explaining the returning back stage, I mentioned the example of putting birch bark remnants back on the forest floor and her response was “Yep . . . a lot of these teachings were lost because we don’t preserve them anymore. Everything has been made convenient for us. We don’t even want to come out on the land anymore.”

In summary, Frieda’s ideas about craftmaking seemed to encompass something very immersive that could not be readily divided or defined. Her sense of “being of the world” was at one point called oneness, a labor of love and just part of her life. Her holistic experience of craftmaking is partly captured in her words. “Craft is a part of [hu]man. I believe its the mind, body, soul and spirit that goes with it, if you do crafts. The true craftsman knows the wood, the feel of it, the grain, everything.” The ‘everything’ Freda eludes to must be associated with a “being of the world.”

Skye Morrison

Skye Morrison works at Sheridan College teaching Craft History in the School of Craft and Design. She believes that her long time interest in material culture stems from her childhood experiences finding dinosaur bones because these bones made her feel connected to the earth while giving her some sense of space, place and history. Unlike most other college teachers, Skye holds both a Masters and a PhD. from two Ivy League schools in the area of material culture/folk art. Her higher education, yet continual work at the college level has created some dilemmas as she believes she is perceived as “public enemy number one” or the “most radical faculty member” because she is both a maker and an academic and this is unusual. She explains that “the thing that is scary about me to other people is that I have that cerebral development, but came out of a making development.” She describes her work environment not only as a-intellectual but anti-intellectual as most contemporary craftmakers now are like artists in that they do not like to have to justify or explain their work.

Skye continues to be involved in various activities related to craftmaking in both a professional and personal manner. She has chosen to visit India annually since 1993 to use her folklore skills to aid women in small villages better communicate with the outside world what their textile program represents. Her volunteer work with these women, as well as thirty years of experience with kite making around the world has allowed her to stay grounded in a diversity of craftmaking contexts. She has worked with people ranging from those who stitch to literally put food on their table, to children and

adults who want to entertain themselves with kites to affluent students who want to make non-utilitarian crafts for the Canadian gift market such as the *One of a Kind* shows.

Skye outlined many concerns she held on the direction craft education was heading and the way cultural trends impact the craftmaking process. At numerous times she referred to her struggles to convey to her students that they could not produce good crafts if they did not understand the history of their own culture that originally gave rise to shape the crafts. She also stressed that students required more basic experience in life to develop practical craftmaking skills.

They don't understand how to be a good designer. You really need to get involved with the material and learn how it operates and make sure it is used properly. This is part of our social or perceptual framework.

People often say oh this is a conceptual piece. Then I say "of an excuse for bad craftsmanship. This is ugly and badly finished. You failed in conceptual 101 because I don't know what your idea is. So clearly the craftsmanship or poor craftsmanship has gotten in the way of your idea. You must be clear on how you are making things."

It use to be that students had to printed 20 different yardage's in one year. Today they print 1 yardage for each three years.

The people I work with in India use needles and thread and cloth period. They use one technique, two different stitches and they have a whole repertoire of amazing work they can do. If I ask the students in the textile studio here to do that, to just work with one technique at this kind of scale for a whole year, they would tell me I am crazy. So part of it is cultural and related to life and part of it is what is ecology.

Skye outlined that a lack of "common academic background" was what lead to a lack of cultural understanding that resulted in students making poorly designed and conceptualized crafts. She explained that she could no longer count on students having read or experienced the same literary, social, musical or visual world in which to have

experienced the symbols and metaphors in a culture. She emphasized that the regular person on the street just did not know that Michelangelo and Da Vinci were first “trained as Master craftsmen in the highest of guilds and it was this fundamental training that allowed them to invent so many amazing things.” In a similar manner, Skye expressed an interest in teaching animation students narrative, as they presently had “all technique, but no content. It is all motion with no story.” The importance of common understanding of a culture’s symbols and narrative in combination with skill in the craft mediums, was important aspects of the craftmaking process and part of what Skye stressed in her craft history course.

Skye recognized that to have good designing skills a person required a good understanding in both cultural symbols and ecological design. Skye was aware that today an ecological understanding was missing from our overall understanding of the material world. She described students as people with disposable income trying to find a way to accent themselves or to find what they are missing in their lives through a craft and design program. Skye suggested that a Sheridan College type program did not offer the more subsistent kind of inspiration that had probably influence myself. She mentioned that students could write a paper about the rainforest, even create an item out of material from the rainforest, but that this was no indication that they understood the rainforest ecosystem.

On a camping trip you are already preaching to the converted, but put someone from here [a Sheridan College Student] into a very strange environment and ask them to analyze it as a design process, to experience it, and recognize that it is really deeply philosophical—what the thing is

about. Designing is about that relationship between human and the environment, day to day, and what they actually do.

Skye outlined how students needed to “understand science and biology and all that kind of relevant stuff,” but that this was not being taught. In comparison she suggested I probably had that kind of awareness and therefore an interest in ecology and ecological design.

Skye also identified that a person’s lack of awareness in the manner ecology was part of the craftmaking process stemmed from human self centering and a lack of an ability to work in groups. She suggested that students needed to recognize that they were part of a greater system that included ecological connections.

One thing about the environment is it is a collective experience and it isn’t like a tree or forest replanted. It is a mixed forest. If you wanted to have your students have a mixed forest experience, you would have to get your students to work cooperatively and pool their efforts . . . Design is not an individualistic process nor is craft really. It is an interdependent process.

