TRANSFORMATIVE LEARNING IN UNDERGRADUATE EDUCATION

by

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Abstract

This qualitative study examines student engagement in transformative learning in an undergraduate university setting. Although transformative learning using Mezirow's model (1975, 2000) has been described in adults, it has received little attention in relation to traditional age undergraduate students. This is surprising in light of developmental potential at this age and purposes attributed to undergraduate education. In keeping with concerns around Mezirow's adult transformation theory, Freire's philosophy of liberatory education, and other gaps in the literature, this exploratory study examines three main questions: 1) What are traditional age students' experiences of transformative learning in an undergraduate liberal arts university setting? 2) What factors contribute to transformative learning for traditional age undergraduate university students? and 3) What role do discrete student-centred courses have in the process of transformative learning? The empirical basis is the beginning of engagement in transformative learning for a volunteer sample of twelve traditional age students in three, 13-week undergraduate courses across disciplines at a small liberal arts university in Canada. For students in the study, engaging in the process of transformative learning involved seeing personal relevance in course issues; sensing tensions among perspectives; and digging deeper to explore underlying assumptions, agendas, and contexts. Rather than being an individual process as implied by Mezirow's model, student descriptions highlight a social process built on sharing experiences and working to understand the assumptions underlying the experiences. Students described changes in assumptions, as a result of their experiences, that involved cognitive-affective reflection and cognitive-behavioural action. Factors facilitating transformative learning included considering multiple perspectives (challenging traditionally assumed authority of the professor, discipline, and academic knowledge), shaping course experiences (challenging more traditional organization of

courses), and developing relationships (focussing on interpersonal support). Through tapping into the power of experience, these student-centred courses moved beyond dichotomies critiqued in the literature to integrate emotion and cognition in learning, link individual and social learning and change, and offer students a different experience of power. The concept of power in transformative learning is developed further and implications for practice and theory around the role of universities in transformative learning and future research are discussed.

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Dedication

To my daughters—Sarah Harvie and Christine Harvie

And to "daughters of Acadia"— Lana MacGillivary, Sesaly Davidson, Cindy Frizzell, Meredith Harrigan, Jennifer Hill, Meghan Barry.

In so many ways, this thesis is because of you and for you.

TRANSFORMATIVE LEARNING IN UNDERGRADUATE EDUCATION

Chapter One: Introduction

> [T]he full potential of the role education *can* play within the larger praxis of social change will only be realized to the extent that we understand power intimately—which implies understanding power as a discursive production—and become capable of *reinventing* it in educational contexts (Escobar, Fernandez, Guevara-Niebla, & Freire, 1994, p. 185, emphasis in original).

In discussing higher education, Escobar et al. (1994) describe a broader, more-encompassing social function than that usually ascribed to universities. A major challenge in responding to this call is a relative lack of previous exploration or theory development around the meaning of and relationships with power in the university classroom. Escobar et al. (1994) do not specify how power would be reinvented in education. If power is to be a force for emancipating both the oppressed and the oppressors (Freire, 1981), students need to develop the ability to free themselves from assumptions that keep them from developing full human potential (Freire, 1998) for participation in informed social change. This different way of seeing and using power involves more than shifting established modes of power from the teacher or one group of students to another group of students. In the classroom this involves more than learning in a climate that models democratic values; it involves transforming the assumptions that hold power over learners and limit development.

Parks (2000, p. 5) describes young adulthood—the age of traditional undergraduate students as a time of potential transformation; she contends that "the promise and vulnerability of young adulthood lie in the experience of the birth of critical awareness and the dissolution and recomposition of the meaning of self, other, world, and 'God'." Through research on adult women returning to college, Jack Mezirow developed a general transformation theory which has been used in adult nonformal and formal education, and graduate studies settings. While Mezirow's theory on the process of transformative learning has added greatly to understanding adult learning and adult education (Clark, 1993; Merriam & Cafferella, 1999) and has generated discussion and further research, it has not been explored in the undergraduate setting with younger

students. It is not known from the research conducted using Mezirow's theory whether transformative learning is limited to adults (Merriam, 1993). Lack of focus on this particularly interesting time of life is not limited to work around Mezirow's model. Although the challenges in becoming a responsive adult are commonly acknowledged, the early adult years have not been a major focus in human development theories (Parks, 2000). There appear to be gaps in the literature from the perspective of young adult development and around the role that university can play in such development (Kegan, 1994).

Among it many roles within local and global communities (Donald, 1997), universities have been described historically in terms of important educational functions that include training students for future work, assisting students in individual life development, and preparing students to take their places as concerned, caring citizens (Spies, 2000). Competition among these functions has become more apparent as expectations around university roles have increased and funding support has decreased (Asmar, 2002; Doring, 2002; Inayatullah & Gidley, 2000; Rhoades, 2000; Rolfe, 2002). Universities have been moving toward greater emphasis on vocational preparation (Downey, 2003; Giroux, 2001; Rhoades, 2000). The other two aims—individual development and preparing students for participation as democratic citizens—have been receiving less attention as universities face external demands and competitive pressures (Doring, 2002; Fairweather, 2002; Manicas, 2000; Neubauer, 2000; Rhoades, 2000; Rolfe, 2002). Lack of attention to these two historical elements of the university's mandate is unfortunate when normative age university students often enter university interested not only in greater self-understanding and development but also in having a positive effect on their larger social world (Parks, 2000). Undergraduate students are, arguably, at a developmental age when focus on development as individuals and concerned citizens may be most appropriate. Exploring transformative learning in the undergraduate university setting may help to bridge gaps in our understanding of young adult learning and of ways in which universities can support learning around its three historical aims.

One starting point in exploring transformative learning in the undergraduate university setting is Mezirow's transformation theory. Developed from interaction with

adult women struggling with their developing identity as they returned to community college (Mezirow, 1975), it provides a framework for considering transformative learning in the university setting. While not intended to follow the development of undergraduate students in a more normative age group, it is based on both learning and change principles. Mezirow (2000) defines transformative learning as

> the process by which we transform our taken-for-granted frames of reference...to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true and justified to guide action (pp. 7-8).

The emphasis is on examining and transforming assumptions that influence our thoughts and actions rather than only on adding information; individuals are asked to "risk loyalties at the very foundations of their lives" (Kegan, 2000, p. 67). Transformative learning moves away from an information banking model (Freire, 1981) to critical reflection on personal and social assumptions. In discussing transformative learning, Clark (1993) notes that "[I]f learning is the restructuring of meaning as adults engage life experience, then learning can be conceptualized as the vehicle of adult development. This is a considerable expansion of our understanding of the role of learning in adulthood" (p. 53).

Although not without significant limitations or challenges to its intent, Mezirow's Transformation Theory provides the most developed frame available and a starting point for my study. In thinking further about the critiques of Mezirow's model, Freire's work on transformative learning in community settings provides useful insights. Of particular interest in relation to the present study with undergraduate students are Freire's emphases on praxis involving both reflection and action, individual and social transformation, and developing a new relationship with power as a subject with, rather than an object of, power. While appreciating that these elements have different implications for students in undergraduate classroom interactions than for adults in voluntary community-based programs, Freire's work highlights important considerations in developing a model for this study.

Freire's work on oppression and literacy education with adults in Brazil has had a profound influence on educators around the world (Weiler, 2001). Although Freire warns

against appropriating his approach as merely a method of teaching or as dogma, the appeal of education that moves beyond a banking model of depositing knowledge into students to a praxis that involves critical reflection and social action related to students' own experiences has been wide-spread. Although widely discussed both as theory and practice, interest in Freire's work has not translated into research related to undergraduate students. Freire's approach of education for liberation has had limited application to formal education in North America (Merriam & Cafferella, 1999), although many of the principles have been invoked. This limited application is surprising when many young adults are attempting to find how they can become contributors to a more just world (Parks, 2000).

Freire's emphases on reflection and action, individual and social transformation, and developing a new relationship with power have not been developed sufficiently in terms of university students. Even in discussions by Freire on higher education (Escobar et al., 1994) and education in first world countries (Shor & Freire, 1987), the perspective of instructors is used and the structure of the university discussed, rather than the learning experience of students being the focus. Other research relating Mezirow's model of transformative learning to higher education has focused on the practice of reflection and has been conducted predominantly with older adult learners or at the graduate level or in preservice teaching courses (e.g., Brewer, 1998; Day, 1999; Herbers, 1998; Kaminsky 1997). These gaps mean that there is not an established research base or developed theoretical model related to transformative learning in the undergraduate setting with traditional age students.

The purpose of the present study is to explore transformative learning in an undergraduate university setting. Rather than focussing on the outcomes for students of the university experience or the cognitive development in students (e.g., Pascarella & Terenzini, 1991; Perry, 1970), this study focuses on the experiences of students in the class where instructors consciously attempt to employ strategies to promote student-centred or transformative learning. The aim is to explore interactions among individual learners, social relationships in the classroom, and catalytic events that initiate exploration of student assumptions, values, and beliefs. Both the influence of students' past experiences and current contextual factors, especially around power relationships

within the class, are expected to be integral in understanding the process of challenging former assumptions and perspectives.

The study relies on data that captures "the voices of students from an 'inside-out' perspective. This viewpoint begins with microprocesses that are closest to individual students and then considers the facilitating conditions surrounding them, including the classroom, the school, ... and the school environment" (Smith, Butler-Kisber, LaRoque, Portelli, Shields, Sturge Sparks, & Vibert, 1998, p. 2). Like much of the research in primary and secondary education, more traditional research in higher education has used instructors' perspectives of teaching and has resulted in frustration for students and instructors, and blaming students for lack of expected achievement (Davis, 1993; Entwistle, 1984). Moving beyond instructor intentions, use of student perspective can highlight the process of student learning and influential aspects of setting and teaching practice from the lived experience of the learner (Entwistle, 1984).

Rather than seeking a description of individuals who experience transformation or specific classroom characteristics in which transformation occurs, the study explores the dynamics of a process that is individual and social, and reflective and active, a process in which classroom power students experience power relationships. A constructive-developmental framework that considers students as developing creators and participants in the learning environment is used for this study (Kegan, 1982). In keeping with concerns and issues described and gaps in the literature, this exploratory study will examine three main questions:

1) What are traditional age students' experiences of transformative learning in an undergraduate liberal arts university setting?
2) What factors contribute to transformative learning for traditional age undergraduate university students?
3) What role do discrete student-centred courses have in the process of transformative learning?

Building on the model of perspective transformation in adults developed by Mezirow (2000), this study examines the beginning of engagement in the process of transformative learning. In relation to E. Taylor's (2000) recommendations for future research around Mezirow's model, this study uses other theoretical models for

comparison, focuses on aspects of the model in depth, and considers how transformative learning is fostered in the classroom setting. The study uses Mezirow's transformative theory to develop a proposed working model in keeping with critiques of Mezirow's model and in light of relevant knowledge and models developed in education and psychology that consider developmental and social context of traditional age university students.

In Chapter Two I present literature used to develop the model for the present study. Four areas are highlighted: challenges facing undergraduate universities; the developmental potential and challenges of engaging traditional age undergraduate students; the adult transformative learning model proposed by Mezirow; and Freire's work on liberatory pedagogy. Chapter Three integrates the literature presented in Chapter Two and describes the conceptual framework for exploring initial engagement in transformative learning developed for the study. In Chapter Four, I describe the methods used for site and course selection, recruitment, data collection, and data analysis. During analysis of student responses, I became aware of the limitations of my original model. I went back to the literature and explored other literature along with themes emerging in the data to develop the model further. I present the revised model, which I have used for analysis, at the end of Chapter Four. In Chapter Five I present descriptions of the courses, professors, and students in this study. In Chapter Six, I explore the first research question around the experience of transformative learning for undergraduate students. To allow a glimpse of the impact students describe these courses having, I provide short descriptions of how students describe their reordering of affective-cognitive-behavioural assumptions in Chapter Seven. In Chapter Eight, I look at the second research question around facilitators of the learning experience using Burbules' (1986) work on power relationships. I consider, in Chapter Nine, the final research question about the role of discrete, student-centred courses in the process of transformation. In considering this third research question, I will discuss more fully issues of power, emotion and cognition, individual and social change, and gender that developed during data analysis. Discussion in this chapter highlights the tension that is inherent in most discussions of emotion versus cognition and individual versus social change. This tension is discussed further in Chapter Ten when power issues in learning are revisited. In Chapter Ten, I summarize study

findings, explore further the issue of power as it relates to findings in the study, describe the limitations of this study, discuss implications for theory and practice related to the role of the university in transformative learning, and suggest direction for future research.

Chapter Two: Literature Review

In attempting to explore the experience of traditional age university students, I found myself amidst a fascinating array of literatures that consider transformative learning, adult development, university education, and university organizational change. Beyond tapping into more areas than I could study in a lifetime, I was surprised at the limited conversation among elements that fit together in my thinking. Four areas of literature that form the frame for this study are reviewed here: challenges facing undergraduate universities; potential and challenge in early adult development and education; discussion on adult transformative learning started by Mezirow; and Freire's work on emancipatory pedagogy. Although these elements each independently contribute to understanding transformative learning in traditional age undergraduate university students, these are usually explored separately, and there has little interaction or crossfertilization among the fields they have produced. I believe this results in a loss of insight on the nature of transformation at this interesting developmental time for undergraduate students. The sections on challenges facing universities and early adult development will provide context for transformation at the undergraduate university level. The sections on Mezirow's model of transformative learning and Freire's liberatory pedagogy will be used to identify some of the limitations in our understanding of important conceptual elements related to transformative learning in the undergraduate university setting and provide a basis for developing a working model for the present study.

