Integrative and Transformative Learning Practices: Engaging the Whole Person in Educating for Sustainability.

by

Tara Todesco
Bachelor of Arts, University of Victoria, 2001

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Supervisory Committee

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Abstract

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This thesis examines the tenets and approaches of integrative learning for sustainability, and critiques the adequacy and effectiveness of conventional, higher education practices in preparing students for what is an increasingly uncertain future. At the centre of this inquiry is the study of a fourth year, undergraduate field course from the School of Environmental Studies at the University of Victoria that took an integrative, whole-person approach to sustainability in light of integral systems theory. The course provided students with an experiential and integrative learning approach to the study of sustainability that sought to engage the multiple intelligences of students, issuing from their intellectual, physical, social, and spiritual dimensions. To support this process, the course aimed at meeting the needs associated with these facets through diverse learning experiences that included contemplative exercises, the development of a learning community, a critical examination of course readings and experience in service learning activities.

The evaluative research of the course's impacts examined the learning experiences from the students' perspective to identify which experiences and approaches were most meaningful. The enquiry also investigated which, if any, of these experiences led to enduring personal transformation and/or community action. The methodology undertaken involved a phenomenological examination of two small group interviews with six of the participating students, as well as an analysis of the six students' written reflection assignments. The results of this research show the effectiveness and impact of some of the distinctive approaches of the course, namely the powerful effects of experiential learning, community based learning and the provision of time and space for personal and group reflection. These activities supported students in broadening and changing their view of themselves, their sense community, as well as provided opportunities for students to engage in sustainable practices.

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Chapter 1: Introduction

This thesis investigates an alternative learning approach in educating for a more just and sustainable future. At its core is a study of a field course from the School of Environmental Studies at the University of Victoria that took an integrative, whole-person approach to sustainability education. The course, for which I was a teaching assistant, was a powerful, imperfect and brave approach to facilitating an upper-level university course that sought to include the subjective, personal and collective realm of *interiority*[1] into the discussion of the objective, *exterior* realm of the sustainability crisis. This approach was guided by the recognition that the planet is without question in need of a generation equipped with sustainable ways of living. Sustainability is not, however, arrived at merely by the application of systemic interventions by well-informed citizens but arguably entails a greater understanding of interpersonal and personal dimensions such as worldviews, values, and motivations.

The primary goal of the course was to experiment in using an integrative education approach to educating for sustainability. In this course, students could explore the inter-connectivity of the complex systems at play in the current crisis in sustainability, and develop a better understanding of their individual and collective roles in these systems. A complementary objective to this purpose was to provide students with the opportunity to explore their particular gifts and passions, and how they might apply their gifts to their larger social and environmental context, thus enhancing their ability to be agents of positive change and transformation. The initial feedback and reflection assignments from the students after the course suggested that the

[1] Interiority has both individual and collective dimensions. Individual interiority relates to our direct, internal experiences from a first person perspective. It is the domain of the interior space, related to one's subjective experience and to one's mental spiritual being where we make meaning and hold our values. Our collective interiority relates to our shared cultural experience and is connected to the relational space of being with a friend, a student or a group of people. This is the domain in which groups share values and make meaning of their collective experience (Dea, 2010, p.152).

course was a positive experience. Determining what inspired these experiences and understanding the subtleties of the affirmative outcomes required a more thorough investigation.

This evaluative research examines the course from the students' perspective to identify which experiences and approaches were most meaningful and effective. The study also investigates which, if any, of these experiences led to enduring personal transformation and/or community action. In attempting to understand the students' most meaningful learning experiences, I have endeavoured to elicit a deeper understanding of the course's model and framework to assist with the future design of this and related courses in the Environmental Studies program. Although not readily generalizable to other populations and contexts, this research should (a) provide insight to the reader in reflecting on his or her learning environment, and (b) add another perspective to the discourse of identifying alternative education approaches that lead to meaningful personal and collective change in our communities.

Significance

"If we do not change direction, we are likely to end up exactly where we are headed."

Chinese Proverb

We live in a time of global social and environmental crisis. There is an alarmingly ever-increasing amount of research and scientific data about the destructive effects of human activities on the earth, revealing that for the first time in the earth's history humanity's impact on the planet is on a scale of nature itself (Homer-Dixon, 2006; Orr, 1994; O'Sullivan, Morrell & O'Connor, 2002). Humankind's technological and economic prowess has now created social systems that jeopardize the health and wellbeing of the earth and virtually all of its inhabitants. Underpinning this planetary emergency is the current mechanistic and expansionist worldview which guides our actions and shapes our economic system, a global structure which determines

our social, cultural and environmental worlds and has brought on intense human suffering and environmental degradation (Kolbert, 2006; Lovelock, 2006; Weisman, 2007).

Yet, in spite of the need for immediate action, our global socio-economic and environmental problems have reached a level of such daunting complexity that many people feel simply a sense of denial or hopelessness. Slaughter (2004) referred to this as a consciousness characterized by 'living in the breakdown', where there is a sense that something has gone wrong at such a deep level it cannot be clearly articulated, let alone resolved. Numerous writers point to the increasing despair being felt by our youth in particular, where young people are falling "into despair and hopelessness and appear to be apathetic in their response to the future" (Ashford, 1995, p. 75; Domask, 2008; Gunlaugson, 2004; O'Sullivan, 2008). Ashford stated:

> At the same time we face crisis in population growth, resource depletion, environmental destruction and new civil wars of horrendous brutality, many people express cynicism, helplessness and despair that anyone can influence the course of events even on a local scale. (p. 75)

This theme of hopelessness and the social malaise it generates is worsened by our tendency towards individualism, materialism, and competition versus one for community and concern for the common good. Indeed, goals of personal advancement through the accumulation of material wealth seem to dominate our culture, frequently at the expense of broader social, moral, and spiritual meaning. The result is a society that is increasingly polarized and fragmented, with a decreasing sense of being united by shared values and perhaps most importantly, participation in a common enterprise (Colby & Erlich, 2000; Daloz, Keen, Keen and Parks 1996; Keilberger & Keilberger, 2004; Putman, 2000).

Learning Our Way Out: The Problems and Promise of Higher Education in Educating for a Sustainable Future

It seems clear to me that the current crises in sustainability will require every resource as individuals and as communities to plot a course towards a more just society and better world. Many, including myself, consider institutions of higher learning to hold a powerful role in shaping this new future (e.g., Moore, 2005; Palmer & Zajonc, 2011). In a time when many of our formal political institutions seem unable to take on the great changes we now require, universities potentially have the power and freedom to take the lead in developing new ideas, commenting on society and engaging in bold experimentation (Cortese, 2003). Society has given universities influence, particularly when we consider that most of the professionals who shape our principal political, economic, and educational institutions are university educated. It seems evident that universities must be a part of the greater movement in encouraging change towards a more sustainable future. And yet, most universities are arguably leading the way in the retrograde kind of thinking and teaching that reinforces and even compounds our current social and environmental crises (Cortese, 2003; Glisczinski, 2007; Orr, 1994; O'Sullivan et al., 2002).

"Intellectual rigor has become our true north—and a mountain range of reason has replaced old landscapes of feelings, convictions and beliefs" (Keeva, 2007, p. 174).

In Canada and the United States many institutions of higher education have been criticized - for what is seen - as an impersonal and fragmented approach to educating for the extraordinary challenges of our age. There is a predominantly modernist approach to education that in practice tends to treat "information as commodity, education as industry, and students as

either products or consumers" (Hart, 2001, p. 3). This business-model approach to education is dominated by a rational and empirical approach to knowing, which typically prefers the accumulation of facts and has set the standard for knowing across most disciplines. Cranton and King (2003) noted this tendency in higher education by describing universities as generating little more than obedient citizens who are prepared to work within society's existing institutions, professions, and organizations.

In addition, there is increasing criticism about the conventional, transmission-based approach to learning that comes with the modernist agenda (Podger, Mustakova-Possardt, & Reid, 2010; Selby, 2002; Wals, 2010). Contemporary institutions tend to emphasize an instrumental, knowledge-based approach to learning, in which the essential goal is the accumulation of technical knowledge and skills required for effective functioning in modern society. In educating for sustainability, the instrumental approach emphasizes learning that is mostly expert driven, "where there is a strong sense of what is 'right,' what needs to be done and a high degree of confidence and certainty in both the current knowledge base and the kind of behaviour that is required" (Wals, 2010, p. 17). Many educators challenge this approach. They argue that education should above all be formative and they apply an emancipatory approach to learning that encourages capacity building and critical thinking that allows learners to understand what is going on in society, to pose critical questions, and to decide for themselves what needs to be realized (Palmer & Zajonc, 2011; Sterling, 2001, 2007; Wals & Jickling, 2002).

Integrative Learning for Sustainability

> "Pressing up against the Earth's limits, we are being confronted with the limits of our thinking: a dawning realization that the fundamental problem is not primarily 'out there,'

> but 'in here,' rooted in the underlying beliefs and worldview of the Western mindset." (Sterling, 2007, p. 63)

Sterling (2001, 2007) argued that placing sustainability in the curriculum of higher education is not a question of incorporation but rather one of innovation and systemic change within universities that will allow *transformative learning* to take place. Many argue that the dynamics of our current world are such that the transformative learning we now require must be *integrative,* engaging the full spectrum of human knowing of cognitive, aesthetic, emotional, and spiritual intelligences to create a wiser global society (Astin & Astin, 2010; Awbrey et al., 2006; Daloz et al., 1996; Hart, 2001; O'Sullivan et al., 2002; Podger, Mustakova-Possard and Reid, 2010; Orr, 2000; Sterling, 2001; Selby, 2002). Hence, by cultivating ways of understanding that incorporate but reach beyond intellectual knowledge, we can better encourage learning that personalizes education for sustainability. In the process we forge stronger links between the study of the objective empirical world and the more interior or subjective world, encompassing the purpose, meaning, limits and aspirations of the students themselves.. Palmer and Zajonc (2011) noted:

> Our colleges and universities need to encourage, foster and assist our students, faculty, and administrators in finding their own authentic way to an undivided life where meaning and purpose are tightly interwoven with intellect and action, where compassion and care are infused with insight and knowledge. (p. 56)

This quotation illustrates an emancipatory approach to learning for sustainability in which there is a strong sense of empowering, engaging, and involving the subjective realm of the learner in the issues at hand. Thus, instead of "education for sustainability" as training, an integrative approach implies a more meaningful and possibly more transformative learning

experience. This experience can engage students in active dialogue to establish co-owned objectives, shared meanings, and solutions that are personally desired versus being externally imposed.

An integrative approach to educating for a more sustainable future

An integrative approach to learning speaks powerfully to my belief in the potential of education. Like Freire (2002), I believe a sustainable world can arise through learning. We *do* need a new way of understanding the world and our role in it if we are going to be agents of change in the current crises. Yet, it is important to come to terms with the fact that despite decades of environmental and social justice education, including many examples of integrative education, the modern industrial world has for the most part continued along its destructive path. Certainly there are some promising changes in both behaviours and attitudes taking place throughout the world, such as the inspiring stories of individuals and organisations working to reverse environmental and social decline outlined in Suutari and Marten (2007) publications on eco-tipping points and Hawken's (2007) *Blessed Unrest*. Nevertheless, the shift in thinking and behaviour we need has not reached the scale required to alter the world's current unsustainable course. The approaches to education offered by the integrative model provide some promising visions to foster such a shift. However, I consider the key to realising the potential of any educational practice is the continual exploration, experimentation, and assessment of these new philosophies. I believe such experimentation may prove essential if we are ever to use education for sustainability to its full capacity. It is doubtful any one type of intervention or single philosophy in education (no matter how integrative) will fulfil the needs of every learner or become the only tool we wield in developing the shift in awareness and behaviour we now require.

Research and Questions: Exploring Meaning and Transformation

My research was a study of the collaborative and innovative fourth year environmental studies field course on integral systems theory taught by Duncan Taylor (University of Victoria) and several community leaders from southern Vancouver Island.

The primary objectives of this research were to:

1. understand the impacts of this course from the students' perspective and identify which experiences and approaches were the most meaningful and significant, and which, if any, have led to enduring personal transformation or community action;
2. conduct a review of academic literature on design features for effective and transformative environmental education; and
3. synthesize literature findings and analyse data collected in order to develop a deeper understanding of what occurred for the students both during and after the course and make recommendations for future course designs.

The primary questions I asked were:

1. Which were the most meaningful and transformative experiences[2] in this course from the students' perspective?
2. What in the course's design contributed to these meaningful experiences and what (if anything) has led to enduring personal changes, transformation, and social or environmental action?

[2] I describe these experiences as "learning" throughout the thesis but chose to start the conversation of such learning in my interviews with students as "experience." I felt there would be hesitation to regard certain activities and experiences as learning, where students tend to be more familiar with discussing rote learning outcomes. I did share my definition of learning with students, built from the work of Harold Glasser (2007) who defined learning as the process of acquiring knowledge, skills, norms, values or understanding through experience, imitation, observation, modelling, practice or study; by being taught; or as a result of collaboration (p. 46).

Environmental Studies 470 (ES 470): Integral Systems Theory—Its Application

A brief synopsis of the course's primary objectives follows. I have dedicated a second chapter to describing the theoretical and practical underpinnings of ES 470's integrative course design, which includes descriptions of the principal concepts, assignments and design features.

ES 470 took place in the winter session of 2009. Its principal component was a one-week field experience in which students explored the theories and practices of integral system theory (Taylor, Segal, & Harper, 2010) in a variety of experiential, community-based contexts. Following this, students embarked on completing their final project, which involved a choice between (a) engaging in a hands-on community-based learning project, or (b) performing a theoretical analysis of a community challenge of their choosing. The class met monthly during this latter phase at informal meetings to discuss their projects, seek feedback and gain support in completing their projects and final papers for the end of the term in April 2009.

The background to this research and its relevance requires understanding the objectives and design features of the course in question. As mentioned, the primary goal of the course was to experiment in using an integrative education approach to educating for sustainability. In this approach, students could (a) explore the inter-connectivity of the complex systems at play in the current crisis in sustainability, and (b) develop a better understanding of their own individual and collective roles within these systems. A complementary objective was to provide students with the opportunity to explore their own interiority and help foster an increase in self-understanding and of their deeper held values and aspirations. They were in turn asked how they might apply this knowledge to their larger social and environmental context and enhance their ability to be agents of positive change and transformation.

It is important to note that underlying these objectives was the objective of creating a holistic course design that would emulate, as much as possible, the principles of the primary concept under study: integral systems theory. To achieve this, Duncan Taylor collaborated with teachers' assistants and community facilitators to create a learning experience that attempted to meet the interior and exterior needs of the students by engaging their intellectual, physical, social and spiritual dimensions in the learning experience.

Qualitative Research Methodology

I applied a qualitative, phenomenological research approach to elicit a deeper understanding of the students' learning experiences in the course from three main sources of data: a set of semi-structured small group interviews which I facilitated six months after the course in November 2009, as well as copies of the students' course reflections; and the brief, informal written evaluations of the course that were completed during the course itself (from February to April 2009).

Applying a phenomenological approach allowed for a deep investigation into participants' subjective learning experiences and reflected the pedagogic aspirations and practices of the course's integrative design. Through this interpretive qualitative approach I sought to reveal the rich detail of the students' meaningful learning experiences and explore some of the course outcomes through my own subjective lens. A full description of my methodology is given in Chapter 4.

Limitations of the Research

Timing.

I facilitated two small group (three-person) interviews with a total of six of the course participants six months after the course ended and nine months after the one-week field

component. I used the semi-structured small group interviews to gather experiential data about the students' learning experiences and possible transformations during the course, as well as highlight the enduring aspects of what was experienced in the course.

Despite the fact that the timing of the interviews held the potential to shed light on the lasting components of what was experienced, the timing presented its own set of limitations. As the interviews were aimed primarily at exploring the students' meaningful experiences during the course, the lapse in time meant that memories of the course might have faded or even become lost over time. This could be especially important if students were not able to remember and relate specific design features to the meaningful learning and changes they had experienced. To offset this possibility I opened each group interview with a group reflection exercise in which we reconstructed the course's activities, readings and assignments. In this way each student, as well as myself, helped fill in the gaps of time by recalling the elements of the course. The goal of this exercise was to provide a simple, interactive and primarily objective means of retracing what had taken place six to nine months previously, without going into an interpretive analysis. It remains, however, that certain experiences issued from the informal elements of the course and were not captured in this exercise.

In addition to this exercise, I was able to compare group interview data with the reflection assignments to determine whether there were any discrepancies in what was recalled over time. The written assignment was particularly useful for this purpose, as the assignment asked students to explore their most "memorable, meaningful and challenging" experiences from the course.

Transferability.

The pursuit of this qualitative, phenomenological study is not to prove efficiency, generate law-like statements or establish functional relationship (van Manen, 1990). Although

this may limit the transferability of findings, when looking to develop a deeper understanding of a particular human experience, I believe such an approach does not diminish its relevance or value. Phenomenological accounts afford us insights into particular human experiences so that we might make meaning of them and learn from them. Thus, although not readily generalizable to other populations and contexts, this research should provide insights that give researchers and practitioners opportunities to reflect on the nature of their own learning experiences, the pedagogies, and the course design features that support them.

Significance of the Research

This research will contribute to the evolving dialogue about what produces meaningful and effective learning experiences that encourage personal and collective change and transformation. As an example of a university course that has undertaken an experiential, integrative approach to the study of sustainability, this design is relatively unusual (Astin & Astin, 2010; Wals, 2007). Thus, if we consider the course as "next practice," the analysis I made might become a means for improving future models and heuristics in this field.

The research will benefit Duncan Taylor and the School of Environmental Studies (SES) directly as it is an in-depth study of the students' learning experiences. It also highlights the links between meaningful learning and the course goal of inspiring hope and positive personal and collective change. SES grapples with balancing the amassing of often overwhelming data about the current crises in sustainability, with opportunities for action and students' actualization of sustainable values. This study may help guide future ES 470 course design, as well as other related Environmental Studies field courses that seek a balanced approach to the formal learning process.

Researcher's Perspective: Description of Terms

In this section I explore my perspective through an examination and description of some of the main terms considered in this thesis, namely *sustainability, education for sustainability, ecological worldview, transformative learning, meaningful learning* and *spirituality*. I explain my perspective further in Chapter 3, which is dedicated to describing the phenomenological research approach in the study of ES 470.

Through many experiences and reflections, including those that occurred prior to this study, I have come to develop an ecological worldview (O'Sullivan, 2002) and a more radical approach to creating sustainable change through education. I agree with the late E. F. Schumacher that what we require is "education of a different kind: an education that takes us into the depth of things" (Schumacher, 1973, as cited in Sterling, 2001, p. 21). As educators, I believe we must be careful in both the quality and type of information we provide, as well as the experiences we facilitate when teaching for sustainability. Firstly, we risk information overload, which can lead to feelings of hopelessness, fear, and a sense of disempowerment (Hall, 2002). Secondly, in teaching sustainability, we risk training for sustainability where we apply prescriptive experiences and information for developing a predetermined sense of what is right and what needs to be done.

I have come to see *educating for sustainability*[3] as an emancipatory process where educating for a more just and sustainable world must hinge on a student's ability to establish his or her perspective and decide the most meaningful, personally and culturally relevant, course of action. In this way, my sense of educating for sustainability reflects a transformation-based approach, described by Sterling (2001) as one "that values, sustains and realizes human potential

[3] I employ the terms 'educating for sustainability' and 'sustainability education' interchangeably in this thesis

in relation to the need to attain and sustain social, economic and ecological wellbeing, recognizing that they are deeply interdependent" (p. 22). My concept of *transformative learning* experiences has been influenced by those that acknowledge not just the rational dimension involved in such change, but also the emotional and spiritual changes (Dirkx, 1998; Gunnlaugson, 2004). My preferred understanding of transformational learning is inspired by the integrative approach described by Morrell and O'Connor (2002), as follows:

> Such a shift involves our understanding of ourselves and our self-location; our relationships with other human beings and with the natural world; our understanding of relations of power in interlocking structures of race and gender; our body awareness; our visions of alternative approaches to living; our sense of possibilities for social justice and peace and joy. (p. xvii)

This personalized and whole-person learning approach to educating for sustainability influences and reflects my definition of *sustainability* itself. The most commonly reported definition of sustainability, and perhaps the most contested, was presented in the World Commission on Environment and Development document titled *Our Common Future*: "Sustainable development is development that meets the needs of the present without compromising future generations to meet their own needs" (Brundtland, 1987, p. 43). My own concept of sustainability encompasses the goal of creating an ecologically and socially just world that functions within the Earth's carrying capacity and meets our genuine needs (encompassing spiritual and material requirements) without jeopardizing the ability of future generations not simply to sustain but to flourish. Deep ecologist Glasser (2007) wrote powerfully about this vision of sustainability, noting, "A world that is less unsustainable is neither sustainable nor a positive vision for the future. Ultimately, we must shift our focus from preventing the

destructive, which is a vacuous goal, to promoting the good" (p. 145). This concept of sustainability is reflected in the *ecological worldview,* based on the notion that humanity is not separate from the natural world but very much a part of it. The concept of the development of an ecological worldview is an inherent part of ES 470 and other related Environmental Studies courses. This worldview has come to "act as a forum from which to engage in a sustained critique of the dominant values and assumptions underlying modern Western Society" (Taylor, 1992, p. 32). This concept of ecologically-inspired views call for 'wide identification' by expanding our sphere of concern to all living beings, characterized by the perception that all life is interdependent and that our common goals be united with those of nature (Glasser, 2007).

