

**PRE-SERVICE TEACHERS BRANCH OUT: LEARNING TO LEARN
TOGETHER THROUGH THE *CARING TREE* MURAL PROJECT**



by
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for the degree of Master of Education*

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ABSTRACT

While there is a growing body of literature on the educational benefits of engaging in community murals, less attention is given to the pedagogical significance of community mural-making in schools and Faculties of Education. *Pre-service teachers branch out* is a thesis which explores this significance and looks at how the inclusion of community murals as research in environmental education can enrich practice. Specifically, this thesis supports community murals as a way of learning and doing research that is: participant-centered, process-oriented, relationships-based, and activist in aims. This thesis argues that these qualities, at the heart of community murals, are important for enabling an approach to environmental education that honours its inherent complex, embodied, and political nature. The research is co-constructed through a community mural project with six professional year students in the Faculty of Education at Lakehead University. Our knowledge is represented in this thesis through art and text, which respond to the research questions: How is environmental education knowledge created and negotiated through a community mural project? And, what is the nature of the relationships amongst the participants, throughout this process? The findings reveal some insights for addressing complex challenges facing environmental educators, thus promoting participation in creative and collaborative forms of inquiry.

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His sentiment exposed –
Care, passion, advocacy –
An invitation.

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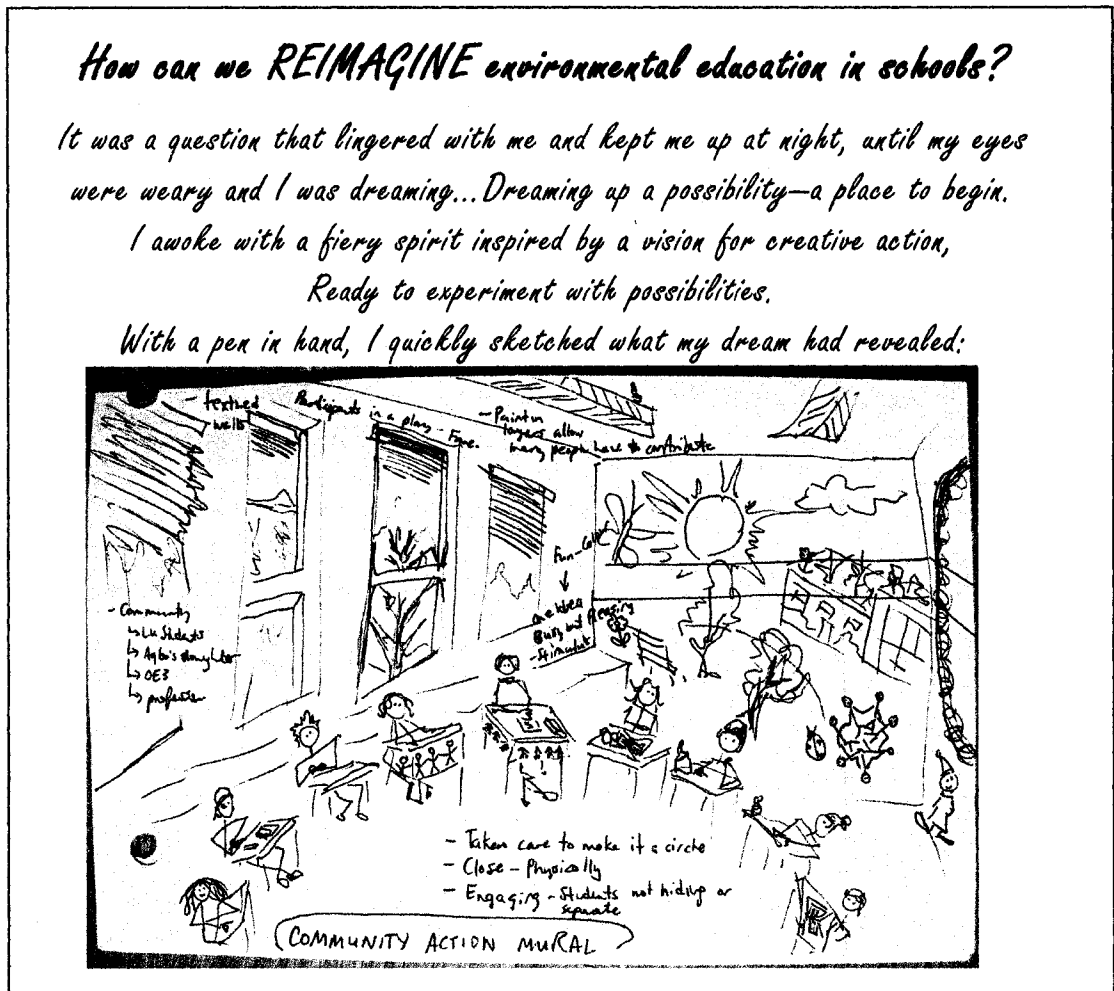
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CHAPTER 1: DREAMING UP SEEDS OF POSSIBILITY

Introduction

Provoked to research

Pre-service teachers branch out grew out of the experiences and concerns of a team of students in a teacher education setting and connected to their desire of becoming creative, caring, and critical educators. The research was provoked by a question and a dream—this is where the journey begins:



Postcard 1. Reimagining environmental education through art.

Art plays multiple roles in this research. Postcard 1 reveals one way art has infused the research text, through the use of *postcard art*.¹ Throughout the thesis, postcards are used to represent snapshots of noteworthy thesis moments captured in a minimalist style, through image and/or expressive text. The first postcard represents a moment in time and expresses the voice of an inspired student in the Outdoor Ecological and Experiential Education (OE3) program at Lakehead University. The time was winter 2005; the voice was mine; the question was posed by my OE3 instructor, Bob Jickling; and, the vision became a reality as a mural on our classroom wall. Once it was painted, it stood as a symbol of community action as well as a display of arts-based environmental education (see Figure 1).

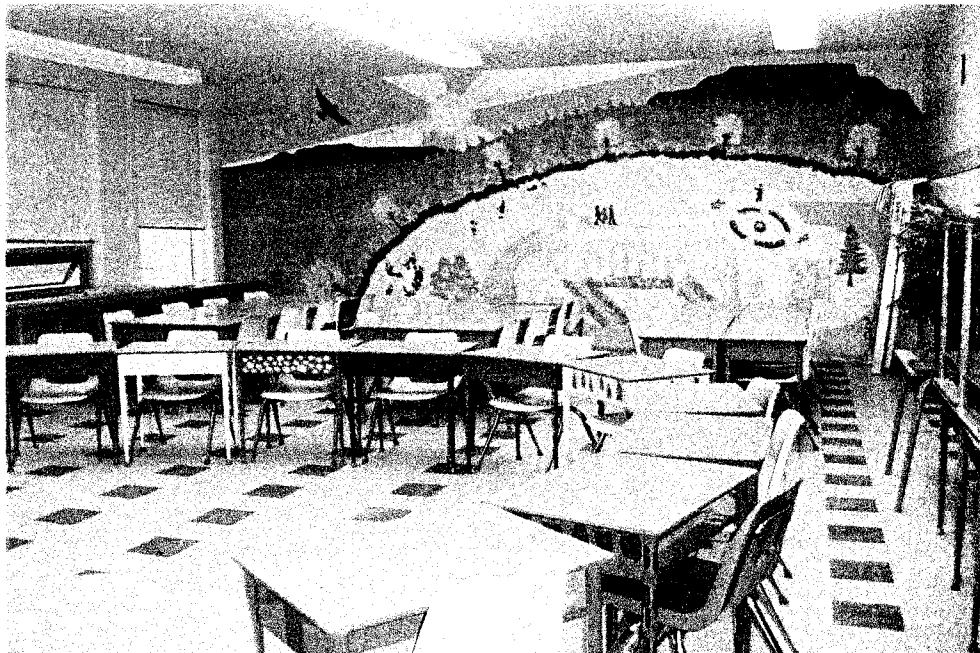


Figure 1. First completed community mural.²

¹ In this usage, text is considered in its broadest context, as any “actions in the world that can be ‘read’” (Finley, 2005, p.686).

² This mural was created by a group of artists, including myself, from the OE3 class. Its theme communicates a vision for a “greener” campus. It was painted across a 20-foot classroom wall and dramatically changed the aesthetic qualities of that learning environment.

One concern which was explored and addressed by this mural involved responding to the lack of environmental education in schools and Faculties of Education.

According to Connie Russell, Anne Bell, and Leesa Fawcett (2000):

Environmental education remains on the margins of most teacher training, whether pre-service, in-service or graduate. It is strong only in institutions where there is a committed faculty member. Even then, with the exception of a few programs, environmental education at best is offered as a single course among many electives. At worst, some institutions do not offer even a single course. (p.201)

I was fortunate to participate in a teacher education program that Russell et al. (2000) describes as an *exception* to the norm amongst Faculties of Education in Canada. Specifically, Lakehead University's Faculty of Education offers a program in Outdoor Experiential, and Ecological Education. This unique B.Ed degree is the only one of its kind in Ontario which provides its graduates with a teachable subject in Environmental Science. Further, Lakehead's location (situated in Thunder Bay, Ontario, on the north shore of Lake Superior) tends to draw students who are interested in outdoor/nature pursuits. Despite these and other factors, I did not feel that environmental education was any less marginalized at Lakehead University. At best, environmental knowledge was included in some of my classes outside the OE3 program. Thus, for the majority of students and faculty, it remained undervalued and overlooked in everyday practice. Tom Puk and Dustin Behm (2003) believe this to be a result of a *diluted* environmental curriculum. According to their study, there are a variety of barriers preventing environmental knowledge from being included in schools (e.g., minimal environmental subject matter in curriculum documents and limited time for meeting curriculum expectations).

Bob's question about reimagining environmental education in schools was meant to be an exercise in transcending these, and other barriers that can prevent environmental education from being included in everyday schooling. By responding to the lack of environmental knowledge in school-based learning, the first community mural project also demonstrated the possibility for change in schools and Faculties of Education. Creating a community mural in a classroom (a dominant setting for school-based learning) made environmental knowledge more visible (thus including it) in an everyday context. It was a reminder of multiple values and messages, including the beauty of the natural world and importance of environmental understanding in education.

Just as Bob's question had provoked within me a creative restlessness, so too did the community mural, this time by a feeling experienced during the process of working with others to create an environmental education mural. There was something rich coming out of this experience, growing out of its process. It was a way of knowing and being with others that was different from any experience I had had so far in the Faculty of Education.

The difference between my experience learning in the community mural project and other experiences in teacher education became evident after reading Paulo Freire's (1970) *Pedagogy of the Oppressed* (a book chosen for one of my OE3 projects). Freire suggests that the dominant view of knowledge practiced in education is that of a *banking method*, in which knowledge is deposited often by teachers—the depositors, into students—the depositories. He argues that the depositing process removes vibrancy from knowledge, leaving it, “motionless, static, compartmentalized, and predictable” (p.71).

Freire (1970) offers an alternative view that, “knowledge emerges only through invention and re-invention, through the restless, impatient, continuing, hopeful inquiry human beings pursue in the world, with the world and with each other” (p.72). He refers to this alternative process of learning as “problem-posing” (p.79). The first community mural project exemplified the possibility for such an approach to learning and evoked within me a craving for more creative and collaborative learning experiences in schools and Faculties of Education. If environmental education was to become a part of everyday schooling, then how might community murals play a role in making space for it both physically (i.e., through image), and also contextually (i.e., through community and collaborative processes)? I sensed the importance of this experience to my future work in education so I could not let it go—it had to be probed further. It was this embodied experience that sparked my desire for creative inquiry, led me to graduate studies in education, helped in framing the research questions guiding my journey, and began my journey as a mural artist. I describe myself as an emerging community artist, having completed two previous murals before this thesis project, and begun to examine community murals as an art form.

The branching out begins: Emergent research questions

This study combined my interests as an environmental educator and emerging community artist. As such, its methodology demanded an interdisciplinary approach. For the most part, I drew from participatory action research and arts-based educational research; but also, as this was an inquiry into collaborative learning, social constructivism played an important role in the research design. Specifically, I found it helpful to consider community murals as research. As a guiding framework, this implied that the research

was participant-centred, process-oriented, relationships-based, and activist in aims. These characteristics served as guidepost which helped to frame the research questions. Specifically, the questions asked:

- How is environmental education knowledge created and negotiated through a community mural process? And,
- What is the nature of relationships amongst participants throughout this process?

Another community mural project was initiated in the Faculty of Education as a medium for exploring these, and other questions that would arise throughout the process. I worked with six participants for nine weeks to create a classroom mural, entitled the *Caring Tree* (see Figure 2). I respond to my research questions through an exploration of the outcomes from this mural's process and products.



Figure 2. The *Caring Tree* mural: A lasting outcome of this thesis's work.

This thesis is organized into seven chapters: Chapter 1, *Dreaming up seeds of possibility* introduces the research; Chapter 2, *Laying down the ground work* explores community arts and environmental education theory and relationships as they fit with the research questions and identifies the significance of this research; Chapter 3, *Exposing the research at its roots* outlines the research methodology by first sharing its epistemological and ontological assumptions, and then by exploring their possibilities for practice; Chapter 4, *Bringing the research to life* introduces the who, where, what, and why of the research—the participants and methods are described to bring the project to life; Chapter 5, *Once upon a Caring Tree* shares a story about the community mural project, which begins the discussion on what happened and what was learned in the research; Chapter 6, *What was learned from branching out?* works more deeply into the research, focusing on the research questions and exploring the knowledge and expressive outcomes that emerged from the process; and Chapter 7, *Further musing on the Caring Tree mural project* offers a resting place that works to clarify the teachings of the research, while also revealing the boundaries of its work.

In evaluating the quality of this research, I ask the audience to consider an alternative method of assessment common in arts-based education research, and to avoid considering whether this is good arts-based educational research but rather, to question: “What is this arts-based [educational] research good for?” (Sinner et al., 2006, p.1253). In this way, the evaluation can focus more on the potential contributions and usefulness of this work and less on how this research measures up against traditional qualitative research practices. In this regard, I find Elliot Eisner’s (2002a) notion of art helpful. He distinguishes a work of art as either: a “work of *art*” or “the *work* of art” (p.81). In taking

my time to create this thesis, I challenged myself artistically to create an aesthetic work of community art; but more notably, *Pre-service teachers branch out* revealed the work of community art to reimagine and enrich environmental education.

CHAPTER 2: LAYING DOWN THE GROUNDWORK

Review of the Literature

A need for research

My early study into the existing literature on community murals in environmental education as well as general education research was disconcerting. Community mural-making was not a new idea (Barnett, 1984; Cockcroft et al., 1977; Lippard, 1984); its many benefits, such as creating community, voicing marginalized knowledge, and revitalizing indoor/outdoor spaces have been widely recognized (Barndt, 2004; Conrad, 1995; Gude & Huebner, 2000, Lowe, 2001). Further, David Conrad (1995) discusses community murals as educators for democracy. Yet, as a way of learning and teaching environmental education, or other subjects, in schools and Faculties of Education, community murals were not being explored in educational research.

For the past 7 years, I have been learning and teaching about environmental education. Though, it was not until I participated in a community- and arts-based project that I began to imagine the possibilities of practicing environmental education as a complex, embodied, and political pedagogy. Later in this chapter, I will discuss this further to reveal the pedagogical links I have considered between community murals and environmental education. This discussion is fundamental to understanding how my research makes a new contribution to environmental education research. As an introduction, my first community mural experience inspired curiosity about how expressive outcomes (Eisner, 2002b) emergent from such a process could inform teaching and learning in environmental education.

To begin, I present a brief history of community murals in North America as a way to bring this form of art into the field of environmental education, but also to act as a more general introduction to community murals. From there, I explore the environmental education theory relevant in my research. Throughout the chapter, connections between environmental education and community mural-making are made.

Community murals in North America

In Canada, the community arts movement has been developing for over 30 years. As Deborah Barndt (2004) notes, the development of community murals has been a response to a diversity of factors: corporate globalization which has fuelled an increase in the commodification of culture, new ways of framing and making art introduced by Canada's multiculturalism, the call for the democratization of arts by artists of colour, the trend of artists practicing their social consciousness by working with communities to make and create art, and the increase in community arts grants supporting and promoting the voices of marginalized communities.

These factors, although set in a Canadian context, also have their roots in the United States. Specifically, community murals were given their name in the 1950s and early 1960s in the US as a way of validating their place in the socio-political context of the civil rights movement. Not everyone in the art world was supportive of the community mural movement (Felshin, 1995). Those who were critical of mural art considered it a lower art form and questioned its aesthetic value and integrity (Barnett 1984; Kester, 1998). In response, community artists began to redefine aesthetics in art, by giving their work meaning in terms of its transformative powers in social justice. For example, Alan Barnett (1984) argues:

The source of creativity is the labor process itself. It changes nature, shapes it to meet human needs and provides new satisfactions. By changing the world and their relations to it, people change themselves and grow. And the pleasure of growth—of greater comprehension and more fulfilling interaction with the world—is at the root of aesthetic delight. (p.383)

This focus on a relational process shifts emphasis commonly associated with evaluating aesthetic quality. The dominant position in art criticism is that the final product is judged, not how the art was created. As Barnett highlights, in community murals “the labour process itself” is an important aesthetic consideration. Since this process is collaborative, shifting aesthetic value to process implies that the *work* of art becomes relationship-based.

To illustrate this further, I share a story about the *Wall of Respect*, a celebrated mural that was created in Chicago in 1967 (Barnett, 1984). This mural was co-constructed by 21 artists (visual artists, photographers, and writers) who were united by a collective aim: to share with the world a *different* story about Black people. The authors’ voiced their purpose through image and text. On a caption located on the corner of the mural, it states, “this was created to honor our Black heroes and to beautify our community” (p.50). According to Barnett, “beautify” meant more to the artists than the aesthetics of the mural, it also meant raising awareness in the local people of “their ‘soul’, creativity, and power, a consciousness that was expressed by the then new affirmation, ‘Black is beautiful’” (p.50). In this way, aesthetics were not only defined through process and self-identity of the participants, but also by political purpose. When the mural was completed, it stood as an example of possible change through sharing a new story about Black people, offered a place for community gathering, and served as a catalyst for many murals to come. Let it stand as an example of what is possible for

environmental education (i.e., complex, embodied, and political praxis that is co-constructed through community and presents new ways of participating in the world).³

From this example, then, I ask: How can this work help us to imagine possibilities within our field?