Undergraduate University Education

Historically, three functions described for university education have been to train students for future work, assist students in individual life development, and prepare students to take their places as concerned, caring citizens (Spies, 2000). In offering adult and peer models, and exposure to a variety of challenging ideas, the university experience provides greater influence on student beliefs and values and greater opportunity for change than probably any other social institution (Pascarella & Terenzini, 1991). Higher education, with its "intention to serve as a primary site of inquiry, reflection, and cultivation of knowledge on behalf of the wider culture....hold[s] a special place in the story of human development" (Parks, 2000, p. 10). As future graduate students,

professionals, and workers, students will need to have a considerable knowledge base in their field. More importantly, in a time of rapid knowledge accumulation, they will need to think critically about the use of knowledge (Halpern, 1998; Rooney & Hearn, 2000). The problems facing disciplines, professions, organizations, and society are beyond simplistic solutions. In their future roles in a changing organizational and global environment, students will also need to critically reflect on how knowledge is created and used and why particular knowledge and solutions are valued, rather than accepting "facts" as received or applying standard procedures to social problems. Engaging in critically reflective and collaborative discourse is not academic luxury; it is necessary to face the conflicting challenges in a globalized economy (Abeles, 2000). Historically, university aims and activities have attempted to balance student development as individuals and citizens with training for future work. Liberal education offered hope for individual and social transformation (Freire, 1981; Mezirow, 2000) rather than the occupational training for a job (Shor, 1980).

Expectations around the roles of universities have been expanding and changing (Asmar, 2002; Doring, 2002; Inayatullah & Gidley, 2000; Rhoades, 2000; Rolfe, 2002). In Canada, expectations for post secondary education include being "of the highest quality and ... affordable and accessible to Canadians throughout their lives," preparing learners for "good jobs," and graduating "young people who are independent, knowledgeable, versatile, and creative—in other words, able to take up the many challenges and opportunities that the 21st century will present." Canadians also expect postsecondary educational institutions to "serve as pillars of regional economic growth and of global competitiveness" and "make vital contributions to the social and cultural well-being of the country" (Council of Ministers of Education, Canada, 1999, p. 1). These expectations translate into five key functions for post-secondary educational institutions as described by the Council of Ministers of Education, Canada (1999):

- to inspire and enable individuals to develop their capabilities to the highest potential levels throughout their life (for individual growth, self-sufficiency, and fulfillment and for effective contributions to society and the economy)
- to advance, preserve, and disseminate knowledge and understanding
- to serve the learning and knowledge needs of an adaptable, sustainable,

knowledge-based economy at local, regional, and national levels

• to foster the application of knowledge and understanding to the benefit of the economy and society

• to help shape a healthy, democratic, civil society. (p. 4-5)

Universities attempt to fulfill this array of functions amid multiple challenges: the need to be responsive to students with more diverse backgrounds, needs and abilities; reduced funding from government and greater demand to locate other funding sources; higher expectations from future employers of students; and globalization and commodification of university credentials (Manicas, 2000; Neubauer, 2000). Reflecting on the developmental history of universities, Laidler (2002) notes

> What is new about modern universities and has put them in need of renovation is neither the complexity of their offerings nor the potential for conflict among the constituencies they are expected to serve, but the sheer scale of their activities as both creators and purveyors of knowledge of all kinds (p.4).

While an option pursued by universities in the past was expansion, decreased funding does not allow this response to increased activities (Gumport, 2002). Large increases in public spending on formal education worldwide, in hopes of securing economic development following the Second World War (Thomas, 2001), set the stage with both expectations for higher education and structures and policies to support those expectations. Structures, practices, and policies that met university needs in the past no longer appear sufficient as challenges resulting from the promotion of mass higher education and decreased funding occurred.

Abeles (2000) describes the response of universities to the challenges and expectations they face in less than complimentary terms, noting that "...as the world changed, the Universities, in lock-step reaction, dropped their core or essence and entered the highly competitive 'short-term knowledge' marketplace" (p. 85). This analysis, however, does not allow for exploration of the complexity involved. Meyer (1984) provides a different perspective; Meyer notes that universities are loosely coupled systems involving a formal bureaucracy required for functioning in the larger environment—which is not effective in coordinating the complex system, especially in times of uncertainty—and an informal system that performs on a day-to-day basis. Loose

coupling allows both systems to function while buffering each from the other. This system offers the university the best of both worlds: external credibility and internal functioning (Birnbaum, 2000). With the challenges facing universities, the disconnecting buffer to which Meyer (1984) refers has been seriously affected. Boundaries with the environment are challenged by partnerships with companies and sponsorship from corporations. Relationships between academy and industry are expanding, from contractual agreements between corporations and universities, strategic research partnerships, technology transfer, and spin-off companies to commercialization of university intellectual capital through distance or continuing education programs (Anderson, 2001). As well, a perceived need for highly skilled knowledgeable workers has resulted in demands for greater university accountability to industry and for national economic well-being, and a more utilitarian view of higher education (Alexander, 2000). Likewise, Giroux (2001) contends there is a need on the part of university leaders to "reverse [the] tendency to collapse the boundaries between corporate culture and civic culture" (p. 37).

In a keynote address to the Association of Universities and Colleges of Canada, Downey (2003) notes,

> The perceived centrality of universities to the economy is increasing the range and intensity of business transactions for them to an extent never before experienced. Universities have always jealously guarded, at least in theory and rhetoric, their independence from society, believing as a matter of principle that an essential part of their role is the critical evaluation of society, in the interests of society's self-renewal. The danger at present is not that someone is conspiring to deprive us of that role, but rather that the warm embrace of economic functionalism is weakening both our capacity and our will to stand apart. (p. 7)

In keeping with changing government expectations, Giroux (2001) contends that emphasis on hiring university presidents who can connect universities more fully with their corporate environment accommodates "vocationalization and subordination of learning to the dictates of the market" (p. 34). Among university roles have been "providing useful knowledge that allows the community at large to enhance its material well-being, and ...train[ing] young people in productive and marketable skills" (Laidler,

2002, p. 3). That these activities are part of the university education and that they bring increasing connection with the corporate world is not the main issue; rather, it is the shift away from other activities that include "the power of self-definition [and] social responsibility" (Giroux, 2001, p. 36). The resulting rationalization and restructuring to meet market demands is a "macro-trend whereby the dominant legitimating idea of public higher education has changed from higher education as a social institution to higher education as an industry....with a logic of economic rationality at a detriment to the longer-term educational legacies and democratic interests " (Gumport, 2000, p. 67). There has been "a dramatic policy shift away from education for the public good, to education as a private benefit for which the user should pay" (Howitt, 2001, p.148). According to Giroux (2001),

> Missing from much of the corporate discourse on schooling is any analysis of how power works in shaping knowledge, how the teaching of broader social values provides for safeguards against turning citizen skills into simply training skills for the workplace, or how schooling can help students reconcile the seemingly opposing needs of freedom and solidarity in order to forge a new conception of civic courage and democratic public life. (p. 36)

Higher education is considered a crucial element in economic transformation and long-term development; accountability for this task is being left less often to the universities as governments attempt to set agendas (Alexander, 2000). Responding to the challenges facing many higher education institutions—"financial pressure, growth in technology, changing faculty roles, public scrutiny, changing demographics, competing values"—requires comprehensive change, while current change literature in higher education provides strategies that are either too generalized or too idiosyncratic to be useful (Kezar & Eckel, 2002, p. 435). Models to guide the change process are limited (Lueddeke, 1999). To accommodate external partnerships and meet government demands for accountability, universities have looked to models from business (Patterson, 2001) which emphasize "the importance of goals, rationality, and causality" (Birnbaum, 2000). In traditional organizational theory, goal setting seems particularly important during times of limited resources or significant change as it provides a sense of direction and an ability to gauge progress (Patterson, 2001). An assumption is that the stated goals of the

university are supported by its many and diverse constituents and thus can offer the possibility of efficient and effective management. Morgan (1986), however, asks, "Rational, efficient, and effective for whom? Whose goals are being pursued? What interests are being served?" (quoted in Patterson, 2000, p. 160). Measurable goals that universities develop to meet the expectations of external agencies, partners, and funders around "institutional efficiency, consumer satisfaction, job placement, and value for resources" (Alexander, 2000, p. 428), do not necessarily reflect the values or needs of internal stakeholders. Many of the most valued goals are not easily measured (Mintzberg, 1994). Beyond setting rational goals, change requires exploring the values inherent in the goals of stakeholders—the underlying purposes of the goals and the systems that support or disaffirm the underlying purposes. But as Downey (2003) notes, pressing challenges may make it easy for universities to "put aside...questions of *what* and *why* and how *well* we teach" (p. 9, emphasis in original).

Nunan, Rigmor, and McCausland (2000) note that "the forces that are reworking universities are producing a paradigm shift that is transforming the work of teachers and the activities of learners" (p. 85). Changes that "lead universities to become more managerial and to increasingly emphasize accountability" and "to become more market oriented and to focus on revenue generation" also "are transforming faculty's teaching and research" (Rhoades, 2000, p.45). Doring (2002) contends that, with the expectations placed on faculty due to changes in the university environment, "academics are at risk of becoming victims of change rather than agents of change" for university students (p. 146). Instructors who provide an interface between the university's societal functions and students through the experiences of classroom and research learning are pulled in multiple directions as corporate and civic responsibilities vie for attention. Maintaining viability by making teaching more relevant can mean preparing students for the work world, while greater relevance in research can mean commercially viable and valuable research (Rhoades, 2000). In the process, civic relevance can be left behind. Student civic engagement, for example, is often noted as a purpose of higher education, while faculty engagement in the larger community is not seen as essential to the role of faculty members. Civic engagement is not included in faculty development nor is it supported through university reward systems around tenure and promotion, release time, salary

gains or status (Checkoway, 2001). Nunan et al. (2000) contend that universities need to consider the key elements of teaching and learning that they value and wish to develop further and decide how they can support these elements. Current reward systems favour research, competitive research grants, and refereed publication over teaching in undergraduate universities (Fairweather, 2002), although faculty value and derive intrinsic satisfaction from teaching (Leslie, 2002). Favouring what is more easily measurable and prestigious is, perhaps, not surprising considering university competition for ranking, funding, students, and faculty. Competitive, economic approaches, however, are unlikely to support the mandates for quality teaching involving active, collaborative teaching and learning (Fairweather, 2002) or civic engagement.

University administration within a rational model (Downey, 1988; Hoy & Mishkel, 1982) considers the "what" and "how" of education. The process of exploring the deeper underlying reasons for university education (Shor & Freire, 1987) requires "time for learning about, looking at, discussing, struggling with, trying out, constructing, and reconstructing new ways of thinking and teaching" (Darling-Hammond, 1990, p. 240). Considering the purposes of university involves moving away from unreflective reliance on rational models to explore relationships and core values. Poklington and Tupper (2002) call for reflection on the assumptions underlying the perceived need to focus on how universities can best "[prepare] students for their role in the modern economy" (p.162). While they agree that job preparation is one of the tasks of university, they are adamant that the assumption that it is the main task of the university is false. "This is not to deny that students need knowledge and skills necessary for employment and to build careers....[However,] the ends of education have as much to do with human dignity and social justice as with economic self-sufficiency and professional advancement" (Downey, 2003, p. 11) .

Early Adult Development

The Potential

Undergraduate students are at a developmental stage of defining their personal values and questioning and exploring values acquired from parents and other former authorities (Feldman & Newcombe, 1969, cited in Pascarella & Terenzini, 1991, p. 59). Perry (1970) describes this as moving from an authority-bound form of knowing based on

external facts and values through reflection, probing, and testing toward informed commitment to issues. Belenky, Clinchy, Goldberger, and Tarule (1986) describe this as moving from received knowing through subjective and procedural knowing toward connected knowing. Drawing on the work of developmental psychology, Parks considers early adulthood, from age seventeen to thirty, as comprising a distinctive mode of meaning-making involving three tasks: developing critical awareness of how one has composed reality, ongoing dialogue in a self-conscious manner toward truth, and developing the ability to act in just and satisfying ways. In the process there is a move from just "being a life" to realizing one has a life (Parks, 2000, p. 6).

Consideration of the developmental level of learners is important in that educators in higher education tend to assume that traditional age students have abilities and development more consistent with adult learners, creating frustration for both learners and instructors (Davis, 1993). This frustration often results in professors blaming students for lack of ability or motivation (Entwistle, 1984). If instructors wish to move beyond vocational training or memorization of information to explore learning for personal and social change that appears possible at this important developmental stage, they need to provide not only the challenge to develop but also support for students to develop (Davis, 1993). Unfortunately, while there is common acknowledgment of the challenges of becoming a responsive adult in an ever more complex world (Barnett, 1997; Kegan, 1994), young adult years remain largely unrecognized in human development theories (Parks, 2000) and relatively unexplored.