To move towards this vision of sustainability, I believe a transformative, integrative learning approach must support *meaningful learning.* This learning incorporates students' personal experiences, emotions and locations in exploring the goals and concepts of sustainability. I explore the concepts of meaningful learning in greater detail in later chapters, however my personal concept is that meaningful learning is tied to a personalized approach to learning that is both subjectively valued and personally and collectively relevant. Dirkx described this incorporation as bringing soul back to higher education where we aim for learning that deepens our sense of meaning and purpose in our lives (Dirkx, Mezirow & Cranton, 2006). Such learning is considered a necessary step towards transformative pedagogy:

> [Which can] lead to deeper awareness and understanding of our role in life . . . [and] can contribute to a deeper appreciation of how meaning in our lives is intimately bound up in our relationships with others and the greater whole. (p. 129)

This definition of meaningful learning implies an engagement with the inner lives of students or what many call the spiritual dimension. There are many definitions (and implications)

implicit in the term *spiritual,* especially in academic forums where there is a longstanding reticence to engage in a domain that can have religious connotations (Palmer & Zajonc, 2011). I have drawn on Astin and Astin's (2010) definition of spirituality that reflects a quest for meaning and involves an exploration of self and one's place in community.

> Spirituality points to the inner, subjective life . . . it has to do with the values that we hold most dear, our sense of who we are and where we come from, our beliefs about why we are here- the meaning and purpose we see in our work and life- and our sense of connectedness to one another and the world around us. (p. 4)

The type of learning I describe here hinges on the idea that the path towards sustainability lies in learning that sews ourselves and the world together, rather than pulling it and ourselves further apart. This includes a vision for a different kind of world and learning that draws on the full spectrum of human potential, which requires the engagement of the whole person: head, heart and hands (Sterling, 2001, 2007). Wals (2010) called this integrative approach an attempt at deeper learning that cannot be supplanted, transferred or handed over with a how-to manual but, with careful analysis, can provide stepping stones for the transition to new and effective practice. In the next few chapters I take my understanding of one experimental course a step further with the hope that these insights may help build greater understanding of the course's impacts and contribute to the next practice we now require.

Chapter 2: Description of Environmental Studies 470

> "It's never enough to tell anyone about a new insight. Rather, you have to get them to experience it in a way that evokes power and possibility. Instead of pouring knowledge into each other's heads, you need to grind them a new set of eyeglasses so they can see the world in a new way." (John Seeley Brown as cited in Brown and Issacs, 2005, p. 12)

My goal in this chapter is to provide contextual information for the course and describe some of the course's central concepts and design features in order to provide a more detailed picture of the container that supported the students' experiences. Unless otherwise cited, this description draws from the course syllabus (see Appendix A) several of my conversations with Duncan Taylor (January 3rd and 17th, April 2nd and 12th 2009, March 27th, April 16th and November 11th and 22nd, 2011) as well as my own experiences in assisting with the preparation and facilitation of the course, as a teachers' assistant.

To begin with, I have listed some of the contextual information, including a brief description of how this course fits in with the School of Environmental Studies' greater curriculum, the background of students who participated in the course, the number and types of facilitators involved, and the variety of places in which we learned. Following this, I explore the primary course concept of integral systems theory by describing its systems and integral theories. To conclude, I summarize the main vision and goals of the course that reflect the tenets of integral system theory, and describe key learning and design objectives.

Context

The School of Environmental Studies offers an interdisciplinary undergraduate program in which students engage in an intensive study of the systemic problems of sustainability issues through exploring the social, economical and political systems at play, as well as solutions at the

local and international level. Underpinning this central function is the goal of looking deeper into the root causes of the sustainability crisis and recognizing that the social and environmental problems we face are inextricably connected to the cultural values predominant in political, social, economic and educational institutions (http://web.uvic.ca/enweb/undergraduate/).

Environmental Studies 470: Integral Systems Theory: Its Application (ES 470) is a course that complements the School of Environmental Studies' more general theory-based interdisciplinary examination of the current sustainability crisis. However, I believe from my experiences as a former undergraduate student in Environmental Studies and a teacher's assistant of the course, ES 470 transcends the School's usual forms of learning and study. As a field course that incorporated an integrative approach to learning about sustainability, it blurred the lines of formal and informal learning. It incorporated such elements as contemplative pedagogies and practices, services learning, social learning and community action projects.

Students

The course was developed for upper level Environmental Studies students who had foundational knowledge in integral systems theory (IST) and were interested in participating in an experiential field course that provided an opportunity for both a theoretical and practical examination of IST and that reflected its integrative tenets. The maximum number of students who could be involved was 30. In the end, 27 students took part, almost all of which were in their fourth year of study.

Timeframe

The ES 470 class I examined, the first of its kind, took place in the winter session of 2009. Duncan worked collaboratively with teacher's assistants and community leaders to design an intensive one-week field experience. Students explored the theories and practices of integral

system theory almost entirely in community settings. For the remainder of the session, students set out to complete their final projects, which involved the choice between engaging in either a hands-on community-based learning project (of their own design) or a theoretical analysis of a community challenge of their choosing. The class met monthly during this latter phase at informal meetings to discuss ideas, seek feedback and gain support in completing their projects and final papers for the end of the term in April 2009.

Outline of One-week Intensive

The one-week field-intensive component involved a broad range of learning experiences, locations and facilitators. I have included a table below to provide a brief description of this week.

Figure 1: Outline of One-week Field Component of ES 470, 2009

Key: UVIC: University of Victoria, indoor and outdoor settings, CI: Camp Imadene, residence and surrounding property, WES: Wildwood Eco-forestry Site, ESP: East Sooke Park, RRU: Royal Roads University (RRU) and OEV: O.U.R. (One United Resource) Eco-village, classroom and garden settings (OEV). Facilitators have been distinguished as university or community affiliated: University of Victoria (UVIC) Royal Roads University (RRU) and Community: (COMM)

Date	Location	*Principal Activities*	Daily Facilitators
Jan 26th	UVIC	*Field course preparation: review of field logistics, maps, medical forms* *Discussion of integrative course design and principal assignments* *Sitting yoga and breathing exercises*	Dr. Duncan Taylor, Tara Todesco, David Segal and Ashley Aikens, (UVIC) Sarah Kinsley (COMM)
Feb 9th	UVIC	*Yoga and breathing exercises* *Introductions, discussion of roles and constructivist learning processes, i.e. opportunities for students to facilitate during the course*	Dr. Duncan Taylor, Tara Todesco, David Segal and Ashley Aikens, (UVIC)

		Integral Systems Perspective: theory and practice: recap and discussion of theory concepts *Discussion of Panarchy and systems dynamics readings* *Presentation of Wilderness Therapy: finding opportunity for change and transformation through systems dynamics* *Trust building exercises, i.e. trust falls, group games and ropes exercises*	Sarah Kinsley (COMM)
Feb 10th	ESP and RRU	*Laughter Yoga* *Hike into East Sooke Park* *Interpretive walk- identifying native plant and tree species* *Eco-psychology exercise: contemplative walking in nature* *Let your life speak exercise: reflecting on deep meaning* *"Let Your Life Speak" Journaling Exercise*	Dr. Duncan Taylor, Tara Todesco, David Segal and Ashley Aikens, Dr. Brenda Beckwith (UVIC) Sarah Kinsley (COMM) Hilary Leighton (RRU)
Feb 11th	WES CI	*Travel and site visit to Wild Wood Eco-forestry site* *Tour and discussion of the history and development of the eco-forestry management at Wildwood* *Discussion of eco-forestry as integral systems practice* *Meeting and group discussion of eco-forestry methods with nonagenarian Merve Wilkenson, owner and founder of Wildwood* *Travel to Camp Imadene* *Set-up, sign-up for camp duties* *Group meals: collaborative food preparation and clean-up* *Discussion of readings* *Group reflections* *Evening yoga* *Games*	Dr. Duncan Taylor, Tara Todesco, David Segal, Ashley Aikens and ES 470 students (UVIC) Sarah Kinsley, Merve Wilkinson and Jay Rastogi (COMM)

Feb 12th	CI	*Morning yoga* *Integral systems discussion- applying theory to our communities and ourselves as potential actors* *Eco-psychology exercise: nature as teacher* *Hike in snow to high hilltop where participants were invited to take a fear or sadness and cast it off by throwing a rock off the cliff as they mentally let go of the burden.* *Group meals: collaborative food preparation and clean-up* *Presentation on community partnerships: opportunities for change and service with non-profits* *Group reflections* *Evening yoga class* *Games and "Tell and Show", a student-led activity during which students shared their talents, or gifts, (included theatre, music and spoken word)*	Dr. Duncan Taylor, Tara Todesco, David Segal, Ashley Aikens and ES 470 students (UVIC) Sarah Kinsley (COMM)
Feb 13th	CI, WES and OEV	*Morning Yoga* *Preparation for departure from IC* *Travel to O.U.R. Eco-village* *Introductions to site leaders, tour of property, presentation of the village's history and the present work reflecting the integral systems perspective demonstrated through the farm's perma-culture model* *Presentation and discussion on the tenets and practice perma-culture* *Journaling and group discussions* *The Bucket of Fear Exercise- students led an exercise in which each student wrote down anonymously a fear they held associated with being in a group and placed them in a 'bucket'. Students took turns reading aloud he fears of others.*	Dr. Duncan Taylor, Tara Todesco, David Segal, Ashley Aikens and ES 470 students (UVIC) Sarah Kinsley, Brandi Gallagher(COMM)
Feb 14th	OEV	*Morning yoga* *Journaling*	Dr. Duncan Taylor, Tara Todesco, David

		Service learning- gardening and greenhouse construction *Closing circle: group discussions* *Departure for Victoria*	Segal, Ashley Aikens and ES 470 students (UVIC) Sarah Kinsley, Brandi Gallagher(COMM)
Feb-April 6th	UVIC	*Monthly group meetings to discuss final project development, seek support and insight (from within the group as well as the greater community) and make connections with local experts where applicable*	Dr. Duncan Taylor, Tara Todesco, David Segal, Ashley Aikens and ES 470 students (UVIC)

Integral Systems Theory Perspective

The primary function of Environmental Studies 470 was to provide an experiential and integrative approach to learning the theories and practices of integral systems theory in its application to sustainability. Integral systems theory is based on the concept that the world is composed of interdependent relationships and systems and that the solutions to complex problems, such as violence and war, overpopulation, economic disparity and loss of cultural and ecological diversity, lie in understanding this inter-connectivity. In turn, a fundamental goal of integral systems theory is to recognize the critical importance of both individual and collective values and world-views as well as to offer an alternative perspective to the dominant expansionist worldview.

Solutions to complex problems associated with the sustainability crisis have traditionally been sought in the modernist approaches of science, logic and reductionism (Capra, 1997). Systems theorists argue that despite our application of analysis and technical brilliance, these problems persist because they are intrinsically systems problems—undesirable behaviours characteristic of the system structures that produce them (Meadows, 2009). In the course, we

examined the problems as being different facets of a single crisis, which is largely a crisis of perception (Capra, 1997).

The *integral* systems perspective acknowledges both the interconnectivity and systems dynamics concepts devised by systems theorists, but also delves deeper into the crucial role that both individual and societal values play in shaping the worldviews that determine our actions and policies. Course participants explored this integral viewpoint primarily through the study of the ideas described by Ken Wilber and his colleagues, who posit that applying a conventional systems view of the world can still lead to a partial understanding of reality, where we reduce our understanding of systems as patterns of "objectively interlocking events" (Wilber, 1995, p. 462). An integral approach to truths tells us that the world is not just a collection of objective facts to be measured (or mere "its") as scientism and reductionism would lead us to believe, but that they include inherently subjective dimensions informed by individual and collective subjective experience (Dea, 2010).

Because this integral approach is thought to provide a more comprehensive map of reality, we employed it as a means of generating more effective responses to the problems of sustainability. These responses are achieved by balancing a focus on the exterior dimensions of sustainability challenges with practices that acknowledge and explore the subjective, interior reality involved in these problems.

To navigate the integral systems viewpoint in our examinations of systems, we employed part of Wilber's "Integral Meta Map" or AQAL[4] model, namely the integrative perspectives afforded through the *four-quadrant model* and the notion of *levels* in relation to self-development

[4] AQAL stands for all quadrants, all lines, and refers to what Wilber calls a meta map of an integral view of human experience that involves five principal domains: quadrants, levels, lines, types and states. More of the AQAL framework can be brought into an examination of sustainability. This course included quadrants and levels in terms of translation or transformation.

processes (Wilber, 1995, 1996). The four-quadrant model maintains there are at least four irreducible perspectives to understanding a given system, two of which are frequently excluded from much of the formal academic discourse on sustainability. The premise of this approach is that if we exclude any of these perspectives, we arrive at partial understandings and, unfortunately, partial solutions (Esbjorn-Hargens & Zimmerman, 2010). Thus the model provides a map with which to navigate an integral systems perspective, where our examination of systems includes objective, inter-objective, subjective and inter-subjective perspectives (see Figure 2).

Figure 2. Esbjorn-Hargens' AQAL map (2007, cited in Murray, 2010, p. 28)

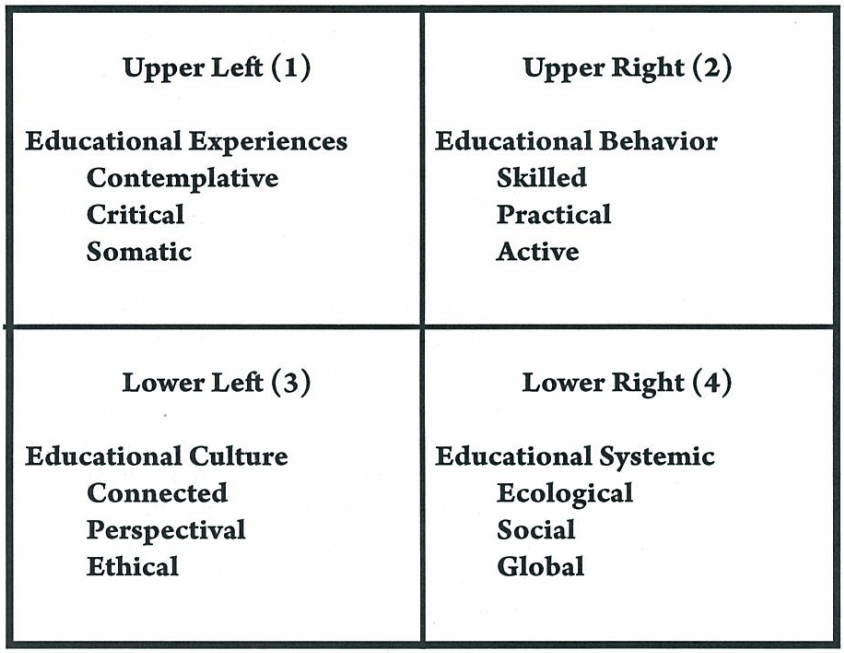

Figure 2.1. Esbjorn-Hargens' Twelve Commitments of Integral Education

Learning Through Example

Integral theory, the four-quadrant model and the issue of levels are often best described and understood when applied in a particular context. In this case, I have drawn on a course reading that examined the case study of an integral community development project in El

Salvador (Hochachka, 2009) to describe how this theory can be applied in practice. The case study investigated the incorporation of interior and exterior needs in creating resilient and sustainable communities. For example, it examined the quantifiable elements of economic growth, resource management and decision-making structures and the unquantifiable dimensions of cultural, spiritual and psychological well-being. Such an approach recognized that sustainability is not arrived at by systemic interventions alone but requires an understanding of all quadrants or what she called the "big three:" the personal dimension "I," the Interpersonal dimension "We," and the practical dimension "Its" (p. 404).

Hochachka's (2009) integral theory model extends to include the notion of levels that encompass the evolution or transformation (and sometimes translation) of the evolving worldviews held by individuals involved in sustainable community development. In this way, the increasing ability to adopt higher and more inclusive perspectives are explored through understanding the individual's sphere of consideration and care. As an individual's sphere of consideration and care expands to include others and as that person acts in concert with others who share this expanded worldview, the closer the community or society comes to sustainability.

Vision and Goals

The vision of the ES 470 course was to provide students with an *experiential*, field-based learning format in which they could engage in integral systems theory and its application to issues of sustainability. Such a hands-on approach afforded students the opportunity to apply this lens to real-world situations as well as experience theory-in-action through community examples. Inherent to this intention of moving from theory to practice was the recognition that there are no templates for sustainability. Considering this, the course fell into what is a growing global recognition that sustainability requires an ongoing social learning process that involves learners

as stakeholders in creating personal and collective vision, and acting and making changes based on the reality of communities (e.g., Tilbury 2007; Wals, 2010).

As mentioned earlier, underlying this vision were objectives of creating an integrative or holistic course design that would emulate, as much as possible, the principles of the primary concepts under study: integral systems theory. To achieve this, Duncan Taylor worked collaboratively to develop a course experience that attempted to engage the multiple intelligences of students, issuing from their intellectual, physical, social, and spiritual dimensions. To support this process, the course aimed at meeting the needs associated with these facets through diverse learning experiences that included contemplative exercises, the development of a learning community, a critical examination of course readings and experience in service learning activities. Underlying this integrative design was the goal to balance the inner and the outer realities of the students and teachers by paying attention to both the internal dimension of learners (values, visions, feelings, motivations, relationships) and external realities (assessment, measurement, action and physical health).

Approaches to Learning: Principles and Practice

Transformative and informational learning.

The course aimed at supporting informational learning as well as transformative learning experiences. The informational objective meant providing learning experiences that could facilitate a more informed, nuanced, sophisticated, and deeper understanding of the concepts, ideas, and projects we examined. The transformative learning objective was supported through meaningful learning experiences that could support changes in not just what we know but changes in how we know it, involving a fundamental shift in the understanding of self, relationships with others, and a vision for action (Kegan, 2000; Morrell & O'Connor, 2002). The

theoretical approach to transformative learning in this course drew on the integrative concepts of self-actualization suggested by Dirkx e al. (2006) and the planetary, whole-system change suggested by O'Sullivan (2002), in which transformation involves both the personal and emancipatory.

Practice.

We understood that the transformative learning goal could be supported and hoped for, but by no means be expected for each individual. The following practices describe some of the learning principles that supported both the transformative and informative learning objectives.

Contemplative learning.

The course aimed at learning experiences that allowed students to explore their inner lives by encouraging self-reflection and contemplation processes. The intention was to provide time and space for guided reflection exercises to encourage insights into the student's lived experiences of what they value and find most meaningful, as well as futures thinking to discover their possible and preferred futures and to uncover the beliefs and assumptions that underlie these visions (Tilbury, 2007 p. 124).

Practice.

"The contemplative mind cannot be willed, as it arises spontaneously, but it can be welcomed" (Hart, 2004, p. 34). Contemplative practice was thus encouraged through making time and space for eco-psychology experiences in nature, vision exercises, and yoga. Time was also made for daily reflective journaling as well as a life-mapping exercise in which students explored the most significant changes in their life over time and the meaningful learning that these elicited. The students were led through a journaling exercise based on Parker Palmer's work *Let your life speak,* in which they explored the idea of vocation by listening to their interior

nature. A guiding question was: “Before you tell your life what you intend to do with it, listen for what it intends to tell you” (1999, p. 3).

Constructivism.

The course aimed at balancing passive (uni-directional) learning, such as reading texts or listening to a presentation, with active learning, involving a constructivist, non-hierarchical co-learning process (Glasser, 2007). Such an approach was intended to engage both student and teacher in the learning process as equal partners, where each was a participant in examining the values and assumptions inherent in transferred knowledge and each shared their knowledge and experience in generating new insights.

Practice.

The constructivist approach was facilitated through group discussions and encouraging the course participants to take part in teaching and presenting, including community leaders, the teacher’s assistants and the students themselves.

Development of a learning community.

The development of a learning community involved the objective of creating what Hart (2001) referred to as the *essence of community*, where there is an integration of the concerns of the individual (such as agency, democracy, individuality, rights) and the needs of the group (including membership, cooperation, and mutual respect).

Practice.

Practice was facilitated in part through developing a common language (integral systems theory, sustainability, multiplicity of worldviews) and from this to build a sense of transparency, mutual trust, collaboration, shared interests and concerns for the common good. Important to this process was the facilitation of authentic, honest dialogue established in group discussions and

experiential co-learning processes, such as service learning activities. Facilitators played a key role in setting the stage by modelling collaborative learning and authentic dialogue processes.

We drew on play as a means of engendering shared joy, laughter and fun and thus promoting trust, connection, and a deeper sense of sharing a common experience. The play involved planned activities such as trust falls, laughter yoga, and group games as well as allowing for "emergence," or "living qualities" that arose from the dynamic interaction of the group-learning processes (Sterling, 2001, p. 81). In addition, we engaged in communal living, where students and teachers shared in daily cooking and cleaning chores and students took turns organizing evening activities including theatre, music, and games.

Community-based learning.