She outlined a group rug making project she had once tried to do that was “the worst time.” Students expressed grief and anger because not one of them owned the rug. “They could not stand the fact it was not theirs. Within the process of textile making this [dependency on a group] is very important, but they don’t get it. It is not in our culture.” Another example she outlined on this point was in her grant writing workshop were students become outraged when she states that they have just lost the opportunity to get a grant because what they describe does not include a contribution to the culture or community as was requested on the form. She describe students who find it hard to think past doing anything but setting up their own studio “to indulge themselves in their

favourite activity.” Skye’s comments emphasized that the whole design and conception of a craft should reflect a craftmaker’s understanding of ecology.

On the interview day Skye had purposely worn a certain silk outfit to illustrate her comments on the importance of understanding the whole design process of a craft. Her dress was made only from the wild silk cocoons found on the forest floor that had already had the moth chew its way out. Acquiring silk threads from such sources was a more labour intensive manner of making silk cloth, but in comparison to acquiring silk in other manners it eliminated the killing of any silk worms. This method of creating cloth mimics the non-violent beliefs that some religious sects in India choose to live by. Acquiring both food and crafts was to be done in a process that reduced, as much as possible, the harm done to the more-than-human world. In other words the craftmaking design for obtaining silk reflected the ecological process people wanted to become. Skye emphasized that to create such cloth one person had to understand the way the silk worm connected to the local ecology and eliminated constructs of economics that emphasized profit over spiritual beliefs and environmental ethics.

The point is I am wearing something where I know the entire process of where it came off the tree to who stitched it together and who put it on my back. This is a completely weird thing for a westerner at this point. It is probably pretty weird for anyone in India too as we are more and more removed from all this process. But I look at that [indicates dress] and I see the incredibly intense amount of human labour that goes into doing something like that. And all that the market place is doing is asking how cheaply can I get it? How much less can we buy this for? . . . I think of those other students and they don’t have that understanding as their experience in life has never been to take a process right from its beginning to its end. . . So when you ask a question how all that works for the environment, the non-urban environment as being a system with a tremendous amount of inherent design and process in it in an evolutionary

kind of way. If you are going to do design, you are going to need to know where you are coming into it, where you are leaving it and what you're doing with what. Are you destroying it? Are you improving it? Do you have some sense of morality and purpose? . . . You know, like when some people say things like "well I'm interested in nature," well what does that mean?

Skye thought such awareness would be hard to introduce in the western world without immersion programs into wilderness areas or small village community life. She felt people needed some kind of devastating experience to allow them to begin to understand things in a new manner. Such radical education programs would force students and people in general to be more conscious of the impact of the ecological footprint their made possessions created.

Skye also expressed some concern over the lack of utilitarian function that was now evident in the contemporary craft world.

We teach about what is the stuff that people make and it is suppose to have some type of utilitarian function. Now the difficulty is that many of the things which are hand crafted and are artistic are made within the context of say religious beliefs, ceremonial purposes. So eight percent of what is made or sold at craft fairs and markets is either birthday gifts, wedding presents and gifts, because you went on a trip. What do we understand about what a gift is in our culture if you are from Japan and you have to come to Canada and have to take something back which is exquisitely Canadian?

Skye thought that students should get a more scientific basis in ecological training in order to improve their awareness and understanding of the context and design processes embedded within their craftmaking, yet she was doubtful that such changes could be readily implemented.

Skye offered new insights on the terminology associated with the world of craftmaking. Her own Phd. research had struggled to define and understand the oxymoron aspect of the term folkart. In describing her interests she stated she preferred to “look at farm implements than fine art.” Skye was aware that “there is no difference between contemporary craft work and fine art.” Later she expanded this notion, “certainly there is an academic history between art history and material culture studies and certainly a philosophical difference.” She described the craftmaking map as a conceptual framework that added ecology to the continuum previously determining art and craft items. At this time she outlined why she preferred the term *making* or *made items* to art or craft, as it absorbed the notion of placing items in different places along a continuum more effectively.

Skye expressed a strong concern against the placement of emphasis on the concept and not the utilitarian aspect that bound an item. She states in reference to her work making kites that actually fly in comparison to artists made kites:

Maybe what I am doing is original, but that is really secondary to what I want to make, what I need, what is out there. It is like people saying the concept is the thing. Kites that don't fly, well, they are artists and they are making artists kites and they [say they] don't have to fly. Well then they are not kites. They are kite like objects that happen to be made by artists. They have a reference to kites, but they are not kites. If it doesn't fly, it ain't a kite as far as I am concern. What is the problem here is people want the idea of the kite—kiteness—to be more important then whether the stupid things fly. My priorities are in a different place.

Skye realizes that the change that is necessary is multi faceted and requires both a means to implement it and a means to sustain it.