Development of self-awareness, and reassessment and transformation of previously learned values and assumptions are important aspects of the university experience (Feldman & Newcombe, 1969, cited in Pascarella & Terenzini, 1991, p. 59; Parks, 2000; Perry, 1970). Freire (1981) and Mezirow (2000) address challenging assumptions and being subject, rather than the object, of learning in their theories developed with, and for, adult learners. Kegan also addresses these concepts in describing developmental potential in young adults. Extending Piaget's notions of "de-centration" and "re-equilibration," Kegan and associates (Kegan, 1982; 1994; 2000; Kegan, & Lahey, 2001; Souvaine et al., 1990) look beyond Piaget's stages, which describe development from birth through adolescence, to early and later adult intrapersonal,

interpersonal, and cognitive development. When the principles guiding decision-making are no longer sufficient for understanding oneself and acting in the environment, they are "de-centered" and move from being subject (principle of organizing) to object (which is organized). A new equilibrium is reached with the old structure (now object) organized under the new principle of organization (subject) (Kegan, 1994). At higher orders of consciousness this developmental process allows individuals to become conscious of and reflect on their own thinking and feeling (Souvaine et al., 1990).

At the fourth order of the Kegan's five-order model there is "...a move away from defining the self in terms of the perceived expectations of valued others toward a more internally derived sense of purpose or direction" (Souvaine et al., p. 234). This order of consciousness may occur in late adolescence or adulthood. At this fourth order, there a

> shift from 'being made up by' the values and expectations of one's surround (family, friends, community, culture) that get uncritically internalized and with which one becomes identified, toward developing an internal authority that makes choices about these external values and expectations according to one's own self-authored belief system....a shift from a socialized to a self-authoring epistemology. (Kegan, 2000, p. 59)

This is no evolutionary change that occurs to make a current system run more smoothly; this is revolutionary change that examines and shakes core foundations through the construction or reconstruction of meaning (K. Taylor, Marienau, & Fiddler, 2000). The emphasis is on transformational (epistemological) rather than informational (quantity of knowledge or behavioural repertoire) change; individuals are asked to "risk loyalties at the very foundations of their lives" (Kegan, 2000, p. 67).

In supporting development of exploring assumptions and constructing meaning, university education has the potential to be transformational rather than being only informational, (Kegan, 2000). Instructor caution regarding this process of challenging personal assumptions is needed, however. From a review of thirteen dissertation studies with highly educated participants, Kegan (1994) notes that only one-third to one-half of adults appears to reach the fourth order of consciousness at which this level of self-exploration is likely to begin. Kegan (1994) contends that very few traditional age university students, 18-21 years, have fully constructed this fourth order. For university

students at the third order of consciousness, ideas or relationships with others are important in defining who they are. They do not have experience reflecting on their assumptions as these assumptions provide the framework for their identity. The third order of consciousness allows

> one to be socialized into a 'discourse community.'....The third order mind is both capable of, and subject to, socialization. It is not able to reflect critically on that into which it is being socialized. It is responsive to socialization not responsible for it. (Kegan, 1994, p. 289)

Challenging such powerful assumptions that guide daily interactions would involve going against loyalties to important individuals, groups, or ideals that are central to students' understanding of themselves. In light of this socialization, the process of transformation needs to start at the students' level of development and create solid links between their current abilities and understandings to greater self-awareness and social action (Freire, 1981; Kegan, 1994). Transformation for students at this level of development involves a qualitative change in relationship rather than a process of adding more information about a world external to the learner (Marton & Booth, 1997). This is not a banking model (Freire, 1981), but a process of epistemological transformation (Kegan, 1994), "engender[ing] changes and growth not only in the intellectual realm, but also in feelings, behaviors, and perceptions" (K. Taylor et al., 2000, p. 23). Starting at students' level of development means student perspective must be considered. Rather than considering only what needs to be taught, teachers need to consider how learning is occurring from students' point of view, how learners experience situations and their world (Marton & Booth, 1997).

The Challenge

While the potential for development as individuals and citizens seems large, there are indications that university students are not actively engaging in the undergraduate learning process (Donald, 1997, Hu & Kuh, 2001). Consideration of student engagement in higher education appears to be growing as universities face new challenges: student retention problems; more calls for accountability; greater faculty concern about what they see as decreased student interest in classes; and decreased student ability in individual disciplines and in general literacy and

numeracy (Donald, 1997; Gray & Dirkx, 2000; Hu & Kuh, 2001). Hu and Kuh (2001) have analyzed self-report information of over 50,000 students from 123 institutions which took part in the National Survey of Student Engagement. They, along with others (e.g., Donald, 1997; Rolfe, 2002), note that many students are disengaged from the learning process. Hu and Kuh note that 18% of the over 50,000 full-time students completing the survey between 1990 and 1997 were labelled "disengaged," 77% were labelled "typical," and 5% were labelled "engaged" on the basis of quantity and quality of academic effort. Labelling used a composite score of 14 activity scales—a total of 138 items plus estimates of time spent reading, writing, and studying. While trends toward less time spent on homework in the senior year of high school (Astin, 1998) or student expectations around university education as merely a means for gaining credentials needed for work (Rolfe, 2002) may offer some understanding of this finding of less effort expended in university, the magnitude of the problem, rather than the experience of students, has been the focus within universities.

Considering the learning process that occurs for students, rather than the process initiated by instructor or seen from the instructor's perspective, is key in understanding the process of engagement and disengagement (Smith et al., 1998). From their research in higher education, Marton and Booth (1997) note that there tends to be a focus on content (the "what" of learning) and that more emphasis needs to be placed on how students are learning (skills used and the process of learning). Because instructor perspective, rather than student perspective, is more prevalent in the university setting and there is an emphasis is on a "semantic view of knowledge" (Fensham & Marton, 1991, cited in Marton & Booth, 1997, p. 174), students are at risk in university of becoming objects of de-contextualized knowledge, rather than subjects who are able to read "the word" and "the world" (Freire, 1981). The dichotomy between the "word-world" and the "real-world" (Shor & Freire, 1987, p. 136) can result in a "bookish academic curriculum or a dehumanizing vocational program....where conceptual analysis does not make contact with the real world of students" leading to "[s]tudents withdraw[ing] in passive compliance or offensive sabotage in response to a disempowering education" (Shor & Freire, 1987, p. 137). Learning needs to connect with the lived experience and concerns that students bring and offer hope for change (Freire, 1981).

According to Marton and Booth (1997),

> It appears that learning that has lasting effects is always about *reality*, or about something that is experienced as *real* in some sense. The problem, however, is that although the social practice of schooling is experienced as real, it is far from always obvious that the content of schooling is experienced as being about the "real" world—the cultural, social, physical world in which the learner lives. (p. 156, emphasis in original)

For engagement in learning to progress from class attendance or memorization to "changing as a person" (Beaty, Dall'Alba, & Marton, 1989, cited in Kember & Gow, 1994, p. 58) or changing the person-world relationship (Marton & Booth, 1997), a deeper process of engagement, in which personal perspectives and assumptions are explored, is needed. Exploring assumptions may also provide a link from engagement to student empowerment at the undergraduate level, as promoted by Freire (Escobar et al., 1994), hooks (1994), Shor (Freire & Shor, 1987), and Cross (1998).

The timing of undergraduate education at this apparently important developmental phase calls for further informed exploration of how undergraduate students engage in development as responsive and responsible adult learners. The process of transformation needs to start at students' level of development (Freire, 1981) and create solid bridges (Kegan, 1994) to connect their current abilities and understandings to greater self-awareness and social action. In linking development, in terms of epistemological change, to meaning construction, constructive-developmental theories, such as Kegan's (Kegan, 1982; 1994; 2000; Kegan, & Lahey, 2001; Souvaine et al., 1990), "offer educators a way to think about teaching and learning" (K. Taylor et al., 2000, p. 22). Two theories that highlight engagement in both construction of meaning and learner development are Mezirow's (2000) and Freire's (1981).

> These theories share certain premises about learning: that it is a process *of resolving contradictions in dialectical fashion,* in this way raising awareness of new possibilities and *multiple perspectives;* that it is also a process of moving toward more *complex ways of viewing* oneself and one's situation, potentially leading people to take a more *active responsibility* for the world in which they live; that *discourse is crucial* to the alteration of perspectives that is learning; and

> that such *transformed perspectives are developmental* in the lives of adults. (K. Taylor, et al., 2000, p. 22, emphasis in original)

Both Mezirow's and Freire's models are concerned with adult education in the British use of the concept of supporting development of responsible adult attitudes and behaviour (Thomas, 2001). For Mezirow (2000) learning that is transformative moves learners away from acting on uncritically acquired "purposes, values, feelings, and meanings" to become "socially responsible, clear thinking decision makers" (p. 8). Critical pedagogy as influenced by Paulo Freire and practised in North America (e.g., hooks, 1984: Shor, 1980; Shor & Freire, 1987) views education for democracy and a critically literate citizenry as the answer to the question of engagement in learning for what purpose. The ways in which different students approach the task of serving "humanity through the development of their minds and commitment" (Cross, 1998, p. 33) will vary with their skills, interests, abilities and resources. This does not negate the need to consider whether learning activities and interactions "support social continuity or foster social change and improvement" (Cross, 1998, p. 45). While acknowledging Freire's (1981) warning on the difference between social action and education, perhaps the undergraduate university is a potential site for helping students to engage in the process to develop into critically reflective adult learners more fully prepared for not only a career but also ongoing personal development and for undertaking social action within their careers and personal lives. Exploring learners' development and transformation during undergraduate education may also provide a way of understanding the call by Escobar et al. (1994) for universities to re-invent power in education.

Mezirow's Model of Transformative Learning

Mezirow's model of adult transformative learning has developed over the past two decades. It has appeal as a starting point for research on transformative learning. Clark (1993) contends it is "the most extensive theoretical conceptualization of transformational learning" (p. 49). Likewise, Merriam and Cafferella (1999) note that "[a]lthough others have expanded components of the theory, focused on the process, or considered applications to practice, Mezirow has evolved a fully developed theory of transformative learning" (p. 319). It has become a reference point in adult education and

generated discussion and empirical research (Merriam, 1993; E. Taylor, 2000). According to Mezirow (2000),

> Transformative Theory's focus is on how we learn to negotiate and act on our own purposes, values, feelings, and meanings rather than those we have uncritically assimilated from others—to gain greater control over our lives as socially responsible, clear-thinking decision makers. (p. 20)

It is this learning process of evaluating our assumptions and negotiating and acting on assumptions that we critically develop, rather than uncritically accept, that is the interest of this study. Mezirow's foundational work with women returning to higher education and the conversations that it has generated can provide a backbone for further research and development for use in the university setting.

While variation occurs, Mezirow (2000, p. 22) notes that the following phases are often seen:

1. A disorienting dilemma
2. Self-examination involving feelings of anger, guilt, fear or shame
3. A critical assessment of assumptions
4. Recognition that one's distress and the transformation process are shared
5. Exploration of options for new roles, relationships and action
6. Planning a course of action
7. Acquiring knowledge and skills for implementing the plans
8. Trying out the new roles in a provisional manner
9. Gaining confidence and competence in the new roles and relationships
10. Re-integration into one's life in keeping with one's new perspective.

The emphasis in Mezirow's model is on transformational (epistemological) rather than informational (quantity of knowledge or behavioural repertoire) change (Kegan, 2000).

The starting point in Mezirow's model is a disorienting dilemma. It involves incongruity when experiences are not in keeping with expectations, values or assumptions (Cranton, 1998). The trigger event prompts feelings of inner discomfort and perplexity (Brookfield, 1987). The description of this dissonance is in keeping with the original work on dissonance by Festinger; in the context of psychotherapy, tapping into such dissonance is an important step in facilitating meaningful change in behaviour and

core self-concept (Safran & Greenberg, 1991). During the transformation process, the response to this disorienting dilemma involves three parts: critical reflection on assumptions involved; discourse to corroborate the insight—beliefs, intentions, values, and feelings—generated during critical reflection; and action on the basis of the insight (Mezirow, 1997, 1998). This is not just a process of thinking or talking about an issue, it involves "the disposition and the emotional stamina to believe that one has the will and the way to reach his or her reflectively redefined goals" (Mezirow, 1997, p. 197).

The iterative cycle of reflection, dialogue, and action seen in Mezirow's middle phases of learning is similar to action research first described by Lewin (1948) and is labelled as action research in Foley's (1999) work on informal learning in community settings. First, the issue is reflected on as an object of interest, rather than as a defining aspect of one's being. This separation of self and issue allows more critical reflection than would otherwise occur. Then the individual tries new approaches to address the issue and reflects on their outcomes, gaining confidence in approaches that are effective. This "experimental" approach is also found in cognitive-behavioural psychotherapy as demonstrated in Beck's (1975) classical work, and in organizational literature (e.g., Argyris, 1993). The outcome of this process is a qualitative change in worldview (Hobson & Welbourne, 1998) which is re-integrated into one's daily thoughts and actions.