The community, as a location and an example of sustainable practice, figured prominently in the course. Most of the one-week field component was held in local settings, including two community-learning centres: Wildwood Eco-forestry site and O.U.R. Eco-village.[5] Both these sites provided students with a rich milieu from which to gain experience in the practical application of integral systems theory. In addition, those students who chose to develop their own community projects in the latter phase of the course expanded their learning in their own communities.

The community experiences during the project-development phase of the course varied greatly and ranged from the research and development of a small-scale food co-op using extra produce from neighbourhood gardens, to developing and producing a local music event.

[5] O.U.R. Ecovillage: http://ourecovillage.org/ Wildwood Eco-forestry site: http://blog.conservancy.bc.ca/properties/vancouver-island-region/wildwood/

Practice.

Experiential learning was an essential basis for this objective and indeed most of the course learning objectives. Thus, the community-based learning processes hinged on providing hands-on, action-oriented activities, followed by critical analysis and reflection (Jucker, 2004). Activities included a service-learning project at OUR Eco-village involving the construction of raised beds and preparing a greenhouse for spring plantings).

Learning through systems dynamics.

"How we see the world, shapes the world, and this in turn shapes us." (Sterling, 2007, p. 6)

As mentioned above, the course centred on the practical application of integral systems theory to the challenges of sustainability. Critical to applying an integral systems lens to issues of sustainability was the recognition of positive change implicit in the natural dynamics of adaptive systems. During the course, students used the Panarchy[6] model to explore systems dynamics in order to understand how all adaptive systems undergo points of instability during times of change or stress, in which there is a breakthrough to a stage of restructuring and renewal (or less frequently a breakdown). Such times can lead to spontaneous emergence of new forms of order, where there is an opportunity to influence change in that system. It is also a time when small perturbations can push the trajectory in one way or another (Capra, 1997). Hence, it is a time when individuals and small groups can make a profound difference and where seemingly overwhelming changes can instead be seen as representing opportunity for hopeful action.

[6] Panarchy is a term devised by Buzz Holling to describe the evolving nature of complex adaptive systems. "It encapsulates how novelty and change coexist in a context of persistence and stability" and resolves the paradox of change and stability inherent in open systems (http://www.resalliance.org/index.php/panarchy)

Practice.

Students applied Panarchy concepts to their analysis of systemic challenges of sustainability in their written assignments and during class discussion. They applied their understanding of the change processes to their personal lives, allowing these theories to be embodied. One activity included timeline journaling (going back to one's childhood), which allowed participants to see their own breakdowns and breakthroughs, and the way bifurcations, back-loops, and reorganizing principles have worked in their own lives.

Chapter Three: Literature Review

I have reviewed literature from the field of sustainability studies, and from integrative, transformative, experiential, and community-based education in this section. I draw on these sources to examine some of the literature associated with the alternative learning approaches connected with the ES 470 curriculum, as well as some of key themes that emerged from my research. The goal of this chapter is to provide a literature review on:

i. Deep learning and change: the evolving theory and practices of transformative or higher order learning processes

ii. Transformative learning as an experiential, integrative process

iii. Individual contemplative learning as an integrative learning practice

iv. Collective contemplative learning as an integrative learning practice

v. Inciting sustainable action through integrative learning

vi. Community based learning and action

vii. Engaging learners with Nature

viii. Learning that inspires hope

My goal in examining and presenting this literature is to provide a context of theory and practice within which to build my later discussions of the research outcomes in Chapter Six. The learning approaches here suggest that by cultivating ways of understanding that engage and support the whole person, head, heart and hands, we can encourage meaningful learning that personalizes education for sustainability, in which we forge stronger links between the study of the objective world with the purpose, meaning, limits and aspirations of the students themselves (Palmer & Zajonc, 2011). Uniting these approaches is the premise that such educational

environments can lead to personal and collective transformation and action by changing the way we perceive our world and our place within it.

Deep Learning and Change

> "We should attend to the cultivation of our students' humanity at least as much as we instruct them in the content of our fields. In this way, higher education, both in the classroom and beyond, can balance its informative task with transformation, which is of equal or greater importance." (Palmer & Zajonc, 2011, p. 102)

In the 2001 *Schumacher Briefing on Sustainable Education*, Sterling discussed the possibility of a new educational paradigm based upon a distinction between "first-order" and "second-order" learning and change. Drawing from Bateson's ideas (1972), he summarized first-order (or informative) learning as taking place within accepted boundaries and involving adaptive learning that leaves basic values unexamined and unchanged. He contrasted such instrumental learning with second- and third-order learning and change, which involves critically reflective learning, or "learning about learning" and is connected with "a shift in awareness of alternative worldviews and ways of doing things" (Sterling, 2001, p. 15). Kegan (2000) explained higher order, transformative forms of learning as involving changes in not just *what* we know but *how* we know. For Kegan, both informative and transformative learning are valuable and potentially expansive, but the former "exists in a pre-existing frame of mind [while] the other involves a reconstruction of the very frame" (p. 49). Morrell and O'Connor (2002) described the more profound shifts inherent to transformative learning as involving changes in how we think and feel, and also how we act in the world:

> Such a shift involves our understanding of ourselves and our self-location; our relationships with other humans and with the natural world; our understanding of our

> relations with power in interlocking structures of class, race, and gender; our body awareness; our visions of alternative approaches to living; and our sense of possibilities for social justice and peace and joy. (p. xvii)

Researchers such as Sterling, Kegan, Morrell and O'Connor proposed that transformative learning is the most powerful way to support the growth of the whole human being and an evolution of consciousness and worldviews that we require for building a more just and sustainable future. Mezirow (1990, 1991, 1996, 2000), considered by many to be the most influential of transformative learning theorists, (e.g., Baumgartner, 2001; Dirkx, 1998; Duerr, Zajonc, & Dana, 2003; Gunnlaugson, 2007; Kegan, 2000; Lange, 2004; Schugurenski, 2002; Taylor, 1997, 2000, 2007) described these transformations in terms of changes to how we make meaning in the world, or shifts to our "frames of reference." Others describe these shifts as changes to our "epistemologies" (Kegan, 2000) or "levels" of consciousness (Wilber, 1996; Gunnlaugson, 2007). In each case, the ultimate goal of transformative learning is an evolution of perception and consciousness that expands the learners' sense of self and relationship with others (Dirkx, 1998; Taylor, 1997, 2000, 2007).

Transformative Learning: A Theory in Progress

There are many interpretations of the change processes involved in transformative learning, as well as its ultimate purpose and significance. Mezirow (1990, 1991, 1996, 2000), who described the change process[7] as epistemic in nature, has influenced the current

[7] Mezirow described this critical reflective process as a 10-stage model for transformative learning. He argued that the stages may be experienced in a variety of order and depths, but that all 10 stages must be satisfied if transformational learning is to occur (1990, 1991, 2000).

1. Disorienting dilemma
2. Self-examination of negative feelings
3. Critical assessment of assumptions and relationships
4. Recognition of one's discontent and desire for change shared
5. Exploration of options for new roles, relationships and actions

transformative-learning field. He concentrates on the cognitive dimension in this change, through which a rational, critical reflection process is the main driver in causing the learner to become aware of his or her "frame of reference," a structure that holds and defines the individual's unconscious beliefs and assumptions. In addition to emphasizing the cognitive and rational functions of this process, Mezirow stressed such changes as being inherently an individual experience, occurring separately from the learner's socio-cultural context. Taylor (2007) described Mezirow's approach as a "psycho-critical view," in which the unit of analysis is the individual and personal transformation precedes any meaningful, sustained social change (p. 7). Indeed, despite Mezirow's belief that personal changes result in building the individual's capacity to engage in a more inclusive and integrative worldview, he has argued that personal transformation does not necessarily result in social action (as cited in Dirkx, 1998).

There are varying degrees of acceptance of Mezirow's theory for change, with a general consensus that critical reflection is an important element in transformative learning processes (see literature reviews of empirical studies on transformative learning processes by Clark, 1993; Dirkx, 1998; Taylor, 1997, 2000, 2007). However, some criticisms arise from Mezirow's stress on the rational dimension involved in such change, as well as his emphasis on transformative learning involving a predominantly autonomous and self-directed process (Dirkx, 1998; Kovan & Dirkx, 2003; Gunnlaugson 2007; Tolliver & Tisdell, 2006). As well, there is debate about Mezirow's original emphasis on epochal change (where transformations occur suddenly, often

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6. Provisional trying of new roles
7. Building competence/confidence in new roles and relationships
8. Planning a course of action, acquiring knowledge and skills for implementing one‘s plan
9. Acquiring knowledge and skills for implementing one‘s plan
10. A reintegration into one‘s life on the bases of the conditions dictated by a individuals new perspective

from a single disorienting event) versus cumulative transformations that unfold over time (Dirkx, Cranton, & Mezirow, 2006; Kovan &Dirkx, 2003; Kegan, 2000; Schugurenski, 2002).

Personal and Collective Transformation

Mezirow defined perspective transformation as a process by which the individual transforms taken-for-granted meaning-making structures "to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they can generate beliefs and opinions to guide action" (2000, pp. 7-8). While Mezirow's concept of transformational learning is focused on the individual's journey of personal development (1990, 1991, 2000), there is a strong alternative viewpoint that considers personal change to be intimately connected with the broader collective (Clark, 1993; Dirkx, 1998; Dirkx & Kovan, 2003; Freire, 2002; Gunnlaugson, 2007; Hart, 2004; O'Sullivan, 2002; Taylor, 2000, 2007; Southern, 2007). This approach recognizes the influence of relationships in the transformative learning process as well the collective dimension that results from such change, where the learner ultimately increases his or her sense of connectedness to others and the world around.

In Taylor's reviews of empirical research on transformative learning theory, the importance of relationships was found to be the most common finding of all the studies reviewed (1997, 2007). In particular, it was found that effective transformative learning is much more dependent on the subjective elements of relationships, such as the creation of support, trust, and friendship with others. Southern (2007) described transformative experiences as, by their very nature, co-created experiences: "We don't compose our lives alone. We co-create them through the relationship we have with others" (p. 337). In this way, transformative learning occurs through a reframing that results from a connection with the "other," be it a person or idea. Davis-Manigaulte, Yorks, and Kasl (2006) argued that for deeper learning to be effective, we must have

some form of meaningful relationship with the other, so as have the tension necessary to reflect on differences and consider changing our own understanding and perceptions of ourselves and the world around us.

Theorists such as Freire (2002), O'Sullivan (2002), and Gunnlaugson (2007) tended to view the self-actualization potential of transformative learning as being inseparable from greater collective changes. Gunnlaugson (2007) described this in his articulation of "integral transformative practice," which recognizes that the well-being and evolution of the individual is necessarily set within a greater commitment to the interests of "the all" (p. 317). For Gunnlaugson, this integrative approach to transformative education involves supporting students in not only "translating their transformative learning experiences in personal terms alone" (p. 323), but in connecting them with the different collective dimensions of their experience in the community and the world. In Freire's (2002) view of praxis,[8] individuals and society appear inseparable. For Freire, critical reflection or *conscientization*, while key to the transformation process, is connected with a rediscovery of personal power when the more critically aware learners become, the more they are able to transform society and subsequently their own reality. O'Sullivan (2002) took this perspective further by articulating a planetary view of transformative learning in which the ultimate goal is whole-systems reorganization, involving personal change that is translated to an ecological and planetary scale. These views are tied to the principles of an integrative approach to educating for sustainability, which posits that the well-being of society and the Earth is inextricably linked to the development and potential of the inner life of the individual.

[8] For Freire (1970), education is understood as *praxis:* reflection and action upon the world in order to transform it.

Transformation: Gradual Versus Epochal Change

Theorists such as Cranton (1994), Mezirow (1990, 1991, 2000), and Poutiatine (2009) contended you cannot be forced into a transformative learning experience through any particular intervention or even through the most engaging and meaningful of learning practices. Poutiatine described transformational change as a process that can be supported, but ultimately hinges on the active engagement of the learner: "We cannot be forced to transform by another agent; we must consent to be transformed" (p. 194).

In most of these cases, such "ascent to change" (Mezirow, 2000) refers to transformation in the strictest sense of transformative learning theory, where changes bring about epistemic and permanent shifts in consciousness. Mezirow and Kegan described these changes as rare occurrences (Kegan, 2000; Mezirow, 1990, 1991, 2000). As mentioned earlier, in Mezirow's case he has historically emphasized such a shift being initiated by a singular (and disorienting) event. Alternatively, writers such as Dirkx, Mezirow, Hart (2004), and Schugurensky (2002) have written on understanding transformative learning as an incremental versus epochal process. In his article with Mezirow and Cranton (Dirkx, Mezirow & Cranton, 2006), Dirkx acknowledged the relevance and power of learning that results in dramatic and permanent shifts in consciousness, but argued for providing learning experiences that result in a "re-enchantment" with the students' everyday lives (p. 133). In his article with Kovan (Kovan & Dirkx, 2003), Dirkx described this as a lived journey towards transformation, involving a "gradual unfolding of the self" (p. 102). For Dirkx, these kinds of learning experience result in less clear or dramatic consequences (or consequences that may not be immediately apparent) but offer an opportunity for the learner to feel engaged and drawn into experiences that capture their intellectual and emotional attention.

Integrative Learning: In Search of Meaning and Transformation

> "If we are to prepare students and ourselves for this accelerated and challenging world, and aspire to more than merely trying to keep up or catch up, something more than a stockpile of information and basic scholastic skills sets is required. The greater the complexity and demands of the outer world, the more essential are qualities of interiority." (Hart, 2007, p. 11)

This quote reflects an increasing interest in broadening transformative learning theory to a more multi-dimensional enterprise that supports a holistic or integrative approach in supporting higher-order change (Dencev & Collister, 2010; Dirkx, 1998; Ferrer, Romero, & Albareda, 2006; Gunnlaughson, 2007; Hart, 2001, 2004, 2007; Netzer & Rowe, 2010; Palmer & Zajonc, 2011; Taylor, 2000, 2007). The approach acknowledges the importance of rational discourse and critical reflection in the process of transformative learning but gives equal weight to influences of the learners' social-cultural context, to the role of feelings, as well as to other ways of knowing, including the intuitive and somatic. Hart (2007), who describes transformative learning as a move towards wholeness, defined this approach as one that supports an alignment between one's true self and how one manifests that self in the world. This perspective considers a focus on the rational and epistemic dimensions of transformative learning to offer a useful but limited means of understanding the process of change, self-discovery and social critique involved in deeper learning processes**.** Educators such as Netzer and Rowe (2010) described integrative transformative learning as an approach that places attention on "opening learners to multiple ways of knowing and developing in them, experientially, the capacity for reflective awareness of self in relationship to a larger scope of being in the world" (p. 125).

Integrative Learning

A broad range of names and definitions assigned to education seek an integrative approach to transformative learning, as in *holistic* (Miller 1997, 1999), *whole-person* (Parkes 2011; Podger et al., 2010), *radical interconnectedness* (Selby, 2002), *integral* (Dea, 2010; Eshborn-Hargens, Reams, & Gunnlaughson, 2007), or *integrative* (Astin & Astin, 2010; Awbrey et al., 2006; Palmer & Zajonc, 2011). Common to much of this literature is the idea that the dynamics of our current world are such that we require learning that aims at personal and collective transformation by engaging the full spectrum of human knowing in order to create a more just and sustainable world (e.g., Astin & Astin, 2010; Awbrey et al. 2006; Dea, 2010; Eshborn-Hargens, Reams, & Gunnlaughson, 2007; Ferrer et al., 2006; Glasser, 2004, 2007; Gunnlaughson, 2007; Hart, 2007, 2008; Miller, 2002; Orr, 2000; Palmer & Zajonc, 2011; Selby, 2002; Wals, 2010). Central to this approach is the premise that learning which involves the explicit inclusion of all human attributes in the inquiry process will naturally reconnect education's root meaning 'edu-care' to encourage what is already present in the fostering of new knowledge (Ferrer et al., 2006).

Experiential learning.

A critical theme that extends across much transformative integrative education is the importance of experiential learning. As Glennon (2004) argued, however, it is not just any type of experience that holds the possibility of transformation but those that are relevant to the leaner and significant in ways that are fruitful for further learning. In drawing on the works of Dewey (1938, 1997), Ord (2009) noted the need for such learning to be relevant and to connect with the students' real-life experiences, followed by critical reflection and action. He argued, "Theories and ideas can only make sense in relation to the lived experience of individuals and

communities, and as such, they necessarily inform and enlarge experience" (p. 496). For Ord, meaningful learning occurs when thoughts and ideas are translated to experience. Experiential learning actively engages learners in posing questions, engaging in deep reflection, experimenting, being creative and solving real-life problems (Glennon, 2004; Kolb and Kolb, 2006; Luckman, 1996). In these cases, this learning emphasizes a process that transcends transmissive learning to knowing through a direct encounter with the subject matter where the concepts being studied "come alive within the learner in a personal way" (Davis, 2005, p. 3).

Integrative Learning: A Brief History

The concept of integrative learning is not new. Some of the roots of integrative learning in the context of higher education are reflected in the ideals of a liberal arts education, which traditionally aimed at ensuring an integration across disciplines, forging a connection to community and aligning learning and knowledge in relation to an exploration of self (Green & Noble, 2010; Lee, 1999; Lewis, 2006). An interest in integrative learning has been on the rise in the last dozen years, which some connect with the view that the conventional learning approach offered by most universities is inadequate preparation for the very complex and daunting problems faced by the next generation (Astin & Astin, 2010; Awbrey et al., 2006; Duerr, Zajonc, & Dana, 2003; Huber and Hutchings, 2004; Palmer & Zajonc, 2011; Shapiro, 2003).

Despite this fact, clarity in theory, practice, and the ultimate goals of integrative learning have been slow to emerge. What appears to be common among thinkers in this field is that integrative education is a process that addresses the whole person by looking for ways to support and develop the interior and exterior dimensions of learners. This theme is explored in the recent publication of two volumes on integral education: *Igniting Brilliance: Integral Education for the 21st Century*, edited by Dea (2010) and *Integral Education: New Directions for Higher*

Learning, edited by Esbjorns-Hargens, Reams, and Gunnlaughson (2010). The writers identified many sources of this approach to education, including Amerindian notions (Hampson, 2010), Sri Aurobindo's ideals of integral yoga (Ryan, 2010), or more recently, Wilber's *Theory of Everything* (2001). While there is reluctance in each volume to present a singular or overarching definition of integral education, the editors described a number of the elements they felt encompassed the common elements of this evolving learning approach. The following summarizes the evolving tenets described by Esbjorns-Hargens, Reams, and Gunnlaughson (2010):

- *Exploring multiple perspectives*: The need to include insights and truths from a broad range of perspectives in order to provide a more complete understanding of a particular phenomenon.
- *Including first-, second- and third-order methodologies of learning and teaching*: Combining learning modes that engage students with the subjective, inter-subjective and objective aspects of reality, i.e., combining artistic expression, participatory inquiry and empirical analysis in the learning experience.
- *Combining critical thinking with experiential feeling*: What we know and experience has affective and cognitive dimensions, requiring a commitment to intellectual rigour in direct knowing and embodied experience.
- *Including the insights of constructive, developmental psychology*: Recognizing students and teachers are at different stages of growth in their personal educational journeys.
- *Engaging in regular, personal practices of transformation*: Providing opportunities to engage in various practices that encourage interior growth, i.e., yoga, meditation, and reflective journaling.

- *Include multiple ways of knowing*: Educate from a multi-dimensional view of humans that honours body, heart, mind, soul and spirit equally in the learning process.
- *Encouraging "shadow work" in learners and teachers*: An exploration of the non-rational side of the human self.

Contemplative Learning: Integrative Learning in Practice

> "The purpose of education is to show a person how to define himself authentically and spontaneously in relation to the world—not to impose a prefabricated definition of the world, still less an arbitrary definition of the individual himself." (Merton, 1974, as cited in Hart, 2001, p. 119)

Discovering effective practice in integrative learning involves more than an attempt to understand how the cognitive, affective, somatic, intuitive, and spiritual dimensions affect transformative learning but also how, on a conscious level, to promote and activate the involvement of these various dimensions in the process of a perspective transformation (Taylor, 1997, 2000). The practice of contemplative learning is receiving increased attention as a way to facilitate a more reflective and experiential means of fostering such capacities as the development of self-awareness, interpersonal skills, emotional balance, and other forms of intelligence (e.g., Astin & Astin, 2010; Bush, 2011; Gunnlaugson, 2009; Shapiro, Brown, & Astin, 2008).

Contemplative learning reflects the integrative learning goal of whole-person learning by seeking to develop what Hart (2007) called a third way of knowing, one that "complements the rational and sensory" (p. 3) and engages the inner dimensions of learners. Haynes (2004) described this as an epistemology "based not on data, information, and the separation of subject and object, but on knowledge, wisdom, and the insight about the interconnectedness of things"

(p. 2). Informed by various contemplative wisdom traditions, pedagogues are integrating contemplative practices into traditional higher education curriculum for the purposes of fostering intuitive, non-conceptual, and experiential forms of knowing (Gunnlaugson, 2009). This approach fosters reflection (in the spiritual sense of quiet contemplation) as the necessary intervening activity that transforms information and experience into meaningful working knowledge (Yeganeh & Kolb, 2009). Naropa University[9], a leader in contemplative education, provided this definition (as cited in Gunnlaugson 2009, p. 26):

> Contemplative education is learning infused with the experience of awareness, insight and compassion for oneself and others, honed through the practice of sitting meditation and other contemplative disciplines. The rigour of these disciplined practices prepares the mind to process information in new and perhaps unexpected ways. . . . Contemplative practice unlocks the power of deep inward observation, enabling the learner to tap into a wellspring of knowledge about the nature of mind, self, and other that has been largely overlooked by traditional, Western-oriented liberal education. This approach to learning captures the spark of East and West working within; it's the meeting of two of the greatest learning philosophies in the history of higher education.