As the community mural movement grew in the late 1960s, motives of the artists and communities who created the various examples of public art began to branch out to include: opportunities for local youth to connect with art and community, and means to salvage downtown areas by transforming the space with art (Barnett, 1984). In all cases, though, community murals were tied to aims of social justice. Mural art became known as an art made by the people, for the people. As Barnett notes, “murals give voice to ordinary people’s concerns and involves them in the creation of images that hold meaning for them and for their community” (p.116). In this way, murals offer art in an accessible form that can be useful for transforming current and/or historical events into deeply felt political aspirations or visions for the future (Conrad, 1995).

In my research, the mural offered multiple opportunities for creating change in the Faculty of Education and therefore, in the individuals who were becoming teachers, as well as in the faculty members who were teaching them. The mural could present a new story about education that would become part of the learning and teaching in the classroom within which it was painted, as such it could inform the work of students and teachers in that setting. Moreover, as a part of the teacher education experience, the mural could continue to do its work outside the Faculty of Education, thus serving as a catalyst

³ *Praxis* is a term coined by Freire (1970) to mean: informed action. It is based on an ongoing process that combines theory and practice.

for more arts-based environmental education in schools. In chapters 5 through 7, the contributions of the mural to the Faculty of Education are discussed.

Environmental education

In this section, I will outline the trends in environmental education that inform my research, as well as expose the assumptions that continue to shape how I situate myself within this field. This discussion works to clarify how my study contributes to the development of environmental education. First, I focus on a discussion of the role ethics plays in this research. Then, I move into the characteristics of environmental education that resonate well in this study. Throughout these discussions, I make connections between environmental education and community mural-making. It is important to note that my intent in this work is not to define environmental education, but rather to reveal its usefulness as a framework for teaching and learning in arts-based environmental education. In doing so, I work toward “putting the ‘education’ back into environmental education” (Jickling, 1997, p.100).⁴

Ethics in practice. As an environmental educator, I struggle with issues of education and advocacy—how do I go about making space for environmental education in schools in an educative way? This is a question of ethics, as much as it is about education (Jickling, 2005). As such, I find it helpful to work with environmental ethics theory, specifically within a trend that approaches ethics first, before knowledge (Cheney & Weston, 1999), and applies it to everyday contexts as a process of inquiry and interactions (Jickling, 2004; Weston, 1993). As Jim Cheney and Anthony Weston (1999)

⁴ Exploring, constructing, and/or problematizing environmental education definitions, although sometimes attempted, does not well suit the epistemological and ontological assumptions in this research (see Jickling, 1997).

reveal, the dominant notion of ethics is based on the following assumptions: ethics is a response to the world, the world is fully knowable, ethics is incremental and extensionist, and its purpose is to sort the world ethically. In the spirit of inquiry, Cheney and Weston ask, what if this concept of ethics is flipped upside-down? What if ethics comes first? ...and the world is not fully knowable? ...and ethics co-evolves in a relational context? ...and its purpose is to explore and enrich the world? What happens then? Such a flip reveals ethics in a new light—as an etiquette—a way of participating in the world with “courtesy” (p.120). In other words, an ethics-based epistemology involves participation in an ethical relationship; but as Cheney and Weston suggest participation is conditional: first, it requires acknowledgement, recognizing other human and more-than-human beings and sharing the world with them; also, it requires time because relationships evolve as trust and love develop (it is a mutual process).⁵ Further, Leesa Fawcett (2002) refers to such an ethical relationship as an *inter-species friendship* which considers more-than-humans as “subjects capable of reciprocity and agency” (p.133). Looking at ethics in a relational context resonates well with me; I liken the shift from an old, well-bound textbook about codes of teacher conduct sitting dusty on a shelf, into an aesthetic and embodied teaching practice, continually evolving and co-evolving through interactions and relationships. In this way, ethics comes alive and gives meaning to our environmental education teaching.

Fawcett’s (2002) work, “Children’s Wild Animal Stories”, illustrates research advocating such ethical relationships. In her study, Fawcett focused on kindergarten and

⁵ *More-than-human* is term used by David Abram (1996) based on the belief that epistemology has ethical dimensions (i.e., to articulate an epistemology is to articulate an ethical practice (Cheney, 2002)). In light of this, *more-than human* language transcends anthropocentric, or human-centred language (e.g., *non-human*) and makes room for reciprocal dialogue.

grade 5 students' ideas and stories about local animals, specifically, bats, frogs, and racoons, as a way of exploring possibilities for *inter-species bonds* and *friendship*. She found that the younger students offered “stories about friendship between the humans and all three animals and had less stereotypical attitudes” (p.131), while the older students' stories revealed the influence of dominant beliefs in Western culture that teach “children to divorce themselves from their ‘animalness’” (p.136). Thus, her work suggests the need for examining those beliefs to create opportunities for different stories to be told. marino (1997) describes narratives such as those of the kindergarten children as, “stories of resistance” which reveal voices and/or ideas that are commonly excluded and/or marginalized (p.127). marino notes that telling stories of resistance communicates their importance. In schools and Faculties of Education, where stories of resistance, such as the one explored in Fawcett's research are often excluded, the painting of a community mural on a classroom wall can act as a visual narrative which serves as an expression of their importance and a catalyst for their inclusion.

Following Eisner's (2002a) belief that art evokes what words cannot, I introduce a painting by Henri Matisse (1910), called *Dance*, as a way to reveal some of the possibilities I imagined for including ethics in this research (see Figure 3). My *ethical imagining* (Fawcett, 2000) was guided by literature that unveiled possibilities for new ethical relationships expressed through: fields of care (Evernden, 1985), ethics-based epistemology (Cheney & Weston, 1999), participatory consciousness (Fawcett, 2005), and ethics as an everyday activity (Jickling, 2004). Thus, in this imagining, ethics are *performative* (Jickling, 2004), and “predominantly a way to enrich the world and create more possibilities for deeper knowing” (Fawcett, 2005, p.274). For me, *Dance* reveals

itself as a powerful visual metaphor of ethical action as a mutual relationship and inquiry.

As Maxine Greene (1995) writes:

Not only does Matisse's work present an authentic human involvement with others and the natural world; it somehow draws us into the dancers' movement and suggests the vital networks in which we live or ought to live our lives. (p.62)



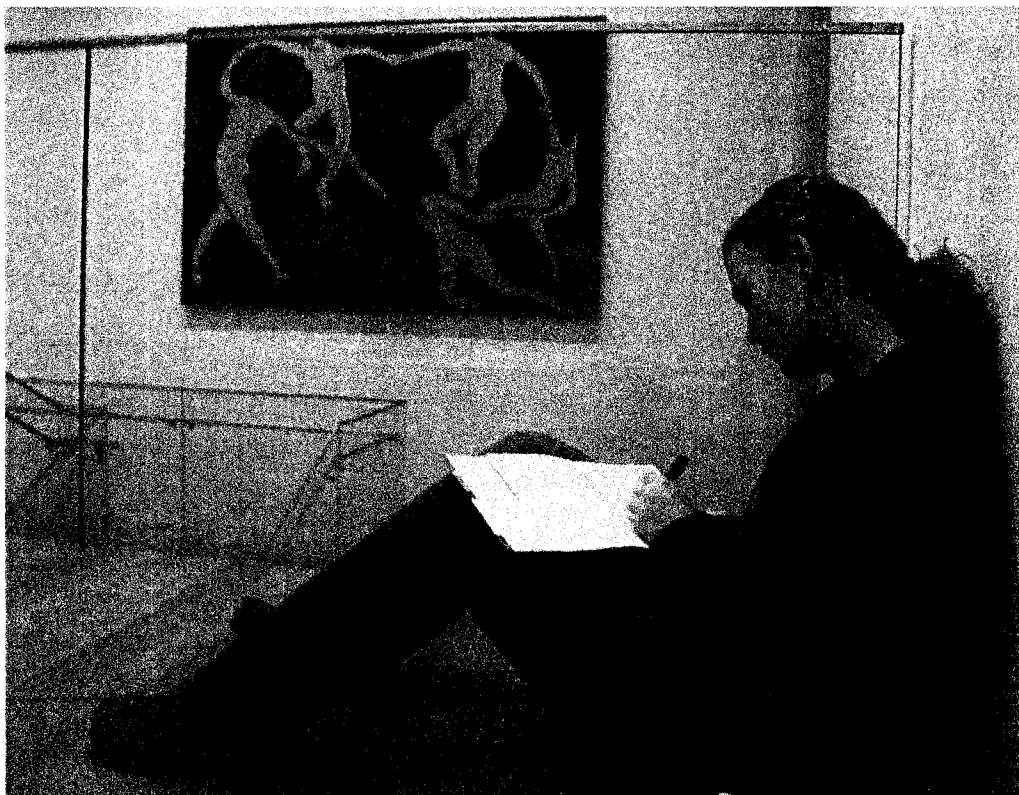
Figure 3. *Dance* by Henri Matisse: A metaphor for the research etiquette.

In December 2006, I took a trip to the Museum of Modern Art (MOMA) in New York City to visit closely with Matisse's original work, *Dance I*.⁶ I was fortunate to share this experience with my cousin Emily, who also was a graduate student in education. She asked me how I connected so strongly to this painting. I replied that *Dance* offered a guiding image for my research: a symbol of my purpose in co-constructing knowledge about the natural world with others through art, as well as the etiquette that would guide me. Specifically, I explained that Matisse's use of form and movement within the figures'

⁶ *Dance I*, created in early 1909, was a quick sketch (composition study) drafted before the painting which appears in Figure 3.

dance acted as an invitation to join in the action. I saw this painting as a celebration of collaboration and harmonious relationships. This led to a thoughtful dialogue about advocacy and education and the challenges involved with providing a complex, embodied, and political curriculum in school-based settings. Our discussion revealed some helpful insights about how practicing ethics (so integral to environment education) could be included through collaboration. My impressions from that discussion are expressed in Postcard 2.

*Advocacy in education requires risk-taking, it takes courage! ...but also solidarity!
Creating opportunities for people to come together to share their concerns
and/or interests can offer an "enabling" space to begin.*



Postcard 2. Provoked reflections at the MOMA.

Emily took the picture shown in Postcard 2, while I jotted down my thoughts and sketched a gestured impression of our interaction with *Dance I*. Later, I came back to a reflection expressed in this postcard: creating opportunities for people to come together to share *their concerns and/or interests*.

It became clear that community murals could open up important spaces for people to begin *working together* on these concerns and/or interests because they too were dependent on advocacy, risk-taking, and solidarity. Paul Hart, Bob Jickling, and Richard Kool (1999) suggest that people generally know about environmental issues, “but they are confused by conflicting views and don’t know how to deal with these contradictions. Environmental education can involve itself with the task of trying to help citizens, young and old, explore their own questions” (p.105). While relational ethics guides this process, community murals can make inquiry collaborative. Exploring questions in groups can be challenging and requires skilled practice of incorporating the ideas and concerns of multiple voices. This complexity reveals the importance of making space for practicing collaborative inquiry. Of making art in communities, Graeme Sullivan (2005) writes, “artworks produced within a community, and used to communicate with others, do so in ways that are multiple, mutual, and where meaning is continually negotiated according to various perspectives, practices, and positions of power” (p.160). Thus, community murals also offer a collaborative and constructivist approach to knowledge in environmental education practice that works to transcend dominant power relations in learning experiences. In this community mural project, I worked to achieve the aim that environmental education knowledge must be negotiated, not prescribed to students and teachers.

Enabling spaces. The role of community murals in making learning collaborative can serve as a helpful tool in responding to the perplexing questions facing environmental education, or what Jickling (2003) describes as “the tough work of good education” (p.25). It can do this by creating what Weston (1993) calls, “conceptual, experiential, or even quite literal” spaces (p.100) for “enabling environmental practice” (p.99). In other words, by creating a community mural project, certain possibilities for environmental education practice can emerge. As a sample, environmental educators can explore learning and teaching while embracing uncertainties; activism and education can co-exist and their challenges can be explored in caring, creative, and collaborative ways; and, community murals can assist pre-service teachers in adopting a pedagogy that is in line with their environmental education values, or at least provide them with an example to work from.

The enabling factor is experienced through the ideas and knowledge that emerge and are co-constructed based on the conditions created within these settings. This goal reveals my pedagogical role in the community mural. It implies my responsibility for setting the stage and providing useful props that can be helpful to participants as they work creatively and collaboratively together. Also, it suggests an alternative approach to teaching environmental education that focuses on a process which is not linear, that is does not proceed from a starting point in a straight line towards some pre-determined, and firmly-held, learning outcomes. Thus revealing the research’s travels into less familiar territory—on a journey with much uncertainty, but as my work will suggest, an important expedition for environmental educators. Eisner (2002b) suggests that the arts are familiar with such uncertain territory and commonly engage with knowledge

emergent in process. He refers to this knowledge as *expressive outcomes*. This is what my study intends to explore: the expressive outcomes that can assist environmental educators as they travel into this new territory.

So far, I have focused on this research's guiding etiquette, as well as its purpose for arts-based collaboration. Now I would like to shift into a discussion on important features of environmental education in Canada that connect to an integration of community murals as arts-based pedagogy in environmental education. Or, to state in another way, I will explore the epistemological connections between environmental education and community murals (e.g., complexity, embodiment, and political) in order to expose and explore the significance of this research in environmental education.

Complexity. In my readings of the field, I side with those scholars who discuss environmental education as complex, embodied, and political (Hart et al., 1999; Russell, et al., 2000). There are countless ways to reveal the complexity of environmental education. Russell et al. (2000) highlight its variety of forms (e.g., in textbooks, through advocacy, engaging with nature, etc.) and diversity of settings (e.g., in schools, parks, summer camps, etc.). This suggests that many different people take up environmental education (e.g., teachers, activists, scientists, etc). Also, Marilyn Mac Donald (1997) reminds us that, "environmental education is both as old as life on Earth, and as new as the early 1970s" (p.58). In terms of complexity, this suggests that there are multiple origins: ancient and academic. The many sub-cultures of theory and practice within this field also add to its complexity (e.g., outdoor and experiential education, education for sustainable development, ecological literacy, etc.). Each sub-culture has its own assumptions about the aims of environmental education and often these have revealed

themselves as conflicting with others. In addition, there is the complexity involved in studying interconnected relationships which demand an adoption of alternative paradigms and practices. Furthermore, the social, ecological, and political realms that continually shape environmental education are complex. The list goes on...but I pause here, to ask: How can environmental education address these complexities and work in developing our understanding of how they fit in our lives? In my perspective, this is a matter of praxis and pedagogy and demands that we ask another question: If environmental education is rich with complexity, how can our practice reflect this?

Embodiment. Environmental education is also embodied. This means that it engages the body. It has been described as such in a variety of ways in the literature. To name a couple, embodiment has been represented as our everyday experiences of the world through our senses (Bell, 1997; Næss, 2002; Orr, 1994), and as cultural practices (Barrett, 2005; Evernden, 1985; Weston, 1994). For instance, in *The Natural Alien*, Neil Evernden (1985) speaks about *fields of self* where “the self is not necessarily defined by the body surface...there is some kind of involvement with the realm beyond skin” (p.43). In other words, our experience in the world, quite literally defines us—we are what we experience when the self is defined within a larger territory than the boundary of our bodies. Evernden also notes that if humans begin to see themselves in this way, they can begin addressing embodied questions, such as, “what does it feel like to have a territory?” (p.47). Arne Næss (2002) advocates similar types of questions, such as, “How do you feel yourself and the world?” (p.20). Since these questions are not commonly asked in everyday conversation, they read somewhat awkwardly. Yet, Næss affirms that our emotions are vital to embodied knowledge and need to be more valued in education. As

such, it is important that such questions are asked, and by introducing them in everyday dialogue, their awkwardness may be alleviated. In fact, the mind/body, and similarly the human/nature split are often blamed as a root cause for the environmental crisis (Carson, 1962; Evernden, 1985; Orr, 1994; Weston, 1994). Thus many theorists within the field believe a central aim of environmental education is to reconnect humans with their embodied experience in the world. As Weston (1994) so eloquently writes, “We cannot think our way back to the Earth. We can only *work* our way more thoroughly into and around the Earth, from the particular place within it that we already find ourselves: practically, mindfully, and open-mindfully” (p.7).

M.J. Barrett (2005) argues that language has a role to play in this process of reconnecting our bodies to our experience in the world. Specifically, she notes that our words have power to determine how and what becomes known; thus, interrogating everyday language can be a transformative experience. To explain, she uses a past teaching moment (facilitating a pond study). With her students, she banned words like, “yuk!” or “gross,” in reference to more-than-human life. Instead, she encouraged words like “wow!” and “cool” (p.81). Her observations of this practice revealed that *wow* words brought bodies closer (in curiosity), while *yuk* words made bodies retreat (in fear or disgust). This insight not only reveals the importance of embracing embodied experience in education, but also of being attentive to the language used to communicate such experiences. Language is particularly important as a consideration of another quality of environmental education: its inherently political nature. What is the language being used in the public sphere? What should it be? This is more work for environmental educators to consider and part of the work of this thesis.

Political. Environmental education represents a marginal voice in Western culture. Many of its teachings are not-commonly practiced or considered in the everyday activities of the masses. As such, supporters of the field can often be found on the frontlines fighting to be heard. They represent many voices each advocating something different: Save the earth! Say no to animal-testing! Let the forests live! Reduce, reuse, recycle! Of course, these are just a sample of the voices. Although there are many others, these offer a starting point in revealing the political nature of environmental education.