In reviewing what has been written on the topic of transformative learning, E. Taylor (2000) notes a divide between theory and research. While published articles have focused on critiquing the theory, unpublished empirical studies, such as doctoral dissertations, have explored different aspects of the theory. A number of dissertations have been completed in a variety of settings using Mezirow's model. In the higher education setting, studies based on some aspect of Mezirow's model have focused on older adult learners, learners at the graduate level, or those in preservice teaching courses (e.g., Brewer, 1998; Day, 1999; Herbers, 1998; Kaminsky 1997), rather than on traditional age undergraduate university students. Analysis of research completed reveals that Mezirow's model by itself has not been sufficient to answer "many of the questions and concerns raised about transformative learning" (E. Taylor, 2000, p. 317). Much of the research around Mezirow's model has focused on critical reflection, with other parts of

the model, as well as the influences around initiation of the process of transformation, relatively unexplored. E. Taylor (1998) notes a number of concerns raised in discussions of Mezirow's model. I review five interrelated issues raised about Mezirow's model that have relevance for this study: individual versus social change, inattention to power relationships, a decontextualized view of learning, inattention to emotion, and focussing on the "endpoint of development" rather than on beginning factors (Belenky & Stanton, 2000, p. 72).

Individual and Social Change

Working within an historical context marked by the "atheoretical character of North American adult education research" (Collard & Law, 1989, p. 105), Mezirow drew on a variety of perspectives in developing his model including aspects of Habermas' emancipatory framework. E. Taylor (1998) sees Mezirow's use of Habermas' framework as problematic because Mezirow has not always been explicit about the role of individual change in creating social change. Clark (1993) also identifies this divide between individual and social change by comparing Mezirow's and Freire's goals; he notes that "while Mezirow's concept of transformation is directed toward personal development, Freire's idea of transformational learning has the ultimate goal of social change" (p. 48). Some of Mezirow's earlier work in 1975 refers to a personal transformation process (Cranton, 1994). Mezirow's ten phases of learning for transformation could imply a solitary activity that need not involve significant social interaction or consideration of social context or social change in the process of reflection (Collard & Law, 1989; E. Taylor, 1998). In further development of Mezirow's theory, there has been less emphasis on Habermas' emancipatory lens, although more emphasis on the role of social change. Although there is critique of Mezirow's theory for not more fully incorporating action into the model, Mezirow (1997) describes action as one of the three phases of transformative learning: "critical reflection on one's assumptions, discourse to validate the critically reflective insight, and action" (p. 60).

In responding to Collard and Law's (1989) critique on the lack of social action in his work, Mezirow notes that while social action is a crucial goal of adult education, it is not the only one. Further he contends that for an educator to direct students toward particular political action would be indoctrination; learners need to decide on social

action for themselves (Cranton, 1994). A similar view is also espoused by Freire: "...one must never attempt to (deceivingly or not) impose one's choices on [learners]" (Freire, 1999, p. 86). Hart (1990) acknowledges that the role that educators play and the forms of viable or appropriate action vary with "social, historical, and institutional circumstances" (p. 137), but describes Mezirow's stance as "setting up a false dichotomy between 'indoctrination' (or an educator's intention 'to effect a specific political action') and the educator's presumably less dogmatic role of 'fostering critical reflection and action'" (p. 136). In so doing, Hart claims that Mezirow "undialectically severs [the] tension" between individual and social interaction in which education exists (p. 136).

Tennant (1993) counters Hart's (1990) claim that Mezirow's theory should be directly political, describing Mezirow's emphasis as being "at the *intersection* of the individual and social. His concern is with the social within the individual, especially its capacity to generate dysfunctional meaning perspectives which distort or limit our understanding of experience" (p. 36, emphasis in original). In settings such as universities, where values related to individual and social concerns are often explored by students, the intersection may be similar to Freire's (1998) notion of praxis, involving reflection and social action, theory and practice. Newman (1994), however, contends that while radical public action is an integral part of Freire's praxis around shared oppression, it is optional, and likely a separate step, for the individual in Mezirow's model of transformative learning. Mezirow (1994) is adamant about the role of educators: "In my view, what we cannot do as educators is to act as advocates, organizers, or leaders in effecting collective social change. I have thoughtful colleagues who disagree" (p. 231).

Power

Mezirow is critiqued by Hart (1990) for not specifically addressing the issue of power in his theory, in keeping with his use of Habermas' work. Although Cranton (1994) views awareness of power as an underlying element of the theory, Hart (1990) argues that Mezirow "does not place the issue of power and its relationships of dominance at the center" (p. 127). This is in keeping with Hart's (1990) contention that "not only are individual as well as social dimensions of power intricately interrelated, they also enter the educational situation in forms of ideological values and beliefs, power-bound forms of interaction, and intrapsychic distortions affecting learners and educators

alike" (p. 136). Brookfield (2000) concurs; critical reflection in his view involves two aspects of ideology critique: exploring power that influences "so many adult educational processes and interactions" and questioning "assumptions and practices that seem to make our lives easier but that actually end up working against our own best long-term interests" (p. 130-131). Thus, power, for Brookfield and Hart, moves from awareness to a focus of active exploration.

> [E]ducators need to understand the social or nonindividual causes of the distortions they are attempting to correct, not only because they want to be successful, and because as members of society they are drawn into the very same force field of power as their students, but also because power enters the interactional structure of the educational situation itself. (Hart, 1990, p. 126)

Researchers at an international conference on transformative learning "stressed the importance of greater recognition of the ubiquity of power and influence in transformative learning and adult education" leading Wiessner and Mezirow (2000) to conclude that this "somewhat neglected dimension needs to be incorporated more prominently into the theory" (p. 347).

Context

In keeping with E. Taylor's (1998) critique of decontextualization, Clark and Wilson (1991) note the lack of attention to cultural context in Mezirow's work through the uncritical incorporation of "the hegemonic American values of individualism, rationality, and autonomy" (p. 80) and separation of context which provides meaning to experience through over-reliance on critical reflection. Referring to Kuhn's insight, Clark and Wilson (1991) note that "it is the interpretation we bring to argument and observation that gives meaning, not the event itself being interpreted" (p. 87). Because of

> the fallibility of human knowers and the way our knowing and acting in the world depend upon our understanding of the world which in turn reflects the historical community in which we exist....reason cannot exist independently of these contextual contingencies, for without them there would be no experience. This leads us to adopt a view of rationality as context-dependent, historically situated, and value-oriented. (Clark & Wilson, 1991, p. 89)

Tennant (1993) challenges Clark and Wilson's (1991) critique of decontextualization, noting that such a view does not take into account Mezirow's discussion of the individual in a dialectical relationship with society: "Quite the contrary, the whole project of perspective transformation is based on the notion of an underdeveloped or distorted self which is prey to its own uncritically assimilated social and cultural norms, assumptions, premises, language codes, and so on" (p.36). It is through challenging these socially constructed assumptions that social change is possible (Mezirow, 2000). Tennant concedes that in one sense Mezirow emphasizes the individual in the dialectic as Clark and Wilson (1991) charge, but notes that Mezirow advocates analysis of both individual and social sides of the dialectic; "he shifts the onus for social analysis onto the learner, so that it is grounded in the learner's experience, rather than being a decontextualized theory of society generated by, and for, academe" (p. 37).

Newman (1994) argues that, unlike other theorists and practitioners who promote reflection,

> *Mezirow has recontextualized the act of reflection.* In perspective transformation we engage in a reflection to critically examine our culture, to understand how we interact with our culture, and examine how that interaction influences the way we think, feel and act. (p. 239, emphasis in original)

While admitting to cultural insensitivity in his original study, Mezirow (1991) insists that "cultural context is literally embodied and gives meaning to the symbolic models and meaning perspectives central to my argument. Both are learned in a social context and are, for the most part, uncritically assimilated" (p. 190). In more recent work, Mezirow (1997, 1998, 2000) has been explicit about discussing the impact of biographical, historical, and cultural context and describes transformation as "reformulating reified structures of meaning by reconstructing dominant narratives" (Mezirow, 2000, p. 19).

Although the criticism that Mezirow's model presents a culturally decontextualized view of learning may be based, to a fair extent, on early formulation of the model (E. Taylor, 1998), individual and social aspects of transformative learning are not clearly integrated in Mezirow's more recent work. While Mezirow (2000) contends that "transformative learning has both individual and social dimensions and implications" (p.8), he creates a dichotomy between individual and social context in describing

transformative learning as occurring through objective reframing (critical reflection on other's assumptions) or subjective reframing (critical reflection on our own assumptions). Brookfield (2000) disagrees with Mezirow's distinction between reflection on external cultural systems such as educational or political systems and reflection on our "private interpersonal domains" (p. 130). The interaction of emotion and cognition and the pervasive nature of ideologies within us make it difficult to critically reflect on individual and social values separately. Brookfield (2000) does not see separation as appropriate—"because the norms, value judgments, and self-images we play with in the process of making moral decisions are socially learned, anytime we critically examine these we are doing a kind of ideology critique" (p. 135). Integration of the individual and their context is more clearly presented in Brookfield's description than in Mezirow's.

Emotion and Cognition

The need for explicit linking of individual and social context raises a related issue of the lack of integration of emotion and cognition in Mezirow's model of transformation. There appears to have been an over-reliance on rationality (Clark & Wilson, 1991; E. Taylor, 2000) to the neglect of affective elements in the social context and as experienced by the individual. Research studies have found, incidentally, that emotion was important in the process of transformation, acting as a trigger, a barrier to be dealt with before critical reflection can begin, or a facilitator of deeper reflection (Neuman, 1996; E. Taylor, 2000). Mezirow's recent writings make more reference to emotion in the process of transformation (Mezirow, 2000). "However, Mezirow as well as most other studies looked at these two concepts (affective learning and critical reflection) separately and did not give enough attention to their interrelationship in the transformative process" (E. Taylor, 2000, p. 303). For example, Neuman (1996) explores the relationship between affective learning and critical reflection in a study of nine adults in a leadership development program aimed at supporting transformative learning. He gives examples of the ways in which processing of emotions provokes and enables critical reflection leading to affective outcomes, such as "feelings of empowerment, self-esteem, and positive self-regard...greater appreciation for differences, tolerance for ambiguity and feelings of courage, self-trust and inner strength" (p. 463). While this acknowledges the importance of both cognitive and emotional aspects of transformation,

the discussion is about two separate but related processes. International researchers on transformative learning note that Mezirow's theory does not adequately address emotion and further research is needed (Wiessner and Mezirow, 2000) on this important aspect that links individual with context. It is notable that critiques around lack of integration of emotion into learning models are not unique to Mezirow's work. While emotion may be the target of education, it is "under-theorized [in] philosophy and education studies" (Boler, 1997, p. 204). "[T]he strong motivational and emotional underside of critique...still awaits critical illumination by educational theory" (Hart, 1990, p. 136).

Endpoint Focus

Belenky and Stanton (2000) critique Mezirow's focus on the "endpoint of development" (p.72); with this focus educators are likely to be unaware of students' limited ability in critiquing their own and others' underlying assumptions or might overlook students' lived experiences. Mezirow (2000) describes preconditions for participating in discourse leading to transformative learning: maturity, education, safety, health, economic security, and emotional intelligence. Because these criteria are unlikely to be met by many learners in many learning situations, only select groups of learners would be able to engage in transformative learning processes if Mezirow's criteria are valid. As well, because we construct meaning, it is "highly subjective, personal, and changeable" (Merriam & Cafferella, 1999, p. 322). In focussing on the endpoint, rather than the starting point, of transformative learning, experience and perspectives that students bring to the class and changes in meaning construction occurring in the class are likely to be undervalued. This highlights the need to be aware of students' experiences and abilities within a process of ongoing meaning making, rather than focussing on an endpoint or facilitating discourse in search of a final answer.

In focussing on the endpoint, Mezirow does not expand on the social learning aspects of interactions at the very beginning of his transformation model around the disorienting dilemma. This implies that transformative learning is starting with the individual, albeit within supportive conditions, rather than in the social interaction that might facilitate transformative learning. Exploring social interactions and factors that might facilitate the beginning of reflection on self and social assumptions may offer fuller understanding of both the process and substance of transformative learning. In reviewing

research on transformative learning, E. Taylor (2000) notes the most common research finding was emphasis on the importance of relationships, "contradicting the autonomous and formal nature of transformative learning as we presently understand it, and instead reveal[ing] a learning process that is much more dependent on the creation of support, trust, and friendship with others" (p. 308). The social process and interactions between individual learners and the learning context that support the beginning of transformative learning have yet to be explored. Little is currently known about how relationships play a role in transformative learning; relationship elements "have been discovered more as outcome of transformative learning, with little understanding of how they can be initiated safely in the classroom setting" (E. Taylor, 2000, p. 308).