Applications of these practices in the university setting are still relatively infrequent, yet there is a growing interest among students and faculty for more experiential and personal approaches to learning that supports the inner capacity for reflection, self-knowledge, and a connection with others (Astin & Astin, 2010; Hart, 2004, 2007; Palmer & Zajonc, 2011). Contemplative learning practices are being increasingly used in formal education settings to engage students in a way that recognizes and reflects their spiritual aspirations and desire for

[9] http://www.naropa.edu/

personal meaning (e.g., Bush, 2011). Despite this rise in interest in contemplative learning, there is still much resistance to incorporating contemplative practices in traditional, secular learning institutions, where there is an assumption that the spiritual roots of such practices have religious connotations (Astin & Astin, 2010; Chickering, 2003; Hart, 2007). As well, there is a reticence about engaging with the student's inner subjective (or spiritual) life, as it threatens certain core values of intellectual life (Astin, 2004; Astin & Astin, 2010; Palmer & Zajonc, 2011). "Rationality and empiricism, say the critics, should never cohabit with religion" (Palmer & Zajonc, 2011, p. 47). Hart (2007) argued that using contemplation in schooling is not a religious issue but a practical epistemic question: "It is about how we know, not about what knowledge we are giving others" (p. 3). In this way, inviting in the contemplative hinges on the natural human capacity for knowing through silence, looking inward, pondering deeply and exploring our consciousness to find knowledge and understanding that issues from within. This cultivation of inner knowing is therefore "a technology of learning and pedagogy without any imposition of religious doctrine whatsoever" (Hart, 2007, p. 3).

Critics of secular institutions argue that conventional forms of education are in fact not value free, as they tend to promote a positivist, materialistic and agnostic or atheist perspective (e.g., Astin & Astin, 2010; Chickering, 2003; Glazer, 1999; Orr, 2004; Sterling, 2001). The Dalai Lama described this approach as its own form of indoctrination:

> A great irony is that while spiritual indoctrination, in particular, has been banned from our classroom, indoctrination and imposition continues unimpeded. Students aren't indoctrinated into religious liturgy but instead into dualism, scientism, and most especially consumerism… We have been indoctrinated into a severely limited, materialistically biased worldview. Rather than learning to nurture and preserve spirit, we

> learn to manipulate the world: to earn, store, and protect wealth. Rather than learning to be sensitive—understand and attend to the needs of others—we learn to want, rationalize, and do for ourselves. With the rise of a kind of "economic individualism" as our basic sense of identity has come the centralization of wealth and power, the loss of the commons, and the ravishing of the planet. The fact is, within our schools and culture, identity is being imposed: not spiritual identity but material identity. (Dalai Lama, as cited in Glazer, 1999, pp. 79-80)

Contemplative learning seeks to expand this reductive understanding of the world and embrace and develop an enlarged view, one that has room in it for the exploration of meaning, purpose and values, and how to serve our common human future (Palmer & Zajonc, 2011). Davis (2005) described this as an experiential approach to understanding the world and our place within it—one that includes and transcends the rational and intellectual strengths of critical reflection.

Contemplative practice.

The contemplative mind is activated through a wide range of approaches that are designed to quiet and shift the habitual ways of thinking to cultivate a personal capacity for deepened awareness, concentration, and insight (Hart, 2007). Researchers with the Contemplative Net Project (CNP) (Bush, Hallstrom, Duerr and Maceo, 2002), under the auspices of the Centre for Contemplative Mind in Society,[10] prepared an insightful report on the effects of contemplative practice in social justice organizations and programs. They constructed the following working definition of contemplative practice that reflects the description suggested by

[10] The Centre for Contemplative Mind and Society is a non-profit organization that works to integrate contemplative awareness into contemporary life in order to create a more just, compassionate, reflective and sustainable society. They work primarily in the context of higher education and hold retreats, workshops and training sessions to build capacity in this area. (www.contemplativemind.org)

other theorists and practitioners (e.g., Gunnlaugson, 2009; Hart, 2004, 2007; Kirsch, 2008; Shapiro et al., 2008) but also recognizes communal forms of practice:

> A practice designed to quiet the mind in the midst of the stress and distraction of everyday life in order to cultivate a personal capacity for deep concentration and insight. Although usually practiced in silence, examples of contemplative practice include not only sitting in silence but also many forms of single-minded concentration, including meditation, contemplative prayer, mindful walking, focused experiences in nature, yoga and other contemplative physical or artistic practices. We also consider various kinds of ritual and ceremony designed to create sacred space and increase insight and awareness, such as council circle or vision quest, to be forms of contemplative practice. (Centre for Contemplative Mind in Society)

Community of care: The communal aspect of contemplative practice.

Contemplative practice is often considered a solitary practice, but recent research reveals how contemplative practices are being used to facilitate more authentic and empathetic learning communities (Dencev & Collister, 2010; Gunnlaugson, 2009; Kirsch, 2008). The CNP research project (Bush et al., 2002) reported many benefits of group contemplative practice, including improved communication, a greater sense of team and community, recognition of interconnections and the desire to work across boundaries.

> Most of the time, when people do meditation, it's such a solitary thing and they're cut off from other people. But let us say a couple or two friends go into that space and they share with each other as these things are arising, and there is this kind of dialogue that comes out of deep spiritual intimacy, so it is meditative and it is contemplative, but it's also

> socializing. It creates a bond between people who can share such depth and integrity. (Bush et al., 2002, p. 23)

This insight describes the types of benefits the Contemplative Net Project research group revealed in interviewing leaders in social justice who engage groups in individual and communal contemplative practices, such as sitting meditation, and also relational practices such as council circle and engaged dialogue. Interviewees stressed the importance of the "deep listening" involved in communal practices, which in some cases led to feelings of genuine and connected community.

This impact on a group of learners' sense of community and connection brings us back full circle to transformative learning theory, which contends that transformative learning requires supportive relationships to help foster the learners' belief in their potential to influence reality (Schugurensky, 2002). Mezirow (2000), despite his focus on individuation, argued that reflective discourse, in which learners dialogue with others to understand the meaning of an experience, is a means through which transformative learning takes place. Daloz (2000) underscored this by drawing on the work of political theorist Mark Warren, who argued that participation in "a community of understanding that involves shared commitments" could foster democratic "self-transformation" (Warren, 1992, as cited in Daloz, 2000, p.114).

Transforming the Self: Transforming the World

> "We require learning that transforms, where the intent is not just personal transformation but societal transformation so that individuals can be creative producers of self and of society." (Lange, 2004, p. 122)

Schugurensky (2002) contended that a collective process is not only a powerful catalyst for deep and transformative learning, but also a precondition for social action. Daloz (2000)

agreed and maintained that there are four conditions under which "engagement with otherness" (p. 112) leads to greater social responsibility: the presence of the other, a reflective discourse, a mentoring community, and opportunities for committed action. Southern (2007), explored the idea of transformative learning as a relational process and discussed how student and teacher relationships may create meaningful inquiry and conversation that make individual and collective transformation possible. She maintained that understanding learning in this way:

> ….calls us to participate with students in creating communities of care in our learning environments, which hold relationships in a way in which we can both challenge and support one another in negotiating meaning, expanding horizons, and taking shared responsibility for co-creating a better world. (p. 329)

Parks (2011) noted the power of the social group in academic learning processes in her descriptions of an integrative, "whole-person" curriculum (p. 175) at Whitworth College in the United States. She argued that the information, skills, and capacity for action that are now vital for the future of individuals and societies are most effectively learned in community. "It is difficult to adopt new ideas that require a change in behaviour if it will leave us bereft of belonging in meaningful terms" (p.177). For her, students who experience community and a network of belonging that allows them to share their insights and understanding opens the possibility for their learning to become transformative. In turn, these experiences encourage the formation of the citizen and leaderships skills necessary for action.

Group Process and Action: Community-based Education

> "When we are dreaming alone, it is only a dream. But when we dream together, it is the beginning of reality." Bishop Dom Helder Camara

McKenzie (2008) posited that a powerful arena for engaging students in learning, that balances reflection and activism, involves community-based education. Educators create spaces for students to engage in place-based, collaborative experiences, which are not pre-determined, but support a constructivist approach to learning and "cultural formation" (p. 367). Wals (2010) argued that such experiential learning creates the conditions for participatory and grassroots initiatives that provide a necessary forum for activism and experimentation in creating benefits for the community.

Community-based education (CBE) in the context of higher education involves the engagement of university and community, thus providing an opportunity for learners and researchers to apply concepts, information and skills to the pressing issues that affect local communities (Ostrander, 2004). Such engaged scholarship is widely considered to enrich classroom-based learning and foster not only a student's sense of community engagement, but also result in shifts to more engaged and sustainable behaviour (Ellis & Weekes, 2008; Glennon, 2004; Marullo & Edwards, 2000; Ostrander, 2004; Palmer & Zajonc, 2011; Zlotkowski, 2007).

Successful interventions in CBE draw on a pedagogic design that includes some key strategies in encouraging a transformative learning experience and meeting the needs of the community. These approaches hinge on providing a hands-on, action-oriented learning strategy that includes:

- providing students with a learning experience that is experiential where the student learns through direct experience in community settings and works on open ended problems, projects and challenges;
- ensuring an opportunity for students to engage with community issues and with groups seeking to solve problems and improve the quality of life for others and for the environment; and

- providing opportunities for integrative learning in which students organize and deal with unstructured problems and generate new links among previously unconnected issues, approaches, sources of knowledge and contexts for practices. (Schneider, 2007)

Engaging students in these types of experience, especially in the field of sustainability education, requires balancing the burden of information with shared vision and a chance to experiment and work collectively (Wals, 2010). In many ways, the tenets of experiential, self-empowered and relational learning involved in community-based education mirror the many themes of integrative learning and, when done well, prove its assertion that creating a positive future involves engagement with the full spectrum of humanity: head, heart, and hands.

An Engagement with Nature

In addition to the documented results of being immersed in a meaningful learning community are the effects of education in natural settings. A large body of experiential, environmental and sustainable education literature demonstrates that learning in the natural world inspires stewardship of the natural systems upon which we rely (e.g., Andrews, 1999; Hart, 1999; Orr, 1994; O'Sullivan, 2002; Plant, 1998; Stone & Barlow, 2005; Thomashow, 2002). Hart (1999) wrote about the theory and practice of involving people in community development and environmental care, and stressed that "intimately knowing the wonder of nature's complexity" (p. 18) helps students "fully appreciate the immense beauty of the planet as a whole" (p. 18). Thomashow (2002) described educating in nature as facilitating a deep connection with the natural world, which serves as an incubator for developing a sense of self and transforms the way students conceptualize the world.

Uniting people with nature encourages a sense of connection and stewardship of the natural world and brings a deep sense of self and feelings of wholeness. According to many

authors (e.g., Greenway, 1995; Harper, 1995; Macy, 1991; Naess, 1995; Thoreau, 1993), time spent in nature is restorative because it allows one to experience moments of wholeness and belonging. Naess (1995) described this reconnection with the natural world as conducive to a reconnection with the web of life in which the feelings of wholeness that it can inspire create a healing experience. "Our human psyche, with its self-created sense of individuality, slips away and a larger, eco- self" comes into play (p. 17).

Returning to hope

> What is information without hope, without shared vision, without the chance to experiment or work collectively? Wals (2010, p. 36)

The tenets of experiential, self-empowered and relational learning involved in community and nature based education mirror many of the themes of integrative learning and in fact, when done well, encapsulate its assertion that creating a new, positive future involves an engagement with the full spectrum of humanity: head, heart and hands.

This quest for wholeness, "in knowing, in being and action" (Awbrey et al. 2006, p. iv) is also associated with the premise of moving students beyond the objective analysis of our many problems and actively engaging them in building an understanding from personal reflection and experience. This approach engages learners in constructivist and emancipatory processes that involve them in the creation of knowledge and meaning, and ultimately, in producing a sense of empowerment and aspiration to shape the communities in which they want to live (Gabler & Schroeder, 2003; Wals, 2010). Palmer (in Palmer & Zajonc, 2011) likened this to an immersion in real-life experience, which begins with the idea that we are all embedded in a communal reality hinging on an epistemological assertion: "We cannot know this communal reality truly

and well unless we ourselves are consciously and actively in community with it as knowers" (p. 27).

By applying learning approaches that facilitate this immersion, we might arrive at what McKenzie, Hart, Bai and Jickling describe as "spinning pedagogies of possibility": where the project at hand is not one of objectivism and critique, but of direct engagement and, ultimately, of engendering hope (2009, p. 2).

Chapter Four: Research Methodology

In this chapter I describe my research journey and explore some of the history and tenets of hermeneutic phenomenology. I present the goals and issues of trustworthiness linked to this form of interpretive phenomenology and provide information and summaries of my research methods, the research participants and the data analysis framework I employed. In order to situate myself in the research, I end this chapter by providing an explanation of my own perspectives, knowledge, and experiences that relate to this research project and the integrative learning course under study.

My Research Journey

> Stories go in circles. They don't go in straight lines. It helps if you listen in circles because there are stories inside and between stories, and finding your way through them is as easy and as hard as finding your way home. Part of finding is getting lost, and when you are lost you start to open up and listen. (Tafoya, 1995, p. 12, as cited in Wilson, 2008)

I applied a hermeneutical (interpretive) phenomenological approach to develop a deeper understanding of the meaningful learning experienced by ES 470 students. Interpretive phenomenology, which Hart (2004) noted "[w]as an attempt to describe a more direct and penetrating disclosure of subjectivity" (p. 81) is defined as a way to interpret experiences of shared meanings and practices that are embedded in a particular context (Koch, 1995). In this approach, the interest is not how the world is, but how the world is conceived, both from the perspective of the researcher and the participants in the research (Creswell, 1998).

Interpretive phenomenology provided me with a methodological "home" for my inquiry (Glesne, 1998, p. 37). It reflects my 'integralist' and constructivist views of reality, in that I

consider those perspectives that embrace more of reality to be more truthful. I did not arrive at this methodology by following a straight line, however, but began my research journey with an inquiry based on an interpretive form of grounded theory (GT). After undertaking preliminary analysis of the data, I felt uncertain about the approach.

The initial rigorous analysis I conducted using grounded theory methods, and even the NVivo[11] software I employed have been very valuable to my analysis. Both tools provided a systematic means of sifting through each line of data, seeing the beginning of patterns and themes in the participant's stories and also diminishing the chance of missing unexpected ideas. Despite this, GT seemed to provide me with a partial gaze with which to view and work with the analysis. In the end, GT did not resonate with my desire to engage in a holistic reading of the data and to direct a more integrative lens to understanding (and interpreting) the individual and collective experiences of the students.

I began looking for an alternative process of inquiry, based on the premise of meaning making as a relational and contextual process, and one that was more explicit in exploring the dialectical epistemological relationship between the interpreter and the participant. I found myself drawn back to the interest I held throughout my research journey: to understand and describe the nature and meaning of the students' meaningful learning experiences from their own subjective perspective. Through conducting the initial analysis, I realized this goal involved embracing and navigating my own personal knowledge and experiences as well.

I wished to draw lines between the students' learning and the elements in the course that helped shape their experience. I found the theorizing implicit in this process was in practice an undertaking that involved weaving a richer and more nuanced story of the course experience,

[11] NVivo: Qualitative data analysis software

rather than generating an "abstract analytical schema" as suggested in an enquiry based solely in grounded theory (Creswell, 1998, p. 56).

Turning to Phenomenology

> Phenomenology encourages a close relationship between the experiences of real life and the ideas that guide our actions in practice by "by dropping the dualism of subject and object." (Boweree, 1998, p. 2)

Phenomenological studies attempt to describe and build a meaningful understanding of a particular phenomenon as it is experienced by the individuals who have lived through it (Flood, 2010; Koch, 1995; Lester, 1999; van Manen, 1990; Wojnar & Swanson, 2007). "Epistemologically, phenomenological approaches are based in a paradigm of personal knowledge and emphasize the importance of personal perspective and interpretation" (Lester, 1999, p. 1). Flood (2010) emphasized this focus on interiority by describing phenomenology's primary position as one that posits that the most basic human truths are accessible only through subjectivity, and that all knowledge is both relational and contextual.

Husserl: History of a philosophy and research approach.

The phenomenological approach to research is largely shaped by its founder, Husserl (1859-1938), who argued for both a philosophy and a descriptive approach to inquiry that defined realities based on the lived experience of individuals "from a first-person point of view" (Wojnar & Swanson, 2007, p. 173). Husserl's work represented a critical divergence from the positivistic and mechanistic approaches to human science of his time (Koch, 1995; Lopez & Willis, 2004; van Manen, 1990). This dominant philosophy of positivism (which continues today) claimed that knowledge or reality exists primarily outside of human consciousness and was acquired by a passive, independent consciousness that more or less objectively perceived

and analysed objects and actions (Koch, 1995; Lopez & Willis, 2004) Husserl questioned the premise of a passive accessing of consciousness and argued for a "direct grasping of the phenomena" as they appeared through the consciousness (Koch, 1995; Laverty, 2003, p.23; Lopez & Willis, 2004; van Manen, 1990).

However, underlying Husserl's descriptive phenomenological approach to the study of human consciousness was a more positivist assumption that there are features or "essences" that are common to all persons who have that experience (e.g., Flood, 2010; Laverty, 2003; Lopez & Willis, 2004). The goal in this descriptive, phenomenological approach is to reveal the "essential, invariant structure, or essence, of the experience," which will result in one correct interpretation of the participants' experiences (Creswell, 1998, p. 55).

From that perspective, the effect of contextual realities on the lived experiences of participants, such as environment, culture and politics, are secondary "and [are] at best, a peripheral concept to Husserl's teachings" (Wojnar & Swanson, 2007, p. 174). Laverty (2003) argued that Husserl's emphasis on the ability of the researcher to intuit essences without a consideration of context is reflective of the values of traditional science:

> At heart, Husserl seemed to have a deep need for certainty that pushed him in the direction of making philosophy a rigorous science. There appeared to be an unresolved conflict [in] his thought between phenomenology as describing experience and phenomenology as a quest for certainty. (p. 27)

Descriptive phenomenologists believe it is possible to grasp such a "pure" understanding of a particular phenomenon by engaging in a process called bracketing, which requires researchers to shed prior experiential knowledge and personal bias so as to avoid influencing the description of the phenomenon under study (e.g., Flood, 2010; Lester, 1999; Wojnar & Swanson,

2007). The premise here is that once bracketing is achieved, phenomenological description can take place and the phenomenon can be presented without interpretation (Wojnar & Swanson, 2007).

Heidegger, Gadamer, and interpretive phenomenology.

> "One of the most important Heideggerian assumptions stresses the indissoluble unity between the person and the world." (Koch, 1995, p. 831)

Heidegger's work (1962) marked the beginning of a hermeneutic approach to phenomenological research, which purports a more descriptive and holistic method to studying the lived experiences of others. Munhall (1989, as cited in Laverty, 2003) described Heidegger as having a view of people and the world as being wholly interconnected with their cultural and historical contexts. Flood (2010) explained Heidegger's perspective as one encompassing a view that asserts humans are embedded in their world to such an extent that nothing can be encountered without reference to the person's "background understanding" (p. 9). This approach asserts that interpretation is a central characteristic of human experience and that meaning making is an "embedded" process, in which an individual's subjective experiences are invariably influenced by the many facets of their social and cultural environment (e.g., Flood, 2010; Geallanos, 2000*;* van Manen, 1984, 1990). Taylor (1987, as cited in Koch, 1995) described such meaning making as inter-subjective and rooted in our own self-definitions, hence in what we are:

> We are fundamentally self-interpreting, self-defining, living always in a cultural environment, inside a web of signification we ourselves have spun. Thus there is no outside, detached standpoint from which we gather and present brute data. When we try to understand the cultural world, we are dealing with interpretations and interpretations of interpretations. (p. 42)

Taylor's description evokes the work of Gadamer who was influenced by both Husserl and Heidegger, "but moved to extend Heidegger's works into practical application" (Laverty, 2003, p. 25). Gadamer understood interpretation to be a fusion of *horizons*, in which the meaning arrived at, in interpretive research, comprises a blend of those articulated by participants and the researcher (1960, 1998, as cited in Laverty, 2003, p. 27). In this context, the "horizon" encompasses an individual's "particular vantage point" (Laverty, 2003, p. 25) and includes the person's background of "various assumptions, ideas meanings and experiences, which are fluid and open to change" (Flood, 2010, p. 10).