Skye does not judge her students and their upper middle class culture which encourages them to find success within the western cultural context of earning money. The educational change she envisions in craftmaking stems from increasing a sense of community or cultural awareness and reducing the emphasis on the individual or the sense of originality that permeates the western world. This change she suggested could possibly be initiated by increasing tactile stimulation in order to rid the culture of the more abstract, cerebral, business world agenda that focused on making money. She emphasized this by describing a lecture she gave on kite making that emphasized the materials which cost seven cents in comparison to the skill and labour costs of at least two dollars per kite. Her point was she hates being paid a pittance and the pittance that is paid to labourers must be acknowledged in order to induce change and emphasize skill and personal awareness of the world, not the monetary value of the kite alone. She acknowledges that the challenge will be to integrate change into our culture in a manner that will not return it to a money making agenda, especially when we are making practical things. Skye mentioned that only a sophisticated soul will not be bled dry by the market. To this idea Skye raised the concept of the type of Master craft person that exists in China where it is the community that determines a craft's value and not the status of an individual. She also outlined that this is what probably occurs in Native societies, where people are better connected to the land and maintain a sense of survival in their lives. Skye's work in India keeps her conscious of the idea that it is the maintenance of the survival aspect and not the money making agenda that ensures that

crafts are made with an emphasis on improving the quality of life for all and not just making items so an individual can express themselves.

Skye strongly agrees that children need to be making things in order to produce the changes in society that are desired. "Children should have experience making things. By giving computers to kids a year old you are not giving them art materials that allow them to interact and play while making something. They will not find those skills later." Skye then mentions that she has to teach students basic skills like ironing. In contrast to this she described teaching four young girls how to make Easter eggs for four hours. When the girls parents called to make sure they were OK because they had never worked so long on any project before, one child's responded with the line "this is way more fun than television." Skye thinks that children do not have enough of those kinds of frequent inexpensive making experiences any more. Skye believes that the lack of ability to create in schools meant that children did not learn ways of playing and would eventually become bored and tempted to vandalize things. Skye spoke of frequently recalling her own childhood experience being surrounded by "volunteers" and "Mariposa" type events. "You asked how do you get this into peoples lives. I think children should be doing this with their hands. I do a lot of public stuff. People are desperate to do things like this, but it isn't inherent in the culture. It should be, but it is not."

During the interview Skye told me about her next kite making workshop in a small town near her home. Her enthusiasm for volunteering her craftmaking experiences and her descriptions of kite making enticed me to travel to the small country town to join her making kites. In describing why she does such workshops she states,

You know you are successful when you make something at 11:00 in the morning and a kid is still flying it at 7:00 at night. That is something I totally believe in and I have been doing it for 30 years and I'll never stop doing it. I'll do it in villages in India with street children, with wealthy kids, at birthday parties with adults, at picnics . . .

At the workshop after a day of learning to make a kite out of seven cents worth of material I had a glorious afternoon flying it. I felt very rejuvenated and refreshed from all my long hours spent writing at a computer. A sense of being of the world, through connecting with the sky was present and all it took was some paper and thread and my hands. Skye captures this being of the world in her interview passage.

The best experiences of my life have been when I have walked into a strange place with a few supplies and had an afternoon of kite making with various people . . . the best kite flying I do is all by myself . . . It is not showing off. It is not your ego that is there. It is just you and your kite and the place you're in.

Kirk Whipper

Kirk Whipper's first statement to me, "most part of my life has dealt with environmental issues" is an apt description of this man. He was born and raised in the far north in Manitoba in a simple cabin living situation. He describes this time by saying "I lived the ways of the wood, next to a Cree reserve. I learned from them, wore buckskin clothes that sort of thing." His elementary schooling first occurred through correspondence courses, but eventually he was to take geology at the University of Manitoba and teach outdoor-based classes at the University of Toronto. He also helped initiate and direct many outdoor related programs such as Bark Lake, Camp Kandalore, Ontario Recreational Canoe Association (ORCA), and Ontario's Camping Association.

I learned of Kirk Whipper at the CANEXUS conference which focused on the Canoe in Canadian Culture. At this conference it came to my awareness that Kirk had started the largest collection of canoes in the world and that he was presently looking for a secure place to store and display these hundreds of canoes. Intrigued by the idea that someone held such a passion for canoes that they would accumulate hundreds of them, I went to visit the collection. They were stored at Camp Kandalore, the camp Kirk also owned and operated. Presently the canoes have found a home for themselves at the new Canoe Museum in Peterborough.

Walking through Camp Kandalore also left a strong impression on me as it was full of the rustic charm I typically associate with old camps. In describing the camp's program Kirk told me that "its emphasis was on woodsmanship in all its forms."

I was using natural material for arts and crafts, teaching aboriginal arts: spear throwing, .atlatls. . . all those kinds of things. The main theme at Kandalore was to be a good woodsman. This was high status as well as canoe tripping . . . One of the big programs at Kandalore was using natural materials for art and craft work, birch bark containers, fungus art carving, stone craft, bone craft, natural clay craft, soapstone carving—always natural materials. I did not have any crafts at Kandalore that used the Lewis craft concept . . . I have nothing against Lewiscraft, but my idea was that I was under the responsibility of helping our campers and staff to learn about the natural material, the natural world and its many diverse gifts. We all made noggles [cups] out of the burl of oak and we showed them how to seal it when they took the burl off . . . The central theme was helping young people learn to live in harmony with the natural world. That is the central basic theme, some of these other things we can do on the periphery of the program, but the central theme has to be there . . . and as we did at Kandalore trying to understand the ways of the First Nation peoples.

Kandalore was named to mean Canada Lore and was based upon disseminating the lore of the First Nation people. This camp and its program was based upon Kirk's life long interest in learning from aboriginal people. Kirk's experience in the out of doors had taken him from a boy hood trapping and hunting ground where he made his own camping gear to the presidency of the Ontario Camping Association. As he states about his vast experiences "in all these situations I was able to emphasis the environment and what it meant to Native people, not only in crafts but in edible plants , medicines and so on."