In stating that environmental education is political, I do not suggest it is uniquely so, in fact all education is! To discuss this further, I find the words of dian marino (1997) to be of assistance. She notes, “learning is not a neutral process—staying idle is maintaining a position, just as movement is never motionless” (p.128h). I find marino’s perspective helpful in exposing the implicit and hidden curriculum that exists in all education (Eisner, 2002b). It encourages environmental educators, like myself, to ask questions about knowledge, such as: by whom? and for whom? (Barndt, 2004). These are questions commonly asked by critical theorists and relate to issues of hegemony.⁷ More examples of these kinds of questions include: “who gets to choose what data are included and excluded? On the basis of what criteria would such choices be made?” (Kincheloe, 2005a, p.107). Political questions of this sort are what led to the development of community arts. In this thesis, I turned to inquiry informed by community murals to explore strategies for creating counter-hegemonic knowledge and embracing politics in environmental education practice, thus preparing environmental educators for political action.

⁷ *Hegemony* is a term coined by Antonio Gramsci to express hierarchical power relations that involve persuasion from above and consent from below (marino, 1997).

Eisner (2002a) argues that the arts can prepare the mind and body for seeing the world in new ways:

Our seeing is practical, and practical perception is not usually designed to provide delight in what is seen, to challenge our beliefs, or to generate questions that lead to productive puzzlement. Most of what we do when we see does not have its primary outcome a new way to view the world. The arts, however, do this with regularity. (p.84)

Eisner suggests that art can be transformative because its inherent nature is capable of provoking new perspectives. Eisner's ideas have important implications for environmental education. Consider for a moment the purpose of education: Is it to reveal and reinforce the ways things are? If so, then none of what I am arguing for is necessary. However, if education is meant to stir *wide-awakeness, imaginative action, and a renewed consciousness of possibility* (Greene, 1995); or said another way, if education is meant to be more critical and enabling, then, as Eisner suggests, the mind must be provoked!—through delight, controversy, curiosity, etc.—so that new knowledge is possible.

Greene (1995) further suggests:

Participatory involvement with the many forms of art can enable us to see more in our experience, to hear more on normally unheard frequencies, to become more conscious of what daily routines have obscured, what habit and convention have suppressed. (p.123)

This notion of the power of art to disrupt routine is also significant to environmental education. Arts-based inquiry can act as a tool for exposing unquestioned assumptions of environmental education which Evernden (1985) refers to as, “the real authorities in our culture” (p.43), and can transcend the common fault of educators to become creatures of

habit in their teaching. For example, as we learned from Eisner, our everyday ways of seeing the world are practical, rather than critical. However, Evernden points out that how we see the world is greatly dependent on our cultural beliefs, and when we are not critical and/or conscious of these beliefs, they become “embedded and tacitly agreed to” (p.47). Unquestioned assumptions in environmental education can become hidden and are hard to find and/or change; thus, as Evernden notes, not questioning results in their power or authority. Teaching actions can become automatic (an unconsciousness process) and thus can inhibit awareness, creativity, elements of surprise and uncertainty, and/or or action. In response, the arts can help environmental educators stay attentive as they experience and teach in the world.

Louise Glück (1994) writes that art can inspire action:

Art is not a service. Or, rather it does not reliably serve all people in a standardized way. Its service is to the spirit, from which it removes the misery of inertia. It does this by refocusing an existing image of the world...where the flat white of the page was, a field of energy emerges. (p.8)

Glück’s words are provocative: who would choose *misery* if given the choice? Inertia thought of in a desolate context becomes what Barrett (2005) noted in her pond study lesson as, yuk; it literally encourages the body to *recoil*. Although, Glück’s passage comes from a book of poetry and conveys the power of expressive text, it can easily be understood in the context of community murals if you replace *of the page* with *wall*: where the flat white wall was, a field of energy emerges. Glück’s idea is further extended into the discussion of *enabling environmental practice* (Weston, 1993) when one asks: How art can become a process capable of inspiring environmental action? As Eisner (2002a) states, this is the *work* of art.

Environmental education is complex, embodied, and political and hence, messy, emotional, and controversial. When asking: How we can we reimagine environmental education, we must also ask what practices embrace the messy, emotional, and controversial? I have proposed that first, we need to create conceptual, experiential, and literal spaces as sites of experimentation in schools; but also I add, it is imperative that those spaces reflect the complexity, embodiment, and political spirit of environmental education. Creating community murals is one way of enabling new teachers to think through and engage in this kind of environmental practice. Community murals are created collaboratively by a group of individuals, their process and product are negotiated over time. They are relationship-based and integrate theory with action. As well, they are often created to communicate a statement, and/or challenge the status quo (Barndt, 2006; Barnett, 1984; Conrad, 1995). In this way, community murals are also complex, embodied, and political. Therefore, they fit nicely as a practical framework and pedagogy for creating a mural about environmental education.

Murals can act as the impetus for new teachers to engage in conversations about the complex, embodied and political work of environmental education. Given that schools and curriculum (even in Faculties of Education) deny environmental education its time and space, they also work against education that is complex, embodied, political (Russell, et al., 2000). Using community murals in environmental education can work to disrupt the barriers to its practice in schools and reveal new processes, energies, and visions to fuel environmental education in everyday learning within school-based settings.

CHAPTER 3: EXPOSING THE RESEARCH AT ITS ROOTS

Methodological Musings

My own interdisciplinary interests in combining environmental education and community art challenged me to uncover relationships between these two forms of education. Several forces drove this reflection: a passion for being creative and imaginative, pressures for accountability in the trustworthiness and validity of my process, and the desire to work authentically with people to create a project that is worthwhile and beneficial for those involved directly and indirectly. Since my epistemological and ontological assumptions create a frame of reference that affects the design and philosophy of my research (Schram, 2003), an important part of my methodological musings included revealing these assumptions and beliefs; this is where I begin.

My assumptions became clear early on in my graduate journey, when I was introduced to a collection of works by Greene (1995), called *Releasing the imagination: Essays on Education, the Arts, and Social Change*. She concludes one chapter with the following vision for education:

Our classrooms ought to be nurturing and thoughtful and just all at once; they ought to pulsate with multiple conceptions of what it is to be human and alive. They ought to resound with the voices of articulate young people in dialogues always incomplete because there is always more to be discovered and more to be said. We must want our students to achieve friendship as each one stirs to wide-awakeness, to imaginative action, and to renewed consciousness of possibility. (p.43)

Greene highlights many of the sentiments I spoke about in my discussion about environmental education, but she goes further and embodies the passion and care

required of our practice. Her vision not only reveals my purpose for engaging in graduate research, but also helps to situate and expose my guiding assumptions that education should reflect multiple ways of knowing, be social and counter-hegemonic, and should enable critical, caring, and creative possibilities to be imagined and realized.

Ontologically, I assume that it is important for educators to see themselves as embedded in experiences and relationships within the physical and social worlds in which they inhabit. And, I assume that valuable knowledge can be constructed by individuals and groups through these experiences and relationships.

Epistemologically, I assume that knowledge derives from multiple sources and can be developed through interaction and dialogue with the human and more-than-human world. Also, I assume that the world is not fully knowable, and there are always hidden possibilities. Therefore, I assume that it is important for educators to create enabling spaces capable of exploring multiple epistemological possibilities.

Based on these assumptions, I find it helpful to enter into research as a “methodological negotiator,” who draws from multiple methodologies and creates an emergent framework that best suits my research goals (Kincheloe, 2005b, p.325). As Anita Sinner, Carl Leggo, Rita Irwin, Peter Gouzouasis, and Kit Grauer (2006) note, “pluralism and hybridity offer researchers a way to broaden and deepen methodological design, strengthening interpretation and ensuring a rigorous engagement with sources throughout the inquiry process,” (p.1251).

In this thesis, arts-based educational research and participatory action research offered important methodological foundations. Social constructivism is also an integral

part of the research design, and weaves through the text in a variety of ways in order to highlight learning as a social process. First, I will discuss arts-based educational research and participatory action research; then, I will focus on the emergent framework that looks at community murals as research that is participant-centred, process-oriented, relationships-based, and has activist aims.

Arts-based educational research

Arts-based educational research is characterized in two ways: first, by its epistemological aims, and second, by meeting specific criteria related to art and aesthetics. First in terms of epistemology, arts-based educational research differs from traditional educational research. Tom Barone and Elliot Eisner (2006) describe the difference in the following way, “If traditionalists generally seek to secure solid explanations and confident predictions, arts-based researchers aim to suggest new ways of viewing educational phenomena” (p.96). In other words, this knowledge is not meant to create certainty, rather, it works to enrich theory and practice in education by revealing new perspectives on existing issues. Arts-based research differs from traditional research in purpose, but also in format; thus, its methods for representing knowledge are also arts-based.

Specifically, arts-based educational research must reflect two criteria: engagement in artistic activity as a central purpose of the research, and the research must be characterized by “certain aesthetic qualities or design elements that infuse the inquiry process and research ‘text’” (Barone & Eisner, 2006, p.95). Barone and Eisner claim that the more pronounced these elements are in the research, the more it may be characterized as arts-based. Also, the *text* that Barone and Eisner speak of is considered in its broadest

context, as “actions in the world that can be ‘read’” (Finley, 2005, p.686). Thus, embracing arts-based education research as a methodology comes with the responsibility of creating research characterized by *aesthetic qualities or design elements*.

For the purposes of this research, Barnett’s (1984) criteria for judging community murals were chosen. Barnett suggests that four areas need to be considered in critiquing community murals: purpose, process, form, and quality. Thus, he includes group aspirations and dynamics, as well as traditional aesthetics in his definition. Further, Barnett writes:

The ultimate judgement of a mural concerns not only its imagery but the success of the total process of making it and assimilating it into the life of the neighbourhood, local union, or school where it has been done. The final test is whether the painting makes a difference, whether it raises the level of awareness, establishes and strengthens bonds, empowers people. (p.391)

This description speaks to aesthetics in terms of its lasting impact. In other words: Does it become part of the everyday culture of the place it inhabits? Barnett’s criteria provided a diverse landscape for art criticism in relation to this project; this was important in celebrating the achievements of the work (i.e. including the process and products).

Further, Sinner et al. (2006) who reviewed a collection of arts-based educational dissertations noted the following four common attributes: commitment for aesthetic and education practice, inquiry-laden processes, searching for meaning, and interpreting understanding. Throughout the project, these criteria provided useful guideposts for reflection and writing and helped to develop my researcher voice.

Participatory action research

In addition to arts-based approaches, participatory action research informs the process of the community mural project. This work is *participatory* in the sense that it involves *mutual inquiry*: the knowledge is collaboratively constructed and the research is a social practice (Kemmis & McTaggart, 2005). Three features distinguish participatory research from conventional research: shared ownership of research projects, community-based analysis of social problems, and an orientation toward community action (Kemmis & McTaggart, 2005). These features identify with the aims of the community mural project. Further, the notion of *shared ownership* was helpful in positioning the researcher/participant roles in this work: What would be my voice, what would be theirs, and what would be ours? As the research developed, responses to these questions became clear. The mural and thesis could represent *our* voice, but in each, one would be more dominant; in the mural, theirs would be central, whereas in the thesis, mine would be.

This research involves participation in a social practice aimed at collective knowledge. That knowledge is created through doing and making; thus, *action* plays a role as a process and product of knowledge. Further, action acts to inspire theoretical reflection, as well as inform its creation (Patton, 2002). Everything considered, the community mural project is participatory and action-related, and is guided by relationships between participants aimed at reaching intersubjective agreement and mutual understanding (Kemmis & McTaggart, 2005).

Community murals as research

Participants, process, relationships, and activist aims exist at the heart of community mural-making. In engaging community murals as a process of inquiry, these

four qualities also create the foundation of this research methodology. Specifically, the research set out to create knowledge which was negotiated by the *participants* through non-exploitive and collaborative *process* grounded in *relationships* and held together by common *activist aims* (i.e., creating consciousness and informed action). To further develop how these four qualities informed the research design, each one is explored in more detail in the subsequent paragraphs.

Participant-centred. I have suggested that it is important for educators to see themselves as embedded in physical and social experiences and relationships. Thus, in the community mural project, participants were actively creating knowledge through collaborative activities and individual reflections. As such, the research outcomes were highly dependent on the participants' contributions. This was a vital consideration in how the research process was designed. I took advice from David Hunt (1992), who states:

How researchers choose to view those researched profoundly influences their research findings. When researchers treat persons as objects, they learn only about their physical movement as physical objects. When researchers treat persons as organisms, they learn only about their basic needs and their reflexes. However, when researchers treat those whom they research as persons, then they are more likely to uncover understandings which are relevant to the human condition, and therefore contain practical value. (p. 114)

Hunt reminded me that if this research was to be co-constructed, it would have to be mutually beneficial. This research was important in my personal growth as a learner and educator. For the participants, it offered an opportunity, not otherwise available in the Faculty of Education, for developing skills in creating murals about environmental education, as well as for practicing agency by communicating their voices to the greater education community.

Process-oriented. I have argued that there are multiple ways to learn in the world and that knowledge can be developed through interaction and dialogue. Thus, knowledge is understood through process. Therefore, in this community- and arts-based research, “the how [was] as important as the what,” (Barndt, 2006, p.16). The research focused on *the process* of creating collaborative knowledge. Developing collective knowledge involved negotiation; therefore, an important part of this process involved dialogue. Nel Noddings (1992) writes that “genuine dialogue” is open-ended, which means “neither party knows at the outset what the outcome or decision will be” (p.23). In this way, dialogue as a process for learning is closely related to arts-based approaches which aim to create expressive outcomes (Greene, 1995). Noddings further shares:

Dialogue is a common search for understanding, empathy, or appreciation. It can be playful or serious, logical or imaginative, goal or process oriented, but it is always a genuine quest for something undetermined at the beginning. (p.23)

For Noddings, dialogue is an interactive process, rather than a prescriptive method for creating knowledge. In this process, the outcomes are unknown, thus dialogue and uncertainty are closely tied. This notion was important to the planning of my research and responds to my belief that the world is not fully knowable. Uncertainty was vital to this process and I worked to embrace it. Eisner’s (2002b) insightful words inspired my journey; he reveals, “We are ‘condemned’ to a life of exciting uncertainty in which the flexible use of intelligence is our most potent tool” (p.41). With those sentiments in mind, the participants and I took steps forward into unknown and emergent territory, with faith that trust in the process would result in meaningful outcomes.

Relationships-based. The knowledge created in this research was grounded in relationships (Cheney & Weston, 1999; Evernden, 1985; Fawcett, 2002, 2005; Weston, 1994). I, and the participants involved, transcended observation and moved towards participation in embodied experiences and complex relationships. As an initial framework, I found *a/r/tography* (an emerging arts-based educational research methodology) very helpful. It is deeply rooted in a similar notion of participation, referred to by Rita Irwin (2004) as “knowing, doing, and making” (p.31) through multiple identities and relationships. As a metaphor, *a/r/tography* involves the coming together of art with writing (*graphy*), where art (*a/r/t*) is also an expression of the multiple ways one can come to know and experience the world, as an *Artist, Researcher, and Teacher* (Pinar, 2004). In embracing this metaphor, I chose to wear three hats—as an artist, researcher, and teacher, and encouraged the same of the participants. Irwin (2004) reveals that:

To live the life of an artist who is also a researcher and teacher is to live a life of awareness, a life that permits openness to the complexity around us, a life that intentionally sets out to perceive things differently. (p.33)

For me, the awareness that Irwin speaks about offered a way of expressing how I wanted to participate in the research, with a critical consciousness attuned to the important relationships that helped to shape the knowledge and experience.

Activist in aims. In speaking about activism, Barndt (2006) suggests that “we reframe art *as* activism” (p.18). Looked at in this way, activism becomes the *work* of art. This notion is helpful in revealing how the mural created as part of this research was an act of resistance. In the community mural, entitled the *Caring Tree*, activism was directed at the academy as well as the Lakehead University community. The participants in the

project believed that dominant forms of learning and teaching within the Faculty of Education were hegemonic, anthropocentric, and individualistic, thus they set out to create a mural that would resist and transcend such values. By transforming a drab classroom wall into a colourful artwork, the artists drew attention to a different way of learning and teaching. The *Caring Tree* mural stood as a visual statement that education can be socially constructed in imaginative ways. Also, the mural demonstrated the responsibility individuals have in creating a just and vibrant world, since its existence was dependent on the commitment and passion of its creators.

Community murals as research in environmental education brings learners together in a participant-centred, process-oriented, relationship-based, and activist journey. It embraces the complex, embodied, and political nature that defines both community murals and environmental education, thus weaving these educational traditions together. It does so by participating in caring relationships that consider the value of human and more-than-human life. Based on this, ethics are understood as an etiquette that informs educational praxis and works to expose, explore, and enrich relationships (i.e., between humans, and human-Nature, etc.).

Research journey as a critical practice/process

In this research, I recognized the possible shortcomings that could result from working closely with the teacher who inspired my graduate work. However, the potential for dominant power relationships as well as to understand how my own beliefs might shape this process were thoughtfully considered. Further, Bob and I are critical thinkers and our academic relationship grew from our common passion for critical thought and action. Specifically, the need for a balanced power dynamic was addressed in four ways.

First, arts-based research wasn't an area of expertise of Bob, therefore I was not coerced by expert understanding, to follow a prescribed research route, or frame my research in any particular way. Rather, we learned about arts-based inquiry together. Second, a conscious effort was made to develop a balanced power relationship. I was fortunate to work with him in a variety of settings within and beyond the school walls, thus allowing for a more balanced power relationship to develop.

Third, we made extensive use of another committee member and numerous critical friends and relatives. Throughout the process, Bob continued to challenge my writing. Countless drafts were exchanged, with comments from him encouraging me to dig deeper into the work in order to make connections with real-world issues. As a team, we also sought the feedback of our peers and co-workers who were outside of the project. Specifically, my committee member was extremely helpful in providing constructive criticism and resources to enrich the research. Within the Master's program, I was part of a collegial team of graduate students committed to critical practice. We met often to share and discuss our work. This was an invaluable experience which kept me searching for more ways to improve my writing and practice. Further, I was fortunate to have the critical voices of my family and friends who challenged me to communicate my passion outside the academic circle.

Fourth, this thesis was written over a period two years, during which time, both Bob and I were able to distance ourselves from the writing in order to see the work from a fresh perspective. As such, throughout the research journey, many steps were taken to enable critical practice and multiple voices were invited to contribute—it was a truly rewarding collaboration!