Freire's Liberatory Pedagogy

Like Mezirow's model, Freire's work has stimulated a great deal of conversation over many years. Friere's work adds to our understanding of issues salient to university education and to aspects of Mezirow's model. Freire's concepts originally developed during his involvement in a community-based adult literacy project in Brazil around the issue of class and unjust distribution of material resources (Escobar et al., 1994). In defining oppression as "hinder[ing] pursuit of self-affirmation as a responsible person" (Freire, 1981, p. 40), Freire opens up the possibility for reflecting on and applying his concepts across a wide range of settings and addressing issues other than class, as in his original work. "His powerful writings have inspired educators and social activists alike" (Weiler, 2001, p. 84). hooks, for example, used a Freirian perspective of pedagogy for liberation in the context of race and gender because she felt he spoke to her in ways that feminist writers at the time did not (hooks, 1994). The appeal to social activists is due, in part, to Freire's insistence on the political nature of education as a result of intellectual and emotional abilities that make individuals "capable of remaking themselves as they remake the world" (Freire, 1999, p. 85). "The exercise of freedom leads us to the need to make choices, and this need leads us to the impossibility of being neutral" (Freire, 1999, p. 86).

While Freire said little specifically about the undergraduate experience and warned about transferring his concepts and practices uncritically to new settings, he did encourage reinvention of his ideas by Western educators "in addressing the themes and

tasks that characterize their own struggles" (Roberts, 2000). Freire's approach to education with liberation as its focus has had limited application to formal education in North America (Merriam & Cafferella, 1999), although many of the principles have been invoked. Freire's work and discussions of his work deserve attention as they complement Mezirow's concepts of transformative learning and hold insights in regard to undergraduate university. Freire's warning is valid, however; implementing concepts or practices from other settings and contexts requires critical reflection on both the principles of the practice and the context of the new setting.

Freire (1981) considers liberation to be praxis: "action and reflection...upon [the] world in order to transform it" (p. 66). In this approach "the learner become[s] the subject of his/her own education rather than the object of the system's educational agenda" (Aronowitz, 1993, p. 9). This moves education away from a banking model in which teachers make deposits into the consciousness of students, toward awareness of both the limitations of freedom and the potential to free oneself, to the "idea of self-liberation, proposing a pedagogy whose task is to unlock the intrinsic humanity of the oppressed" (Aronowitz, 1993, p. 13). The emphasis is on "doing with" rather than "to" or "for" the learner (Freire, 1981, p. 33).

> [In] the school system devoted to banking pedagogy, students internalize values and habits which sabotage their critical thought. They develop as alienated and anti-intellectual adults after years in mass education and mass culture, where they were treated as objects filled with official ideas and supervised by authorities. (Shor, 1993, p. 29)

Instead of a banking model, Freire proposes a model that is liberatory. While "[the] former attempts to maintain the *submersion* of consciousness; the latter strives for the *emergence* of consciousness and *critical intervention* in reality" (Freire, 1981, p. 68, emphasis in original). As noted by Brookfield in regard to transformative learning, the call is for "revolutionary", rather than evolutionary, change (Brookfield, 2000, p. 143). The aim is not adaptation to the status quo as if the problem involved lack of integration by some individuals into society.

> The truth is, however, that the oppressed are not 'marginal', are not the men living 'outside' society. They have always been 'inside'—inside the structure that made

> them 'beings for others'. The solution is not to 'integrate' them into the structure of oppression but to transform the structure so they can become 'beings for themselves.' (Freire, 1981, p. 61)

Developing the ability to self-liberate is not an individual, time-limited act in Freire's view; the task given to the oppressed "to liberate themselves and their oppressors as well" (Freire, 1981, p. 28) requires seeking longer-term change in life as individuals, members of social groups, and maintainers of societal structures which scaffold liberating or oppressive relations. To facilitate this process, Freire contends that intellectuals "must share the power over knowledge, share the power to shape the future" (Aronowitz, 1993, p. 21). The important role of education is also emphasized by Shor (1993) "because it is one place where individuals and society are constructed. Because human beings and their society are developed in one direction or another through education, the learning process cannot avoid being political" (p. 28). Freire is not, however, prescribing a format for education and he warns against taking his work and translating it as a mere method in other settings (McLaren and Leonard, 1993). Educational action without reflection is not his goal. Nor is reflection on social conditions alone sufficient; Freire (1981) notes that without action, reflection on social conditions can result in mere dogma.

Unlike Mezirow, who is critiqued for focussing on the individual, Freire's work is discussed more in terms of his emphasis on the social aspect of learning and change. Like Mezirow, Freire is critiqued on several interrelated issues: a limited view of power, insufficient consideration of context, limited attention to emotion, and focus on the endpoint of development.

Individual and Social Change

Freire's emphasis on social change is in keeping with the community action focus of his work. This does not preclude the individual as the starting point for social action. "In fact, Freire's pedagogy seems crucially directed to breaking the cycle of psychological oppression by engaging students in confronting their own lives" (Aronowitz, 1993, p. 14). Like Mezirow, "there are obviously many ways to read Freire and there are many Freires to call forth from his texts" (Weiler, 2001, p. 73). Although there is more emphasis by Freire than Mezirow on social action as the outcome of transformative education, it is important not to lose sight of the individual transformation

occurring in Freire's work. Freire's (1981) call for the oppressed to become liberators of themselves and their oppressors involves a substantial change in self-concept of the individuals involved; he is not calling for social change in isolation from this significant internal, individual change. "[T]ransformational learning *shapes* people; they are different afterward" (Clark, 1993, p. 47, emphasis in original). It is not just the social environment that changes in the process even when social change is the intended goal (Foley, 1999). For Freire, critical awareness on the part of individual learners is a significant first step toward social change (Roberts, 2000).

Power

Although Freire speaks of power and social change along with individual change, some question his limited focus on class struggle to the exclusion of gender and racial issues. Weiler (2001) critiques Freire for not including the experiences of women is his work. In later books, Freire no longer refers only to male learners; he also discusses the need to fight sexist discrimination and notes the importance of multiple experiences of oppression. Weiler (2001) contends that he still locates oppression in class and describes the most important emancipatory role for women as being supporters of the larger struggle along class lines, rather than focussing on gender issues. Beyond the issue of inclusion of gender, Weiler contends that in presenting an inspiring appeal, Freire puts forward a picture of a struggle between good and evil, often with himself as "heroic teacher" (Weiler, 2001, p. 74). In the struggle against an oppressive social power, there is danger of a shift of power from an identified oppressor to the teacher. This would undercut the stated intent of Freire's work of doing with rather than for or to the learner and demonstrate a "lack of confidence in the people's ability to think, to want, and to know" (Freire, 1981, p. 46).

Context

Freire is also critiqued for not considering context sufficiently. By seeing the oppressed as "a general category without an acknowledgment of the complexities and differences among real people," Freire gives the impression of the "liberatory teacher as 'transparent' without taking positioning due to race or gender into account" (Weiler, 2001, p. 75). Because the "complexities of overlapping oppressions" are not considered (Weiler, 2001, p. 83), difficulty arises in applying the work of Freire to classroom

settings: "the conflicts hidden in Freirian abstractions are called forth", resulting in a turbulent rather than peaceful learning environment (Weiler, 2001, p. 84).

This turbulence has been described by Ellsworth (1989) in her attempt to implement critical pedagogy in the university setting around issues of racism on campus. "Acting as if our classroom were a safe space in which democratic dialogue was possible and happening did not make it so" (Ellsworth, 1989, p. 315). Although there was an articulated political agenda for the course taught by a feminist instructor, end-of-course reflection by students indicated that there had been reproduction of dominant relations in the class. Ellsworth uses this experience to argue that underlying critical pedagogy is a rationalist assumption that what was formerly unknown can be made to make sense through dialogue in an open, safe environment. When applying this premise to practice, knowledges that are "contradictory, partial, and irreducible", and a lack of developed trust and community in most classrooms prevent realizing student empowerment proposed in critical pedagogies (Ellsworth, 1989, p. 321).

Emotion and Cognition

Criticism of Freire's work for focussing on rational discourse as a way of exploring social problems and considering community solutions is similar to that levelled against Mezirow's transformation theory. Emotions are not sufficiently acknowledged or intentionally integrated into the process (Boler, 1997; Fisher, 1987). For Ellsworth's class this made emotion a "present-absence" (Boler, 1999, p. 19) with feelings of fear, vulnerability, resentment, guilt, and confusion not fully addressed (Ellsworth, 1989, p. 316). Rather than describing the interconnection between emotion and cognition, Freire describes emotions as having a motivational role only until rational understanding is developed; some emotions, for example mutual trust, are necessary for critical dialogue to ensue, but emotions are not associated with critical consciousness (Sherman, 1980, cited in Boler, 1997). This is in contrast to feminist philosophies which challenge the division between cognition and emotion, describe emotion as collaboratively, rather than privately, constructed, and consider emotions as displayed in gender-related patterns due to culture, rather than being gender specific (Boler, 1997).

Endpoint Focus

Like Mezirow, Freire can also be critiqued for focussing on the endpoint of development. Although Freire speaks of starting where the learner is and developing praxis, attempting to apply these concepts in a university setting assumes both a supportive environment and ability that learners may not have (Fisher, 1987). Freire used dialogue in his literacy work in Brazil involving adult learners and a specific and utopian aim for social change. Dialogue is also promoted in critical pedagogy in other settings.

> Following Freire's lead, it becomes the task of critical pedagogy to invite students to engage the discursive and conceptual means through which they produce the ideological dimensions of their experiences, deep memories, psychological blockages, and passionate investments in everyday life and relate these to the material and symbolic structures of power that operate in the larger context of social life. (McLaren & Tadeu da Silva, 1993, p. 69)

In an undergraduate setting in North America with normative age students, the required dialogue abilities and motivation for engaging in the process are likely not developed. Being able to speak on an issue of emotional significance requires development in learners of the ability to reflect on the "contradictory intersection of voices constituted by gender, race, class, ability, ethnicity, sexual orientation or ideology" (Ellsworth, 1989, p. 312), not just the opportunity and courage to speak in "the essentially paternalistic project of traditional education" (Ellsworth, 1989, p. 307).

If transformative learning is to occur in undergraduate education, it is imperative to begin where students are and at the point at which critical pedagogy can "open up new institutional spaces" (Giroux, 1999, p. 110-111) for students' development as cultural producers. Embracing the political nature of education, without imposing their own views or agendas on students (Freire, 1999, p. 86) requires educators to "provide the conditions for individuals to acquire a language that will enable them to reflect upon and shape their own experience and in certain instances transform such experiences in the interest of a larger project of social responsibility" (McLaren & Tadeu da Silva, 1993, p. 49). It also involves educators' ability and willingness to "share the power" (Aronowitz, 1993, p. 21), and awareness of students' experiences within and beyond the classroom, "as well as their levels of cognitive and affective development" (Shor, 1993, p. 34).

Chapter Three: Developing a Conceptual Framework

Integration of Transformative Learning Literature

There are similarities in Mezirow's and Freire's writings on transformative learning. That is, perhaps, not surprising; they were writing at similar historical times and Mezirow notes that Freire influenced his thinking (Merriam & Cafferella, 1999). Both Mezirow (Newman, 1994) and Freire (Weiler, 1994) are sufficiently broad that they appeal to a wide audience and can speak to many readers. Merriam and Cafferella (1999) note a number of common emphases in the work of Mezirow and Freire:

> the importance of inner meaning and mental constructs in defining the nature of learning in adult life,...change brought about by critical reflection on the origin and nature of our submerged assumptions, biases, beliefs, and values...[with] tentative new understandings and new meanings...tested out in discourse with others....[and the need to act upon] our new meanings, perspectives, or consciousness. (p. 326)

Likewise, Clark (1993) describes common features in their work, noting that both Mezirow and Freire maintain a humanist belief about the potential for humans to link reflection and action, and gain control over their experiences, along with a constructivist perspective involving critical reflection through rational thought and dialogue, and democratic views. Mezirow and Freire describe the learning process and in so doing expand understanding of adult education:

> [Through] the work of Mezirow and Freire....an understanding of learning as a change in consciousness carries theory to a new level. In theories focused on either the life situations or adult characteristics of learners, we are dealing with *descriptions* of learners, their situations, or both, but the actual *process* of learning is not addressed. We see this process dealt directly with in transformational learning. (Clark, 1993, p. 53, emphasis in original)

Freire and Mezirow move the focus away from the instructor to the learners' experiences. Through dialogue with other learners, the process of reflection is made public (Clark, 1993), allowing greater awareness of and involvement in the social process of learning and greater understanding of the process individual learners are experiencing.

While similar in a number of ways, Mezirow (1994) points out a significant difference between his work and Freire's:

> It is important to understand the difference between a learning theory and an educational philosophy. Freire does not attempt to develop a comprehensive adult learning theory. His sole focus is on using education to effect social change. The concept of conscientization and level of consciousness (Freire, 1970) are as close as he came to doing this, but he abandoned this line of thought in the '70s in favor of developing his ideas about education. A learning theory attempts to describe an abstract, idealized model, the elements and dynamics of which may or may not be applied in a variety of social and educational settings. One may become critically reflective in or out of a group or critical reflectivity can be understood as culturally aberrant. Transformations in learning may occur in or out of a social action context....Race, gender, and class often determine who participates in discourse. (pp. 231-232)

Freire's (1981) philosophy of education focuses on collective action for initiating social change in a setting of shared oppression. Mezirow's theory of adult education does not, however, consider collective action against oppression to always be the form of action taken.