Accordingly, there is recognition in hermeneutical inquiries that understanding cannot be arrived at solely through bracketing bias and personal experiences. In fact, the knowledge and experience held by the researcher are considered an integral and valuable aspect of the inquiry process. In this way, hermeneutic phenomenological research represents a major departure not only from positivist forms of research, but other qualitative approaches as well (e.g., Flood, 2010; Laverty, 2003; van Manen, 1990).

Gadamer (1960, 1998, as cited in Laverty, 2003) considered this dialectical interaction between the researcher and participant a critical aspect of producing knowledge and making new insights (and horizons) possible:

> Understanding is always more than merely recreating someone else's meaning. Questioning opens up possibilities of meaning, and thus what is meaningful passes into one's own thinking on the subject. . . . To reach an understanding in a dialogue is not merely a matter of putting oneself forward and successfully asserting one's point of view, but being transformed into a communion in which we do not remain what we were. (p. 375)

This relativist view of reality implies that understanding and interpretation are in fact one process, and because interpretation is always contextual, temporal, and in flux, achieving one definitive or "correct" interpretation is not possible (Koch, 1995; Laverty, 2003; van Manen, 1990).

Goals and Issues of Validity in Interpretive Phenomenology

Van Manen (1990) described hermeneutic (interpretive) phenomenology as an approach that is attentive to both terms in its methodology. It is a descriptive (phenomenological) methodology because it aims to be attentive to how things appear for the other and it is an interpretive (hermeneutic) methodology because it posits there are no such things as un-interpreted phenomena. I understand this apparent contradiction by drawing on Gadamer's ideas, where all descriptions are interpretations and when we try to interpret the meaning of something, we are invariably "interpreting an interpretation" (1962, p. 68, as cited in Laverty, 2003).

Wojnar and Swanson (2007) proposed that interpretive phenomenology is most useful as a framework when the goal is to try draw on the participants' experiences and reflections in order to come to an understanding of the deeper meaning held in their description of the experience. In this way, achieving rich and thick descriptions of the phenomena under study is paramount in this form of research (e.g., Koch, 1995; Creswell, 1998; Laverty, 2003; van Manen, 1990; Wojnar & Swanson, 2007). To achieve this richness, researchers in hermeneutic inquiries are asked to draw on ideas generated from a blend of the researcher's understanding of the experience, participant-generated information, and data obtained from other relevant sources, including academic literature, art, and poetry (van Manen, 1990).

This form of interpretive research does not set its sights on developing effective, generalizable theory with which to explain or make predictions about the world. Instead, as the

Gadamer quote on page 58 illustrates, it offers the possibility of new insights that bring us in more direct contact with the lived world (Laverty, 2003). When theory is suggested, it is done so tentatively and within context (Koch, 1995). In this way, issues of validity in phenomenological research differ from more traditional means of ensuring internal and external validity, reliability and objectivity (e.g., Creswell, 1998; de Witt & Ploeg, 2005; van Manen, 1990).

I found many interpretations and suggestions for approaching issues of validity in interpretive phenomenological research. I have drawn primarily on concepts of validity from van Manen (1990) and Cho and Trent (2006) in this research, who present validity processes that involve thick descriptions, rich and varied sources of data, and a process of inquiry that reveals the subjective experiences and knowledge held by the researcher.

Rich description.

Van Manen (1990) described a successful phenomenological description as rich, in that it provides "an adequate elucidation of some aspect of the life world, where it resonates with our sense of lived life" (p. 27). Drawing on Buytendijk (1988), he described this as a "phenomenological nod" to infer that a good (and trustworthy) phenomenological description is one we can nod to: "recognizing it as an experience that we have had or could have had" (p. 27). Creswell (1998) drew on the work of Goffman (1989, p. 131) to describe this goal as aiming for thick description,[12] where the researcher aims at creating a "verisimilitude" that produces for readers a sense that they could have experienced the events described.

Cho and Trent (2006) described the primary "thick description purpose" of research as one that focuses on presenting "the unique idiosyncratic meanings and perspectives constructed by individuals or groups in particular context" (p. 328). They argued that delving into and

[12] A term coined by Geertz, 1973

interpreting the constructed meanings from an insider's worldview involves holistic processes that allow for nuanced meaning to emerge. To ensure trustworthiness in this applied interpretive work, they advocate the use of several validity methods, including prolonged engagement, triangulation and member checking.

Prolonged engagement.

My interactions with the students and the data sources I collected span a 14-month period from February 2009-April 2010, with fairly continuous interactions occurring between February 2009 and November 2009. My prolonged engagement with the students allowed time to build relationships and contributed to our ability to develop trustworthy data, in the sense that Glesne (1998) described it:

> Time spent at your research site, time spent interviewing, and time building sound relationships with correspondents all contribute to trustworthy data. When a large amount of time is spent with your research participants, they less readily feign behaviour or feel the need to do so; moreover they are more likely to be frank and comprehensive about what they tell you. (p. 151)

Triangulation.

My design ensured multiple data sources, which was critical to developing a more nuanced understanding of what was meaningful for the students during and immediately after the course. Creswell described triangulation as a means for researchers "to provide corroborative evidence" (p.202), which I feel alludes to what Cho and Trent (2006) described as a "truth-seeking" paradigm where the researcher views the possibility that "there is an absolute perceived existence of validity in its own right" (p. 328). I consider my use of triangulation to instead have reflected Cho and Trent's "thick description purpose" (p. 328), as it allowed me to delve into

varied sources of data and so increase the scope and depth of my insights into the lived world of the students I engaged with. It also permitted me to see the differences (but in fact mostly the similarities) between their reflections on the course over time: immediately following the one-week field component, after their final projects in April, and then again in the small group interviews in November. (My engagement in April 2010 occurred when I went back to students to share the transcripts and ask for feedback on what was recorded.)

Member checking.

Member checking was an important part of my intended research design but was limited due to the long delay between the interviews and my initial analysis (due to a leave I took from the project to have a baby). The delay meant I was not able to reach all the students for feedback, as many had finished school and moved from the community. I was, however, able to reach three of the six participants and obtain reactions to some of the initial analysis of the interview transcripts I provided. The feedback I did receive allowed me to confirm some of my interpretations of the students' experiences. In two cases I was able to have a longer conversation about some of the emerging themes as well, which I found valuable in confirming those learning experiences that seemed to have particular resonance for these participating students.

Monitoring and Using Subjectivity

> "The world is our home, our habitat, the materialization of our subjectivity." (van Manen, 1990, p. 112)

I find clarifying a researcher's position as a means of acquiring trustworthiness takes on a special dimension in hermeneutic phenomenological studies. As discussed earlier, the researcher's "lived world" is not meant to be bracketed in terms of suspending personal experience and knowledge in this research approach. Tempered with this acknowledgement of

the dialogic interpretive process, however, is the critical goal of being open and attentive to the participants' experience. As Finlay (2008) argued, the researcher is engaged in a process of trying to see the world differently and so attends more actively to the participants' views in a way in which they are prepared to be surprised and open to whatever may be revealed. Dahlberg et al. (2001, as cited in Finlay, 2008) described this openness as "the mark of a true willingness to listen, see, and understand. It involves respect, and certain humility toward the phenomenon, as well as sensitivity and flexibility" (p. 97). The implicit goal here is to allow the phenomenon to present itself to the researcher instead of us immediately imposing preconceived ideas on it.

Staying attentive to one's perspective holds a tension between bringing awareness to how one's subjectivity might distort the stories of the "other," and bringing awareness to what Glesne (1998) termed its "virtuous" capacity:

> Virtuous subjectivity (encompassing one's reflections, values, attitudes, beliefs, interests and needs) is the basis for the story you are about to tell . . . it makes you who you are as a person and as a researcher, equipping you with the perspectives and the insights that shape all that you do as a researcher, from the selection of topic clear through to the emphasis you make in your writing. (p. 109)

Glesne warned that reflecting upon, acknowledging, and leveraging your subjectivity in research is not synonymous with subjectivism, "a doctrine that individual feeling or apprehension is the ultimate criterion for the good and the right." Thus, the worth of the researchers' narrative cannot rest on its goodness or rightness in some private sense, and "cannot be illusion or fantasy that has no basis outside your mind" (Glesne, 1998, p. 109).

This process of monitoring subjectivity influences my interest in trying to understand the meaningful learning experiences from the students' perspective, as well as my evolving

understanding of the interpretive process that this entails. I have realized my first desire to inhabit the students' lived world in this research (and even to create distance between our perspectives in my original GT analysis) came from my wish to know and be open to what they had to say. I now understand that this process has always involved a "meeting of horizons," and that staying attentive to their stories has in fact enriched an understanding of meaningful, integrative learning that I have long been developing.

Research Participants

Participants were selected using purposeful intensity sampling, which Patton (2002) described as gathering information-rich cases that manifest the phenomenon of interest intensely "but not extremely" (p. 171). I invited the entire class to apply in order to help ensure I received sufficient responses to choose from. When responses came in, I worked with Duncan Taylor to establish a list of prospective candidates but in the end the seven responses we received were all deemed to be representative (one of the seven students was in the end unable to participate due to an employment opportunity). The selection of participants was also appropriate for phenomenological-based inquiries, where the goal is to select participants who have lived experience that is the focus of the study, who are willing to talk about their experience, and who are different enough from one another to enhance possibilities of rich and particular stories of the experience (Laverty, 2003; van Manen, 1990).

To protect the students' requests for a certain level of anonymity, I have changed their names in the results and discussion chapter. Renee, Mari, and Byron took part in the first small group interview and Flora, Sonja, and Nicholas took part in the second. Each student contributed a broad range of pro-environmental and community interests that existed well before their experiences with ES 470, as well as some previous community engagement experience from

social and environmental activism to volunteering on arts and food-based community-building experiments. As well, they arrived with two or three years of intensive studies in sustainability, involving a concentrated examination of the most urgent and complex environmental and social challenges we presently face.

From my time spent with the students, I found them to be a well-informed, caring and engaged group who had a desire to build on their previous experience in working on issues of sustainability. Each of them spoke of information overload in some form, both from school and the media, and the feeling that they often felt their personal actions were inadequate in the face of the challenges we face.

In order to ensure an ethical inquiry, I submitted my research design and data-collection methods to the University of Victoria's Human Research Ethics Board (REB), which reviews applications for human participant research.[13] I proposed specific actions to help mitigate the likelihood of my role as a teachers' assistant making students feel compelled to take part in the research (due to a perceived power-over relationship). Accordingly, I first contacted students by email after the course was completed. This email briefly explained the purpose of the research, invited them to participate and explained the potential of a "Power Over Relationship" influence. A research assistant contacted those students interested in the project, provided them with consent forms, and received their official requests to take part in the project (see Appendix B to view a copy of the research consent form).

Sources of Data and Collection Methods

I conducted two three-person interviews in November, 2009 that each took over two and half hours. Interviews were digitally recorded and later transcribed with permission from

[13] I received approval from the REB in October, 2009

students. Semi-structured, small group interviews were my main source of data and were supplemented by the participating students' written reflection assignments. These in-depth interviews were used to provide rich experiential data about the students' learning experience, the elements in the course that supported this, and the possible transformations that may have occurred as a result of their participation.

I chose small group interviews as a primary method of data gathering because they could reveal aspects of personal knowledge that could not be readily drawn from the written sources of data. As well, the interviews were the sole source of data that I was able to shape myself, so they allowed me to go deeper into learning claims and to see how individual expressions of meaningful learning resonated with the other students present in the interview. In addition, having the opportunity to interview students six months following the course allowed me to gain insight into if and how some of the learning experiences and personal changes had remained relevant to the students.

I chose group versus individual or larger focus group interviews to create an intimate space for discussing the course and to recreate some of the interactive and collaborative aspects of the course's learning environment. Listening to the dynamics of the students' discussions allowed me to discover when and to what extent they agreed or disagreed on an individual student's thoughts and opinions of a particular element of the course.

Einsiedel et al. (1996) argued that group interviews provide more and better quality information than one-on-one interviews because group interaction increases participants' sense of security, thus creating greater disclosure from all participants. I suspected the students would be excited to discuss their meaningful learning experiences and I wanted to create an opportunity for a free-flowing group discussion that would allow our topic to be more fully explored. I

recognized, however, that a possible limitation of this approach would be that the group interaction would influence how participants responded to the questions and therefore the data collected (Morgan, 1997). In the end, I felt that the advantages of exploring participants' ideas through an interactive process outweighed its drawbacks. In addition, I had additional (individual) sources of data to review and compare to help mitigate the weaknesses of a small group interview approach.

Reflection exercise.

I opened each group interview with a group reflection exercise in which we reconstructed the course's activities, readings and assignments. In this way each student, as well as myself, filled in the gaps of time by recalling the elements of the course. The goal of this exercise was to provide a simple and interactive means of retracing what had taken place six to nine months previously without going into any interpretive analysis. Remembering the course collectively was an important exercise in terms of revealing what memories were initially brought up by individuals, as well as creating a broader and more detailed recollection of the course than what would be offered by a single interviewee. Consequently, this reflection exercise did provide another source of data.

Written assignments.

I was able to compare group interview data with the students' two- to three-page reflection assignments to determine whether there were any discrepancies in what was recalled over time. This document was particularly useful for the purpose of triangulation, as the assignment asked students to explore their most memorable, meaningful, and challenging experiences from the course.

Specific interview questions.

The group interviews were face-to-face and semi-structured (see Appendix C for the interview guide). In semi-structured interviews, a list of questions are used as guidelines but in the course of the interview, the interviewer has a certain amount of room to adjust the sequence of the questions to be asked and to add questions based on the context of the participants' responses (Zhang & Wildemuth, 2009). Participants actively shape the process as they follow up and expand on questions as they wish; thus, the research is democratized and to some extent "given over" to the participants for their input (Carspecken, 1996). In this way, the interview is reciprocal, where both the researcher and the subject are engaged in the dialogue (Groenewald, 2004). The interview questions I used aimed at facilitating a discussion on what was meaningful and possibly transformative during the course. They explored what (if anything) had remained of the experience nine months later and what students felt may affect their future.

Data Analysis and Explication

The analysis in this study involved a detailed line-by-line approach that I conducted in the early, grounded theory framework and then a more holistic "selective reading approach" approach that was phenomenological in nature (van Manen, 1990, p. 93). My recursive and non-linear process of uncovering the thematic aspects is summarized below:

Transcribing interviews, organizing and converting documents.

Analysis began during the transcriptions of interviews and organization and conversion of all of data into files in the NVIVO software I employed. I began to hear the emergent narrative during this phase and took notes in my research journal, where I noted the first of my many questions. In my transcriptions I also noted emotion (such as enthusiasm, hesitation, etc.) as well as moments of agreement among participants.

Line-by-line coding.

The compilation of themes began with a detailed line-by-line coding guided by the early Grounded Theory (GT) process of the interview transcripts and extant texts. I coded lines, sentences, and quotes from the transcripts into units where I attempted to simultaneously summarize and account for each piece of data (Charmaz, 2006). In this phase, my goal was to try and "lift" insights, ideas and meanings of the course's experience from the student's perspective and to stay as open and close to the data as possible.

Identification of emerging meaning units.

During this phase I engaged initially in a focused coding process of the text as outlined by Charmaz (2006), " to create more directed, selective and conceptual" coding from line-by-line codes (p. 57). This process helped me start the essential step towards thematizing where I began to synthesize and explain larger segments of data.

With the analytic direction I had acquired though the initial GT coding process, I then applied a phenomenological "selective reading approach" to identify significant meaning units, asking: "What statement(s) or phrase(s) seem particularly essential or revealing about the phenomena or experience being described?" (van Manen, 1990, p. 93). This approach helped me apply a more holistic lens to my very 'sliced' data (Bazely, 2007). Through this process, I pulled out meaning units that captured aspects of the students' descriptions of their lived experiences.

Thematizing.

As I worked to identify meaning units, I also looked for repetitious themes within and between the students' stories, as well as important isolated experiences (Creswell, 1998). Themes began to emerge as I clustered meaning units together and attempted to ascertain the deeper meaning and nature of the experiences being described. I present the main themes in a

brief description, accompanied by exemplary quotes from participants. (Creswell, 1998; Hycner, 1985; van Manen, 1990).

Researcher's Experience and Frame of Understanding

In the first chapter I touched on some of my personal values and key experiences that have shaped my approach to this research, which included discussing some of my worldview and terms I explore in this thesis. What follows here captures part of what I experienced during the course itself and some of the personal changes I experienced from the 'research journey' I embarked upon. I add this here to expose some of my own subjectivity and thus explore my "background understanding" (Flood, 2010, p. 9) as it relates to the students' experiences.

I came to this study with a deep interest in the role of place-based learning and the potentially powerful transformative outcomes of encouraging a sense of place and connection to local communities, both geographically and culturally. My professional background includes several years as a wilderness therapy guide and outdoor educator, where I had the chance to explore learning and change through place-based learning mechanisms in some of Canada's most beautiful and wild landscapes. Through this work, I witnessed profound transformations in trip participants, guides and support staff alike, myself included (Todesco, 2003).

Fuelled by my past experiences, I took leadership during the ES 470 course in coordinating the site visits and service-learning components, including visits to a local Eco-village and Eco-forestry site as well as a trips to East Sooke Park, a beautiful and still relatively wild natural area near Victoria, BC. I felt these experiences held the potential for positive change in students in terms of inspiring stewardship, providing opportunities to depart from their theory-laden courses and engaging in active experimentation in sustainable action. Throughout the one-

week field component, I took a special interest in the service-learning activity, field trips, and hikes, and wondered at their effect on the students' experience.

During the closing ceremony at the end of the one-week intensive, I found myself genuinely surprised by what I heard. My intuitions for what might be occurring in the course (and why) were essentially dispelled when the students spoke. Many of the students spoke of positive personal and collective transformations with great feeling and even tears but associated little these with their community-based learning experiences. Some mentioned the natural beauty of the landscapes we had explored and there were mentions of the appreciation felt in connecting with the local community organizations we visited, but most of the students spoke of deep connections they had forged with one another and the feelings of hope and even love this seemed to have inspired. To be honest, I found myself marvelling at the passion but not really understanding what had happened for them.

I was not "observing" or listening from a so-called researcher's perspective at this point, as my plan at the time was to conduct research with students from a different course focused almost entirely on service learning. In the end, the peculiarity of this enigmatic but very profound course won my interest. This decision led to a personal journey in evaluating the students' transformative learning processes as well as my own.

I am grateful I came to the study not understanding what had occurred for students, so I could engage with the students themselves to delve more deeply into what they had experienced. Through this engagement I have come to a more nuanced understanding of some of the learning and change that occurred, but I did not expect to learn so much about myself as well. One of the more profound realizations I have had in this research is that I am also a student "under study." In listening to and reflecting upon the students' stories, exploring literature and discussing

alternative-learning approaches with colleagues, friends and mentors, I have developed a much clearer picture of my own evolving sense of the role of integrative learning in effecting personal and collective change. I have come to examine the perspectives and worldviews that underpin my notions of effective education for sustainability and my personal search for hopeful action in a world gone so awry.

My experiences in doing this research project have caused me to reflect on my own experiences in environmental education and wilderness therapy. This reflection helped me see that my profound moments in outdoor education had involved a deep connection to nature but had also been shaped by many insightful contemplative moments, as well as by those times I shared my experiences with others and was able to build a profound sense of community. In this way, I now relate to much of the students' narrative about their most meaningful learning experiences. From the standpoint of phenomenology, I can indeed "nod" to their descriptions as they related to some of my own personal experiences, and the feelings of hope, and even love this seemed to have inspired.

Chapter Five: Results

In this chapter, I present what the students considered to be their most meaningful experiences and what they felt in the course's design contributed to these experiences. While each student's experiences were individual, distinct themes emerged from participants' descriptions, which I present in a framework inspired in part by Wilber and colleagues' "big three": "I", "We" and "Its" (Hochachka, 2009, p. 403).

'We' Meaningful community: The importance of experiencing a meaningful community, where the students' learning experiences allowed them to connect with a group of like-minded people and fostered a sense of connection, hope and possibility.

'I' Mindfulness, refection and personal discovery: The value of their reflective and mindfulness practices that gave them time to pause, reflect, and be still, and which led in some cases to significant personal insight and feelings of self-acceptance.

'Its' Community-based learning and action: The meaningful and hopeful aspects of learning through a direct engagement with the community (involving both people and place) and learning experientially about sustainable action.

Supportive Factors and the Interweaving of their Experience

The factors that supported the students' experiences were often discussed in tandem with their most meaningful learning moments. As such, the students' notions of meaningful experiences and the factors that supported them did not always present themselves as distinct phenomena, nor did they arrive in a linear fashion. Although I chose to segment themes and supportive factors into broad groupings and present them with some order and structure, it is important to note that the themes and supportive features are interconnected, and together, reflect the students' whole experience. Indeed, many of the summaries and quotes, as well as the

discussions of the supportive factors reflect the multiplicity of factors involved in their many 'singular' experiences.

The factors that contributed to their experiences included opportunities for:

- experiential learning;
- community-based learning;
- group reflection;
- personal reflection and mindfulness exercises; and
- facilitation that allows for "space" and time for participatory learning

As well as:

- developing a safe and welcoming atmosphere;
- nature as context; and
- providing a holistic experience: an engagement with head, heart and hands.

Presentation of Data

My presentation and discussion of the data includes:[14]

A descriptive summary and discussion of the experiences expressed by the students.