CHAPTER 4: BRINGING THE RESEARCH TO LIFE

Putting It Together

The who and the where?

I chose to do this research with other pre-service teachers within the Faculty of Education at Lakehead University. I made this decision for several reasons. First, since the inspiration for this research emerged from my teacher education experience, I assumed other pre-service teachers may be having similar curiosities. Based on this assumption, I wanted to provide a creative outlet, not otherwise available to most professional year students, to collaborate on shared interests. Also, I wanted to create an opportunity for those who resist the status quo in the Faculty of Education (i.e., of hegemonic, anthropocentric, and individualistic knowledge) to come together and share their voice and passion (to make known what is often marginalized, but may be so crucial to high-quality education), and to make space for an alternative learning experience within the Faculty.

Recruitment. Recruitment focused on students from three areas of study: outdoor ecological and experiential education (OE3), art, and social studies. I felt that these teaching areas would speak to the qualities I was interested in representing in this project, such as interest and/or knowledge in environmental education, and creative approaches to teaching and learning. I kept the invitation list relatively short because it was important that the group be small (less than 10 participants) to enable the continual negotiations that would shape the groups' co-construction of knowledge, and to work with the timeline available to pre-service teachers (nine weeks). I was looking for participants who were

motivated, committed, and excited about working as a group, since the quality of the outcomes would be dependent on these factors.

I made a presentation in one social studies class to invite participants into the project and sent out email invitations to the OE3 and art students (see Figure 4).

An Invitation into a Community Mural Project

Who and What

My name is Ali Solaja. I'm doing a Master of Education degree at LU and I am focusing on how knowledge is created and negotiated in community- and arts-based education, specifically through community murals. I am looking for six professional year students to work with to create a community mural which aims at making space for environmental education and the arts in the Faculty of Education. Learning in this project will be participant-centred, process-oriented, relationships-based, and activist in nature.

When

The project will begin in January and will be completed before students leave for their second placement.

Why

In education, "we also need to generate alternate knowledge and images, making new visions out of the mud of our current interpretations" (marino, 1997, p.128f).

Environmental education and the arts are important to human development and learning, capable of engaging the body, mind, and spirit. Yet, these disciplines are commonly marginalized in mainstream education, making them appear less important. This project aims at giving environmental education and the arts space in the university, teacher education, and mainstream education in general. It will do so by finding a blank wall space, building community, and making and doing art together.

If you are looking for an experience like this, then come participate, experience, engage and explore: community, arts, environmental education, interdisciplinary learning, teaching, self-identity, hidden assumptions, situated knowledge, and collaboration, and contribute to your LU community in an exciting and creative way.

RSVP

If this project sounds intriguing and you would like to be part of it, or if you would like to make an inquiry further, or if you would simply like to talk more about any aspect of this work, email me. I hope to form a group in early 2007 and I will hold a meeting in the first couple of weeks of classes to get into more details about the project. But for now, I'm trying to get a sense for interest in this work and I'm looking for people to engage in it with.

Cheers and High Five!

Figure 4. Community mural project invitation.

Eight individuals showed interest in the project and six of them committed to the project until its completion. Of the six participants, five were from the OE3 program (representative of the two OE3 classes), while one was focusing on art education. All of them were working in the intermediate/senior division (teaching grades 7 through 12). Participants were asked to introduce themselves in this thesis by writing personal statements using their pseudonyms. I was also a participant in the mural team, so I too created one. Our responses are presented below, following the artists' self-portraits (revealed in each participant's artwork of a chosen bird – see Figures 5-11).⁸

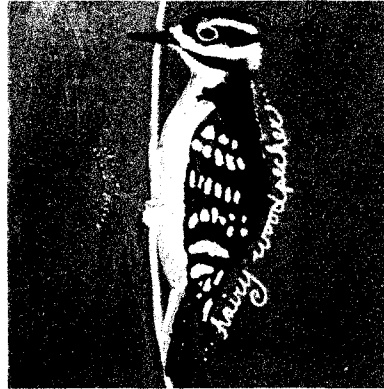


Figure 5. *Hairy woodpecker* by Rambling Wren.

Rambling Wren. I am a queer middle class woman from a strong Dutch heritage although born in Ottawa. My passion as an educator stems from the connections and creativity that are possible within this field of work. In such a fragmented educational system and society for that matter, connections to earth, self, and community that can be incorporated into education programs go a long way to addressing many of the inequities that also exist within these systems. Community projects incorporating art are a creative method of accessing and expressing this passion I have. Art provides other ways of expression and communication that inspire and connect to emotions more than a page essay does. I hope to engage in more

⁸ The statements are expressed in unique fonts, used throughout this thesis to distinguish between participants' voices.

community mural projects in the future after this amazing experience that brought so much to the participants and community.



Figure 6. Red-breasted nuthatch by Henry.

Henry Delacroix. I am a tall, sort of gangly boy with an occasionally thick carpet of facial hair. I grew up in the warm bosom of the Kawartha Lakes and have loved the possibilities and personal adventures held within the natural world ever since. I hope to allow my future students the space to find their own connections in school and outside of it. I feel that any subject can confound the boundaries of its traditional discipline, and matters pertaining to the environment, ecological consciousness, and social justice cross every boundary, and need to be observed, examined, or understood throughout every student's education.



Figure 7. Northern cardinal by Lorraine.

Lorraine Fitzmorris. I am a 26 year old Caucasian female who comes from a middle-class background. My passion for education lies in the ecological realm. I feel that it is

imperative that folks can relate to the universe and planet around them, understand the systems that are the foundations of all life, and develop a feeling of love for and connection to these systems. I feel that our system of education, as it currently exists, fails to achieve these goals. If I was queen of the universe, I would do things differently. I think education has the potential to inspire ecophily (love for and kinship to all living things) as well as compassion, caring, concern for social justice issues, positive and uplifting engagement with local communities, and excitement for continued self-directed discovery. How to achieve this is, of course, a complex issue, but I think that starting with a) very small classes b) a completely different approach to what "should" be learned, and how it should be learned, are important. Creativity is key and art as a vehicle for exploration is an exciting way to engage students. I found it exciting for exploring ideas as we created the mural. So...that is what I feel passion for in terms of education...the potential that exists for radical transformation of the world!



Figure 8. Evening grosbeak by Ramona.

Ramona Lavern. I grew up in Barrie, Ontario and participated in a number of outdoor activities, such as hiking and canoeing, and spent many summers at camp. My interest in the environment and people led me to pursue a degree in geography and psychology at McGill University in Montreal, Quebec before going on to enrol in Lakehead University's Outdoor Ecological and Experiential BEd program. Although I have almost no experience with artistic endeavours such as the mural project, I was keen on getting involved because I felt it might prove to be an effective mode of expressing a passion for the interconnectedness of education and the environment. The group effort fostered a sense of community which I hope to bring to my own projects as an educator.



Figure 9. *Saw-whet owl* by Kaylana.

Kaylana Dee. I'm a white female, 30-something, with a mixture of Irish, English, and occasional Francophone background (particularly during family reunions in Quebec). I am an adventurer, in love with all things outdoors and all things artistic. I see becoming an educator as a path that fulfills my love for learning and my desire to share what I know and have experienced. I wish to continually make my contribution to the education of youth through an environmental and artistic perspective. My educational goal is to bring artistic and environmental awareness into the courses I teach. I do this with the hopes that youth will become socially sensitive to their surroundings as they become the adults of the next generations.

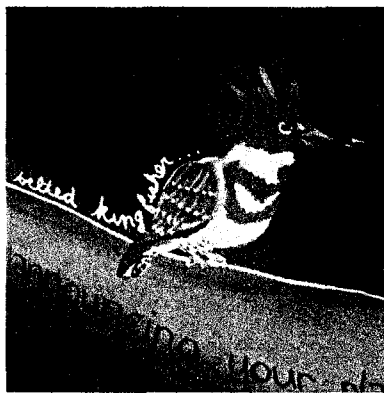


Figure 10. *Belted kingfisher* by Millie.

Millie Grace. My educational goal is to teach students to see themselves as a community, and to extend this consideration ultimately to the entire community of life on earth. For this community project we created a mural, but the process we went through is universal to any group effort. The principles we honoured allow all voices to be heard,

and for students of differing skills and abilities to make their own unique yet equally valued contributions. I also feel it is vital to begin an educational endeavour by considering values and needs before lists of facts as is the current practice with curriculum.



Figure 11. *Black-capped chickadee* by Ali.

Ali Solaja. I'm a 26 year old red-headed woman, born and raised in Toronto, Ontario. I come from a mixed background (i.e., Serbian, Canadian, Italian, Scottish, Irish) and am known for my positive spirit. My education in and out of schools has always been a grounding consistency in my life. For this reason, I have known that I wanted to be a teacher since I was a wee one. I grew up in a single parent low-income family for most of my childhood. Despite this, I was fortunate enough to grow up going to summer camp. This experience opened my eyes to the contrasts between my urban and nature-based lifestyles; it is from this contrast, that my passion for environmental education grew. Since then, I have been committed to learning about and practicing education that aims at making meaningful connections in the human and more-than-human world. At present, I am excited by the possibilities that have emerged through my work with community murals. I would like to continue this arts-based environmental education journey with students in my future classes.

The what and the why?

My research questions asked: How is environmental education knowledge created and negotiated through a community mural process? And, what is the nature of relationships amongst participants throughout this process? These questions informed—the *what and the why*—my chosen methods, and their accompanying rationale for

gathering knowledge.⁹ Methods were selected based on their ability to illuminate the processes and outcomes of the group's co-constructed expressive knowledge. Four methods were chosen: arts-based workshops, audio-recordings, a research journal, and photographs.

Group action workshops. I facilitated five workshops aimed at allowing the mural team to get to know each other, individually and collectively, creating a collective sketch for the mural, and reflecting on the process throughout the stages of the project.

The workshops took form as art-making, discussions, and brainstorming sessions. The outcomes from these activities were represented as multiple forms of knowledge (i.e., pieces of art, dialogue, and writing). Also at the end of workshops, participants were given a reflective activity to take away with them. These activities were small exercises, such as a question to consider, or responses to a quotation, that acted either as a prompt, or debrief (see Appendix A). They were meant to stimulate reflection and/or development of ideas for future workshops, the results of which also contributed knowledge.

Audio-recordings. A significant portion of the knowledge emerged from dialogue in the workshops. Since I facilitated and participated in these sessions, my note-taking abilities were limited. For this reason, I chose to audio-record some of the conversations so that I could return to the ideas discussed and spend time reflecting on their significance.

Research journal. I kept a journal throughout the process of my research as a way of coming to know myself, the participants, and the research better (Richardson, 2003). I took advice from Corrine Glesne and Alan Peshkin (1992), who suggest that an important

⁹ Often termed *data*; however, I find this language mechanical and not well-suited to the nature of the knowledge gathered through community- and arts-based approaches.

goal of the researcher is to become as self-aware as possible, and Valerie Janesick (2003), who claims that the act of journal writing is a rigorous documentary tool. As such, I used the journal as a tool for developing and engaging a critical consciousness. Its entries served as a method of inquiry (Diamond, 1995; Richardson, 2003), and included: reflections, observations, images, artistic representations, questions, and problems that emerged from the research process.

Photographs. Photographs were taken to record the process in a visual form. They helped to illustrate scenes, as well as provided raw material for interpretation and analysis (Eisner, 1991; Patton, 2002; Wolcott, 1994). Consent was obtained from participants prior to using any photographs in which they or their work were the subjects (see Appendix D).

CHAPTER 5: ONCE UPON A *CARING TREE*

The Community Mural Project: A Story

This chapter describes the chronology of events, or *what happened*, prior to my analysis in Chapter 6, or *what was learned* from the research. The chronology is presented as a narrative, which combines my voices as a community artist and researcher. This narrative draws heavily from Marino (1997), whose work is an inspiration for critical and creative approaches to arts-based education.

Up to this chapter, this thesis has been mainly theoretical, a conceptual exploration into possibilities for community mural-making as research in environmental education. This narrative works to contextualize these ideas, through *thick description* (Patton, 2002, p.437) in order to bring the research to life. To follow the mural process from its commencement to its completion, *Once upon a Caring Tree* is organized into five sections: the first meeting, the arts-based workshops, the painting process, the celebration, and the research debrief. What follows are the notable details from these events.

The first meeting

The first meeting set out to introduce me and the research project (see Appendix A), answer questions from the participants, invite participants into the project, or give them an opportunity to opt out (by signing or not signing consent forms—see Appendixes C-E), and create an opportunity for the group to meet each other and share their motivations for participating.

Ironically, I slept in on the morning of this meeting (an event I had been planning for months). Had the participants grown impatient, or had my friend John not been reachable at the university, this meeting would never have happened. Luckily though, this was not the case. I was only 15 minutes late for the meeting and my tardiness, which came with an honest apology, was greeted light-heartedly. How could I have been late on the first day of this important project? There is no explanation to this question, except that it could happen to any of us. This time it happened to me, and the group had its first funny story to bond over. In Chapter 6, this collective attitude of playfulness will be further discussed for its role in setting the tone for collaborative learning.

The group action workshops

After forming the mural group, the participants took part in five workshops which allowed them to grow as a collective entity and introduced them to ways of incorporating art into their emergent group knowledge and action. marino (1996) wrote:

one of the things I like about using graphics or drawn materials for teaching is that they can be easily produced, immediately shared, and readily interpreted; they also tap an imagery pool that is rich in contradictions and possibilities. They are *focalizing tools* for reflecting and acting against the one-dimensional and individualizing communication patterns that predominate in our educational settings and practices. (p.62)

When I was planning the workshops, I used this notion of art-based exercises as a focalizing tool, incorporating it into the learning experiences as a way of facilitating collaboration and exposing and examining cultural assumptions. It is from this framework that art-based exercises became an integral part of the group's collective knowledge and action. Also, throughout the workshops, I asked participants to reflect on

the process and products at various stages of the project, often art-making activities facilitated these debriefing sessions.

Workshop 1. This workshop focused on developing participants' individual and collective conceptions of environmental education through two arts-based activities. The first, *Environmental education snap shots*, had participants sharing their past experiences with environment-related education through art (by choosing an artwork which evoked an influential environmental moment from their past and sharing its significance with the group). This activity created an opportunity for participants to get to know each other through differing and/or common experiences. The second, *Education community self-portrait*, adapted from marino (1997), drew on description, and used drawing and critical dialogue to create a self-portrait of the mural group in response to marino's suggestion that, "we need[ed] to describe 'how we look[ed]' in order to identify critical issues or problems" (p.82). Specifically, the group created a self-portrait on a classroom window. Their artwork revealed many important ideas, notably that their collective understanding of education was that learning and teaching is not exclusively a human experience. Instead, it included a variety of species (i.e., plants, and animals, etc.) as illustrated in Figure 12.

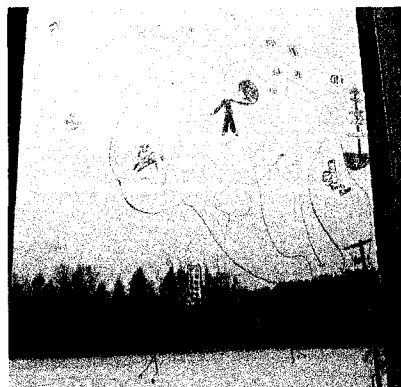


Figure 12. Education community self-portrait.

Other ideas about education that were presented in the community self-portrait included, but were not limited to, knowledge that comes from multiple sources; relationships between social, environmental, and political forces in education; and education as an embodied experience. Making participants' assumptions known initiated dialogue about the project's aims. This assisted the group in their formation of common goals for action. It was agreed that the final product should reflect such beliefs, including education as a human and more-than-human activity. As Lorraine shared:

education that focuses only on humans is limiting for us and the natural world because the boundaries of life are not as vivid when removed from ecological systems. It is important that students have conception of how all the grand systems fit together where, they fit within that.

In Workshop 1, I found my role as the facilitator quite challenging. Navigating my way into the relationship with the participants and not wanting to dominate was met with the tension caused by the group's desire for structure and direction. I knew that it would take time for the participants to develop trust in the mural process, as its structure was deliberately not linear; however, in the meantime, I realized the importance of making the workshops fun. This way, the group could have a chance to become more comfortable with each other. First, they could learn to trust one another, and by experiencing the rewards of such trust, they may be more willing to trust a process that is filled with uncertainties. In other words, this would give them an opportunity to *ease* into a new way of learning. As a result, I decided to spice things up for the next meeting.

Workshop 2. This workshop was a *theme* party—involving costumes and props, but also aimed at developing possible mural themes—that took place at my house over dinner. In an email sent to the participants, giving them directions to the party, the subject

read: “mural diner party!” After it was sent, I realized my mistake (quick typing led to a misspelling of *dinner*). In the spirit of dian marino, whose playfulness attracted smiles from those she met with her outrageous attire and dynamic accessories, I decided to play on my mistake by serving milkshakes and hamburgers, dressed in 1950s *diner* apparel.¹⁰ My close friend Suzanne was visiting that week, and she agreed to help out with the cooking and greeting. As old camp buddies, we appreciated opportunities for role-playing in a theme setting. Together, we dressed in matching costumes: our hair in side ponytails and wearing dangly earrings, short skirts, and leggings (see Figure 13).



Figure 13. Being playful in Workshop 2.

This fun and silly spirit welcomed participants as they arrived at the party, and carried forward into the activities of the workshop. The first activity, *You don't make friends with salad*, took place over dinner and had participants sharing personal stories about themselves, further enabling group cohesion. The second activity, *Mission: Brainstorm*, had participants individually and collectively generating possible mural themes. Many ideas for themes were proposed, but no decisions were made; the

¹⁰ See marino, 1997, p.10.

consensus held that more time was needed to make space for everyone's voice to be heard. Rambling Wren summarized the collective mood on how to move forward on theme development when she shared:

Creating space for everyone is important, like making sure that everyone has space to talk, if they want to talk or share, cause I know that there are some extraverted people, I won't say any names [clearing her voice, suggestive of herself], who talk a lot, I won't say any names, umm... So, I just think that it's important that everyone feels comfortable sharing, or saying pass, so that we may have a system going around the circle, and you can say pass, or you can say okay I want to share, cause I know that if we just have free-form that sometimes it works really well, but sometimes it excludes others.