Kirk describes the environmental education philosophy that accompanied him in all the programs has been involved in founding:

In all these things I wanted to emphasize and make sure I was living in harmony with the natural world. That was the main theme of the aboriginal culture and at the same time I also got into conservation and heritage.

Through out the interview Kirk emphasized the importance of conservation obtained through both sensory based activities and specifically those of learning harvesting skills. His emphasis on heritage was centered on providing experiences that would allow a person to learn to make items in the original manner they were made. “Always my great interest and passion is to do things in the original way to determine what it feels like.” Kirk’s comments on this topic will be elaborate later. He frequently made reference to some overlying ideas he based his environmental perspectives upon.

I have always liked the concept of reverence for life. That is what is essential. What happened with reverence for birch bark? If we had it [reverence] we would not destroy it . . . I live close to the bush. I was part of it. See, I believe in the web of life concept. . . . all the main things are connected together. . . . we all need each other . . . [Look at the interest in] panda bears. There is something innate in the human being that asks if they [panda bears] become extinct is that our destiny too. There is this important linkage.

Making evident the connection between the more-than-human world and humans is of significance to Kirk and is one of the reasons he emphasizes multi-sensory experiences that encourage people to touch and relate to the world through their senses.

When I asked Kirk for his definition of environmental education he readily responded with an emphasis on sensory dependent experiences.

Environmental education is direct learning. It involves all the senses in order to realize [things.] All the senses in craftsmanship involving natural material, is the prime way of the sensory learning. [Craftsmanship] gives a lot about what we understand about of the natural world.

Throughout our interview Kirk readily returned to the importance of sensory stimulated knowledge as very significant for a person to experience in order to come to know the world.

It behooves us to try and understand the world around us in great detail. One of the ways to do that [understand the world] is in handling natural materials. What does birch bark feel like? What does witch hazel feel and smell like? Getting the multi-sensory approach to the world around us I think it is essential . . . You learn about natural objects when you work with them and get your hands on them. It is part of that multi-sensory thing. All materials have their merits. I like working with birch bark a lot. I like working with rawhide too, [by doing this you] learn about the layers of skin . . . the inner and outer layer. The outer layer is stronger.

The sensory stimulation and the knowledge of where the material originated from is the foundation of Kirk's understanding of the world.

Through Kirk's descriptions of the numerous experiences that he has had making crafts from local material, he conveys a sense that he felt immersed in his surroundings and that he was readily aware of the linkages to the natural environment that made his own life possible.

I guess all the things I made were from my surrounding. That is when I began to realize we are so dependent on things around us. I wore buckskin coats. I wore moccasins. I wore birds feathers and things made of furs. I made bows and arrows out of willows. I made objects out of burls on hardwood trees, cups, that sort of things. I learned to weave rawhide to make snowshoes. Everything I had we made. It was the only way we knew. So I think I have a special appreciation for the gifts of the world around us . . . And then through the museum, I collected for 45 years. I realized that these were all gifts from our surroundings and even to repair a birch bark canoe we depend on what was available in the land. So it is a case of living in harmony with the world around us in order to achieve certain objectives, which were basically the eternal quest to see what was around the bend or on the other side. It [the means to quest] had to have a conveyance. Where are the conveyances? Well they are there... if they didn't have birch bark they used . . . [another familiar material.]

Kirk's descriptions continued with specific examples of the types of awareness of the world obtained through working with natural craft material. He begins his discussion by

describing the way the canoe and snowshoe, examples of crafts of conveyance, were originally determined.

. . . we find out well why is the birch bark so good for canoes? People don't realize that birch bark goes around the tree. All the others [barks] are vertical so therefore they split. You see by manipulating birch bark a long time ago the first people found out that it was the favourite bark [for canoe building] they also found out a lot of other things. They found out about sap and these sorts of things that are part of the life of a first Nations people. They had no drug stores they had no alternatives. They made all these amazing discoveries [through having to work with the material.] . . . How to travel on snow? Well they found out they had to make big shoes. They found out they had to make webbing. They found out that skin was a favourite object . . . and Inuit people found out quickly . . . picked up junk . . . driftwood . . . women stitched on seal skins . . . so tightly it was waterproof . . . dried on frame just the right tautness [kayak results] now that is experimentation . . . that is working with natural materials and finding out, bit by bit, what is the best way to put all this to continual use to their advantage . . . Everything they learned we replicate. Frankly everything we do in the out of doors today is in one way or another a replication of what we learn from first nations people . . . with their philosophies.

As First Nations people learned through the hands-on learning process, craftmaking may be considered an essential part of acquiring philosophies about the land similar to those of First Nation people. This includes the notion of reverence and respect Kirk was consistently raising through out the interview. Following Kirk's mention of the importance of craft was his expression of disappointment in what he noticed occurring in the environmental education experiences offered today.

Kirk did not support the increase in stimulated educational experiences that reduced the impact of learning through direct experience dealing with practical situations. Kirk was critical of contemporary based recreation, typically called adventure education today and survival education as well. He expressed concerned about programs

that emphasized non-useful craft work and eliminated the act, and therefore the lessons, learned from gathering one's own materials.