Supportive quotes from the interviews and written assignments.

Summary of the supporting factors.

Discussion of the enduring aspects and impacts of each theme.

I chose to present summative descriptions because, despite certain variances in the intensity of expression, each of the themes was widely communicated by each student (I note the numbers of students involved in each section below). However, one important discrepancy in the

[14] I discuss ideas connected to the potential of transformative learning in Chapter 6.

participating students' experiences issued from some of their decisions to take part in an action project as their final assignment rather than a theoretical research paper. Two of the research participants took part in action projects for their final assignment, which involved a collaborative backyard permaculture project with two other ES 470 students. Their experiences in carrying out this action project were different from those of the other students. To address this, I explored some of their meaningful experiences associated with the garden project separately in the presentation of the *experience and action* theme.

In addition, to differentiate the students' written work (which tended to contain more emotive and intense language than that expressed in the interviews), I have italicized those quotes taken from the reflections assignments.

The Theme of 'We': Experiencing Meaningful Community

> "It was like all of us became intertwined for a time and we learned some stuff a long the way." (Mari)

Descriptive summary.

For the participants, connecting meaningfully and creating a sense of community in the course was a moving learning experience. These connections, described as "authentic," "vulnerable" and "real" incited feelings of hope, where students felt a palpable sense of relief, inspiration, and empowerment by being with people who, like themselves, cared deeply for their communities and the planet. In many cases the sense of community that developed during the course was described as a pre-requisite for their ability to engage in sustainable action. Three of the six students associated their feelings of connection as 'love'. Feelings of caring and intimacy towards one another were universally expressed. Although students commented on having experienced such a sense of community with other people before, five of the six participants

stated they had never experienced the connection that was achieved in any other formal learning environment. Indeed, both implicit and explicit in many of their descriptions was a sense of surprise of experiencing such a profound sense of community within the confines of a university course.

> Sonja: I think one of the most meaningful things for me was the experience of being a part of a community. I had experienced meaningful connection before with people and groups, but never with such a large group and I had never experienced it in a university-based class.
>
> Mari: I feel like the week was a demonstration of how a collection of individuals can become strongly interconnected. We really came together in such a powerful way, sharing our collective interests, skills and passions, really getting to know one another.
>
> Flora: I valued watching a community blossom: an open, gentle, brilliant, motivated and motivating community. It was a true gift to take away from this experience the meaning of what community can inspire and what it can be.

An important aspect of students' experience of meaningful community was the idea that this experience engendered feelings of hope. Both explicitly expressed and implicitly implied, the students' felt that community was a necessary pre-requisite for feeling that positive change in the world was a possibility.

> Byron: I mean you can't solve these problems on our own, there's no way. And if we are always by ourselves, or only giving our opinion to our teachers and not each other then there is not that sense of constructing the possible.

This sense of community was not just valued for the sake of fun or intimacy, but because of the sense of shared common goals it generated.

Flora: Deep and meaningful connections, really knowing each other and making connections; this is what can lead to the social fabric necessary to make change.

Renee: In the face of all the cruelty and uncertainty we witness everyday, I have felt like my optimism is out of place, perhaps naïve. Now I believe that it is a gift to be hopeful. It is also a gift to have met a group of people who hold the same seed of hope in their hearts and are dedicated to being catalysts for positive change."

Supportive factors.

Group dialogue and reflection.

Five of the six students expressed how their meaningful connection with one another came from the fact that they shared some of their deeper, personal experiences during group reflections. This was especially true when the activity centred on sharing their deeper, subjective experiences, such as the group reflection exercise that followed the eco-psychology exercise, the closing circle at O.U.R. Eco-village and the spontaneous student-led activity "Bucket of Fear" where students anonymously shared their fears of being in a group.

Students described these conversations as open, honest, and authentic. Finding out that they shared so many of the same values, hopes and fears for their communities and their role within them was an important means of building connection with one another.

Renee: Sharing experiences like eco-psychology or when we were talking about things that really matter, this was important to make these deep connections with each other happen.

Sonja: The most valuable piece was seeing people's guards come down and minds, hearts and souls open.

'Space' and participatory process.

Each of the six students described the importance of "space" (also described as "time" and "open-ness") in which students were given the chance to reflect upon, engage with and guide their experiences both as individuals and as a group. Two of the students used systems language to describe this participatory process as allowing for "emergence"[15] in which the course provided the space and support for the evolving properties of the group to arise. This participatory approach encouraged student involvement and inspired feelings of creativity, imagination and community.

> Renee: The variety between structured and unstructured time made the unstructured time so much better. It gave you the time to reflect as an individual, and as a group, and think about what had gone on.
>
> Byron: I think the deep sense of community that was generated within the course had a lot to with the space that was created. The professor and teachers' assistants allowed a lot of space and time for students to contribute to the learning process.

Safe and welcoming atmosphere.

Another important feature that came out of the discussions of supportive features to both the building of community and the course's learning process as a whole were the feelings of safety and open-ness that were developed by the facilitators. These notions were implied when students spoke of the caring and loving aspects of building connections with one another, as well as explicitly stated as students talked about what supported their moments of deep connection.

> Nicholas: I valued the space we had, in which people felt safe to open themselves up and open themselves up to others.

[15] Sterling (2002, p. 81) described these in the context of a learning organization as the "living qualities" that arise and change from the dynamic interaction of a given systems parts (including its individuals).

Flora: I have deep gratitude for the gentleness of our community. I never expected love and comfort to emerge from a university course.

Facilitation.

Four of the six students mentioned the facilitation as a key factor of their experience, both with respect to their experiences of connection and community. Renee and Sonja both appreciated having multiple teacher's assistants that according to Renee, "seemed to somehow level out" the usual gap between teachers and students. The facilitators were described as "approachable," "authentic" and "easy to talk to." Byron emphasized the role of the facilitators in the interview, stating:

Byron: I think there was a real feeling of safety that was felt through a feeling of lack of judgment and the authenticity of connections and discussions with students and teachers.

Enduring aspects.

Students revealed several enduring aspects of their experiences of community in the small group interviews, which occurred seven months after the course. Among these were the continued sense of connection with others in the course and a (varied) sense of optimism in having experienced community.

Sonja: I feel empowered and more hopeful by my experience, but I would say moderately so. I do go back to the course when I'm feeling down though, and remember what it felt like to be with everyone.

Flora: My experiences (of community) in the course have definitely added to my sense of optimism. To be with such beautiful people—it was just so great to have a class where you saw the beauty of life and people who want to do something, make a real difference.

Mari and Renee described a powerful realization that their sense of connection and community was possible outside the course.

> Mari: It (the course) made me realize the community I had been wanting was already right there—my neighbours, people leading change in local organizations—it was just about connecting with them more.
>
> Renee: I felt like after the course, like I had a place to go to in my community.

It is important to note that juxtaposed with these enduring aspects of the course were the many statements that alluded to the initial "let-down" upon returning to their everyday life and more conventional studies after the course. Although they described an enduring sense of community and connection amongst their fellow ES 470 students, several students also described a disappointment and sadness in not having this connection to people outside the course. Nicholas's comment from his written assignment reflects some of this sadness that was felt after the course:

> Nicholas: Our society lacks community in a big way. The other day I tried to talk to someone on a bus. She answered my question with a one word "yes" answer and then returned her headphones to her ears, then at the soonest possible moment she moved away from me to find an open seat. I know that experience doesn't reflect all people but it made me think how sad it is that we are missing out on many possible connections, conversations, and lessons with people that we share this planet with.

The Theme of 'I': Self-reflection and Personal Discovery

'I' Descriptive Summary.

Opportunities for reflection and self-exploration provided significant and meaningful learning experiences for several of the students. For three of the students, the eco-psychology

exercise, a mindfulness exercise conducted in a natural setting of their choice, was particularly powerful. The question they were asked to hold in their consciousness during this exercise was: "What is it that I need to do in the next six months to move towards living my true calling?" from which they were asked to reflect on how the space they had chosen mirrored themselves and their path towards this goal. As the activity was a mirroring exercise, students were invited to participate experientially and open themselves up to the possibility of nature as both an ally and an extension of themselves. This exercise inspired significant personal insights, self-acceptance and feelings of wholeness. The insights from this experience were also associated with a sense of empowerment and were described as having implications to their "real life" after the course.

The journaling exercises, yoga, and the silent hike in East Sooke Park presented opportunities for mindfulness and reflection as well, associated with eliciting personal insights as well as opportunities to reflect on what was learned during the course. Five of the six students described their reflective experiences as rare opportunities to pause, be still and reflect.

Self-acceptance.

The three students who attributed so much personal insight from their reflective eco-psychology exercise each described developing a new and more accepting perception of who they are. Renee, for example, chose a quiet spot under a tree that had branches hanging down. For her, the reflective exercise became a vehicle for exploring herself as a person that is observing, but nonetheless engaged.

> Renee: I experienced, well, it was really a sense of wholeness. I saw parts of myself in the place I had chosen . . . I was partially hidden by the trees, but looking out. I don't know if people could see me but I could see out quite clearly and that got me thinking a

lot just about myself and kind of how I move through life. Because I feel that, often, I'm present but often fairly quiet, you guys may have noticed. Not to cast myself in the role of an observer, but it's something that I'm becoming more comfortable with, that I am fairly introspective and, or maybe just, sometimes more internal than external . . . but I realized there . . . even I just observe or am just be there, I can still be part of it. That's what I felt when I was sitting there, that I was still part of my environment. I felt just kind of a peace in myself.

For Byron, it was a recognition and acceptance of being more nomadic by nature that issued from reflecting on a Scotch broom plant.

Byron: The thing that was particularly meaningful was that it was just the nature of what I was reflecting on and allowing myself that time to just sit there and reflect on seeing the nomadic quality that pervades everything in my life and everything that I do, and that I always have this sense of wanting to move on and do other things.

(The exercise) made me kind of reflect in a way that was not so self-critical. You know it's something that's a very passionate experience for me, being able to travel constantly and being able to always feel myself as kind of like a guest of the world.

In the written reflection, Mira described it as a time to connect with a larger picture of who she was:

Mari: The eco-psychology exercise was very inspiring for me. Though sceptical at first, it allowed me sit still and just be. I often feel like I am pulled in so many directions, but reflecting in that place made me see that I am a part of a greater wholeness that is always there within me.

I became so much more in that activity—it allowed me to expand my sense of who I am.

Journaling and yoga were also described as important reflective times but in most cases without the intensity of the eco-psychology exercise. For Sonja, the daily journaling time was associated with opportunities to reflect on course leanings, while for Flora, yoga was a type of meditative reprieve.

> Sonja: The time we spent alone, with our thoughts, was important to process the information we were receiving. . . . Journaling helped me to personally reflect on each day of our week together.
>
> Flora: The yoga element really seemed to provide, the words that come to mind, are grounded and healthy, it was about relaxing and slowing your thoughts and just caring about yourself.

Supportive Factors.

Reflective space.

The key supportive factors of these experiences were the facilitated reflective exercises themselves, including journaling, yoga and the eco-psychology exercise. Although mentioned less frequently than within the theme of community, students emphasized the provision of space and time for reflection as key features of their experience, as well as the feelings of safety and open-ness in the course. Sonja, for example, described feeling "relieved" at having the time to journal. Byron described having the time and space to reflect a "rarity," comparing his experiences with other courses he had taken.

> Byron: I found having the space to ask questions that I really wanted answered was deeply meaningful—posing existential questions within a course is a rare opportunity. It is amazing that you can go through four years of university and never learn anything about yourself.

Experiential and participatory.

A significant supportive factor that was both explicitly described and implicitly suggested in the students' narratives on this theme was the experiential and participatory aspects of their experiences. Mira called this a "process instead of content" approach, "where facilitators set up the space and gave us the tools to do what we wanted in terms of the learning." Nicholas likened this to a course about questions versus answers:

> Nicholas: We learned experientially how to view problems and how to view ourselves. It wasn't so much a course about answers but a course about lessons and questions to help us develop our own answers.

Byron described part of this experiential learning approach as one that elicited a total, holistic, engagement with the material.

> Byron: When we were asked (in the eco-psychology exercise) "[to] let the inner compass guide you," it was very experiential. I was able to feel what David Henry Thoreau[16] was talking about in his essay. And so yeah, doing this gave me like a very distinct kind of experience in myself. I knew it in my body, in my mind, in my spirit.

Nature: An implicit factor.

Apart from Mari, when the students discussed which aspects of the course supported their reflective experiences (and other meaningful experiences), the role of nature was not a prominent theme. Sonja, Mari and Flora did mention their appreciation for the beauty they were immersed in, but this was not emphasized as a key feature of their meaningful experience. Nonetheless, natural settings were important contextually, as much of the field days occurred in natural spaces, such as Wildwood's forests, O.U.R. Eco-village's gardens and fields, Sooke Park's hills

[16] This is a reference to one of the course readings by Henry David Thoreau.

and bluffs, and Camp Imadene's treed areas, lake and mountain. The context of the natural settings in which the students were immersed figure in some of the students' descriptions of the eco-psychology exercise and other meaningful experiences associated with community and action: however, in almost every case the environment was not highlighted in detail. In this way, nature seemed an implicit, almost secondary factor for most of the participants.

An exception to this was Mari who explicitly described the role of connecting with nature during the eco-psychology exercise: "I felt our trial of eco-psychology was a great demonstration of my deep tie with nature." In her written assignment, she reflected on a poem she had written during the exercise about a plant that reflected her own desire to reach her fullest potential.

This entity is the only one of its kind in my eyesight.

But it has the same goal of the other entities around.

It is to break free from the ground and reach out

Into the world and get closer to the sun.

Enduring aspects.

There were several enduring aspects of the reflective experiences, but these were, by and large, emphasized by the students who underscored experiences of personal insights. At the time of the small group interviews, Renee described a sustained change in her new, more accepting view of herself:

> Renee: I think that (these reflective experiences) led me to more a recognition of the way I am, maybe not changed who I already was, but pushed me further, a little more further along my path, and into a new level of acceptance and comfort with who I am. I don't even know if I would call it confidence, but just more a sense of coming to more a sense of wholeness or recognition of myself.

Byron talked about his insights as enduring and "powerful." With time, he felt the new acceptance he found for his nomadic ways, had led to a deeper, and happy, understanding of how he creates the lens with which to view himself and the world.

> Byron: When I say that it's something that keeps coming back now, it's been something that's been a very vital—that recognition, or that seed that was planted that grown into something so much more in myself over the last several months. It's something I keep coming back to and it puts a smile on my face every time.

Mari and Renee associated their personal changes with a sense of hope and desire to take part in positive action. For example, at the time of the interviews, both students had started volunteering with local environmental organizations.[17] While they did not ascribe the decision to do so solely to the course, they did attribute some of their actions and decisions as issuing from their course experience. Renee associated taking new actions as coming, in part, from her self-realizations during class. Her description of this alludes to the influences of her communal experiences in the course as well.

> Renee: Environmental issues have always been something that I've been really interested in, even when I went to lectures or protests, I sometimes felt, not isolated, but not part of a larger community—like I really didn't have the right to belong. Now, it is different. I know myself more, and I have created more of a sense of community.

Mari described her personal realizations as "spiritual," which she connected with real-life ramifications.

[17] Mari had previous volunteering experience, but volunteering for an organization dedicated to food security as new. Renee had not volunteered for an environmental non-profit organization before.

Mari: Having a spiritual connection to what you are learning means you can bring what you learned back to your real life . . . when you take the things that you are learning into yourself, your interior, exterior, all your quadrants—you see it can be used in real life.

Mari attributed much of her personal insights to being influenced by her communal experiences during the course, as well those opportunities for hands-on learning. This multi-dimensional aspect of her learning experience is presented further in the following section.

Theme of 'Its': Community-based Learning and Action

'Its' Descriptive Summary.

Five of the six students emphasized the value of the hands-on learning at the community sites they visited. In many cases the meaningful aspects of this form of learning involved a multi-dimensional experience in which they describe a combination of the personal, communal *and* active elements involved. Students described the meaningful impact of having "theory" become real through learning about such subjects as permaculture, integral systems theory and eco-forestry in a field setting. Several students also described an enduring sense of hope that was inspired by these experiences, both from experiencing places dedicated to sustainable practice themselves and from meeting the people at the sites that were engaged in this work. These experiences and interactions in turn shaped some of the students' actions and decisions after the course.

The two students who chose an action project for their final assignment, which involved the building and tending of a backyard permaculture-designed garden, experienced additional and special meaning associated with this theme. They emphasized the hands-on learning component of building a garden, as well as the experience of consulting with community experts. The garden was described as meaningful in terms of providing an ongoing source of community,

as well as an opportunity for enduring personal environmental action by growing food using sustainable practices.

Hands-on learning.

Renee, Mari, and Byron likened their meaningful learning at OUR Eco-village and Wildwood as experiencing, versus theorizing, systems theory principles.

> Byron: Wildwood was a really important experience for me. I was seeing a living, breathing way of doing systems theory.
>
> Renee: (At O.U.R. Eco-village) I felt like I was getting so much more than just learning something intellectual about systems theory. What we learned and how we understood ourselves, and our group—all of it made so much more sense because I was living the systems theories that normally I'm just reading about.

Mari echoed these sentiments and emphasized how her experiences at OUR Eco-village brought sustainable theory to life, making it more real and potentially more attainable.

> Mari: I think the course was important, because it wasn't just theory, we were doing something hands-on. At the eco-village we saw what all the ES theory on sustainability looks and feels like; it put a face to it. It was an example of what is possible.

Renee and Mira also emphasized learning about permaculture at O.U.R. Eco-village as being particularly meaningful.

> Sonja: Exploring and practicing permaculture at OUR Eco-village made it seem really possible. Experiencing it first hand and actually interacting with it, it became something . . . a tangible reality, a possibility for my life to go to.
>
> Mari: If I just read about permaculture and engaged with it purely academically, it probably would have just passed by me. But interacting with it at O.U.R. Eco-village and

then choosing to be involved with it was a very different experience. That kind of learning sparked a much deeper self-curiosity.

People.

Several of the students placed value in meeting the community leaders at the sites and seeing people engaged in sustainable practices. For Flora and Sonja, this was associated with feelings of inspiration, possibility and hope:

Flora: Our time at Wildwood and O.U.R. Eco-village allowed me to see the ways in which integral practices can be incorporated into our lives and our vocations. I saw people there living out their unique gifts for the world, and it inspired me to live out my own.

Sonja: [At O.U.R. Eco-village] I saw how you can apply your passion. We experienced so many things there- meeting so many different people, and from so many different fields.

Final Assignment: Building a Backyard Permaculture Garden

Renee and Mari emphasized the meaningful aspects of learning experientially while designing and building a backyard garden using permaculture principles. Both spoke of the importance of starting from nothing and building something of value.

Renee: In our final project we built a garden together from basically nothing, a grassy backyard and none of us had experience either . . . it was very much a learning-by-doing experience.

Mari: It was so amazing to go out and to know that before there was absolutely nothing there and now we were making entire meals just from what we had grown there.

Both students underscored the communal aspect of the hands-on work that allowed them to build on the connections they had made during the one-week field intensive.

> Mari: I think that was one of the most meaningful things to me in the 470 class, the connections we made and then building on those connections.
>
> Sonja: We faced a steep learning curve, but what we were blessed with, abundantly, was excitement, a spirit of co-operation, and a willingness to throw ourselves into the work.

Supportive Factors

The key supportive factors of these experiences were the facilitated experiential learning opportunities themselves that provided community-based, hands-on learning about alternative, sustainable practices. The design features and activities emphasized by the students included the talks and service learning activities at O.U.R. Eco-village and Wildwood, as well as the opportunity to take part in an action project as a final assignment. Inherent to those activities associated with the completion of the final project, was a constructivist and participatory process, where the students helped shape and lead their learning experience from beginning to end.

Head, heart and hands.

In addition to these activities and approaches, several students associated the depth and enjoyment of their experiential and action-oriented learning with the course's "holistic" approach, associating their meaningful moments with multiple experiences and supportive factors. In describing her final project, Renee stated "there were many meaningful experiences" and that it "was the collection of them all that made it significant." Mari and Flora echoed this in describing the whole of their course experience as being shaped by each experience. Their words encompass both the physical, and communal, as well as the cognitive and reflective facets of their experience.

Mari: There isn't a defining moment that made the course so significant, but the whole thing. Each individual experience supported and enhanced the next. I couldn't imagine having missed a day at any part of this. From the physical hiking to the conversations we had as a group, to the presentations at Wildwood and travelling from one place to the next, it all created [my] experience.

Flora: I valued every experience—the opportunity to hike, climb, journal, listen, learn and reflect, laugh, breathe, connect with my peers, make new friends, feel inspired!

Impacts and enduring aspects.

Connections to community leaders.

Byron, Renee and Mari each described an enduring and evolving relationship with one or more of the community leaders they had met during the course. Byron described how he returned to O.U.R. Eco-village after the course and had since made a strong connection with the director there, who had been helping him explore some options in sustainable practices.

Byron: I've been back [at O.U.R. Eco-village] a few times now and each time I got back it's a deeper connection with [the director] and the most recent time was huge. And it's the kind of thing that I think might actually really help me in my path after school and deciding what to do next.