This comment and others made by the group encouraged me to consider the notion of structure. I tend to think of friendly relationships (of which I hoped would transpire throughout the mural process) as grounded in informal interaction. Thus, I did not predict that structure would emerge as an important attribute of community development. In this workshop, I realized that my fear of imposing rigid structure on the participants had blinded me of the potential benefits to creating structure in learning experiences. As Rambling Wren noted, sometimes free-form discussion can be excluding, especially when dominant voices exist within the group. This grew as a source of tension for both dominant and non-dominant voices in the group. In Rambling Wren's example, creating structure was important for facilitating shared voice and group cohesion. In the group's view, this structure was necessary to ensure outcomes be authentically collaborative. It took this experience for me to appreciate the importance of, and place for, structure within a creative process.

Workshop 3. This workshop again focused on developing group decision-making considerations (see Appendix F) and mural themes. Group discussion was audio-recorded and the transcription revealed that laughter was the most dominant theme. In terms of group dynamics, laughter exposed the playfulness of the emerging relationships between participants; but also, revealed a mode of expressing participants' attentiveness and interest (Fawcett, 2005). In other words, laughter was a joyful response made possible because of participants' active engagement in group dialogue.

This meeting was filled with enthusiasm. Themes were creative and imaginative and ideas extended *outside the box*. For instance, some participants wanted to challenge the mural as a fixed form existing inside a rectangular shape and suggested extending the painting beyond its boundaries. The participants worked in groups to brainstorm and Rambling Wren and Henry had this to share from their group's discussion:

Rambling Wren: *We were thinking that the actual mural could keep going outside of the mural. So like Henry was saying, [we could] have the mural here, right? [Referring to her drawing] And [we'd] have the raindrops all around it, like coming from outside the mural and [we'd] have a little bird going into the mural. And we could have...an ant walking across a locker...it would be a neat idea to extend it beyond the mural so that [the mural] is not just a space people come and look at but [reveals] the idea of continuity.*

Henry: *It would be depending where we [paint] it. Like if we [paint] it in the hall, you can have at one far end of the hall, a little ant, and then a raindrop, and then people become aware of it as they walk and then there will be lots of raindrops falling in as you get closer to the mural.*

Further, Henry and Ramona suggested that the mural did not even need to be rectangular, it could take a “blob-like” shape. These ideas were not without aesthetic challenges; however, they revealed the group’s excitement and willingness to consider ideas *outside the box*. marino (1997) reminds us that in brainstorming it is important to include the *crazy ideas* because they are usually the ones that create opportunities for transcending the status quo. In this meeting, the group grew closer to a decision on the mural theme and image; however, the consensus was that it would take one more session. At this stage, the group was beginning to understand the extensive time required to formulate a collective image.

I began to see the emergence of expressive outcomes, such as, but not limited to, excitement and solidarity, which fuelled the group’s participatory consciousness (Fawcett, 2005) in this project, but also prevented them from quick decision-making. Fixed timelines were a limiting factor; excitement and solidarity (as an example) did not neatly fit into the weekly one-hour workshops. Since the participants were pleased with the expressive outcomes, it allowed them to put trust in the creative process and gave them confidence in believing that something good would result from such a process. Rambling Wren wrote in the final debrief:

This group was incredible for flying by the seat of our pants. Starting the painting without knowing the exact end design was fun, and allowed us to breathe life into the creation of the mural. Also it allowed the less dominant voices spaces to share, and the thinkers more time to think.

As her writing highlights, the group did not rush decision-making which made room for collaboration; as such, the group was able to avoid settling for a decision that did not

honour their emerging collective identity simply because the hour was up. Embracing uncertainty was thus a common goal amongst participants, as Henry summarized:

Our embracing of the uncertainty was an occasional cause for frustration, but more often it was the basis for all of the great ideas that came forth and the unknown quality created the most satisfying feeling when everything finally came together in a lovely mural.
WORKSHOP 4. THIS WORKSHOP PRODUCED THE IDEAS THAT INSPIRED A ROUGH MURAL

sketch. It took shape as a moonlit landscape with a tree as its focal point (see Figure 14). I drew the sketch based on the ideas and considerations formulated by the group. For example, the group decided that all the lines on the branches should be rounded to create a tree that was inviting and open, to give the impression that it was opening its arms to the audience, but also to embody an important part of the collective process—its non-linear nature.

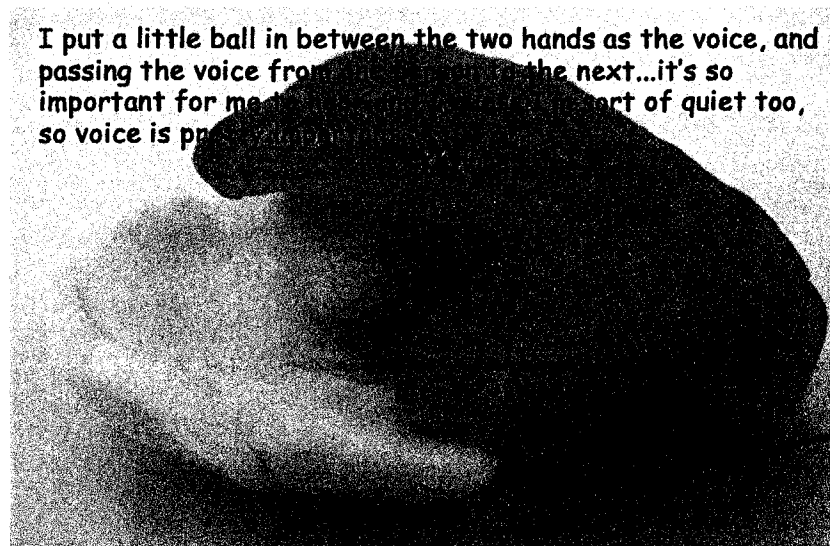


Figure 14. An outline sketch of what was to become the *Caring Tree*.

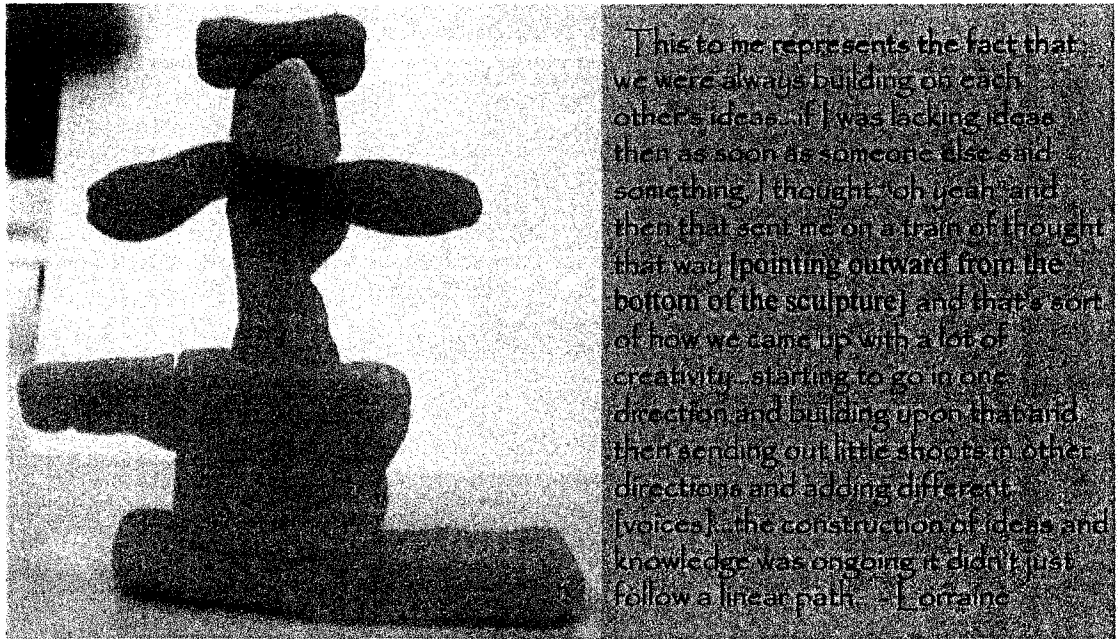
The participants wanted to make space for emergent ideas that would reveal themselves through the painting process; therefore, the sketch's purpose was only to

provide a skeleton for the mural. It would be printed onto a transparency (so that it could be projected onto the wall); however, there were elements of the artwork that were not represented on the sketch because they were yet to be developed and/or imagined by the group. Two examples that emerged and that participants were keen to include were: painting quotations on the branches that expressed their educational beliefs and aspirations, and painting local birds on the mural to include bioregional learning into the artwork. However, the consensus of the group was that more time was needed to conceptualize how these ideas would take shape.

Workshop 5. This workshop aimed at reflecting on the outcomes and experiences of the group members at the middle stage of the project. *Play-dough teachings* was an activity I facilitated with the participants to generate emergent themes related to the group's negotiation of knowledge. Each participant created a play-dough sculpture to represent the themes important to her/him. As a sample, Postcards 3 and 4 reveal Kaylana and Lorraine's discussion about the role of sharing voice.



Postcard 3. Kaylana's experience sharing voice.



Postcard 4. Lorraine's experience co-constructing knowledge.

For Kaylana and Lorraine, sharing voice and co-constructing knowledge was relational and involved an interaction of reciprocity. This theme is more thoroughly discussed in Chapter 6, but briefly here, the nature of these relationships suggest that for Kaylana and Lorraine, knowledge created in the community mural project was mutually learned.

The painting process

The mural took two weekends to paint. During the first weekend, the aesthetics of the classroom in which the mural was painted were dramatically transformed from a white wall into a colourful landscape (see Figure 15). Also during this time, the mural was given its name, the *Caring Tree*. This name was chosen to represent the collective aim of the group to inspire a caring ethic within the Faculty of Education that extended to the human and more-than-human world.



Figure 15. The early stages of painting: A dramatic transformation.

During the second weekend, the group painted the finer details of the mural. This included blending and shading, as well as developing and painting the emergent ideas. On the whole, participants experienced a steep learning curve. Therefore, my role as a leader was able to shift from providing much of the direction/instruction in painting and delegation to participating alongside the participants, to taking directions/instructions from the participants. Collaboration amongst the participants was at its peak and expressed through the blended brushstrokes of the six artists during the painting of the night sky (see Figure 16).



Figure 16. Artists' collaboration at work: Painting the night sky.

The finishing touches of the mural helped to solidify the nature of the participants' collaboration. Each participant represented her/his individual contribution to the collective work by painting a local bird of her/his choice (illustrated in Chapter 4 in Figures 4-10), as well as adding a quotation to the mural that reflected her/his conception of caring relationships in education (see Appendix G for selected quotations). In addition, the group chose a couple quotations collectively to represent parts of their conception of caring that were not yet revealed.

The celebration

An open house was organized to celebrate the mural group's work with community members and create an opportunity for dialogue about the process. To communicate to future audiences, a message was written on the wall beside the mural. It was co-created by the group and read by Millie at the open house, to those who attended the celebration (see Figure 17).

Welcome Friends,

Our mural, entitled the *Caring Tree*, is the product of the collective Creativities of education students who care. We want it to stand as an invitation for participation in, and creation of, community. We hope that it will continue to inspire future community members to find ways to contribute to this educational space. The *Caring Tree* represents natural connections, transgression, and community, but there were also many different themes, both personal and universal, that arose for each of us throughout the process. Feel free to gaze upon this work and interpret it for yourself.

The quotations on the branches extend our conception of Caring to include activism, solidarity, more-than-human relations and creativity. Some group members also highlight the importance of "leaving a place better than when you found it." The painting of the colourful and meaningful mural was intended to enhance the educational environment. It is important that the "footprints" we leave behind should contribute to the future. Like a living tree, our *Caring Tree* shines in the sunshine so we invite you to push back the curtains and let the natural light in.

Cordially, Lorraine Fitzmorris, RAMONA LAVERN, Henry Delacroix, Ali Solaja, Millie Grace, Kaylana Dee,
& Rambling Wren

Figure 17. The *Caring Tree* plaque: An address to future audiences.

Afterwards, the audience watched as each artist ceremoniously added her/his autograph to the plaque, and the ceremony concluded with a ribbon cutting, representing the mural's unveiling (see Figure 18).



Figure 18. Artists celebrating with community.

Research debrief

The open house brought closure to the mural process, but in order to do the same for the research process, one final debrief session was held after the open house. Its purposes were to create an opportunity for participants to share with each other their final reflections on their experience as part of the group, and respond to the research questions through one more writing strategy, *The snowball activity*. This activity used individual (short) pieces of writing to facilitate the creation of a collective (longer) piece. One excerpt was extracted from each participant's contribution in Workshop 5. These excerpts represented an emergent theme from group process. The snowball activity further developed the themes. Each excerpt was placed in its own envelope and given to its author. Participants sat in a circle and passed their envelopes to the person on their right.

The receiver read the excerpt and responded to it based on how it related to her/his ideas and/or experiences. Once completed, the excerpt was once again passed and the next person read both the excerpt and first comment; based on this, she/he formulated a second response. This carried on until all participants had a chance to respond; thus, each excerpt was followed by six responses. When the participants received their own envelope back, read the others' comments, and completed their own summarizing comment, they shared their final thoughts with each other, thus concluding the debrief. The findings from this activity were successful in attending to the research questions and they play a major role in the analysis in Chapter 6. The participants' responses were also helpful in guiding how I would authentically represent multiple voices in the thesis text. Specifically, I used the participants' penmanship as a style guide for choosing a font that resembled their writing. Some fonts are more resonant than others, since a second consideration for font selection was its readability.

Once the mural project was completed, I spent the next several weeks working with knowledge that was collected throughout the creative and collaborative process. What follows is my further discussion and findings from that work.

CHAPTER 6: WHAT WAS LEARNED FROM BRANCHING OUT

When I began this research, I imagined the mural would unfold as a medium for dialogue and expression about how environmental education is complex, embodied, and political. Although, these qualities exist as part of the project's outcomes (i.e. as products revealed through collaboration in an arts-based environmental project), they were not dominant. I learned that my research questions brought out more about pedagogy and the process of learning, than about learning that was uniquely environmental. Having said this, the usefulness of this work to environmental education is no less relevant.

This chapter explores the shift in research focus that resulted from the collaborative process. Also, it looks at how knowledge from the community mural project can benefit educators interested in working with aims similar to those of arts-based environmental education. It does so by revisiting the research questions and bringing their significance to light. Two sections are used to organize this chapter and each one is devoted to a research question.

The first section, *From individuals to a collective* looks at the research question: What is the nature of relationships amongst participants throughout this process? This section focuses on the interpersonal context of the community mural project. It explores the nature of the group's participation, which was a relational experience, grounded in social values, and reveals how participation in collaborative inquiry is important for addressing the complexity of decision-making in environmental education.

The second section, *From process to painting* looks at the research question: How is environmental education knowledge created and negotiated through a community mural process? This section examines the knowledge from the process (i.e., how knowledge was co-constructed), as well as the product of the community mural project (i.e., knowledge from the *Caring Tree* mural). This exploration reveals the relationship one has with the other, thus emphasizing the importance of attending to process in planning for and evaluating learning experiences. Furthermore, this section focuses on how this knowledge offers an alternative to the dominant discourse in teacher education. Specifically, the dominance of linear views of knowledge, anthropocentrism, and neoliberalism in education are challenged and transcended through an exploration of socially-constructed, ethics-based knowledge.

From Individual to Collective

Russell et al. (2000) suggest a *fluid* approach is necessary for creating new knowledge and making informed decisions in environmental education:

Many currents stir and animate the waters of Canadian environmental education. We travellers must pick and choose among them, depending on the vantage points we seek, the pace we deem desirable, and the destinations we have in mind. The routes we wish to follow are seldom direct. They twist and turn while currents far more powerful than our canoes carry us along. Choices must be made, and we are grateful when the occasional eddy provides respite from the momentum forward. There is no single correct way of proceeding, and what we propose now is to pause for a moment to contemplate some of the directions that lie ahead. (p.203)

Since there is no single correct way of proceeding, making informed choices about how to proceed involves coming together, as Russell et al. (2000) suggest, to “pause for a

moment to contemplate some of the directions,” and to create praxis that can meet the current challenges facing environmental educators.

Russell et al. (2000) also suggest that groups who work together on common goals and issues (as is true of the participants in the community mural project), are playing an important role in enabling environmental action:

Some of the most exciting environmental action in the schools is not a planned result of instruction but comes from environmental clubs, recycling groups, students action committees... leading whole communities—and often teachers—into new forms of environmentally responsible behaviour. (pp.202-203)

In the community mural project, engaging in environmental action involved creating a context for co-constructing knowledge. Thus, consensus on issues such as decision-making, structure of dialogue, and working with conflict came before the development of mural ideas. In this regard, the group created the following considerations: wear each other's shoes, share voice/take turns—everyone has the right to pass, include voting and consensus, and rub palms together to express agreement (see Appendix F). These considerations came first, before the development of mural ideas. In the early stages of the mural process, these group decision-making considerations were more formal; they were recorded and put on the table during group dialogue as a reminder of the group's common goals. Later in the process, these considerations became more informal, as a part of the group's etiquette and consciousness. In other words, they were not talked about, but rather practiced. In Workshop 5, participants were asked to describe their experiences of contributing to a socially-constructed process. Participants' responses were collected and excerpts from each participant were organized together to create a collective dialogue

(see Postcard 5). The responses reveal how the group considerations were practiced in the mural workshops.

"passing the voice from one person to the next...*Sharing respect, voice & space ...to sit & joke & carry on...and negotiate whose voices are heard within the group, to hear and listen...to say things if [you] wanted to...and be listened to & heard."*

- Kaylana, *Rambling Wren*, Millie, Lorraine, *Kenny*, Ramona, Kaylana

Postcard 5. Group considerations in practice.