We need not even play games like those of survival. It is a bit of nonsense this whole survival [curriculum] because the people who were out there are not really surviving they are just playing survival. There is not much urgency to that. You can get away with all kinds of things . . . So there is recreational survival and then there is real survival education . . . I'm a great believer in the camping movement. It started with the idea of living in the bush—the idea of Ernest Thompson Seton and his woodcraft rangers and all of this kind of philosophy. Then camping moved on and it began to creep away from the basic woodsmanship theme into something else like programs that have very little to do with the natural world, but have a lot to do with entertainment of kids in camps. I don't want to be cruel about this, but it was to keep the kids coming . . . so what did we get into water-skiing, basketball camp, and all this stuff. They even tried to call it hockey camp. Those were not camps, those were hockey schools in the out of doors.

As Kirk was also heavily involved in museum work his answers to the questions pertain to distinguishing art and craft and displaying items were informative. To him,

Craft is actually involving one's hands and heart, whereas art grows from the heart and mind but it is a representation instead of a reality of the medium. Art is generally expressing yourself in some medium which . . . would convey a mood or pattern or an idea. Whereas craft has generally been devoted to something you can use. One is more decorative the other is more useful.

His concept of the reality of the medium was centered upon “the innate thrill in the idea that you can fashion something that is useful” while also learning of many other things through the process of working with natural material. Kirk mentioned that the type of art he wished to see more of was those pictures of harmonious scenes that captured some sense of the spirit First Nation frequently referred to. Kirk also mentioned that in comparison to displaying things “using things was much more elemental, much more

primal. Displaying was a step below, a step away. Not in reality but once more in a representation frame of mind. One represents, the other one is.” Such descriptions defining the use potential of a craft to the representational potential of an image encourages the engaging, interacting and reciprocating experience of craftmaking. Craftmaking is practical. Yet of all the things Kirk referred to in our interview, it was his sense of urgency and concern for the loss of opportunities to gather craft material directly from the land.

It was through gathering craft material directly, that Kirk recognized valuable learning opportunities on understanding the ways humans were linked to the land. Kirk also expressed unfortunate regret that such experiences must today be carefully limited due to a high human population.

I believe human beings have this unusual talent to adapt to anywhere—space, underwater, but also this talent is an enemy of people as they tend to over adapt and hence our population is too high . . . The big difference in environmental education between what was and what is, is the fact that we can no longer take what we would like from the natural world to accommodate our art and craft interests. It has to be controlled, limited according to supplies . . . This is [an] important message in environmental education that we have to be careful in how much we take and with what we do with it. So many of the things that were commonplace are not commonplace any more . . . I think it is a good thing to live in a birch bark shelter providing that gathering those things is carefully monitored. We can't go running off half cocked in the bush taking bark off trees. We can't go off and make spruce bough mattresses the way we use to—only if the environment can stand it with out depleting that environment. We can't go running around gathering Indian cucumber uncontrolled. We have to be careful about even gathering balsam gum for dressings and wounds . . . We have to do all these things and this is what I mean when I say their has to be a thorough education on what does it mean to gather natural materials or what ever for crafts. We have to be knowledgeable about how much the environment can stand because the terms are different now There are so many of us and the environment does not really increase with us [our

population.] This is a huge responsibility and I am afraid that there is some degree of misunderstanding of what the environment will stand. . . . I remember my mother and father saying don't take too much of this or too much of that . . . When the hunters come up from Winnipeg I was hired to guide. I was only eight. My father would say to me where did you take them . . . I'd tell him and he would say that is not the best place for them. I know. Oh I see what you are doing you are saving your friends [animals] out there so they will survive. Good for you . . .

I asked Kirk to elaborate on the ways we could balance the need for experiences of harvesting with the need to not over harvest and he offered some useful suggestions. He described only harvesting from habitats where a certain material is plentiful and when an educator is in an environment where a plant "is rare [an educator] might say [to campers] you can't take this because, and you give them the reason. They will understand." He also described a piece of film footage he was in where he picked a hard to find Indian cucumber plant and then after letting young people look at the plant while he explained the cause of its rarity. He had them "put it back . . . why? To make sure there is Indian cucumber in the future. We put it back, watered it. We must do this consciously. It is to teach survival, but it is all part of conservation."

Kirk was very critical of the amount of toy guns that children play with today . He described watching a child use a paint gun to shoot at a bird and concluded "what are we doing selling this kind of thing? The manufacturers have got to be educated too." Conservation and doing the least possible harm to the more-than-human world was a strong ethic noticeable in Kirk's attitude. He also described situations that outlined the loss of general public knowledge associated with harvesting today.

That is the big difference. It is hard to find some of the things that were so common once like birch bark . . . I have a bad time finding birch bark

now . . . I was asked by a film company, the NFB to provide 4000 sq. feet of birch bark . . . [I told them] you can't get this bark now, you have to wait until the June full moon. All I heard at the other end was laughter . . . More over [a person] must now go through our forestry department and all of this stuff . I finally got permission to take birch bark off birch trees as the loggers cut them down in Algonquin Park . . . "We have to get birch bark now" [the NFB guy responded.] Be my guest [I replied.] A few weeks later I got a phone call back saying we will wait for June for the birch bark. They just didn't know [the limited availability of good bark, the importance of the harvesting season, and the protocol today for gathering it.]

To Kirk, learning about the land through direct harvesting experiences was critical as it provided an opportunity to learn specific details involved in harvesting sustainably, to recognize the need to conserve and provide a practical sensory based experience by which to connect with the land.

In a publication of the Canexus conference Kirk mentioned ceremonies done for canoe making and I asked him to talk of these things in relationship to craftmaking.