It is important to keep in mind that Mezirow was attempting to develop a general theory of adult learning in an atheoretical climate (Collard & Law, 1989). What his work has offered is a starting point, based on research and developed in response to discussions and critiques of his work, for considering similar settings and extending his work and modifying it for other settings (Brookfield, 2000). A general theory is a framework only; it does not offer explanatory power across settings without consideration of the context involved. By its nature a general theory will not include contexts, concerns or issues in new settings or different socio-historical times. The onus is on those using the theory to bring forward the relevant contextual concerns. Freire's work was in a specific context; he developed a philosophy of education for that context which calls others to collective action. He also was aware of the dangers in uncritically applying his work to other settings; he takes pains to warn against considering his work as transferable teaching methods or unquestioned principles (McLaren & Leonard, 1993).

While Mezirow starts with the individual and the change possible through connections among current context and assumptions the individual brings from past social interactions, Freire sets his work within the context of shared oppression and the need for collective social action (Merriam & Cafferella, 1999). Mezirow has been critiqued for not focussing more fully on the social, shared experience; Freire has been faulted for not sufficiently focussing on individual perspectives within the social group (Weiler, 1994). On this issue, these two approaches offer counter balance to each other in thinking further about the process of transformative learning. While Mezirow and Freire are not discussing completely distinct experiences, the contrast between the focus that each uses highlights the influence of the aim on the process. One is an individual intervention which opens opportunities for collective or societal change; the other is a community intervention around a specific goal of liberation through societal change, with resulting individual change in the process.

Mezirow's relative focus on personal, rather than social, change is noted as a deficit (Clark, 1993); it may also be seen as an extension of transformative concepts developed by Freire. It appears that Mezirow explored the possibility of transformation in North American settings outside the consciousness-raising context of community education and development. In critiquing the lack of "the uniquely adult function of critical reflectivity" in the literature on adult learning, and introducing this element into his model, Mezirow brought a new perspective to adult learning theory (Mezirow, 1985, p. 25). By introducing the concept of transformation to formal education, Mezirow provides a vision of education in keeping with the multiple purposes of higher education, one that moves beyond individual training for employment to incorporate social awareness and development as democratic citizens. While this vision does not endorse collective social action as the main aim, it does provide a view of education in keeping with Horton and Freire's (1990) warning that education is not the same as social action. It is also in keeping with Shor and Freire (1987) on the limits of education in relation to political action: "...to know that education is not the lever, not to expect it to make the great social transformation" (p. 130).

The breadth of Mezirow's work has permitted those with different perspectives to share in the conversation and find some confirmation of their perspective. This breadth

has also lead to different interpretations of his work. Tennant (1993) contends that divergent interpretations arise because Mezirow's theory "is directed at the intersection of the individual and the social" (p.36). This intersection is not well understood. Mezirow's theory has not provided a sufficiently defined frame such that researchers were, necessarily, exploring or discussing the same experience when talking about transformation. In summarizing his review of available research on transformative learning, E. Taylor (2000) notes that "[m]uch of the present research is obtuse, overly academic, difficult to access, and only now and then has direct implications for classroom teaching" (p. 321). In spite of the focus in research on the outcomes of transformative learning, "it is still unclear what warrants a perspective transformation" (E. Taylor, 2000, p. 292); "research reveals very individual responses to a change in perspective" (E. Taylor, 2000, p. 298). In attempting to develop a theoretical model that explores multiple aspects of adult education, Mezirow created layered definitions involving multiple aspects that may be transformed—an overall frame of reference or meaning perspective, specific meaning schemes, and more generalized habits of mind—and multiple categories for the process of reflection. These divisions raise questions about the meaning of transformation and critical reflection as an integral part of the process. E. Taylor (2000) notes that "there is much support for Mezirow's theory, but at the same time there is a need to reconceptualize the process of a perspective transformation" to more fully recognize the importance of context, relationships, and the interconnection of cognition and affect (p. 322).

Brookfield's (2000) description of Mezirow's work and critique of terms that Mezirow uses are helpful in this process of reconceptulization. Brookfield limits critical reflection to one of the multiple aspects of reflection which Mezirow (1998) referred to as systemic critical self-reflection on assumptions: "critical reflection on one's own assumptions pertaining to the economic, educational, linguistic, political, religious, bureaucratic, or other taken-for-granted cultural systems" (Mezirow, 1998, p. 193). This provides the clearest definition of reflection on powerful individual assumptions formed through social construction. It alludes to the importance of issue relevance and emotional investment in the issue for the individual, rather than focussing on cognitive critique of the perceived assumptions of others. In making personal these socially constructed and

lived assumptions, both the context of the experience and the way we have been understanding the experience are included; emotional and cognitive and individual and social elements are left intertwined, rather than forcibly separated as often occurs in educational experiences. Intentionally "making explicit...that which was previously implicit and uncritically accepted" (Brookfield, 2000, p.131) "uncover[s] submerged power dynamics and relationships" (p.136), allowing opportunity for ideology critique, consideration of the variation in interpretations and responses, and the possibility of planning for different actions in the future. To be "transformational," changes in perspective, commitment or action must be "revolutionary," rather than "a fine-tuning of what went before" (Brookfield, 2000, p. 143).

A focus on reflection in Mezirow's and Freire's work does not mean that cognition is the legitimate avenue of change or that emotion is not an integral part of the reflective process. One challenge of attempting to understand the learning process is to avoid the process of separating emotion and cognition. Giving emotion its rightful place in the change process, however, is not furthered by attempting to remove cognition from the learning process; such dichotomization will likely lead to further separation between the change process and exploration of power. If transformative change occurs implicitly without critical reflection as E. Taylor (1998, 2000) contends, how is it different than the hegemonic socially inculcated assumptions that Mezirow and Freire indicate need critical examination? Change from one ideology to another does not constitute liberation or provide a basis for informed action. While there may be change in the guiding assumptions, resulting in changes in the way an individual thinks or acts, when underlying assumptions are not explored the individual is still bound by that which is unknown but influential. In Freire's terms, the individual is still object to the assumptions, rather than subject. According to Giroux (1999), "[w]hat is also needed by postmodern educators is a more specific understanding of how affect and ideology mutually construct the knowledge, resistances, and sense of identity that students negotiate as they work through dominant and rupturing narratives (p. 111).

I am not attempting to replicate Mezirow's model in an undergraduate university setting. I am using it as a springboard to explore the beginning of engagement in transformative learning, a process not described in Mezirow's model and one that is

important in the undergraduate university setting. While this use of Mezirow's work does not mean that I embrace all of Mezirow's concepts or views, it does mean that issues raised by Mezirow's model form a background for exploring transformative learning in an undergraduate university setting. Merriam (1993) notes that "in addition to issues stemming from the philosophical underpinnings of Mezirow's theory, it is not at all clear whether perspective transformations are limited to adulthood, whether they are common occurrences, and what the specific cognitive and affective dimensions of the process are" (p. 9). While a premise of this adult education model is that adults have a relatively stable view of their experiences and related assumptions, ideals and responses available for possible revision, "there has been little research to support this claim,...transformative learning has not been explored in relationship to learning and the age of participants" (E. Taylor, 2000, p. 289). For this study, I keep in mind issues highlighted in the literature on Mezirow's and Freire's work that are relevant to undergraduate education, including integration of emotion and cognition, individual and social learning and change, and power.

Within the challenging context of university education in North America, I am focussing on the beginning of engagement in the process of transformative learning, rather than the endpoint. Although I do not intend to explore later stages of critical reflection and action, it is important to identify the endpoint of interest to clarify what I see as the purpose of engagement in the transformative learning process. I am using Brookfield's (2000) guidance and limiting critical reflection to "critical reflection on one's own assumptions pertaining to the economic, educational, linguistic, political, religious, bureaucratic, or other taken-for-granted cultural systems" (Mezirow, 1998, p. 193). When transformative learning occurs there will be a "fundamental reordering of assumptions" (Brookfield, 2000, p. 139).

Conceptual Framework

> [D]omination is more than being ordered around impersonally in school, and more than the social relations of discourse in a transfer-of-knowledge pedagogy. Domination is also the very structure of knowing; concepts are presented irrelevant to reality; descriptions of reality achieve no critical integration; critical thought is separated from living. This dichotomy is the interior dynamic of a

> pedagogy that disempowers students politically and psychologically. (Shor & Freire, 1987, p. 137)

Assisting development of student power offers promise for informed social action. Freire used literacy in third world settings to develop power, with regard to language, with oppressed individuals. In a knowledge economy, developing power with regard to knowledge may liberate students in first world countries. Freire's development of literacy skills involved powerful, emotional words and ideas (Freire, 1981). Likewise, powerful knowledge is not comprised of mere facts, but is filled with emotion and meaning for learners. As with informal learning (Foley, 1999), the aim of transformative learning is to gain and use knowledge that can change learners' lives. Also, as seen with informal learning, this process develops from within individual learners, although usually in a group setting, challenging personal assumptions related to knowledge, its use, and its ownership (Foley, 2001). This is not a straight-line process with a formula for successfully reaching a pre-determined goal; it evolves in keeping with the changing interactions among individuals and the resources and constraints in their immediate and wider environments.

Given the purpose of undergraduate liberal arts education, the developmental phase of traditional undergraduate learners, and challenges occurring in educational institutions in a knowledge economy, exploration of students' perspectives within undergraduate courses may provide one of the most promising opportunities for exploring transformative learning in a formal education setting. This site also has limitations. The role of undergraduate university education in a rapidly changing world and in the face of changing student needs is fiercely debated (Jarvis, 2000). With increased focus on preparing students for future work, transformative change is unlikely to be a priority in most university classrooms. When student development as individuals and concerned citizens is an aim, courses involved are likely to be about a particular issue, such as gender, race, or class, which may not seem relevant and engaging for many students. Opportunities for transformative learning at the undergraduate course level may be limited to relatively few courses. Further, in the restricted time of thirteen weeks of a university course, expectations of transformation need to be limited and focused. While both Mezirow's and Freire's work focus on the endpoint of development, transformative

learning, if it occurs in undergraduate courses, is likely to be just starting rather than reaching an endpoint.

It is the beginning of Mezirow's model, that has little detail and about which there is little subsequent research, that is the focus of the present study. The conceptual framework considers the influences and interactions that connect the learner, the classroom environment, and the catalyst or trigger event to potentially result in what Mezirow calls a disorienting dilemma or what Cochran-Smith (1991) calls critical dissonance. The working model (see Figure 1, page 45) is intended to be a starting point for thinking about the dynamics and interactions as students start to engage in the process of transformation. While the focus is on the student, it is not on student characteristics that promote or inhibit transformation. Rather the focus is on how the assumptions that students bring with them to the learning situation interact with the assumptions operating within the class and how students explore these interactions as transformation begins. Likewise, the aim is not to test which specific characteristics of the class promote transformative learning; the aim is to explore the social process of learning.

In this model, dissonance or disorientation involves incongruity around a significant issue or perspective and is initiated by experiences that are not in keeping with learner assumptions, expectations or values (Cranton, 1998). This implies interactions among assumptions of the learner, assumptions operating in the classroom, and a catalyst experience that take place within a larger social environment of the university culture and the societal culture in which the university is situated. The interaction is influenced by assumptions brought to the interaction and the cultures surrounding it. The hope for individual and social change lies in the possibility of the interactions influencing individual assumptions and ultimately the larger culture.

Work by Kegan and associates (Kegan, 1982: 1994; 2000; Kegan, & Lahey, 2001; Souvaine et al., 1990) draws attention to the learners. Students involved need to be developmentally ready to fully participate in the process. Individual level of development need not prevent involvement, however. In keeping with Vygotsky's (1978) construct of the "zone of proximal development," social interaction within the class may provide support for development of latent capacity. Vygotsky (1978) uses the metaphor of scaffolding the developing ability, while Kegan (1994) refers to creating a solid bridge so

that students may travel from where they are to a new level of understanding, and Freire (1981) refers to starting where the learner is. Beyond level of development or ability, the intersection of race, gender, class, and other significant aspects of life for an individual can only be understood from the perspective of the individual whose integrated experience it is. Starting from outside that experience, however well intentioned, will honour some experiences while dishonouring others. Without their own perspectives as starting points, individuals may change from one status quo ideology to another, but are unlikely to develop their own power for personal liberation and effective action with others for social change.

A supportive environment is required for engagement in the process, rather than avoidance of the issue or the sense of discomfort, when there are differences in assumptions that the student brings and assumptions in the course (Neuman, 1996; Pascual-Leone, 1991). Although the elements of such an environment have not been well defined, the need for a challenging, caring, and supportive learning environment is noted by a number of authors and researchers on transformative learning. Desirable conditions include a sense of safety, openness, and trust; a learner-centred approach; participation and collaboration; exploration of alternative perspectives (E. Taylor, 2000); active listening; reciprocity and cooperation; lack of domination; withholding judgment until the other's point of view is understood (Mezirow, 2000); and challenge and support (Kegan, 2000). Supportive leadership that provides both consideration for learners as individuals and needed structuring of new tasks (Fleishman, cited in Hughes, Ginnett, & Curphy, 1999) may allow learners to feel supported when challenge to former assumptions occurs. Likewise, research on engagement in learning also emphasizes the value of caring, support, and relevant, challenging activities (hooks, 1994; Newmann et al., 1992; Smith et al., 1998; Wentzel, 1997). Within this supportive environment, which itself reflects values, beliefs and assumptions about the process of learning, are particular content assumptions, for example, around race, gender, or class, or course topics. These enter the interactions with student assumptions through course materials and presentations. Each course will have multiple content assumptions in keeping with course discipline and subject. As well, other students in the course will bring assumptions into the interaction in keeping with their past experiences (Mezirow, 2000) and multiple positioning around

elements such as gender, race, and class (Weiler, 2001). Dissonance may occur relative to content assumptions, assumptions brought by others into the class, or around course process that provides a supportive environment for exploration of the dissonance and the assumptions, value, and beliefs underlying the dissonance.