The participants' voices respond to the research question which asked: What is the nature of relationships amongst participants throughout the community mural process? Relationships were developed based on social values. Lorraine shared that participating in the project involved, "negotiat[ing] whose voices [were] heard within the group." Sometimes, this meant that participants chose to contribute, while other times they gave space for others to share. Kaylana added that it was important that participants "be listened to and heard." In other words, listening was a form of active participation in the group. When others spoke, listening revealed participants' interest and respect. Thus, relationships were seen as a mutual experience, which for *Rambling Wren* involved, "sharing respect, voice, and space."

Further, the relationships were defined through friendly interactions. For example, Millie's description of co-constructing knowledge involved, "sitting, joking, and carrying

on together.” The following dialogue between Lorraine, Ramona, and Rambling Wren explores the significance of the group’s friendly interactions:

Lorraine: Humour strengthened relationships, and what really struck me about this process was how much I enjoyed doing art with other people...I had never participated in a collaborative art project before, but I was pleasantly surprised by how humour played into the experience in many ways...developing ideas, making work fun, keeping us engaged...

Ramona: I agree. Friendship was strengthened by humour. It lessened stress and allowed people to become loose with their ideas and allowed the process to be collaborative. We laughed at ourselves and others, and this communicated comfort, care, and respect.

Rambling Wren: *And, when you laugh really hard you are also close to tears and sorrow, a mixing of emotions, an opening of yourself. You need a baseline trust within a group to be able to access these emotions. I think when you are able to tap into these spaces within people then the passion associated with those emotions hopefully seep into the project itself and then hopefully those intentions may get passed on in one form or another. I feel this passion when I look at our Caring Tree.*

Humour was an expression of mutual appreciation for the participants. As Lorraine and Ramona suggested, it helped to develop friendly relationships and made that process fun. But also, it allowed the participants an opportunity to deepen their interpersonal connections. Ramona spoke about how humour allowed her to experience and express, “comfort, care, and respect.” Rambling Wren added that she was able to access embodied emotions, which enabled closer relationships and more meaningful knowledge than she had experienced in the regular teacher education program.

Relationships in the community mural project were grounded in social values and friendship; these qualities created the interpersonal context for learning in the community mural project. Also, they provided a common ground for participants to work from in their journey of group decision-making. In Figure 19, Henry's artwork represents the nature of integrating differences in the community mural project:

We all had similar ideas, interests, and goals (as like-minded people) but they were all different too (as unique individuals). So in a way, they swirled and came together quite nicely...but at times, it was also like...a whirl pool out at sea. So it was a little rough sometimes and you didn't know exactly what was going to happen. This is where humour played a role by sailing into the picture (over the rough seas), represented as a little, bright orange, boat...to help integrate different themes and ideas. Our friendship made it possible, laughing together brought common understanding!



Figure 19. *Rough seas of collaboration* by Henry.

For Henry, working collaboratively was challenging at times because creating knowledge was a social practice, thus understanding grew out of the participants' interactions. As Henry mentioned, there were commonalities, but also differences to work with. For example, choosing a mural theme was a complex task. Participants were given an opportunity to come up with ideas of which to share with the group. At first, participants held strong to their own ideas, since these reflected their individual purpose for participating. During this stage, coming to a consensus was not possible. However, as discussions evolved over the course of several workshops, participants were able to find common ground by exploring ways of incorporating multiple ideas into a new collaborative vision. To do this, participants had to let go of their own vision (temporarily) and let it evolve into the group vision.

In environmental education, the challenge of working with divergent voices is ever-present, no matter the issue. If finding common ground is the goal (as opposed to compromise), as it was in the community mural project, then much can be learned by Henry's statement that, "friendship made it possible," and, "laughing together brought common understanding!"

The next section explores how the context established in the community mural project contributed to the process of creating new knowledge and resisted the dominant culture in schools that "can constrain students and teachers who want to work on eco-political work" (Russell et. al, 2000, p.203). Conventional methods of knowledge, which view learning as a linear process, are common in the dominant culture. In contrast, working with a different notion of knowledge creation is revealed as an enabling factor in creating alternative knowledge that challenged the status quo in the Faculty of Education.

From Process to Painting

Prior to sharing the knowledge created by the community mural group, it is helpful to introduce the significance of the mural's process within the context of environmental education. To do so, I contrast conventional methods of disseminating knowledge with learning from the community mural process. As Eisner (2002a) notes, conventional methods view learning as a linear progression:

[Outcomes] are supposed to be well defined, firmly held, and used to formulate means, which are theoretically related to the achievement of those [outcomes]. Once means have been employed, evaluation is to follow. If means are found wanting, new means are conceptualized and implemented, and their effects evaluated. Again, if means are ineffective, even newer means are implemented. [Outcomes] are held constant in the [linear process]. Means follow goals. It's all quite neat. (p.78)

In my teacher education, this view was dominant. Pre-determined outcomes were the focal point of teacher preparation and the purpose of learning strategies involved working towards their achievement. Eisner helps to expose my motivations for exploring an alternative path by revealing two important flaws in the linear process.

First, Eisner (2002a) suggests that the linear view emerged from a desire to alleviate "anxiety about quality of our schools," thus it is grounded in efficiency—a way to "help us achieve, without surprises or eventfulness, the aims we seek" (p.xiii). Unfortunately, imagination and elements of surprise are underscored when learning outcomes are known before they are achieved. There is limited room for imagining possible outcomes and/or being surprised by what emerges through such a process. Thus, exclusively committing to efficiency can compromise qualities that can bring wonder and excitement to learning, and as much literature in environmental education points out,

wonder and excitement are vital factors to developing caring relationships with the world (Bell, 1997; Carson, 1956; Eisner, 2002a; Fawcett, 2005).

Further, Eisner (2002a) says, “the problem is that [the linear process is] too neat. Life does not proceed that way, and for good reason” (p. 78). Assuming that learning fits neatly into a linear process ignores complexities that exist in real life (i.e., learning that emerges unexpectedly and brings meaning to an experience, or learning that is experienced in close relationships that cannot be valued based on measurement). As Eisner writes, “the implementation of means might lead to unanticipated effects that may be more interesting, promising, or problematic than the ones originally sought” (p.78). These types of learning, familiar to everyday living (occurring in our ongoing interactions with the human and more-than-human world), are misplaced in the linear view because their value is not best understood through measurement. Trying to fit such learning into a linear view, is not only difficult (since often, intended outcomes do not exist), but also may be counter-productive. For instance, one intended outcome in the community mural project was to create a mural. So, in the linear view, the project’s value could be evaluated based on how well it was painted (its aesthetic qualities), but this ignores *how* the mural was created (the subject of one of my research questions and a vital part of this argument). Thus, what is central to the learning can also be silenced by focusing strictly on intended outcomes.

As a student and educator, I have come to know that many students (in school-based settings and in teacher education) become uninterested in learning when their only motivation is getting good grades. If learning is more than a means to evaluation; if its process is essential to making experiences meaningful, then school curriculum needs to

better reflect that. Much of the learning in the community mural project illustrates this complexity and works to reveal ways its process transcends the “quite neat” view of learning by adopting a messier understanding. In doing so, learning is understood and valued through process and product.

Messy is wonderful

Rambling Wren and Lorraine’s dialogue reveal that the process is what made the experience “vibrant” and “magical”:

Rambling Wren: *As the mural was being created so too were ideas concerning the mural. We started with a base coat then added details, thoughts, messages, and vibrancy. Not linear in any way which also made it difficult to see the end, but opened avenues for collaboration.*

Lorraine: Yes, it’s been really wonderful to feel stimulated by everyone else’s ways of knowing. Knowledge creation is a mystery! And it was a very magical process to be part of.

Learning is described by Rambling Wren and Lorraine as collaborative, stimulating, and mysterious. It is evident that they were pleased with how the group worked together and what came out of their collaborative experience. Lorraine said, “it’s been really wonderful to feel stimulated by everyone else’s ways of knowing. Knowledge creation is a mystery!” Thus, the learning process could not be easily predicted and there was much uncertainty which, Rambling Wren added, “made it difficult to see the end.” Yet, by embracing learning as messy and unpredictable, Rambling Wren noticed opportunities for collaboration, and for Lorraine, this is what made the experience “wonderful.”

Rambling Wren said, “We started with a base coat then added details, thoughts,

messages, and vibrancy.” Thus, the emergent knowledge became more meaningful as more time was spent developing it. As Eisner (2002a) suggests, “sustained work promotes attention to the work in depth, taking the work seriously” (p.96), and in time, it can come alive (or, become vibrant).

Collaboration in the community mural project exposed Rambling Wren and Lorraine to a process of knowledge creation filled with surprise and uncertainty. “Mystery” and “vibrancy” were not intended outcomes; in fact, they emerged from a certain set of conditions that resisted the limits of a linear process. In this context, success was revealed not through evaluation of the product, but rather through the participants’ appreciation of the emergent outcomes from the process. Lorraine noted, “it was a very magical process to be a part of.”

In the spirit of Abram (1996), who reminds me that language is value-laden, I chose to use the term *more-than-linear* to represent the process of learning experienced in the community mural project. By implying that this process is *more than* linear, fluid and complex notions of learning are appreciated and valued. The subsequent sections explore this process and the knowledge created, and highlight how the knowledge works as stories of resistance in teacher education by examining dominant beliefs and creating space for different stories to be told (marino, 1997).

A more-than-linear process

Going about learning in a more-than-linear way created a context for learning that made certain outcomes possible; it was a defining feature of all learning in the community mural project. In this thesis, I have spoken about this process in terms of an

enabling space (Weston, 1993) or fields of play (Finley, 2005), where knowledge can be socially constructed in imaginative ways. Since the term more-than-linear was given after the project's completion, it was not part of the mural group vocabulary; therefore, to honour the participants' contributions, *not linear* and *non-linear* are used in spoken text, while *more-than-linear* is used in my discussion of this process.

Lorraine's discussion of the more-than-linear process reveals its social-constructivist nature:

We were always building on each other's ideas...if I was lacking ideas then as soon as someone else said something, I thought, "oh yeah," and then that sent me on a train of thought [one] way...and that's sort of how we came up with a lot of creativity...by starting to go in one direction and building upon that and then sending out little shoots in other directions and adding different [voices]...the construction of ideas and knowledge was ongoing it didn't just follow a linear path. And, why do I think this is? Because we are all different, we all bring different creative potential to the group and so, when we all pool our creativity, it sends us off in new and interesting directions.

Thus, the construction of ideas was an active social process that depended on the contributions of the participants. "Building on each other's ideas," as Lorraine described, involved sharing voice and sometimes someone else would have to speak before Lorraine's ideas began to flow. This was a common experience for participants. Kaylana added:

The journey felt like a spiral, where moving forward could feel like moving backwards but really it was moving up and around and forwards again. Moving up because how could you not with all the ideas we were building on?

The process was always in motion, but not without purpose. Kaylana felt that the journey of making collaborative decisions or, going forward, required flexibility in movement,

“like moving backwards...up and around and forwards again.” Travelling in this way made it possible to consider multiple possibilities and represent each participant’s voice.

Throughout the process, creating collaborative knowledge resisted fixed timelines. This created on-going stress for the group, but also an opportunity for learning. As Rambling Wren said, “Time was a stress factor in this project and although it was sad to lose a couple of people from the initial group, it facilitated more voice.” Rambling Wren highlighted that the one-hour sessions demanded a small group. The project started out with nine participants, however, two participants had to withdraw due to scheduling conflicts. From the beginning, it was evident that many participants shared common experiences and aims; however, this was not true of everyone. Making space and time for equal contribution took time and energy. Therefore, the transition from nine to seven participants made a significant difference in both the sharing of voice and group dynamics.

In spite of this, I would also argue that some of the stress the participants experienced was grounded in the group’s unfamiliarity with working collaboratively in a constructivist process, since it is not a common practice in school-based learning, or in teacher education. Importantly, when the group became more comfortable with co-constructing knowledge through a more-than-linear process, they were less concerned about creating certainty at the end of each meeting because their trust in the process grew stronger. Henry said, “differences [were] what stimulated creativity and help[ed] us to think un-linearly!” and Millie shared, “going forward without things being totally together...can lead to really good things as long as we believe our path is worthwhile and that we stick together on it.” Further, Lorraine shared:

Uncertainty fosters a great deal of generativity, certainly. Ambiguity is something that we don't allow much space for usually. I'm trying to be more open to ambiguity and not force definitions or structure upon things. I think we did a great job of that with this mural. There were lots of ideas created, and we didn't put pressure on needing it to take a certain shape, and when the time was right a cohesive idea took shape pretty naturally. And it's so beautiful!

For Lorraine, creating a “beautiful” product was an expression of experienced success in the more-than-linear process. As in any learning, success can build confidence and motivation for engaging with more complex challenges. For instance, after participating in the community mural project, Lorraine expressed an interest in being “more open to ambiguity and not forc[ing] definitions or structure upon things.” This quality is desirable in pursuing further complex challenges since ambiguity is an ever-present reality in real life issues.

In summary, the tensions experienced by the group in relation to fixed timelines were met by the participants' desire for creating a meaningful mural. The blending of the two factors created a group energy and cohesion, not otherwise possible, which fuelled the participants' commitment to the project and its aims.

In the quotation below, Rambling Wren also describes how the group was prepared to address complex challenges by resisting the status quo:

This group was incredible for flying by the seat of our pants. Starting the painting without knowing the exact end design was fun, and allowed us to breathe life into the creation of the mural. Also, it allowed the less dominant voices spaces to share and the thinkers more time to think. I loved how the group supported the “beyond the boundary” ideas, the wackier the better it seemed, which stimulated the dreamer in me and

allowed my creativity the freedom to contribute to a mural I love. (I have fallen in love with).

Like myself, Rambling Wren gains great inspiration from the work of dian marino. In her quotation, Rambling Wren speaks highly of the group's tendency to work with "beyond the boundary" ideas. Similarly, marino (1997) believed that "the crazy or wild ideas...just slightly off the norm" were capable of threatening the status quo; she stated, "that's why they're labelled crazy and wild" (p.34). For Rambling Wren, the "beyond the boundary" ideas acted as a catalyst for her creativity and strengthened her connection to the mural and its aims. The knowledge co-created through the "beyond the boundary" ideas is the subject of the following section which explores the outcomes of lingering in more-than-linear process.

In large part, creating counter-narratives to linear notions of learning involves transforming the language used to describe the learning process. For instance, by focusing on more-than-linear process, a different way of creating knowledge was made visible. Another way that that will be central in this section involves transcending language that reinforces efficiency, so that meaningful ways of knowing and experiencing the world can be more valued. As Eisner (2002a) puts it, "few of us like to eat a great meal efficiently or to participate in a wonderful conversation efficiently, or indeed to make love efficiently. What we enjoy most we linger over" (p.xiii).

Lingering in more-than-linear process. In the community mural project, the lingering process was grounded in activism. Specifically, the participants explored how their work could challenge the dominance of anthropocentrism and neoliberal values in teacher education. The *Caring Tree* mural offered a lasting medium for expressing their

resistance to other pre-service teachers and faculty. Its placement in a classroom was significant to the group. Ramona stated, "The fact that it is in a classroom is important because the mural reminds one of the earth while in class."

The sections that follow explore the voices of activism which revealed themselves throughout the project and communicated another way of living and learning in teacher education. As Marino (1997) noted: "changing our relationships with each other and our environment is intimately linked to a habit of exploring and revealing assumptions in our everyday acts" (p.128e). Lingering in more-than-linear process enabled spaces to initiate dialogue and action about these assumptions (Fawcett, 2000).

Transcending anthropocentrism

Facing environmental issues is not purely a human activity. More-than-humans have a stake in the outcomes and deserve consideration as well. Thus, a vital task for environmental education involves learning how to find common ground and create solutions together, with other humans and more-than-humans, even when multiple and often conflicting values are at play. This is an important challenge facing environmental educators, and the community mural project was one way of honouring and integrating multiple values.

Anthropocentrism is often discussed as a human-centred perspective widely rooted in various social institutions and discourses (Oakley, 2007). With the exception of environmental education and feminist research, human-centredness exists as an unquestioned assumption in the curriculum of many schools and Faculties of Education across Canada. Consequently, the lack of critical discussion about human/more-than-

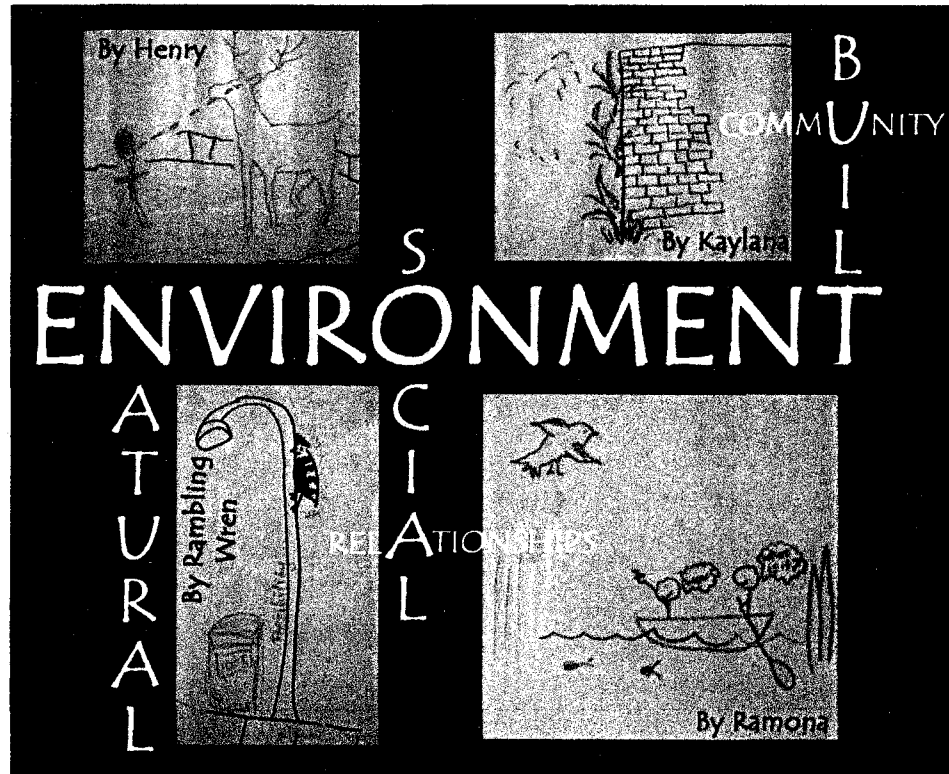
human relationships in social/ethical/political contexts produces and reproduces anthropocentrism in a variety of ways in the education system (e.g. through anthropocentric silences/hidden curricula, human-only spaces, etc.) (Oakley, 2007; Orr, 1992; Weston, 1991). One example from the community mural project was realized when the term anthropocentrism was introduced and only the OE3 students were familiar with its meaning, still although they knew what it meant they could not recall an example of when human/more-than-human relationships were considered/critiqued outside their OE3 class. The dominance of anthropocentrism in the Faculty of Education was a concern of the participants in community mural project. This was evident throughout the process as well as in the completed mural. In the final debrief, Lorraine shared what she appreciated about the group's effort to transcend anthropocentrism:

We were interested in getting at "the truth" or at least the truth that resonates with us, "dropping the veils," as Tom Robbins would say and turning our minds to the earth. I have loved the image that we created because it unifies humanity and nature and eliminates an artificial divide, and that is a "truth" for me.