Oh sure thanking the tree. It happens in most parts of the world were they actually have a ritual asking the tree to transfer the spirit to the canoe. And if they do not feel like the canoe was [will] they would abandon it. I found that even among the Maori in New Zealand . . . I think in the case of the rituals, thanking the tree for allowing its spirit to be transferred to a canoe, it gives the tree special status because in the First Nations reference to all living things are to be respected, they are not just commodities . . . There is a book out called Do Trees have Standings. . . . it refers to the beliefs of the aboriginal people. In some parts of the world there is a very strong sense of appreciation for the gifts that have been provided by the natural world to accommodate various aspects of daily life.

Kirk also made reference to the idea that land could not really be owned. This concept he said was introduced to him through a conversation. "Chief Commanda once said to me how can you own the land . . . rain . . . earth and sun? We all need to have access to these

things.” Kirk brought this notion to a deeper level when he outlines the way a person is a consequence of all that has happened before them.

When we get right down to it, we, our bodies when we are no longer living become part of the earth. They go back to makidina, Mother Earth. So the plants that grow on the earth and so on, are the energy—our ancestors... so if you want to carry it that far there is even that kind of linkage to the past and I think that was recognized by first nation people for a long time; that they are the product of all that has gone before.

More specific examples of this kind of in depth understanding came when Kirk also referred to a friend of his who put a piece of birch bark in a composter and emptied the composter over seven times before the birch bark started to show signs of composition. To Kirk the returning back stage was not so much about recycling but of thinking long term into the future because you were aware of the long roots of ancestry you also came from.

Kirk’s comments conveyed a long range of experience in this area. In his lifetime he had seen the slow decay of specific craftmaking skills and what he generally calls woodsmanship skill. He recognizes that with out long term exposure to craftmaking experiences that occurred throughout a person’s life span, a close association with the land, the woodsmanship skills would be lost. To develop these skills people require an exposure over a long period of time to the atmosphere of learning directly from the land.

When I go on canoe trips . . . they [young canoeists] don’t have any notion at all about what is out there. Which is sad, as here they are traveling through what is left of the wilderness and they have no notion of what they are traveling through. And that is our challenge in outdoor education.

Like when putting the pitch on the birch bark canoe, knowing when it is the right hardness and viscosity.

Sad to say that generally camping has leaned away from an intensive woodsmanship experience . . . [Leaders are no longer] seeped in the ways of the woodsman.

Kirk described for me the type of program he envisioned starting many years ago when he first recognized a need for “establishing a national school for woodsmanship leaders.” He described the manual he wrote outlining the proposed curriculum. Unfortunately the program never proceeded due to funding cuts.

It was a week long and all the skills related to the natural world. I started the National canoe Instructors school, then I realized that here we were sending all these people canoeing and they have no idea what they are doing out there. They have no idea what they are traveling through and now I realize they need a companion woodsmanship school . . . One for winter conditions and one for non winter conditions.

Kirk is still trying to establish a discussion group that might lead to re-establishing this type of woodsmanship skill in some manner. He elaborates,

I think we have to work with the camping movement to reinstate these kinds of skills. I think we have to encourage school boards to include this in their curriculum . . . All schools should have quite sophisticated programs in outdoor education, but the boards say you can't afford that. I say, well you can afford it when you think of the long range consequences . . . Outward Bound, theoretically, should be a group that addresses this part, this way, but it doesn't. Hahn was not able to inject this into the Outward Bound school.

Kirk seemed very pleased to hear that I was studying the importance of craftmaking and gave me several very encouraging remarks to continue to do research in this area despite any lack of support I might be encountering. “There is not an awful lot on this craftmaking today. It is what I call convenient arts and crafts that is predetermined by pre-fabricated materials.” In sharing some stories of my own experiences teaching craftmaking to youth groups Kirk also described a particularly fond memory of teaching

birch bark basketry on a canoe trip. Kirk concludes that “all kinds of things happened. The primal experience of making something that actually held water was the highlight for the kids.” For Kirk, all the crafts made come from the “gifts of nature.” He is hopeful that through sensory experiences that revive the skills of woodsmanship a deep holistic vision of the land will be recalled and people will once again recognize the links between themselves and the land. He described this link by referring to the widespread Panda Bear interest and explaining that this interest in the faith of the panda bears was really a demonstration of concern for our own human faith. The existence of the more-than-human reflected the existence of the human world because they were so interconnected in the web of life. To Kirk, craftmaking provided experiences that allowed people to understanding heritage and conservation, then together these experiences explored the human/more-than-human linkages.

CURRICULUM VITAE

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Education

PhD in Environmental Education, Faculty of Environmental Studies,
York University, ABD

Masters of Science (Environmental Education emphasis), obtained through
the National Audubon Expedition Institute and Lesley College. USA, 1990

Bachelor of Education, Lakehead University, Ontario, 1986

Honour's Degree of Outdoor Recreation, Lakehead University, Ontario, 1984

Bachelor of Natural Science, Lakehead University, Ontario, 1984

Additional Qualification/ Courses --Education Focus

- | | |
|------|---|
| 1993 | <i>Tribes Training</i> , Rainy River Board of Education, ON |
| 1996 | Harmony Foundation Program for Environmental Values, BC |
| 1991 | <i>Family Studies Level One Certification</i> , Senior Division, York University |
| 1991 | <i>Teen Suicide</i> , Rainy River Community College |
| 1991 | <i>Project Wild training</i> , Ministry of Natural Resources, Fort Frances |
| 1989 | <i>Primary Qualifications</i> , University of Toronto |
| 1988 | <i>Curriculum Development for Outdoor Education</i> , University of
Northern Illinois |
| 1988 | <i>Adventures in Human Services II</i> , Georgian College of Applied Arts and
Technology |
| 1983 | <i>Teacher of Native Children</i> , Lakehead University |