The catalyst experience may be a specific situation or experience that highlights a conflict, a new (or renewed) sense of distress, or a perceived need for change. This catalyst may be an event that occurs outside the immediate learning environment (e.g., corporation announcing the cutting down of a rainforest; Foley, 1999) or one that is created within the classroom, often by the teacher, to initiate thought and action on an issue. The catalyst experience or trigger event prompts feelings of discomfort and perplexity (Brookfield, 1987; Dewey, 1933). Tapping into such dissonance is considered an important step in facilitating meaningful change in behaviour and core self-concept (Safran & Greenberg, 1991). The dissonance that occurs may be in the cognitive, affective or behavioural domains. For example, learners may notice differences between the way they talk about the issue and how others talk about it in the learning setting, or between how they think and talk about the issue in class and in other settings, or how they think about the issue now and how they have thought about it previously. There may be discrepancies between talk and action around the issue, or conflict between apparently opposing feelings related to the issue within the individual or the group.

As described in later stages of Mezirow's model, the response to reduce the dissonance or discomfort will lead to critical reflection to explore the issue more deeply (E. Taylor, 1998). It is through the tension and struggle (Foley, 1999) of critical reflection that there is a qualitative change in worldview (Hobson & Welbourne, 1998) or what Brookfield (2000) calls a "fundamental reordering of assumptions...a shift in the tectonic plates of one's assumption clusters" (p. 139). This transformative process, by the end Mezirow's model, can lead to both individual and social change. While cautioning about the danger of assuming that education is the lever for great social change, Shor and Freire (1987) contend that "...critical curiosity, some political awareness, democratic participation, habits of intellectual scrutiny, and interest in social change are realistic goals from inside a dialogic course" (Shor & Freire, 1987, quoted in Brookfield, 2000, p. 145). This working model examines the beginning of transformative learning in

traditional age undergraduate students' critical curiosity and awareness, and the influence of university classes in the process.

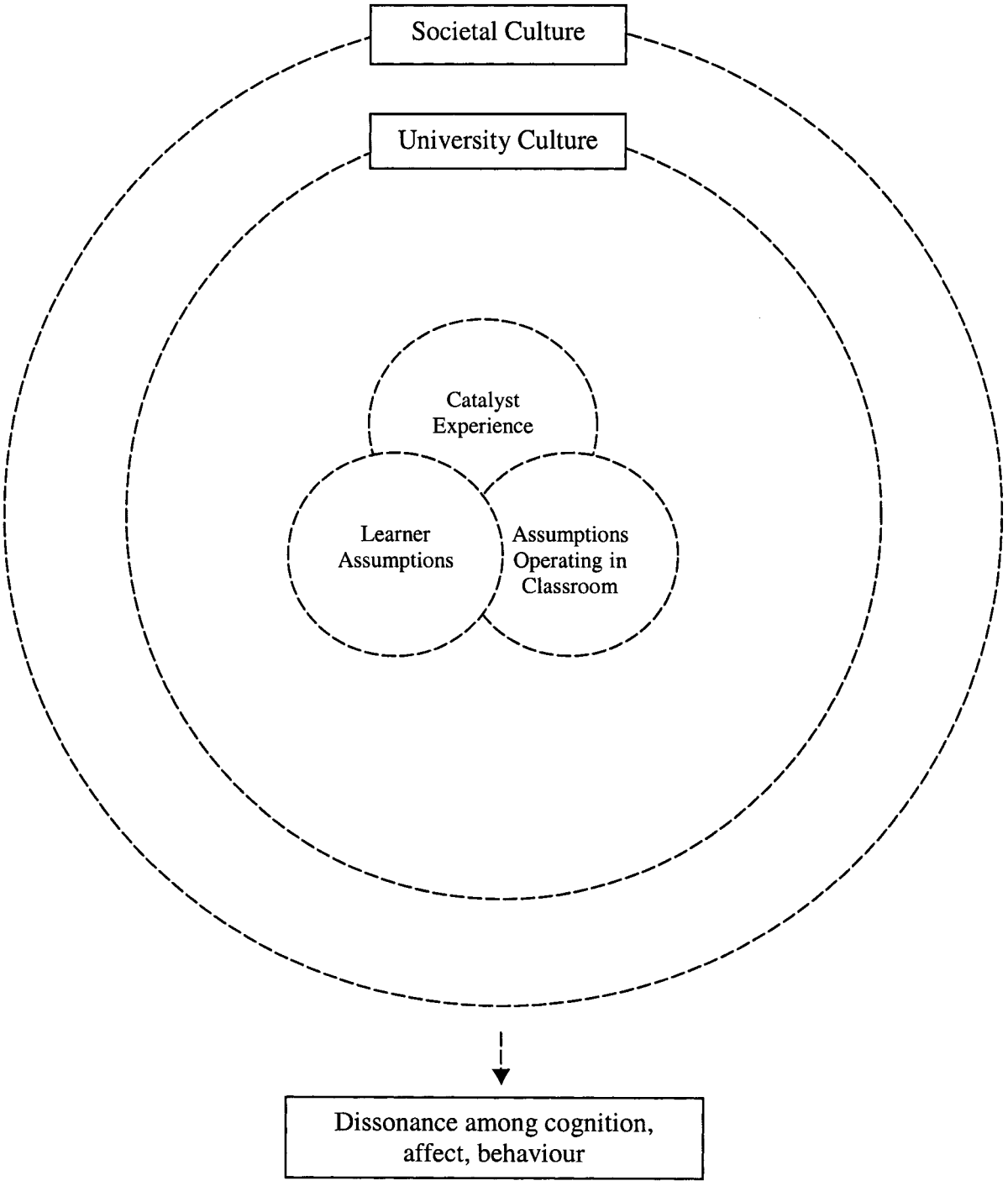

Figure 1: Working Model

Chapter 4: Study Methodology

Selection of Site and Courses

The setting for this study is one of Canada's smaller, predominantly undergraduate universities. Nineteen of the forty-six universities in Canada have full-time student enrolments of less than 6000 and focus on undergraduate student education, with roughly 95 % or more of their full-time students enrolled in undergraduate programs. In choosing a smaller university, I hoped to explore issues that would have resonance with other universities of similar size, facing similar challenges as government funding decreases and smaller universities look for ways to remain viable. Without the levels of research funding and endowments that larger universities boast, smaller universities are challenged to be creative to maintain financial stability and their "small is beautiful" appeal in terms of class sizes and availability of professors. Because of concerns raised in the literature about the emphasis on the individual while ignoring the social nature of transformative learning, I was also interested in selecting a university for the study in which the influences of university and larger societal assumptions on transformative learning in the classroom could be considered. Choosing a site where the faculty was actively considering the influential connections beyond the classroom was important. Increased integration of technology was one possible university initiative that could stimulate such consideration. Increased emphasis on technology has the potential to infiltrate the university boundary which provides some distance for students from the larger social and work world (Doring, 2002; Inayatullah & Gidley, 2000; Manicas, 2000; Rolfe, 2002). By shifting some of the focus to workplace skills and the multiple alternate sources of internet information, technology challenges university separateness, societal role, and authority (Abeles, 2000; Anderson, 2001; Gumport, 2000; Rooney & Hearn, 2000). Faculty awareness of this change and concern for the implication for teaching and learning could offer opportunity to explore the links among classroom, university, and societal assumptions that might influence transformative learning.

A number of universities undergoing changes in technology and curriculum would likely have been appropriate for this study. The university chosen was first considered because of conversations with university faculty contacts I had through professional associations. They were both excited about their successes with integrating

technology into the curriculum and concerned about possible effects on student learning and the future of university education. As well, these contacts indicated that the university would likely be interested in taking part in my research. Through learning more about the university, I believed it would provide the opportunity I sought to explore student transformative learning. I followed protocols set by the university and completed its ethical review process to obtain permission to conduct research on site.

The setting for this study is Beaverbrook University (a pseudonym), a smaller university in Canada. According to informal comments by faculty, the increased emphasis on technology use is a response to expectations for increased computer literacy and critical thinking skills in graduates. It was also anticipated that increased access to internet resources would increase awareness of world issues. Faculty noted that in a university that prided itself on positive faculty-student relationships, adding technology as a support for class instruction has stimulated greater awareness of student response to course activities and interactions in the classroom. It has created a sense of change in the learning environment with new challenges and opportunities for both faculty and students.

My intention was to choose courses from across disciplines (sciences, arts, and professional studies) to include a variety of discipline perspectives and approaches, and in which variation in exploration of assumptions and attitudes was likely. Gender is one of the ways in which power has been both distributed and explored in the university setting (Lewis, 1992; Luke & Gore, 1992; Maher & Tetreault, 2001). Exploration of gender issues varies across courses and disciplines; it is a focus of some courses and not overtly considered in other courses. While gender is only one way in which power is distributed or explored, it was expected to provide an interesting focus point in this study. I wished to select classes to capture variation in terms of gender of instructor and issue emphasis in the classroom. In light of feminist literature on historical male domination of the organizational structure and knowledge taught in higher education (e.g., Lewis, 1992; Luke & Gore, 1992), and assumptions about teaching styles of men and women (Lewis, 1992), considering instructor gender seemed important when thinking about variation in learning contexts. For example, gender differences in socially developed or defined roles around encouraging engagement in emotional, as well as cognitive, aspects of learning

may be significant in light of the importance of emotion in transformative learning (Clark & Wilson, 1991; Neuman, 1996; E. Taylor, 2000). Considering gender differences in this study could shed light on gender issues and transformative learning in higher education, as well as the intersection of their separate literatures.

Faculties, programs, and individual courses also integrate technology in different ways. In doing so, they emphasize different aspects of the purposes of technology use envisioned by universities. Selection of classes also attempted to capture this variation. Selecting courses across disciplines allowed for greater topic and classroom variation than usually explored in research on transformative learning; considering variations in gender and the use of technology in course work allowed the possibility of considering assumptions within the classroom and beyond to the university and larger culture.

This sampling strategy also has limits. It was limited to traditional age students who are probably just beginning the transformative process and may be less able than older students to articulate the process they are experiencing. Not focussing on student background factors, such as race or class, may limit understanding of the influence of these aspects on findings for this study. I believe the sampling approach is useful for this exploratory study. Since there is not an existing research base at the undergraduate level, my intention is to get a first broad view of what the process of transformative learning might involve at the undergraduate level for traditional age students across disciplines and gain a sense of direction for future research.

From the literature, I believed that transformative learning was more likely to occur in student-centred courses that encouraged active participation and critical reflection. To start the process of selecting courses for the study, I considered teaching awards given by the university and other professional associations, student recommendations in Macleans magazine university ranking reports, and informal comments by students about courses and professors they had found particularly interesting and helpful. Although I did not see any risk to faculty taking part in the study, I limited my selection of potential faculty to those who were fully tenured so that findings of the study could not negatively influence career progress, should findings raise questions about teaching approaches. I used the university course schedule to identify senior level courses taught by these professors during the intended time of the study,

considering gender, subject, and discipline to tap as wide a range as possible. Since variation across classes was important, the process was intended to balance multiple factors in the classes considered, as well as conflicts in class schedules, rather than follow a set of absolute characteristics for selection. From this process I had a short list of four instructors.

To keep the study a manageable size, my original intention was to include three courses in the study. The four faculty members from across disciplines identified by the above process were contacted by email using an informed consent letter to tell them about the study and invite possible participation in the study (see Appendix A). I explained in both the initial contact email and at the start of the interviews that courses would be selected in a way that provides variation across courses in terms of discipline, subject, use of technology, teaching approaches and activities, and gender of professor and students, along with class size and percentage of senior students. I also explained that the classes of faculty approached for initial interviews would all be interesting in their own right because of the student-centred philosophy that these instructors hold, even though they may not be asked to participate further in this very limited study due to scheduling conflicts or the balancing among factors for the group of classes considered. All four instructors agreed to be interviewed.

I used a semi-structured interview format (see Appendix B). The interviews of approximately 60 minutes were audiotaped with consent of the professors to ensure accuracy. The information gathered in the interviews was used to decide which courses might be appropriate for the study and later to provide context information for understanding students' experiences better. Once the faculty interviews were completed, I emailed those interviewed to let them know I wished to have their class in the study. I decided in the end to include all four courses whose professors I had interviewed because of their strengths and the variety across important variables. Before agreeing to course participation, instructors discussed my attendance at some classes with students in the course to assure student comfort. While I attended classes for all four courses, ultimately, only one student in one of the courses was available for an interview. Since neither I, nor the professor, knew student age distribution in the course, it was not until I asked for volunteers at the end of the course that I learned that almost half of the 13 students in the

course were outside of my target age range for the study. Many others were busy preparing for or attending job interviews, as they were in their final year of university, or working on major term projects and did not feel they had time to be interviewed. As a result only one student was available for an interview and the course was not included in the study. The three remaining courses formed the basis of the study.