Lorraine speaks of "truth" not as an absolute, but rather as an intersubjective term which represents the content of the mural team's story. The participants' collective aim was to share a vision that "unifie[d] humanity and nature" and eliminated the dualist relationship which Lorraine expressed as "artificial."

The mural team's interest in resisting anthropocentrism came early in the community mural process. Alternatives to human-centred values were explored in the group's collective working definition of environment (which they created in the first

workshop). Environment was expressed as a community of relationships, and humans were only part of the story (see Postcard 6).



Postcard 6. Group's working definition of environment.

In the group's collective notion of environment (revealed in the text in Postcard 6), no part of the environment was revealed superior to another; instead, the text described environment as a notion that was made up of community and relationships existing in natural, social, and built contexts. The accompanying drawings support this idea by revealing that humans can have an impact on nature, but also, nature can have an impact on us; thus, encouraging humans to consider what kind of impact (or relationship) one can and should have. In terms of ethics, this consideration can be an enabling factor in creating inter-species bonds and friendship (Fawcett, 2002).

Inter-species bonds and friendship. Fawcett (2002) speaks about how many values in Western culture teach humans to be anthropocentric by “divorcing themselves from their ‘animalness’” (p.136), and seeing themselves as separate from it. This can make becoming friends with the more-than-human world challenging for a number of reasons (i.e., being disconnected may inhibit humans from seeing the value in such a friendship, or may prevent humans from knowing how to initiate and sustain such a friendship). As an example, Henry drew a human-deer interaction on a road. Of his drawing, he commented:

I wanted to highlight the eye contact between the human and deer as a reminder that when we look at them, they are also looking back at us. Their interaction takes place on a road because that is often how we encounter deer and how they encounter us, so this is how we know them and how they know us.

Henry’s discussion implies that the human-deer interaction is relational and is not just experienced by humans. Acknowledging the interaction as a relationship suggested that humans and nature are both subjects capable of communicating with each other. Henry noted that the interaction taking place on the road was significant because it suggested that if we meet a deer on a road (a piece of built environment that has fragmented the deer’s habitat), then we will come to know who they are and how they act in that environment. But also, they will come to know who we are and how we act in that environment (as speeding drivers who threaten their well-being, or eyes that stare at them). Henry found this to be an important consideration for preparing for more friendly relationships. Further, developing an inter-species friendship and coming to know the deer in another way would require a different environmental context.

Ramona's drawing offers a human/nature interaction within a natural setting. Her sketch reveals factors that helped and hindered her ability to consider friendship with the more-than-human world:

I went to camp as a kid and spent a lot of time on the water doing pond studies. I loved it! I learned so much and I wanted to be in the boat, or in the mud, all day long, both suited me just fine. When I was there, I would notice a lot and was excited to learn more about the insects, birds, and plants that frequented the pond, or came to surprise us. I remember seeing Red-winged Blackbirds before knowing what they were, and seeing them often allowed me to get to know them and notice how often they joined us on our adventures. Now I don't have to be at camp to spot one, but when I'm not there, I'm not always looking.

The natural setting offered Ramona a chance to notice and get to know about Red-winged Blackbirds. When she was at the pond, her enthusiasm and curiosity was high for making more-than-human connections. In her urban life, however, she suggested that sometimes she overlooks such relationships, by "not always looking." Rambling Wren's drawing addressed this complexity and shared her strategy for developing inter-species bonds or friendships:

In a new place I like to look around and find out who lives in the neighbourhood. Thunder Bay is new to me this year, so recently my eyes have been wide open! One day when I was walking home from school, I spotted a Pileated Woodpecker sitting on lamp post and I was so excited because I never would have expected to see one in a city (I'm a bird-geek, I admit it). And after seeing him, I was inspired to find other neighbours that might surprise me. There are so many, if only you look and take notice! But I think knowing the birds' names makes this process easier, it has for me, anyway...And I think that it is important to learn human and more-than-human names, so that we can acknowledge them and then get to know them better.

Rambling Wren's story reveals how making efforts to notice birds in her everyday living allowed them to become very familiar to her. Also, her story uses enabling language that values the more-than-human world. She calls the birds her "neighbours" and reveals an interest in finding who else "lives in the neighbourhood." Thus, when she encounters a bird, she greets it with warmth and enthusiasm; this has brought Rambling Wren success in getting to know, and befriending, her bird neighbours.

The next section explores how the group chose to include text and images in the mural that could enable inter-species bonds, and present an alternative to the anthropocentric perspective. Also, it highlights how their actions put ethics into practice as a way of enriching relationships with the more-than-human world. They focused on enabling an ethics-based epistemology (Cheney & Weston, 1999) and participatory consciousness (Fawcett, 2002), as a way to create reciprocity, capable of disrupting dichotomous relationships.

Ethics-based epistemology. The participants chose to acknowledge a sample of local birds in the *Caring Tree* because throughout the process of creating the mural, much of their stories included a common interest and connections to birds. Therefore, it seemed appropriate to choose birds since they strengthened interpersonal bonds amongst participants, as well as their connection to the mural. Each participant chose a bird with whom they felt particularly connected. The birds' inclusion was an ethical decision because it was meant to be a visual statement of acknowledgement (i.e., the participants viewed the birds as subjects whom with they were capable of developing relationships). As a way of expressing their etiquette, the participants labelled the birds by their common names to help audiences identify their neighbours and get to know who was flying around

their neighbourhood. The participants' sentiments were expressed by Rambling Wren, who noted, "By including the birds and their names, community can be understood as more than just human." In this example, the birds were considered part of the participants' "community" (see Figure 20).

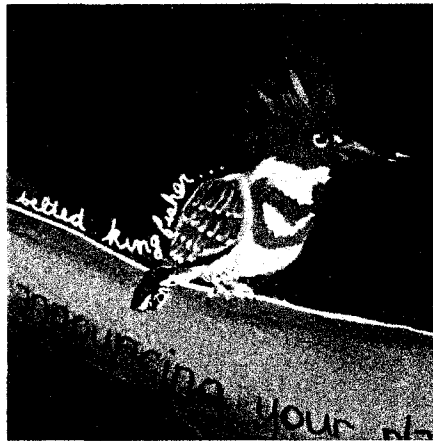


Figure 20. The *belted kingfisher* acknowledged and identified in the *Caring Tree*.

Also, the group chose to include quotations on the *Caring Tree* that could represent their collective notions of caring in education. Some of the participants chose quotations which evoked more-than-human consideration (see Figure 21). These passages revealed themes of interconnectedness, love, and embodiment.

COLLECTIVE:
 "... That which unites all forms of life is more important than that which divides" (Næss, 2002, p.92).
RAMBLING WREN:
 "If we change the stories we live by, quite possibly we change our lives" (Okri, 1997, 46).
ALI:
 "Where there is love, there is life" (Gandhi, quoted in Prabhu and Rao, 1967, p.417).
RAMONA:
 "The world is mud-licious... and puddle wonderful" (Cummings, 1996, p.580).
HENRY:
 "The world offers itself to your imagination, calls to you like the wild geese, harsh and exciting - over and over, announcing your place in the family of things" (Oliver, 1986, p.14).

Figure 21. Quotations which challenge anthropocentrism from the *Caring Tree* mural.¹¹

¹¹ These quotations were brought by the participants and added to the mural without references.

The voices represented in these quotations, such as Arne Næss, Ben Okri, Mahatma Gandhi, e.e. cummings, and Mary Oliver, speak a transformative language set out to address social, environmental, and political issues and transcend hegemonic relationships. Thus, the authors' words helped the participants create an alternative to everyday language that reinforces dominant values in education: a language of resistance.

The *Caring Tree* focused on what connects humans and more-than-humans (relationships) rather than what separates them, as a reminder that humans are not separate from the earth. Caring relationships can transform how life is lived and learned. As Okri (1997) has said:

We live by stories, we also live in them. One way or another we are living the stories planted in us early or along the way, or we are also living the stories we planted—knowingly or unknowingly—in ourselves. We live stories that give our lives meaning or negate it with meaninglessness. If we change the stories we live by, quite possibly we change our lives. (p.46)

Thus, making alternative language more familiar can be an important step in enabling new relationships with the more-than-human world.

Participatory consciousness. Another strategy used to unite humans and nature is identified through the notion of participatory consciousness. Fawcett (2002) describes this awareness as a form of somatic perception that involves a reciprocal relationship. It attends to the immediate sensations that an interaction can evoke, as opposed to experiences from past or future. In the mural classroom, there is a wall of windows which offer exposure to the life that exists beyond the glass panes. Thus, the windows allow one's senses to interact with the outdoors and visa versa (i.e., one can feel the warmth of the sun's rays, or see the snow flakes as they fall, or hear the wind blow, etc.). Yet,

curtains are often draped over most, or all, of the windows which inhibit such connections to the natural world. In my own experience, sometimes when the drapes are covering the window, I forget to push them back. In other words, when I am not immediately experiencing Nature within the classroom, it often drifts from my consciousness. I do not think about how sunlight (as an example) could enhance the learning experience in that classroom.

So although some ways of healing the human-nature disconnect are complex and hard to transform, this example of participatory consciousness requires only that the curtains be pushed back so that Nature can communicate to us and we can engage back. Thus, the participants responded by including a reminder to audiences in their mural plaque which read: “like a living tree, our *Caring Tree* shines in the sunshine so we invite you to push back the curtains and let the natural light in.”

Transcending neoliberal values

Another theme that emerged during group dialogue was the effect of neoliberal values. Neoliberalism has been described as:

An ideology that makes the market central in governing economic, social and political life. Based central on a belief in the inherent wisdom of the market, it assumes the rules of the market should govern societies, rather than the other way around. A pivotal concept in neoliberalism is that of *competition*, which is valued for its believed ability to get things done in the most efficient ways possible. According to this doctrine, allowing the talents of the most able to find expression will eventually benefit everyone: the rising tide of capitalism will lift all boats. (Wilson, 1994, p.2)

It is commonly argued that Canadian society has been increasingly invaded by neoliberal values, and that efficiency has come at a high price (Campbell & Pedersen,

2001; Chomsky, 1999; Wilson, 1994); this belief was supported by the mural team. Throughout the community mural project, participants exhibited their resistance of neoliberalism in education. They challenged its focus on competition, its centrality of economic values, and its dependence on efficiency.

Community rather than competition. Participation in the first mural meeting was an indication in the group's interest in pursuing community-based learning. My invitation to the participants included my intent to offer an experience different from the regular teacher education program. This was expressed in the participants' responses to an individual reflection activity, which asked them to list some goals and/or expectations for the project. Participants wanted to: "work closely with friends and new acquaintances in order to accomplish a worthy goal" (Henry), "participate in creative community process" (Rambling Wren), "create community" (Lorraine), "participat[e] in a creative project... 'learning' through the group process and 'teaching' through the product" (Ramona), "create an amazing mural that speaks not only to the group working on the project, but to everyone who sees it" (Millie), and "learn and teach with others through this process" (Kaylana). Therefore, the participants wanted to engage in an educational experience which contrasted competitive values and presented them with an alternative path. To the participants who showed interest in, and committed to, the project, having such an experience in teacher education was seen as valuable.

Multiple values over economic values. In the first workshop, the group created an education community self-portrait (drawn upon a classroom window) which illustrated critical issues the mural group were facing as educators. Kaylana sketched currency

flying out of a book to illustrate the dominance of economic interests within school curriculum (see Figure 22).

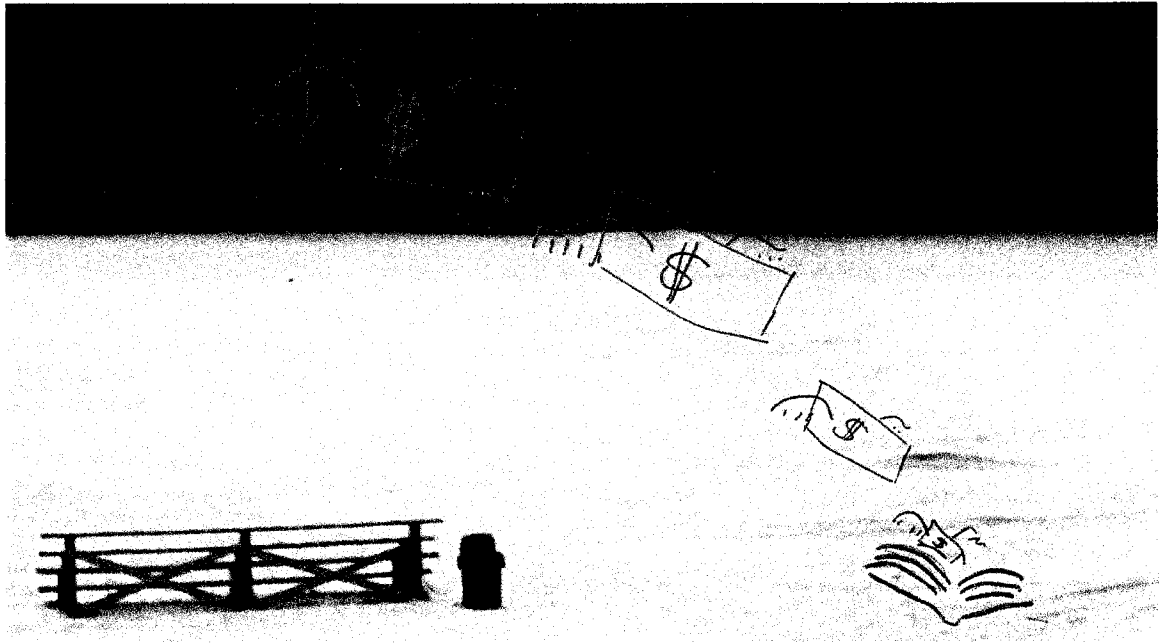


Figure 22. Kaylana's interpretation of learning reduced to economic values.

She stated, "Competition and individual interests are more valued in schools. I think this is because money controls what does and does not get taught." Kaylana was concerned that when money has power to determine the curriculum, community values remain silenced. Eisner (2002b) writes that, "what is not taught can be as important in someone's life as what is taught, whether explicitly or implicitly" (p.159). Later in the project, Millie voiced concern that reducing learning outcomes to economic values sells humans' interest short:

We also care about the Earth and about other humans. But we don't learn how to do that well in schools. The mural project was an experience to let go of knowing in an individual way, but still to care a lot about the work...together!

For Millie, the mural project revealed that letting go of self-interest did not come at the expense of her passion and care for the work. Instead, community values facilitated the integration of multiple values and helped participants in finding common ground.

Lorraine added:

I think there's an instinct to want to be represented, and heard, and often we fall back on competition. But comfort with that shifts between people and across contexts... This is why the learning environment in the mural project was so special. Each of us knew when to speak and when to listen. We didn't have to force it. Outside of this project, I'm not sure I've experienced that kind of learning, at least not in schools.

Thus, she enjoyed what was different about her learning in the mural project in comparison to her other school experiences. In a non-competitive and collaborative context, Lorraine did not need to “fall back on competition” or “have to force [her voice].” The group functioned as a supportive community and shared voice throughout the process.

Meaning over efficiency. Ramona felt that her education in schools cheated her out of the joys that can emerge from working in groups:

I used to hate group projects. They were frustrating, but that's because there were often competing ideas and there wasn't always an interest in working together to create something collaborative. So really there was no point then in doing the work as a group! We didn't know how to work with each other, but also, we never gave ourselves the chance to figure it out. If we were “lucky” we learned to be efficient, to get the work done with minimal stress and time, but often there was no fun in that. But this mural project's tendency to build upon ideas and create a unique thing that everyone felt they had a piece in was quite pleasing.

Before this project, Ramona spoke about hating group work. In her case, she didn't understand the purpose of working in groups when collaboration was not a central goal. In school, she learned how to work efficiently to get a group task completed, but she questioned whether that was really group work, since the outcomes were not necessarily collaborative. She questioned the worthiness of efficiency, rather than building community, because it took the meaning and fun out of working with others. In the mural project, Ramona was able to reimagine group work:

The mural isn't what anyone would have created on their own, if they were doing something individually. The result is probably really unique to this group of people and I think that happened because of the personal experiences people brought to this project, but also because they were willing to cooperate, or give up some of their own visions, and join other people's ideas to combine them.

In her reimagined notion, group work was about integrating multiple voices, working cooperatively, and creating synergy.

The participants agreed that collaborative outcomes emerged because community values were made central in the project. For example, Kaylana shared, "I really like that this is a group mural. On my own, I would have created something much different, and would have learned differently." In this way, the participants did not assume that community-based learning was better, but they did acknowledge that it was different. For Rambling Wren, community values were also significant in making her experience memorable:

I have been on a journey this year...trying to find the essence of how I feel, where I'm connected, what it is that inspires me and this mural process was definitely a visual representation of that

journey. I will not forget the internal and external connections I have felt...and the beauty.