Mari and Renee consulted with the permaculture instructor at OUR Eco-village when designing their garden, who introduced them to other experts in the Victoria area at the Compost Education Centre. Mari described the value of calling on these community teachers in designing and implementing their project, helping them "bring permaculture theory to practice." Sonja echoed this, in describing the benefits of having an "extended network of human resources to draw upon, most of them facilitated in some way by the course."

Sustainable Action.

Mari attributed some of these connections with the people and places associated with permaculture as a "spark" to undertake building another garden, as well as pursue courses on permaculture and volunteer at a local non-profit organization dedicated to food security. While her interest in sustainable food security existed before the class, she felt the class brought a new awareness to the subject.

> Mari: I learned about permaculture first, maybe in another systems theory in Duncan's class, but definitely this class it came into my awareness in a new way, by seeing it in action. And I know we, Renee and I, did a garden for our final project, and then I started another garden with my roommate and now I'm starting to work with Lifecycles at the Urban Agriculture Hot-line, and have been going to lots of workshops and anything I can learn more about [permaculture].

In describing her final project, Mari talked about the tangible aspect of her work that gave her a sense of creating a more sustainable life-style.

> Mari: We worked together (on the garden) and built something that was meaningful, but it was also real, which I think is really important. It led to tangible results—and you can see them…. I feel more connected to sustainable action now. Gardening lets us know where at least some of our food is coming from.

Renee echoed these ideas, describing how she felt as though her experience had brought her into a greater movement of sustainable food-growing practices, where "people are cultivating their environment and getting involved in things like urban agriculture." She took inspiration from the act of working together and accomplishing something tangible, which was a way of experimenting in positive action.

Renee: The most striking consequences so far, for me at least, have been the strength and immediacy we feel in this accomplishment, and how we've already been empowered by it. Each of our experiences has been different, necessarily, but we have all felt the recognition within ourselves of something awakened and newly powerful—a seed of potential, a new realm of possibility opening up before us. Whatever we go on to, at the end of the summer and in the years ahead, this has been something that will stay with all of us.

Chapter Six: Discussion and Recommendations

In the following chapter, first I address the main outcomes of the research, by exploring literature associated with each theme and their associated key supportive factors. Secondly, I discuss the notion of transformative learning in the context of the course, the participating students and the results of the research regarding the enduring impacts from the course. Thirdly, I link the students' ideas of meaningful learning with literature on integrative learning and a final discussion on the importance of the findings for future iterations of ES 470.

Discussion of Principal Themes and Supportive Factors

Theme 1: Meaningful learning community—necessary for change.

The most prominent theme in the students' narratives was the development of a meaningful sense of community. This experience was communicated with emotion and in many cases with a palpable sense of relief. In her written reflection, Flora described this as meeting a genuine need: "Our souls need these connections with one another, for nourishment. We are not alone. I am not alone."

The importance of providing the nourishment of genuine community to facilitate meaningful learning is reflected in the integrative- and transformative-learning literature. Building a sense of community in the learning setting meets what Southern (2007) described as a fundamental human need to connect meaningfully with others. Rovai and Wighting (2005) described a sense of community as providing feelings "of belonging, identity, emotional connection and wellbeing" (p. 99). Their review of literature on the effects of a felt sense of community on learning processes reveals many benefits. Students "are better adjusted, feel supported, have connections to others and to goals that may be above their limited aspirations, and have stronger levels of social support and social connectedness" (p. 99).

The research participants' sense of relief was translated as feelings of hope and possibility that endured beyond the course. In connecting with others they realized they were not alone in caring for the planet, seeing potential for change in their shared values.

> Nicholas: Making connection with people where we shared common beliefs and concerns was really inspirational. For the first time in a long time I started to consider myself an optimist.

Several students equated having a sense of community with the ability to create sustainable change in their personal lives and community.

> Sonja: Being a community is integral to creating a sustainable life, because having meaningful connections to other people gives us reason to care for the earth, other people, and ourselves.

Mark Warren argued that participation in "a community of understanding that involves shared commitments" has powerful impacts on self-transformation and imparting the necessary support to act (Warren, 1992, as cited in Daloz, 2000, p. 114). In "Common Fire" researchers explored the factors that shaped and sustained the lives of one hundred socially responsible people committed to the 'common good' and found that belonging to a nurturing community was critical to every leader they interviewed (Daloz et al., 1996).

Virtually none of the people we studied were "Lone Rangers," and although they might often feel alone, those who were able to sustain commitments over the long haul under difficult circumstances were inevitably linked to larger communities of solidarity, resistance and persistence. (Daloz, 2000, p. 117)

The young environmental leaders that took part in Raynolds' (2000) study on meaningful learning practices described this idea of experiencing community as enabling action for

sustainability: “Building relationships, connecting with like-minded people, and having a ‘safe space’ to share their views and values was central to enabling these youth to take action during and beyond their learning experiences” (p. 96).

Supportive factors for developing a meaningful learning community.

> I believe the greatest gift I can conceive of having from anyone is to be seen by them, to be understood and touched by them. The greatest gift I can give is to see, hear, understand and to touch another person. When this is done I feel contact has been made. (Satir, 2003, as cited in Brady, 2007, p. 123)

The important supportive factors named in creating a sense of community included facilitating a safe and welcoming atmosphere and creating the space for meaningful group reflection and dialogue. Davis-Manigaulte, Yorks, and Kasl (2006) wrote about the role of “learning within relationship” in facilitating transformative learning, and likened this to creating an “empathic field” where expressive ways of knowing, including those triggered by contemplative practices, encourage an authentic connection with others. “Such activities enable learners to share their experiential knowing in a way that provides others with a brief portal of entry into sharing that experience—and perhaps relating it to their own experiential knowing” (p. 17). Kirsch (2008) described this opportunity for creating community as issuing from a space for deep listening that occurs in “authentic” relational learning. In these experiences, learners “honour those in our presence” and “acknowledge each other’s stories, dreams, hopes, and visions” (p. 11).

Many educators (e.g., Brady, 2007; Daloz, 2000; Hart, 2001; Palmer & Zajonc, 2011; Southern, 2007) argued that facilitating a safe and welcoming atmosphere are pre-requisites for the personal sharing inherent to creating community. Hart underscored the role of the facilitator

in this process and contended that a genuine learning community is supported by facilitators that model "the honesty, authenticity and goodwill" necessary for creating meaningful connections within the group (2001, p. 51). Southern (2007) explored the importance of the student–teacher relationship in inciting transformation and creating learning communities of care. She argued that the teacher's relationship with students is critical to creating the conditions that support "learning environments where students feel they belong, where they can bring more of who they are and take risks in sharing themselves with others" (p. 330).

The research participants described the importance of having been provided with the time and space for participatory learning, and allowing the emergent properties of the group to shape their communal experiences. Sterling (2001) argued for a new approach to educating for sustainability where educators promote such healthy emergence[18] in the learning setting. In Sterling's thesis he suggested that such an emergent design be participatory, where learning is iterative and meaning is constructed and negotiated versus given by the instructor. Glasser (2007) echoed this concept, stating that participatory learning processes allow students to shape the learning outcomes, stressing the importance of creating non-hierarchical relationships between the teacher and learner. This type of learning he contended, is based on the full participation of the students, where each participant, "as an expert in their own right," is encouraged to share his or her knowledge and experience, thus shaping the whole of the communal learning experience.

Theme 2: Self-reflection and personal discovery.

The research participants placed value on the meaningful impacts of the course's reflective and mindfulness practices that afforded them the time to pause, reflect and be still, and

[18] Sterling describes emergence as the 'living qualities' that arise and change from dynamic interaction, including such factors as the types and levels of innovation, trust and atmosphere that are created from participant interaction during a learning experience.

which led in some cases to significant personal insight and feelings of wholeness and self-acceptance. In addition, students associated their reflective practice with a sense of meaningful connections with others, especially during the course's group reflection exercises where students shared their interior, subjective experience with one another.

There are an array of reflective practices (which range from sitting mindfulness exercises to reflective journaling) that attempt to engage learners' multiple intelligences and provide students with the skilful means to navigate their inner and outer dimensions and thus develop their level of self-understanding and capacity to connect meaningfully with others. These contemplative learning practices are widely understood as a means to deepen understanding and insight, lessen stress and cultivate awareness and compassion (Bush et al., 2002; Hart, 2007; Haynes 2004). A more recent comprehensive review of research on the effects of contemplative learning in higher education reports an impressive variety of positive results regarding personal and social wellbeing (Shapiro et al., 2008). Drawing on four decades of research, the researchers demonstrated how mindfulness exercises can enhance capacities they associate with the "development of the whole person" (p. 18), and are associated with an increase in empathetic responses and greater self-awareness and self-acceptance. Their study suggested that contemplative practices contribute to qualities that produce well-rounded persons, reflected in greater capacities for positive interpersonal behaviour and healthy social relationships.

Supportive factors for encouraging self- reflection and personal discovery.

> "It takes clear space, contemplative time and good conversation to engage and understand complex problems." (Daloz, et al., 1996, p. 39)

Whether it was yoga, the eco-psychology exercise or journaling, students emphasized an essential supportive factor of their contemplative practice as the simple provision of time and

space for reflection, which encouraged introspection and new insights. Kirsch (2008) in her article on the benefits of incorporating such experiences in the academic setting, emphasized the ability of contemplative practice to inspire students to explore their inner lives and to "reflect on and write about what moves them, what is meaningful to them... and what engages them" (p. 1). Kirsch described such practices as silent walking meditation, exploratory writing, and reflective essays as providing space for meaningful learning, which for her involves meeting the students' human need to discover who they are and to bring meaning to situations in their lives. Davis-Manigault, Yorks, and Kasl (2006) referred to this as providing generative space, which has the capacity to facilitate holistic and intuitive ways of knowing and allow learners to be still and observant and to take stock of their subjective experience.

Repetti (2010) described the space afforded by contemplative practice as essential in our era of continuously interrupted attention and fragmentation. "Classes that meditate together and engage in other contemplative exercises create safe spaces for opening up that are normally unavailable to the highly stressed, multiply challenged and generally alienated community college student" (p. 11). He argued that professors who set aside time for contemplative practice demonstrate a commitment to depth over coverage. He contended that this sends "an implicit but powerful message to students who have been rushed through mountains of information and whose voices have been neglected: that they matter" (p. 11).

A more implicit and contextual factor that informed some of the research participants' contemplative experiences was the impact of the natural setting on their practice. While most of the students did not explicitly connect their insights or feelings of peace with their immersion in Nature (by which I mean an immersion in relatively natural, undisturbed settings), it was nonetheless a contextual feature of the course. Several exercises, including the eco-psychology

exercise, a silent hike in East Sooke as well as some of their assigned journaling time, took place in natural and often quite strikingly beautiful areas. In addition, the eco-psychology exercise was a mirroring exercise, which called on students to reflect on how the natural space they had chosen mirrored themselves and their path towards greater self-actualization. The students refer to these surroundings during their descriptions but for the most part this factor remains contextual to their primary experience of self-exploration.

A large body of environmental education literature explores the role of the natural setting on the student's learning experience. For example, McKenzie's (2003) study of the meaningful learning identified by Outward Bound participants indicated that an immersion in nature was a critical factor in helping the participants broaden their sense of self, as well as elicit feelings of peacefulness and invigoration. Another Outward Bound study by Hattie et al. (1997) proposed that a natural setting provides unique advantages to the students' subjective experience, increasing participants' self-awareness, and self-concept, as well as promoting personal restoration or feelings of wholeness.

According to many (e.g., Harper, 1995; Greenway, 1995; Macy, 1991; Naess, 1995; Thoreau [1851/1993]), time in nature is inherently restorative because it allows one to experience moments of wholeness and belonging. This precept mirrors some of the ES 470 research participants' language in their descriptions of the eco-psychology exercise, which include feelings of acceptance and wholeness while contemplating their selected natural area at Camp Imadene. Naess (1995) likened these experiences to reconnections with the web of life that bring about feelings of wholeness and connection: "Our human psyche, with its self-created sense of individuality, slips away and a larger, eco-self emerges" (p. 17).Theme 3: Community-based learning and action.

The meaningful and hopeful aspects of learning through action and a direct engagement with the community represented another important feature of the research participants' experience. Students emphasized the deep engagement and inspiration that issued from experiencing places dedicated to sustainable practice and meeting and learning from the people engaged in this work.

> Flora: Our time at Wildwood and O.U.R. Eco-village allowed me to see the ways in which integral practices can be incorporated into our lives and our vocations. I saw people there living out their unique gifts for the world, and it inspired me to live out my own.

For some of the research participants, these experiences translated to sustainable action beyond the course as well as enduring connections with the community leaders they met there. Together, the narratives associated with experience and action pointed to the power of learning about sustainable solutions through action and experimentation. The participants described the impacts of such experiences as making theory real, and the notion of positive action more feasible.

Daloz's (2000) ideas on the role of community based learning coincide with those of the students. He contended, "[It is] the opportunity to act on one's growing convictions in action" that is crucial to fostering an abiding commitment for the common good (p. 117). This concept is reflected in a study presented by Arenas (1999) on the impacts on students who participated in community education programs in Columbia, South America. Arenas noted, "Studying about and acting on the locality was a vital means for understanding the importance of collective solutions, contextualizing academic education in meaningful situations and promoting a balance between reflection and activism" (p. 2).

This type of learning is associated with generating hope and possibility, as articulated by such educators as Daloz (2000), Domask (2007), Hart (2004), and Palmer and Zajonc (2011). In his article on the impact of graduate level experiential internships on global environmental policy, Domask (2007) stated that the "most profound impact" these types of learning experiences have is that of engaging and empowering students in hopeful action (p. 63). He maintained that learning through experience is critical to mitigating the sense of helplessness that can occur when educators impart only knowledge on the complexity of the problems facing people on a global scale. Domask noted:

> It has become increasingly common for educators to realize that knowledge, though traditionally viewed as a means of empowerment, can work in a way that diempowers students . . . but when students are taken out of the classroom and put face to face with individuals whose lives are devoted to creating new approaches to solving problems, then students can personally see the changes that individuals, small organizations and communities can make. (p. 63)

Many of the ES 470 research participants described community-based learning as a multi-dimensional experience, involving a combination of the personal, communal *and* active elements involved. Wals (2010) called this type of active, holistic experience the "cross-boundary dimension" (p. 31), which he maintained provides opportunities for firsthand experience of the interconnectedness between the individual and the community and with theory and action in the real world. Hammond (1996) reflected this view by arguing that to be effective, formal education programs that focus on building awareness and preparing learners for future action must provide students the opportunity to field-test their ideas in a multi-dimensional, real-world context.

Supportive factors for meaningful community based learning and action.

Students emphasized the experiential learning approach itself as a key factor to their meaningful experiences at the community sites and in their final action project. They emphasized the holistic aspects of this form of experiential learning, associated with their moments of action and engagement as well as their overall impressions of the course's impact. Indeed, their descriptions reflect an integrative learning experience where they describe the individual and communal facets of their experience as well as engagement of their physical, cognitive and spiritual selves.

The tenets of experiential learning theory put forth by such thinkers as Jucker (2004), Luckman (1996), Kolb and Kolb (2006), and Ord (2009) reflect the thinking of the students and the evolving theory of integrative learning. Kolb and Kolb (2006) stated, "Experiential learning is a holistic process of adaptation to the world. Not just the result of cognition, [it] involves the integrated functioning of the total person—thinking, feeling, perceiving, and behaving" (p. 194). Luckman (1996) echoed this by describing the experiential learning approach as a whole-person approach, where educators seek to engage students "intellectually, emotionally, socially, soulfully, and/or physically" (Luckman, 1996, p. 7).

The research participants emphasized the participatory aspect of their experiences. Dewey famously reasoned that for experiential learning to be powerful, the learner him or herself must be involved in shaping the purpose and direction of what is learned.

> Setting up conditions which stimulate certain visible and tangible ways of acting is the first step. Making the individual a sharer or partner in the associated activity so that he feels its success as his success, its failure as his failure, is he completing the step. (Dewey, 1966, p. 14, as cited in Glennon, 2004, p. 32)

Sterling described such participatory and constructive learning processes as critical to moving from transmissive to transformational learning processes. It involves students in an iterative learning process, where they are called on to shape their learning experience, to focus on process over content and co-construct the meaning of their experiences as they relate to their whole person: "head, heart and hands" (Sterling, 2001, p. 8)

Enduring Impacts: Meaningful Learning, Transformation and Change

a. An enduring sense of connection from others in the course;
b. A sense of hope and possibility in terms of building a sense of community outside the course;
c. Sustained change in a new, more accepting sense of self;
d. Enduring and evolving relationship with one or more community leaders students had met during the course; and
e. For some, the development of new interests and sustainable actions after the course ended.

The enduring aspects of the course reveal that what was considered important during the course led to lasting change beyond it. Indeed, as the summary of the enduring aspects above indicates, the principal themes of these lasting impacts are almost perfectly reflected in the students' narratives of their immediate experiences of the course. The changes that endured beyond the course are significant, as they imply long-lasting transformations of perception and decision-making. However, while the results point to the course as a key influencing factor, I also wish to explore how these meaningful experiences are set within the students' greater path

towards wholeness and transformation and recognize how these enduring impacts are set within the greater context of the students' previous experiences.

Meaningful learning and incremental change.

I present the meaningful learning and change found here as what Daloz (2000) and Schugurensky (2002) called "expansive" learning, versus "transformative" learning in its strictest sense. This premise of change supports my view that the path towards the deep and permanent shifts in perception associated with the goals of traditional transformative learning theory are in fact supported through the gradual (incremental) provision of meaningful learning experiences (e.g., Astin & Astin, 2010; Daloz; 2000; Dirkx et al., 2006; Hart, 2004; Kegan, 2000; Schugurensky, 2002). Such an approach encourages a lived journey towards transformation or what Cruikshank, in drawing on the work of Freire (2002), likened to if not the making of a whole being, the process of becoming one.

> As Freire suggests, we can only attempt to play a part in an ongoing process of transformation, and trust that those individuals who have been moved enough to consider taking action to change the world, will follow through with committed action as personal situations and circumstances allow. (2006, www.developmenteducationreview.com/issue2-focus4?page=show)

In part, I draw on this framework because I view the enduring and "potentially transformative" aspects of the students' experiences as having incited change and a broader understanding of reality, yet, I do not feel I can claim these changes have involved the deep, permanent transformation of worldview associated with transformative learning theory (O'Sullivan, 2002). Their narratives reveal the enduring impact of their meaningful experiences; however, their stories seem to reflect an incremental or "gradual unfolding" towards wholeness

and transformation versus the dissolution of self and the development of a new identity associated with whole-person change (Kovan and Dirkx, 2003, p. 102).

In describing this premise of incremental versus epochal movement towards transformation, Schugurensky (2002) provided the example of Rosa Parks, the heroine of the U.S. civil rights movement, who accumulated years of learning experiences as a community organizer and then as a participant of the Highlander Folk School. These experiences, he argued, prepared her for her particular form of protest. In discussing Parks's story, Shugurensky noted that, for many people, the movement towards change and action for the common good involves years of learning experiences, most of which would be conceptualized as "expansive" versus transformative learning in its narrow definition. These experiences, such as Rosa Parks's meeting White human rights activists at Highlander, are "nonetheless transformational" because they move that person towards a broader understanding of reality, a more comprehensive worldview and, potentially, towards a moment of deep change and new action (Schugurensky, 2002, p. 71).

I understand the students' experiences of the course to have helped broaden and change their view of themselves, their community, and their sense of hope in creating a more sustainable world. The course also played a role for two students in deciding to act in new ways in their community by volunteering with local non-profits, continuing with their garden project after the course had ended and, for one, building a second garden and taking courses to deepen her understanding of the theory and practice of permaculture. These outcomes are remarkable and the study reveals that the course played an important role in influencing both the students' changes in perspective and their decisions to act. I do feel however, that the research cannot "prove" that these changes are solely attributable to what the students experienced in the course. On the contrary, I believe many of the positive impacts were influenced by the particular context

of the course within the greater program of environmental studies at UVic and the wealth of experience each student brought to it from their own lives. For instance, the research participants came into the course with a pre-developed sense of care and compassion for environmental and social communities and a sophisticated understanding of the role of the many social and political systems that shape them. They arrived with a genuine interest (and in some cases, prior experience) in actualizing their values. Many also brought with them a range of fears associated with the state of the planet, a diminished sense of hope and a strong base of theoretical versus practical knowledge of both the challenges and solutions to sustainability.

These backgrounds were well understood by Duncan Taylor, and indeed, the course was not about inciting an environmental ethic or imparting more information about the urgency of our times to students fresh to the study of sustainability. Rather, as described in earlier sections, it was an invitation to experience integral systems and community examples of sustainable practice in the field setting. Importantly, it was an opportunity for students to explore their own passions and potential paths towards shaping more sustainable lifestyles and communities. In light of this, the long-term, "transformational" impacts of the course result from both the learning approaches and experiences offered in the course and the participants' prior experiences and knowledge, accumulated both as students and as citizens in their own communities.

While the impacts of the course are assuredly embedded in the larger picture of the students' experience and knowledge, the principal themes of meaningful learning and their associated supportive factors still point to the effect of a course design that helped foster self-knowledge, meaningful connection with others, a sense of hope and possibility and, in some cases, a decision to take positive action.