Academic Positions and Teaching Experience

Course Director

- | | |
|-----------|--|
| 2000 | <i>Making: As A Practice for Environmental Awareness</i> , York University |
| 1998-2000 | <i>Environmental Education</i> , York University |
| 1996 | <i>Art Education</i> , Lakehead University / Seven Generations Education Institute |

Teaching Assistant

- 1996-1998 *Environmental Education, York University*
 1996-1999 *Nature, Society and Technology, York University*
 1987-88 *Foundations for Outdoor Education, McMaster University*

Other Teaching/ Professional Education Experience

- 1990-91 Assistant Field Director-National Audubon Expedition Institute
 (High School & Undergraduate students-taking a variety of courses)
 1991-96 Grade 6,7 & 8 classroom Teacher, Lac La Croix First Nation FFRR Bb.of Ed.
 1996 Associate Teacher for Lakehead University Teacher Education Program
 1987-90 Substitute Teacher-Halton Board of Education
 1988 Project DARE Summer Teacher, Parry Sound School Board
 1986-87 Grade 5 & 6 classroom Teacher, Nibin Amik School Board
 *see employment history for further details

Awards

- 1999 Association for Experiential Education Scholarship
 1998 Ontario Graduate Scholarship, York University
 1998 Dean's Award for Academic Excellence, York University
 1997 Zdenka Volavka Fellowship, York University Fine Arts Dept.
 1996 Helen Keefer Scholarship, F.W.T.A.O.
 1996 Ontario Hydro Scholarship, Harmony Foundation Program for Environmental Values
 1996 McEachran Clan Award, McEachran Clan Society
 1995 Common Curriculum Innovation Award, Ministry of Education
 1993 Canadian Environmental Citizenship Award, ECO-L.L.C., Ministry of the Environment
 1989 Audubon Expedition Institute Assistantship, A.E.I.
 1981 Lakehead University Most Improved Woman's Basketball Player
 1980 Lakehead University Entrance Scholarship, Lakehead University
 1980 Ontario Scholarship, Ministry of Education
 1980 Rotary Youth Leadership Award
 1989 Royal Ontario Museum Semifinalist, Dinosaur Marionette Contest
 1979 Cambridge Sewing Festival Semifinalist

PUBLICATIONS

Refereed Journal Publications

MacEachren, Zabe, "Crafting as A Practice of Relating to the Natural World," *Canadian Journal of Environmental Education* 5 (2000), 186-199.

MacEachren, Zabe, "Crafting As Environmental Education," *Selected Monographs from the Association For Experiential Education 27th International Conference* (1999), 12-18.

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MacEachren, Zabe, "Discovering Ourselves Through Environmental Autobiographies," *Pathways, Council of Outdoor Educators of Ontario* 11 (1999), 9-13.

Barndt, Deborah., MacEachren, Zabe & Rigby, Heather, "Reflections from the Neck Down: The Body in the Classroom," *Pathways, Council of Outdoor Educators of Ontario*, 11 (1999), 11-14.

MacEachren, Zabe, "Listen to the Tale to Your Tail," *Pippin—The Newsletter for the Toronto School of Storytelling* 6 (1998), 5-6.

MacEachren, Zabe, "Traditional Native Technology and Design," *Rainy Lake Ojibway Education Authority* (1996), video script writer and narrator.

MacEachren, Zabe, " Wild Rice/ Math Curriculum," *Rainy Lake Ojibway Education Authority*, (1996).

MacEachren, Zabe, "Winter Within," *Boundary Waters Journal* 9 (1996), 8-14.

- Henderson, Bob and MacEachren, Zabe, "The Paddle Dance," *Pathways, Council of Outdoor Educators of Ontario* 11 (1996), 6-7
- MacEachren, Zabe, "Why I tell Stories," *Pathways, Council of Outdoor Educators of Ontario* 7 (1995), 9-13.
- MacEachren, Zabe. "Life Around the Lake Curricula Unit," *Rainy Lake Ojibway Education Authority* (1995).
- MacEachren, Zabe, "Respect for Nature: The Fourth R," *Green Teacher* 40 (1994), 32-34.
- MacEachren, Zabe, "Ballerina Footwear: Hiking Boots," *Pathways, Council of Outdoor Educators of Ontario*, 4 (1992), 6-7.
- MacEachren, Zabe, "Fringes, Fiddling & Flying," *Pathways, Council of Outdoor Educators of Ontario* 3 (1991), 8-12.
- MacEachren, Zabe, "My Desk is Under My Bus Seat," *Pathways, Council of Outdoor Educators of Ontario* 3 (1990), 30-31.
- MacEachren, Zabe, "Prospect Point," *Pathways, Council of Outdoor Educators of Ontario* 1 (1990), 28.