In this passage, Rambling Wren reveals that developing a deeper sense of her individual interests was aided by working collaboratively. Thus, the outcomes of working together in the community mural project did not create strictly opposing values to individualism. Rather, Rambling Wren felt that collaborative work helped her balance self-interest with the interests of others:

I really enjoyed the collective process, the giving up of a part of my vision for the exciting synergy that was to follow. I'm an ideas person, love to think up ways to creatively convey ideas, but I need supporters and refiners to help get a process going. The positive energy in this group made the skies the limits and we ended up with an amazingly beautiful process and mural. Hooray for group collaboration and community!

Rambling Wren recognized her need for support in creating meaningful work in order to move beyond efficiency to a more aesthetic vision. Other participants helped to develop her knowledge and spark her creativity, and thus were an intimate part of her understanding in the community mural project. Since identity is influenced by epistemology and ontology, this consciousness suggests that Rambling Wren experienced a sense of self beyond her physical boundaries. Evernden describes this experience as a field of self (Evernden, 1985). Within this new collective space, Rambling Wren expressed that, “be[ing] conscious of how much space [she] was taking up, as well as being very open to other peoples’ points of view, were very important to [her] in the meetings, and during the mural painting.” Evernden (1985) speaks about this type of consideration as fields of care that are enabled through fields of self. Consciousness as

described by Eisner (2002a) is, “a form of awareness...fed initially by sensibility” (p.108). Thus, becoming a field of care was an embodied experience. In other words, Rambling Wren's extended notion of self included a caring ethic that facilitated her desire to share voice, rather than dominate it. This was a common experience for participants in the community mural project.

Overall, transcending what might be framed as neoliberal values such as competition, economic interests, and efficiency, allowed the participants an opportunity to strengthen skills and consciousness often overlooked in schools. Quality of knowledge was not defined through efficiency, but rather in the strength of caring relationships. In other words, since the knowledge was relationship-based, one's etiquette mattered and this had a great influence on the overall quality of the knowledge created. For this to occur, an ethic aimed at exploring and enriching the world had to come first (Cheney & Weston, 1999); then relationships were strengthened.

Also, caring relationships contributed to the participants' commitment to the project and its aims. Halfway through the project, participants were asked: What is there that you want to change in the community mural process? And what might you try to do to alter that “dimension” to better fit you and your values? Participants' responses to this question focused on their personal contributions that could benefit the collective. Ramona wrote, “To offer more to the group.” Kaylana said, “to not take this experience for granted.” Rambling Wren wanted, “to work with conflict,” because she mentioned that “there were divergent ideas presented when [the group was] deciding on mural themes,” and sharing voice was not always easy. Thus, as the participants continued to work on the mural project, their strengthened relationships allowed them to develop an ethic of care

and commitment to the project. In the community mural project, as was written on the mural plaque, “these students cared!” Henry noted in his response, “if I found a problem with the group’s direction on a certain idea, I could comfortably engage a constructive discussion about it and feel satisfied.” The rewards of co-constructing knowledge in a community mural process involve the ability to respond to complexities together, and stand in each other’s shoes, in order to make good choices about important issues.

This is not suggesting that neoliberal values need to be eliminated, but rather, deserve interrogation of their dominance in teacher education discourse. Warren Allmand warned that, “We live in a world in which it is more serious to break trade rules than to violate human rights” (quoted in Wilson, 1994, p.2). If education has a role to play in changing this reality, then community values deserve more weight in school curriculum. As I have argued in this thesis, more-than-linear processes are not easy because dominant assumptions in education do not facilitate their practice and participation. Like any ability, their mastery requires much time and dedication; community murals as research in environmental education are just one way of making time for such practice and participation. Community murals are not the be all and end all answer to all issues facing environmental education—no approach is—but they can speak a language that is capable of exploring complexity, embodiment, and politics within this field, as well as enabling social change, and that is something that deserves our attention!

CHAPTER 7: FURTHER MUSING ON THE *CARING TREE* MURAL PROJECT

A Resting Place

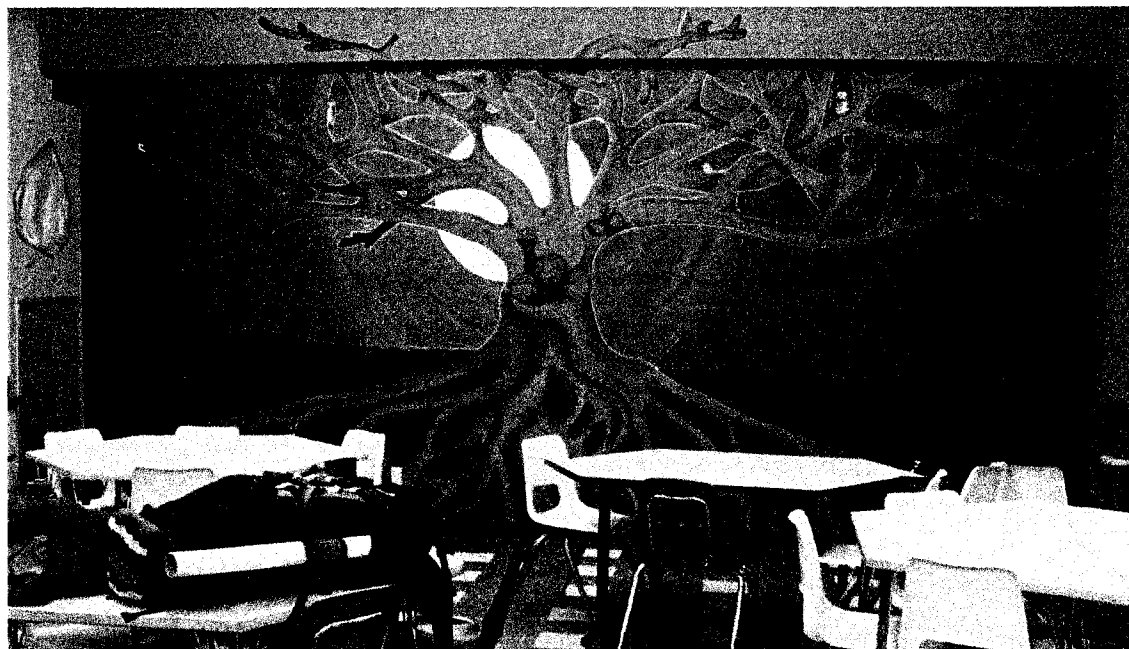


Figure 23. Resting by the *Caring Tree*

I find it comforting to think of the mural making and conclusion of this thesis as a resting place, since the work of the *Caring Tree* is ongoing, even when all its artists have dispersed. That is the beauty of such work. At this resting place, it is important to reflect on the learning that will live on as a result of this group's action and effort to communicate an environmental education message to its community. First, what does it say about the environment? And, what possibilities for environmental education have emerged from this work?

The *Caring Tree* presents the environment as a complex notion, represented as a community of relationships (e.g. social, ecological, and political) including humans and

more-than-humans. In other words, it suggests that we live in a community and should consider and care for all of our neighbours (“the how to” part of this notion reveals a complex challenge facing environmental educators). The mural offers a couple of strategies which include transcending anthropocentrism and neoliberal values by advocating caring relationships. More specifically, the local birds represented in the *Caring Tree* model the participants’ efforts to create interspecies bonds and friendships, ethics-based epistemology, and participatory consciousness. The inclusion of the birds and their common names can enable audiences to become more familiar and aware of a sample of neighbours with whom they share a community. Also, the mural emphasizes community over competition, multiple values over economic values, and meaning over efficiency. Thus, the *Caring Tree* presents a story of resistance (i.e. counter-hegemonic knowledge), by depicting “environment” differently from what pre-service teachers commonly experience in the Faculty of Education; and, it represents the group’s commitment to communicating their refusal to marginalize such a notion of environment in Faculty of Education curriculum.

The theoretical and practical possibilities for environmental education that emerge from this work are diverse. In terms of theory, *Pre-service teachers branch out* goes outside the traditional environmental education framework and offers a new lens through which to view environmental issues and concerns (i.e. through a community art perspective) in order to explore a different way of responding to them. Specifically, community murals remind environmental educators to consider the participants, processes, relationships, and activism activities relevant to their particular learning/teaching contexts, in doing so they give environmental education a new

language to work with which may be better equipped in facing complex, embodied, and political challenges. In this thesis, the challenges explored by the participants' and I included responding to the lack of environmental education in Faculties of Education/school-based settings, developing harmonious relationships with the earth and amongst other humans, and being considerate of multiple values.

In terms of practical relevance, *Pre-service teachers branch out* offers environmental educators important considerations for learning/teaching through community mural-making. Specifically, community murals can assist pre-service teachers in adopting a pedagogy that is in line with their environmental education values by providing a model for working through challenges in caring, creative, and collaborative ways, while also valuing the importance of playfulness while performing serious work. Also, community murals provide an artistic strategy for teaching environmental education which may satisfy those individuals craving more knowledge about creative/imaginative teaching techniques from their teacher education experience or, at least provide them with an example to work from. Finally, the *Caring Tree* popularizes (or makes visible) community art and environmental education, and it models a creative way of encouraging their inclusion in the teacher education curriculum at Lakehead University. Thus, it offers one possibility for transcending barriers to practicing community art and environmental education.

My research questions: How is environmental education knowledge created and negotiated through a community mural process? And, what is the nature of relationships amongst participants throughout this process?, were helpful in revealing outcomes capable of reimagining and enriching environmental education and meeting current and

future education challenges. Further, this mural project allowed me and the six other participants to experiment with our ontological and epistemological assumptions. Ontologically, the participants viewed themselves as embedded in various experiences and relationships (e.g. as members of the mural group, the Faculty of Education, and the larger environment, etc.) rather than detached, separate, or individualized. This stance enabled the group to co-create and practice (however imperfectly) an inclusive ethic of care, an ethic capable of considering individuals in the human and more-than-human world. Also, the *Caring Tree* mural was valuable in reimagining environmental education in schools and Faculties of Education, beginning as it did from an ontological perspective different from the commonly encountered detached Cartesianism (e.g. Evernden, 1985; Eisner 2002a).

The group's ontological stance, in turn, created opportunities for epistemological experimentation. The possibilities for constructing collective knowledge through more-than-linear processes were explored. In the beginning, the participants struggled with the uncertainties associated with creating knowledge. Their familiarity with prescribed outcomes was an initial barrier to group creativity. As a facilitator, this challenge required my patience and trust in the process of creating knowledge through collaborative work. Fortunately, through the group's conscious examination of and resistance to their need to have outcomes known, a process for generating ideas was fuelled and a developing trust in the creative process was fostered. In the end, the participants and I were greatly rewarded by our commitment to letting the process unfold over time; our gifts included: our confidence in the value of such efforts and actions in schools and Faculties of Education, and our desire to create similar experiences in the future.

I understand that the participants in this study were not “average” pre-service teachers and that their passion and commitment for environmental education is not universal in all students studying in the Faculty of Education. Still, the research does reveal the potential role of learners/educators as agents of change through participatory, arts-based, critical, and activist environmental education.

In this project, the creative and collaborative energies/commitment of seven individuals challenged the ontological and epistemological norms they experienced during pre-service teacher education in order to reimagine environmental education in the Faculty of Education. Their medium of experimentation and expression was community mural-making. Their collective artwork made space for environmental knowledge in a classroom physically, and conceptually. Further, their contributions presented another story about education that advocated learning and teaching in caring relationships, and revealed possibilities for practice.

There are a number of methodological elements in this thesis. The work is participatory and action-related. It focuses on knowledge construction as a social process. Further, the research has been inspired by, and draws from, arts-based educational research. And I believe there is an element of art-based research that does run through the work presented. Barone and Eisner (2006) mention that arts-based research is not all or nothing, it can be characterized as “arts-based” to the extent that the arts-based criteria are present. To some extent they are—this project incorporated Barnett’s (1984) criteria for considering quality in the processes and products of community mural-making, the aesthetics of the process itself. As such, this thesis contributes to arts-based educational research by its consideration of the “work” of art (Eisner, 2002a); and, by its concern for

whether the mural's work, "makes a difference, whether it raises the level of awareness, establishes and strengthens bonds, empowers people," (Barnett, 1984, p.391) in the everyday contexts of schools and Faculties of Education. Also, in this thesis, I have been committed to aesthetic and educational practice and exploring how the work of aesthetic inquiry within schools and Faculties of Education can be a collaborative and activist process, and how classrooms specifically, can become what Greene (1995) calls for as, "nurturing and thoughtful and just all at once" (p.43).

My search for meaning throughout this project demanded that I be willing to enter into the same uncertainties I expected of the participants. As such, although I came to this research with an environmental education agenda, I acknowledge that the findings and outcomes are not exclusive to this field and pertain more directly to educational pedagogy and alternative methods for learning. Still, I believe the outcomes are very relevant to environmental educators by challenging them to consider their how their philosophical aims match up to their pedagogical practice.

I have tried to avoid writing a thesis that states a problem only by revealing its urgency; rather I have been interested in exploring to its endpoint, an enabling practice that can respond differently to the barriers/complexities to environmental education in schools and teacher preparation.

At this resting place, I find it fitting to end with the voices of the participants. Thus, I leave you with their final thoughts about the Caring Tree:

- Kaylana: **There is room in this image for imagination to grow.**
- Henry: *The Caring Tree represents natural connections, transgression, and community, but there were also many different themes, both personal and universal, that arose for each of us throughout the process. Feel free to gaze upon this work and interpret it for yourself.*
- Lorraine: | like looking at this wall and seeing a combination of ideas and energies...but also that out of that came a momentum that had its own energy. | think the mural has a life of its own.
- Ramona: I think it's often the case that we're "all working on the same ideas" but often speaking or writing about what is important to us we can lose sight of that—maybe we're better able to feel like we're all on the same page if we put it in a picture!
- Rambling Wren: *I feel I have been on a journey this year...trying to find the essence of how I feel, where I'm connected, what it is that inspires me and this mural process was definitely a visual representation of that journey. I will not forget the internal external connections I have felt...and the beauty.*
- Millie: **It we (humans) generally gave or had (took?) more freedom to do more things this way...I can begin to imagine what we might be able to do.**

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APPENDIXES

- Index Card Activities (Appendix A)
- Cover Letter to Participants (Appendix B)
- Participant Consent Form (Appendix C)
- Use of Photographs Consent Form (Appendix D)
- Participant Confidentiality Agreement Form (Appendix E)
- Group Decision-making Considerations (Appendix F)
- Quotations chosen for the *Caring Tree* mural (Appendix G)

APPENDIX A

INDEX CARD ACTIVITIES

Workshop 1

- List 3-5 environmental issues that concern/interest you as a learner/educator, that you may want to explore in this mural project. (Remember that environment can include: social and political elements)
- List 2 expectations you have for this community mural process.

Workshop 2

- Select your favourite theme from discussion and give your reasons for choosing that theme. Develop the theme further through writing or drawing.

Workshop 3

- Complete this *structured criticism* (adapted from marino, 1997):
 - What in this mural group & process is connecting with you in a positive way? (Give at least 3 points). And why is this insight important to you? Or what helped you learn this in this particular case?
 - What is there that you want to change? (Give only the most important one). And what might you try to do to alter that “dimension” to better fit you and your values?

Workshop 4

- Find 1-2 quotations that represent your conception of caring in education.
- Choose a local bird with whom you connect to represent your artist identity.

Workshop 5

- This was a busy week for the participants, therefore no index card activity was given.

APPENDIX C

Community Mural Project CONSENT FORM

I have read the accompanying explanation of: *A Master's Piece: Co-constructing Environmental Education through a Community Mural with Pre-service Teachers*, a research project by Ali Solaja.¹³ My signature below indicates that I understand the following ethical considerations:

- My participation is voluntary and I have the right to withdraw at any time.
- I understand that I am under no requirement or obligation to answer every question.
- Participation involves minimal to no risk.
- All information gathered about me will be kept confidential.
- My identity will be protected by the use of pseudonyms.
- Photographs, of which I am a subject, will not be used without my prior consent.
- The data will be securely stored at Lakehead University for seven years.
- The findings of this project will be made available to me at my request upon the completion of the project. The completed thesis will be available at the Education Library at Lakehead University.

Name: _____
Please Print

Signature: _____

Date: _____

¹³ Note the original title of this thesis.

APPENDIX D

Community Mural Project: Use of Photographs CONSENT FORM

I am aware that photographs, of which I am the subject, will not be used in this research without my prior consent and I give Ali Solaja consent to use these photographs, in the following parts of her Master's thesis research:

- Final thesis
- Research presentations
- Academic papers

Name: _____
Please Print

Signature: _____

Date: _____

APPENDIX E

Community Mural Group Participant Confidentiality Agreement Form (Appendix E)

I recognize that confidentiality in this research is important to the integrity of the project and its participants and I agree not to disclose any information relating to focus group meeting with individuals outside of the project.

Name: _____
Please Print

Signature: _____

Date: _____

APPENDIX F



GROUP DECISION-MAKING CONSIDERATIONS

1. Wear each others' shoes.
2. Share voice—take turns...
everyone has the right to pass.
3. Include voting & consensus.
4. Rub palms together ("How, How")
to express agreement.

APPENDIX G

Quotations Chosen for the *Caring Tree* Mural

Collective:

“...That which unites all forms of life is more important than that which divides” (Naess, 2002, p.92).

“Oppression for one is oppression for all” – Anonymous.

“Treat the earth well...it was not given to you by your parents; it was loaned to you by your children” (Aboriginal Human Resource Development Council of Canada, n.d., ¶ 21).

Rambling Wren:

“If we change the stories we live by, quite possibly we change our lives” (Okri, 1997, p.46).

Ali:

“Where there is love, there is life” (Gandhi, quoted in Prabhu and Rao, 1967, p.417).

Ramona:

“The world is mud-licious and puddle wonderful” (Cummings, 1996, p.580).

Millie:

“...And the end of all our exploring will be to arrive where we started and know the place for the first time” (Eliot, 1991, p.200).

Lorraine:

“The creation of a thousand forests is in one acorn” (Emerson, 1841, ¶ 2).

Kaylana:

Leap and the net will appear. (Cameron, 1996, quoted in Underhill, 2002, p.216).

Henry:

“The world offers itself to your imagination, calls to you like the wild geese, harsh and exciting – over and over, announcing your place in the family of things” (Oliver, 1986, p.14).