Summary of effective and meaningful practice and recommendations for future practice.

The results of this research show the effectiveness and impact of the some of the distinctive approaches of the course, namely the powerful effects of experiential learning, community-based learning, and the provision of time and space for personal and group reflection. The students underscored the supportive influences of developing a safe and welcoming atmosphere and an immersion in nature (as context). In addition to this, the findings associated with the two students that completed an action project as their final project emphasized the power of having students plan, develop and build sustainable projects.

Heart: Individual and collective lnteriority.

Essential to these activities and approaches was the provision of an experience that engaged the multiple dimensions of the students, or as Sterling described it, an engagement with "head, heart and hands" (2001, p. 8). In so doing, the course aimed at providing an integrative approach to the study of sustainability that engaged students' interiority and exteriority and sought to include but also transcend the conventional objectives of information transmission, critique and rational discourse. In the end, the students emphasized the importance of those experiences that engaged their inner dimension and incited personal refection and meaningful connections with others. This notion of interiority was connected with the value they placed on engaging in positive and sustainable change in the community, where students described such "exterior" experiences as opportunities to actualize their inner values and feel a sense of shared hope and vision. Such outcomes support the future provision of courses that engage students' internal, subjective experiences directly in the study of sustainability. The outcomes also support

meaningful dialogue and the development of a community of learners that has opportunities to share values and make meaning of their collective experience.

Hands: Community-based learning and action.

Students ultimately aligned their individual and collective interior experiences with their desire to actualize values and find ways for hopeful action in the world. This was reflected in part by the value students placed on learning experientially at the community sites they visited. Such results support the continuation of these community-based, experiential features in future course designs. The two students who chose an action project as their final assignment reported outcomes involving their decisions to volunteer in the community and continue with permaculture gardening after the course. While it is impossible to know if all the students would have experienced these same outcomes had they chosen a final project, I believe the impacts associated with the two students underscores the power of including more of these types of experience in future course designs. I did not investigate the students' decision to choose action versus theoretical projects; therefore, future investigations in the effectiveness of assigning mandatory group action projects have not been determined. In some cases, I believe certain students would need more support in implementing their project, and that the two students in this research demonstrated a high degree of leadership. In this way, the value and challenges of assigning action projects could be further investigated; this area is an interesting area to research further.

Head: Systems theory.

It is important to note that the students did not emphasize the more conventional aspects of their learning experience, namely the course readings, lectures and discussions on integral systems theory. The systems theory principles did however reflect and support many of the

practices and approaches that were applied in the course. For example, many of the lectures and readings aimed at developing an understanding of the role that both individual and societal values play in determining our actions towards each other and the bio-physical world, which are concepts reflected in the eco-psychology exercise and several of the students' journaling exercises. As well, the course readings and lectures focused on ideas related to re-conceptualizing sustainability as a complex, interconnected systems challenge related to the social, economic, cultural, ethical and spiritual domains of our existence. Issues were also examined in terms of systems behaviour where students studied the structure of Panarchy and the continual adaptive cycles of growth, accumulation, restructuring, and renewal found in virtually all systems, from forests to world economies. By understanding these cycles and their scales, students studied how certain points in the Panarchy cycle are capable of accepting positive change, and how we can use those leverage points to foster resilience and sustainability within the system (Gunderson & Holling, 2001).

In reflecting on these readings, students were asked to consider which of our individual and collective values and practices need to be transformed in the face of such challenges and to reflect on the effectiveness of the unilateral planning and reductionist paradigm in addressing issues of sustainability in our own communities. These concepts were explored in ways that asked students to look at new ways of viewing both the challenges and potential solutions to issues of sustainability at the individual level. Panarchy was a means of seeing the breakdown of many systems as not just disastrous, but as opportunities for change and renewal. In consequence, hope was an implicit theme to some of the discussion as students explored how small actions are connected to much larger systems, and the that novel ideas have the potential to be incorporated into systems as they cycle through their natural stages of collapse and renewal.

Systems principles and behaviours do figure in some of the students' descriptions of the course, which I consider to reflect an integration of some of the theory they studied. Although my study of the course did not reveal an explicit correlation with the course material and most of the students' dialogue of their most meaningful learning experiences, I believe the theory and course readings were likely important contextual factors in the greater impacts of the course. Again, another possible research project could include examining the role and influence of the study of integral systems theory and systems behaviours on students' learning in future iterations of this course, especially as it relates to providing an alternative way of perceiving the issues of an integrated, dynamic and interconnected world, and seeing opportunities for hope in times of systems chaos.

Conventional learning and changing practice.

I did not find the students' emphasis on the non-traditional elements of the course surprising, in that the students tended to value what was absent in their traditional university studies and often missing from their personal lives as well. Papers, lectures and readings do not figure among the missing factors in students' busy lives, but elements such as engendering a sense of community in the school setting or engaging in learning that allowed space for personal reflection and growth were considered novel and unexpected. Indeed, inherent to some of their descriptions of their most meaningful learning is a strong critique of their conventional studies, in which the students comment on the absence of communal discourse, limited opportunities for experiential learning, and the lack of opportunity to connect their inner lives to the subjects they study. This was underscored by the sense of relief and even surprise they associated with having experienced these unconventional practices in the university setting.

The very positive impacts of the alternative forms of learning encountered in ES 470, however, reveals the valuable and meaningful approaches that were applied and which can be used to guide future designs and iterations of this course and others like it. I believe the powerful tone of hope and possibility that emerged from the findings indicates that the effective design and approaches of the course should be shared widely within the School of Environmental Studies. There is a dearth of information on increasingly frightening global scenarios that can be found in a range of the Environmental Studies courses currently offered to undergraduate students. I imagine the impacts of such knowledge increasingly influence the sense of hope and possibility in students and for the professors that teach it as well, where solutions become increasingly complex and unwieldy. This course points to an alternative form of teaching and learning that includes the importance of traditional study and discourse, but meets the needs of students seeking an education that responds to their very real need for meaning and purpose, the ability to connect meaningfully with others and to be able to experiment in sustainable solutions. The value students placed on such learning, and the sense of hope and possibility it engendered, reflects a growing interest for learning that integrates the cognitive, emotional, social, creative, and spiritual aspects of a person in addressing our personal and global challenges. I believe the results of this study indicate that such practices merit further application in ES 470 and the general curriculum offered by the School of Environmental Studies at the University of Victoria.

Chapter Seven: Conclusion

"Without a minimum of hope, we cannot so much as start the struggle."

Paolo Freire (1995)

This study of alternative, integrative forms of teaching sustainability is situated in a time of genuine uncertainty, when we face not just short-term environmental damage but the possibility of irreversibly destroying the capacity of the Earth to sustain life as we know it. The recent 2012 United Nations Report of the World Commission on the Environment makes clear that challenges such as global climate change, the acidification of oceans and the deforestation of tropical jungles are increasing at such a rate that critical global, regional and local thresholds are very close or have already been exceeded (http://usatoday30.usatoday.com/weather/climate/story/2012-06-06/un-environment-report/55431404/1).

What is perhaps equally shocking is our tendency not to meet these challenges with effective or sustained action, at least for those of us in the world with the relative freedom and wealth to do so. While there are large numbers of organizations that are working to respond to such crises (Hawken, 2007), the numbers of people fighting for change remain relatively small. In addition, there is a significant gap in leadership among world leaders, as demonstrated by the recent failed attempt to create a global environment action strategy at the Earth Summit in Rio de Janeiro (http://www.un.org/geninfo/bp/enviro.html). These accumulating findings paint a forbidding picture on both the health of the planet and the lack of resolve and guidance to find solutions to the many complex and interconnected problems we face. Indeed, we seem to live, as

Steiner[19] described it "in an age of irresponsibility" (http://usatoday30.usatoday.com/weather/climate/story/2012-06-06/un-environment-report/55431404/1), which for many, is also a time of decreasing hope, and increasing sense of helplessness (O'Sullivan, 2009).

It seems clear the current crises in sustainability will require every resource of humanity, as individuals and as communities, to plot a safe course towards a more just society and better world. Many, including myself, consider alternative, integrative higher education to hold a powerful role in shaping this new future and guiding some of the change necessary in these uncertain times (e.g., Moore, 2005; Palmer & Zajonc, 2011). However, when the status quo seems to be at its most untenable, most institutions of higher learning are perpetuating the kind of thinking that underpin our current social and environmental crises (Hart, 2001; Orr, 1994; Palmer & Zajonc, 2011).

Hart (2001) stated, "For the most part, contemporary education remains geared to downloading facts and fostering compliance, [where] we seek to shape a populace for the marketplace and treat the student as a receptacle to be filled and controlled" (p. 4). This business-model approach to education is dominated by a rational, empirical approach to knowing that often stresses training and the transmission of knowledge versus the transformation of ideas (Orr, 1994). Such education is invariably designed to prepare students for individual success and material wealth, where goals of personal advancement take precedence over broader social, moral and spiritual meaning.

In the field of sustainability education, information and training, while still necessary components of learning, are increasingly seen as inadequate preparation for our current

[19] Since June 2006 Achim Steiner has been Executive Director of the United Nations Environment Program (http://en.wikipedia.org/wiki/Achim_Steiner)

challenges. The nature of our social and environmental crises, characterized among other things by high levels of complexity and uncertainty, requires a different set of qualities, related to our capacity for personal strength, self-knowledge, integrity, compassion and cooperation. Such challenges require transformative learning practices that are *integrative* and draw on the full spectrum of human knowing of cognitive, aesthetic, emotional and spiritual intelligences to create a wiser global society (Glasser, 2007). This type of *whole person* learning proposes that if we incorporate but reach beyond intellectual knowledge, we can facilitate education of significance where intellect and action are aligned with meaning and purpose (Palmer & Zajonc, 2011).

Inherent to this process is the goal of bridging what we know with who we are and ultimately to align this with what we do. This is what Hart (2001) described as seeking "an education of inner significance that provides an opportunity for 'bringing forth' the inner person rather than simply 'putting in' information" (p. 7). Such an integrative approach recognizes that the challenges of our time are such that students need to become self-actualized members of society, where they critically engage the objective information set out before them and seek to give that information meaning as it relates to their personal and collective lives. This whole-person approach is what Sterling (2001) described as cultivating an integrated development of the head, heart and hands, so that the person can manifest a growing consistency between what they know, understand and value and what they ultimately do in the world. Thus integrative education for sustainability aims at *transformational* learning experiences, which require educators to draw a link between the inner and the outer dimensions of the individual and the collectives in which they are embedded.

> We must, in short order, be about what Thomas Berry calls "The Great Work" of remaking the human presence on Earth, and build authentic and vibrant communities that sustain us ecologically and spiritually. For this challenge we need a generation equipped with energy, moral stamina, enthusiasm and ecological competence. This is *the* challenge of education. (Orr, 1994, p. 9)

As Leopold once said (1949/1970, as cited in Jickling, 2009) "We can be ethical only in relation to something we can see, feel, understand, love, or otherwise have faith in" (p. 168). This statement links a critical idea of the integrative approach to educating for sustainability: that the wellbeing of society is inextricably linked to the development and potential of the inner life of the individual. Integrative educators argue that the ability to act and serve society in a more sustainable manner is tied to our ability to self-actualize, which is intimately linked to our emotional wellbeing, sense of meaning and purpose and self-reflection (e.g., Gunnlaugson, 2004; Hart, 2004; Kovan & Dirkx, 2003). In this way, it is the inner, spiritual lives of people and the communities that they form, that hold the promise of a shift in values and of consciousness that we now require (O'Sullivan, 2002).

This integrative approach to learning reflects my own desire to make use of the great potential for higher education to provide education that takes us into the "depth of things" and views preparation for the future as a means to align what we value with what we ultimately do in the world (Schumacher, 1973, as cited in Sterling, 2001, p. 21). The ES 470 course at the centre of my thesis represents one such experiment in which students were engaged in a field-based integrative learning experience that sought learning of inner and outer significance and in which students explored their individual and collective roles within the many social and ecological systems at play in the current sustainable crisis. The approaches in this course sought to move

students from theory to practice and to treat them as active stakeholders in creating personal and collective vision and making changes based on their individual and collective realties. To achieve this, Duncan Taylor worked collaboratively to develop a course experience that attempted to engage the multiple intelligences of students issuing from their intellectual, physical and spiritual dimensions. In so doing, he sought not just informational learning but experiences that supported meaningful and potentially transformative learning processes.

The results of this research show the effectiveness and impact of some of the distinctive approaches of the course, namely the powerful effects of experiential learning, community-based learning and the provision of time and space for personal and group reflection. These activities supported students in broadening and changing their view of themselves and their sense of community as well as providing opportunities for students to engage in sustainable practice. Such experiments in integrative learning processes represent a growing but still marginal number of innovations and "next practices" that seek deeper learning processes based on a broader, more inclusive concept of sustainability (Wals, 2010, p. 35). Yet, while many of the practices and approaches of ES 470 can be applied and explored further in other courses, I do not attempt in this research to provide practitioners with a how-to manual. Instead, I believe the outcomes of this course point to the effectiveness of such practices in supporting a participatory way of engaging students in the learning process, which above all has meant inviting the inner life of the student and the community into the educational process.

I also believe the most essential outcome of these processes in ES 470 was the corollary of fostering hope and a sense of possibility. This outcome has in many ways also been the most meaningful for me personally and has allowed me to see that, with or without recognition, themes of hope and despair figure not only in this course but in most courses in the School of

Environmental Studies, and very likely in courses throughout the university. I believe the concept of hope will become an essential matter with which to engage as we seek solutions to collective challenges and as the changes of the future are increasingly part of conversations of the present. For as Freire (1995) communicated so well, hope must come first, for without it, we cannot so much as start the struggle.

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Appendix A

ES 470 Course Syllabus

Course goals and themes:

ES 470 is built upon the core materials of ES 380 and ES 414. As such it "includes and transcends" some of the previous readings and concepts. For example, the course will use the Four Quadrant Model (the perspective that living systems are "part/wholes" having both agency and communion as well as interiority and exteriority. In turn, human and biophysical systems also exist in across differing spatial and temporal scales and undergo periodic cycles of growth, collapse, and reorganization).

A central goal of this course is to explore the ideas of Integral Systems Theory with specific attention being paid to its application to individual and collective biophysical and social systems. In doing so, class participants will be asked to consider questions such as: (i) How can the ideas of Integral Systems Theory be applied to individual and collective problems – social and environmental issues? (ii) What are the consequences and implications of taking an Integral perspective both in terms of one's own personal life, individual agency and collective identity? (iii) How are Integral theories being used currently in such practices as ecoforestry, permaculture, deep ecology, ecopsychology, and adventure therapy?

"When you follow your bliss…
doors will open where you would not have thought
there would be doors; and where there wouldn't be a door for anyone else."
-Joseph Campbell

In the spirit of Joseph Campbell, another goal of the course is an opportunity for students to explore their own unique gifts and "passions" and how they might apply these gifts to their larger social/environmental context in which they currently exist, thus enhancing their ability to be agents for positive change and transformation. This will be woven into the whole experience with specific opportunities for journal writing, small group discussions and explorations with one or two exercises from the *Integral Life Practice* readings. This course is **not** intended to be therapeutic. Rather, opportunities for students and instructors will be provided to deepen their understanding of integral systems thinking, its application, and the implications these ideas may have for our lives.

Appendix B

Research Consent Form

School of Environmental Studies
University of Victoria, BC

"Meaning and significance in community based learning"

Consent Form for the use of the reflection assignment from the course: ES 470: integral system's theory: its practice in the study: "Meaning and significance in community based learning"

Thank you for considering the following supplementary consent form in this research project*: Meaning and significance in community based learning. This research is being conducted by Tara Todesco, a Master of Arts candidate in the School of Environmental Studies at the University of Victoria.*

This supplementary consent form asks specifically for your permission to the Principle Investigator, Tara Todesco, to use the reflection assignment from the course ES 470: integral system's theory: its practice. This form is supplementary to the original participant consent form you filled out in 2009, however you are under no obligation to grant this new request.

About this project:
The purposes of this project are:

- To provide a participatory, evaluative study that seeks to understand the impacts of ES 470: integral systems theory: its practice course from the student's perspective
- To identify which of these experiences were most meaningful and effective and which, if any, have led to community action
- To contribute to the wider understanding of ways in which students experience community based learning
- To contribute this knowledge to the community partner of both the course and the research: The Land Conservancy of British Colombia
- To develop new knowledge and understandings of this course that could be used in future course design and in encouraging further development of these types of courses.

You have been asked to contribute to this project because of your involvement in the course in question.

Your contribution will now also include:

- Submitting the reflection assignment from the course: ES 470: integral systems theory: its practice for data analysis in the current study being completed by principle investigator, Tara Todesco

Voluntary Participation

The contribution of your course reflection assignment in this research is *completely voluntary*. If you do decide to provide this document to the principle investigator for analysis, you may request it be withdrawn at any time without any consequences or any explanation. If you do withdraw this document- any data will only be used with your express permission. If you would prefer your data from this document not to be used, any texts will be erased and not used in the study.

Potential for "Power Over relationship" with the primary researcher and previous Teachers' Assistant (TA) Tara Todesco:

As outlined in your participant consent from, a "power over" relationship can exist when the researcher and the potential participant have an association where there is a power differential. This differential, which can occur between a TA and his or her students, can exert undue influence over the participant's ability to give their consent freely. Because the course under study is now complete and the primary researcher, Tara Todesco, has also completed her role as a teachers' assistant, this "Power over" relationship has officially ended. However, as this previous relationship may still influence your decision to provide and give permission to use this course assignment in the research, please note that this request is separate from your obligations as a student of Environmental Studies: your agreement to allow the use of this course assignment is purely voluntary and you are under no obligation whatsoever to contribute this document. Should you choose to not allow the use of this assignment, you may do so with no explanation whatsoever.

By signing this form, you are indicating your ongoing consent for use of this assignment in the study.

Confidentiality

Please indicate the level of confidentiality you would prefer in how this assignment is incorporated in the study by initialing next to one of the three options below:

_____**waived confidentiality:** you may be identified by name in thesis.

_____**moderately protected confidentiality:** Data from this assignment may be used in the thesis without your name being included, and any identifying information about you will be changed. However, because of the small community in which this study is taking place, your identity may be understood by other participants reading the study, though your name and identifying information not be included.

_____**protected confidentiality in the thesis:** General concepts from the assignment will be included, but not your name or direct quotes.

Please note: *If, at any time, you should desire to change your level of confidentiality, you are free to do so by contacting Tara Todesco. The use of your data will be adjusted accordingly.*

Your level of confidentiality is assured according to your request above. However, there may be some practical limitations to your confidentiality:

1) Due to the small community in which this research is based, your identity may be easily discerned by others familiar with this project, even if your name is not included in the data.

Use of texts from your course reflection assignment
It is anticipated that the results of this study will be shared with others in the following way. Please initial next to the uses of your course reflection assignment of which you approve:

____Academic purposes of the study, including master's thesis, and future academic publications and presentations.

Archival of your course reflection assignment
Digital recordings of the transcripts from this study will be kept by Tara Todesco and destroyed after 10 years

____I agree to have text from my course reflection assignment in the study's transcripts to be kept by Tara Todesco for 10 years at which time they will be destroyed

Contacts:

As current research participants, please contact Tara Todesco directly regarding any questions you may have about this request. You may also contact the supervisor of this research: Dr. Duncan Taylor.

Tara Todesco is a graduate student in the School of Environmental Studies at the University of Victoria and you may contact her if you have further questions by email at ttodesco@hotmail.ca, or by telephone at (250)388-0888.

This research is being conducted under the supervision of Dr. Duncan M. Taylor, assistant professor with The School of Environmental Studies. You may contact him at (250) 721-7359. In addition, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Human Research Ethics Office at the University of Victoria (250-472-4545 or ethics@uvic.ca).

Your signature below indicates that you understand the above conditions of including your course reflection document in this study and that you have had the opportunity to have your questions by Tara Todesco.

Name of Participant	*Signature*	*Date*

Thank you again for your participation. A copy of this supplementary consent form will be left with you, and a copy will be taken by the researcher.

Appendix C

Interview Guide

The past

- Reflecting back on that first one week intensive together- comment on what you feel were the most significant and meaningful experiences?
- Why were these meaningful –were they significant to you? How?
- Was it unique to your other university experiences? If no/yes, how?
- What about the rest of the course- can you comment on your work on the final project and the group support work in completing your assignment? (leading up to April)
- Was this significant to your experiences within the course? How?
- Were there any specific experiences or approaches in the course design that were especially meaningful to your experience?
- Can you articulate what you learned/experienced in terms of knowledge?
- How did you feel at the course's end- what did you think you had learned?
- Do you think this course was important? Why or why not?

Moving to the present

- Has the experience maintained itself? Has it dissipated? How?
- Has the course affected your present life in any way? If yes: in what way does it affect you now? If no- why do you think this is so?
- Have any of the learning experiences remained with you? (If yes) what are these and what seemed to stabilize this? (If no) why do you think this is so?

Moving to the future

- Did this course lead to change- if so what kind? If not, why not?
- On an individual, personal level?
- On a community level?
- When did this change begin?
- How did it manifest? Has it endured?
- Do you see this affecting your future?