Presentations, Lectures and Workshops

- 2000 "New and Ancient Campfire Rhythms to Create" Council of Outdoor Educators of Ontario Annual Conference, Bark Lake, ON
- 2000 "The Role of Storytelling and Craft-Making in Experiential/Environmental Education" Outdoor and Experiential Education Program, Queen's University, Kingston, ON
- 1998 - 2000 "Craft or Art Which is more Ecological?" Arts and Science Program, McMaster University, ON
- 2000 "Making Experiences: Relating to the Wilderness in a Meaningful Manner" 4th Annual Women and Wilderness Network Gathering, Camp Kawartha, ON
- 2000 "Stories from White Water Lake" Wilderness Canoe Symposium, Toronto, ON
- 2000 "Creating Resonance in Environmental Education" Council of Outdoor Educators of Ontario Annual Conference, Bark Lake, ON
- 1999 "Crafting as Environmental Education" Association for Experiential Education 27th Conference, Rochester, NY
- 1999 "Crafting as a Guide to Environmental Awareness" Holistic Education Conference, Ontario Institute for the Study of Education (OISE) Toronto, ON
- 1999 "The Connections Between Storytelling and Crafting in the Tales Told by Women" Oral Narration Conference, University College of Cape Breton, NS

- 1999 "Crafting Literature and its Portrayal of the Environment" Association for the Study of Literature and the Environment Conference, Kalamazoo MI
- 1998 & 1999 "The Basics of Environmental Education means Crafting" McMaster University, Foundations of Outdoor Education, ON
- 1997 "Resonance of Earth, Air, Fire, Water" Artistic Dance Director, Dancer and Costume Designer, Art Gallery of Ontario, Eco Art & Media Festival, ON
- 1996 "Clay, Pottery and the Long Sioux Mounds" Council of Outdoor Educators of Ontario Annual Conference, Six Nations, Brantford, ON
- 1994 "Storytelling To Be Alive" Council of Outdoor Educators of Ontario Annual Conference, Algonquin Park, ON
- 1993 "Environmental Education on the Edge" Fort Frances-Rainy River Board of Education, Professional Development Workshop, ON
- 1992 "Outdoor Education" Fort Frances, Rainy River Regional Woman Teachers Association, ON

Storytelling Performances / Experience

- 2000 Guest Storyteller, Chord Co-op, Toronto
- 1999-2000 Decor Committee, (Harbourfront) Toronto School of Storytelling Festival Weekend Teller at Razzamatas, Festival Week, Toronto
- 1999-2000 Children's Environmental Musician/Performer, Peel District Groundwater Festival
- 1999 Co-chair, 1999 Toronto School of Storytelling Festival Week
- 1999 Performer, Spadina House, "Tales from Past Campfires" (with Bob Henderson and Linda Leckie)
- 1998 Writer and performer, "How Fire Came To Be" DeLeon Eco-Art Gallery, Eco Art & Media Festival
- 1997 Writer and performer, "The Maker's Who Lived With Feeling Under Their Skin" Art Gallery of Ontario, Eco Art & Media Festival
- 1994 Featured Storyteller, writer and performer of "Nanabojette of the North Woods." Council of Outdoor Educators of Ontario Conference, Algonquin Park

- 1993 Personal backpacking trip in Kluane, Yukon, and Chilikoot Pass, Alaska
- 1992 Apprenticeship with North Woods Ways, Garret and Alexandra Conover,
Traditional Guides, Maine
- 1992 Apprenticeship with Jerry Stelmok, Master Canoe Builder, E.M. White wood
and canvas canoes, Maine
- 1989-91 Assorted Audubon Expedition Institute trips
E.g. 9 day backpack - Rainbow Bridge, 7 day backpack - North
Cumberland Island, 5 day canoe trip - Burnt River, Louisiana, 5 day
backpack - Yosemite National Park, 6 day backpack - Big Bend, Texas
- 1989-91 Solo backpack trips, 5-12 days, Sabino Canyon, AZ, Grand Canyon, CO
- 1988 Traditional Winter Travel and Camping workshop, L.M. Frost Centre, Dorset. ON
- 1988 Participant, 15 day dog sledding and wall tent expedition in Northern Manitoba
- 1987 Leadership Expedition Trainer, Outlook Hamilton, Algonquin Park, ON
- 1985 Participant, Tom Brown Jr. Basic Survival and Tracking Course
- 1985 Member, Lakehead University Kayaking Club
- 1984 Participant, Rendezvous Fort William Expedition, Lachine, QB to Thunder Bay, ON
- 1984 Participant, Survival in the Bush, Winter Course, Thunder Bay
- 1980/1982 Vice President & Public Relations executive of Lakehead University Outdoor Club
- 1979 Participant, Rock climbing course, Outward Bound

Membership & Associations

Association For Experiential Education (AEE) -Member

*Council of Outdoor Educators of Ontario (COEO) - 2000 Board Member, Far North Rep.
1999 Annual Conference Organizer
Member*

Ontario Society for Environmental Educators (OSEE) -Member

*Toronto School of Storytelling - Member
Co-chair of 1999 Festival Week of Storytelling*

Women and Wilderness Network - Life Member

Certifications

Bronze Medallion/Cross Swimming (current)

ACUC (Scuba Diving) Standard Certification

Force 6, Wind surfing Certification

Red Cross Instructor and Royal Life Saving Aquatics Instructor

Ontario Recreational Canoe Association (ORCA)-Trip Leader

First Aid - Red Cross Standard (current)

- St. John Ambulance

- SOLO

- Survival in the Bush Wilderness Travel First Aid and C.P.R.

Hunter's Safety Certification

Coaching Level One

Grade Eight Piano, Royal Conservatory of Music

Small Craft Safety Instructor

Class F Driver's License