Class Observation and Participant Recruitment

Before making classroom observations, I briefly introduced myself and explained my research project to students in the class. I explained that I had no intention of evaluating students, instructors, courses or programs, but rather wanted to explore the complex process of learning from the undergraduate student perspective. I noted that students would not be identified in the written results nor would their professors or classes. I explained that I would be trying to get a sense of the activities and interactions in the class from my observations. I also explained that I would talk near the end of term about interviewing some volunteers individually regarding their learning experiences. I encouraged students to talk with me if they had any questions during the term about my research. I provided contact information and was available at the beginning and end of each class that I observed. A number of students from each course talked with me about my research during these times. Through these contacts, I hoped to reduce any influence my presence as an observer might have on class interactions, as well as to reduce sense of strangeness for students who volunteered to be interviewed. From the interactions during these contacts, in class sessions, and in the subsequent student interviews, I think my availability helped students to be more comfortable with my presence and the research.

Class observations were made during approximately 8 classes (1 ½ hours each) in each course during regularly scheduled class times in the second half of the fall term. I looked for student involvement in learning and class activities, interactions among students and instructors, and student responses to the learning activities. This helped provide context information for understanding student interview responses during in-depth interviews, as well as direction for interviewing related to particular class events. It also formed the basis of course descriptions in the next chapter. For each of the courses in the study, I reviewed course materials (handouts, online materials) and instructors' plans to better appreciate instructors' intentions, and student activity and response in the

classroom. Along with classroom observations and interviews with the professors, these also provided context information related to particular class events, direction during in-depth student interviews, and clarification of student responses during interviews.

Near the end of the term, I again briefly described my study and the role of student interviews in the research. I distributed the list of questions I would be asking and asked students who were interested in participating to note their name and email on a sign-up sheet circulated during the last 5 minutes of the class session after the instructor had left the room. At the same time I passed around a sign-up sheet for students who wished to receive a summary of the research. As well I provided my contact information if students later decided they wished to receive a summary or if their contact information changed. Instructors were not told who participated in the study. I contacted students on the interview sign-up sheet by email, sending them an informed consent letter describing the details of the study, including the interview questions and their potential role (see Appendix C). Those who still wished to be part of the study replied by email to set up an interview time.

Student Interviews

Students were interviewed individually at the end of the fall term after classes ended; nine students were interviewed before the end-of-year break and three students were interviewed after, at the beginning of the winter term. Interviews were arranged at a time and place convenient to students. At the time of course observations, most students were completing their penultimate term as undergraduate students and looking forward to and planning for work or graduate school. The two third-year students interviewed were considering course options for their fourth year that would provide helpful background for graduate school plans.

Prior to asking any interview questions, I discussed the informed consent letter and asked participants to sign a copy if they understand the nature of the study, the assurance of confidentiality, and the right to withdraw from the study at any time, and if they agreed to participate. A copy of the consent letter was also given to participants with contact information if they had any questions later. Each student was interviewed once for approximately one hour. All interviews were tape-recorded with participants' permission. As the starting point of the interviews, I used a semi-structured format with

questions prepared to cover important aspects of the conceptual framework (see Appendix D). In light of different experiences of participants, these questions acted as a guide rather than as a structured format; capturing the experience of each participant was more important than following an interview script. Interviews were transcribed verbatim and transcripts were emailed to participants as soon as they are typed (early in the winter term). Participants were given the opportunity to review the transcript of their interview and provide corrections, comments, or additional information for the purpose of clarification, and to make deletions of any parts of the interview they did not wish to have included. Only one student made several word clarifications; these were incorporated into the transcript.

Transcripts, observation notes, and analysis notes were given identification codes to protect participant identity. All data, including documents, teaching materials, observation notes, audiotapes, computer discs, and transcripts were stored in a locked filing cabinet in a limited access area. Pseudonyms were used for the university, courses, professors, and students, with details changed to reduce the chance of identification. Because of the small class sizes, it is not possible to guarantee that the identities of students who participated in the study cannot be guessed by the course professor. I have taken measures to reduce this possibility and to reduce any negative impact should this occur. Students were not asked to make judgments about the instructor or the course; in any event, their comments were all very positive. Most participants were fourth-year students and graduated five months after participating in this study. Two third-year students participated; they will have graduated by the time the study is completed and the dissertation defended. Letters of reference written by professors for students will also have been sent out. As much as possible, I have separated descriptions of student background from individual comments made about the course experience. When such linkage was needed, I contacted the students involved. I sent them what I had written about them and asked if they were comfortable with it or if they wished it to be modified. Of the three students involved, two indicated they were happy with what I had written and had no problem with me using it. I was unable after several attempts to reach the third student, who graduated shortly after the interview, using the contact information provided to me. I have used the data from all three of these students, after again

reviewing background information for possible identifying information, in particular limiting or further masking background information on the student I could not contact.

Interview participants in this study formed a purposive sample: all students in the three selected classes who indicated they were willing to discuss their learning process with me, to a maximum of 18 students across all three classes were potential participants. The final sample consisted of 12 students, six women and six men, with three from one class, four from the second class, and five from the third class. Three students were enrolled in a science course, four were enrolled in an arts course, and five were enrolled in an interdisciplinary course. Students ranged in age from 20-24 years (mean age of 21.7 years; median age of 21 years).

Data Analysis

Transcripts of student interviews were analyzed using a constant comparative method (Glaser & Strauss, 1967). Tentative categories were developed from emerging interview themes and the conceptual framework. Portions of text were placed in these categories to allow comparison of similarities and differences among participants' experiences and the development of further understanding of the experience. Categories of meaning were refined to be "internally consistent but distinct from one another" (Marshall & Rossman, 1999, p.154). Through this process, emergent understandings were tested and alternate explanations for patterns explored (Marshall & Rossman, 1999). During this process, I found that the original working model would have been adequate for describing one of the classes. With some revision, the original working model might also have been adequate for the other two classes and, within limits, allowed me to think about and talk about the process of engaging in transformative learning described by students interviewed. It did not, however, capture the deeper emotion and the social nature for many of the experiences. The most limiting aspect of the original working model was that it did not allow me to dig deeper into the sense students described of having been involved in unique and powerful experiences.

I did not find the original working model to be a misrepresentation of student experience; it is one of many ways, including Mezirow's (2000) model, of describing a complex process. In using the working model with student responses, I found that, like Mezirow's model, it seemed to focus attention toward more concrete aspects, such as the

trigger event, and more cognitive elements of the experience. My intention was to be aware of and attempt to incorporate emotional and social aspects and power more fully into an understanding of transformative learning. The original working model did not provide a sufficiently supportive base for considering these elements at a level I felt I was hearing in student interviews. While the original model alluded to these elements, it did not integrate them in a way I believed possible in light of student comments. While critiques in the literature of Mezirow's model of transformative learning noted that emotion, social learning, and power were not adequately considered, it was only through listening carefully to the students interviewed and digging deeper into the emerging themes that I appreciated the depth of the critiques. This re-affirmed the importance of attempting to address these elements more fully in the present study.

A second related limitation in the original working model was its focus on the initial engagement in transformative learning prior to and including Mezirow's (2000) first step of a disorienting dilemma. In the interviews, students offered a more complex and developed experience than I expected in a 13-week course. Limiting description and discussion to aspects proposed in the original working model would mean loss of student comments that seemed striking and discussion of student descriptions that seemed important in understanding the process for undergraduate students. As a result of reflection on these limitations, after much analysis with the original framework, I went back to the literature to try to understand what I was hearing students say. The process then involved moving between the literature and the data to revise a working model for the study.

Revising the Working Model

My original working model (Figure 1, page 45) considered the way in which assumptions that students bring with them to the learning situation interact with assumptions operating within the class and how students explore these interactions as transformation begins. In this original framework, dissonance or disorientation involves incongruity around a catalyst or trigger experience—a significant issue or perspective that highlights expectations, values or assumptions which a learner brings to the situation. The original model included social influences and interactions within the class, larger university culture, and the societal culture in which the university is situated that connect

the learner, the classroom environment, and the catalyst or trigger event.

The original model was not without merit in considering the responses of students in this study. The assumptions that students bring to a course are central in both the original model and the revised model, and in both models students are seen as engaging in the process of comparing their own assumptions with those of others. For a few students I think it was helpful to identify trigger events or think about sense of dissonance, as proposed in the original model, when describing their experiences. The social element of the learning process and influences beyond the classroom, in terms of university and social contextual factors, are present in both models. The original framework was a helpful starting point for exploring Mezirow's work and the critiques made of it, and considering elements in the literature that have not been integrated. It did not, however, allow me to capture the richness or complexity of group learning that I heard in the interviews.

Exploring assumptions as part of the transformative experience is integral in both models; the original working model, however, limited discussion to more individual assumptions of a student compared with a set of assumptions present in the course. I did not think this captured sufficiently students' comments about the multiple social interactions around assumptions, the malleable nature of the assumptions, or the development of assumptions by individuals and the larger class as the course unfolded. As well, identifying trigger events experienced by individual students limited consideration of the larger social process of learning that most students described. Beyond particular trigger events within a course for individual students, most students talked about unique and surprising learning processes that developed for the class as the course progressed. Further, while some students talked about a feeling of discomfort related to differences in assumptions, students frequently described many other positive feelings, such as relief, excitement, confirmation, or sense of connection. A fit between the data and the original working model was possible, but not without the sacrifice of exciting aspects of most students' stories and themes that emerged from their interviews which held potential for better understanding their experiences and the concerns raised in the literature about transformative learning models.

The revised working model (Figure 2, page 59) was developed through initial

analysis of student interviews using the original working model, noting emergent themes in the transcript, further reading of the literature, and integration of themes in student interview data and the literature. Across the three courses, I had a sense from students' descriptions that there was a difference in power relationships compared to more traditional classrooms. Burbules' (1986) work on power relationships in education provided insights that fit with student interview comments and helped develop the working model in ways that expanded exploration of important emergent themes around class interactions and the process of transformative learning.

In describing a more equitable classroom, Burbules (1986) notes three areas of possible challenge; the first two are challenge to authority and challenge to organization. Challenging authority involves considering who or what is regarded as an authorized voice in the course. Rather than the instructor being the final or only valid voice, appropriate authority involves "consensually defined qualifications...bounded by relevant and sensible limits" so that it can "serve common human interests by sharing information, promoting open and informed discussion, and maintaining itself only through the respect and trust of those who grant the authority" (Burbules, 1986, p. 108). Using this concept of authority involves moving from a lecture format in which "facts" are given to a format that involves hearing multiple perspectives, discussing ideas, and considering the source of information (Burbules, 1986). Redefining power relationships in the classroom requires forms of organization that "emphasize *participatory* rather than hierarchical decision making, *collective* and cooperative tasks rather than specialized ones, and *decentralized* responsibility rather than responsibility focussed and relegated by fiat" (Burbules, 1986, p. 108, emphasis in original).

While raising awareness of the possibility of challenging power relationships in the classroom, Burbules provides little detail on applying his concepts to classrooms. Description of Burbules' first two elements—authority, or who or what is granted status, and organization, or how power relationships are implemented— bring to mind similarities with descriptions of a supportive learning environment noted by a number of authors and researchers on transformative learning. As described in discussion of the original working model, important classroom conditions include a sense of safety, openness, and trust; a learner-centred approach; participation and collaboration;

exploration of alternative perspectives (E. Taylor, 2000); active listening, reciprocity and cooperation, lack of domination, withholding judgment until the other's point of view is understood (Mezirow, 2000); and challenge and support (Kegan, 2000). Burbules' (1986) concepts of challenging power in the classroom seem to fit with conditions for a supportive learning environment, but bring in the awareness that power relationships are, potentially, foundational for these conditions. This is not to imply that the classroom conditions described in the literature are always used to support challenging power relationships in classrooms, but only that they might be used to support such challenges, and that considering this possibility might help to elucidate why these supportive elements are important for engagement in transformative learning.

For the revised model, which attempts to connect Burbules' (1986) concepts and conditions described in the literature on learning environment, the supportive environment is explored in terms of a different classroom experience of power relationships. Themes identified in student interviews relating to this support for the transformative experience included considering multiple perspectives through changing instructor roles, including a range of resources, and discussing personal views; and shaping course experiences through active decision-making, working collectively, and sharing responsibility for success. While considering multiple perspectives reflected challenges to authority, shaping course experiences reflected challenges to course organization. As well, other themes identified in student interviews described developing relationships, through knowing each other, trusting each other, and respecting others, as important in creating an environment of safety and openness for sharing perspectives and exploring issues more deeply. Elements within a supportive environment are discussed in Chapter 8 on factors facilitating the experience of transformative learning.

Burbules' (1986) final power element—challenging ideology—involves "challenging and questioning the root assumptions of a status quo" (p. 108). This aspect of power fits with themes emerging from student interviews around engaging in the process of transformative learning and with the literature on transformative learning that framed the original working model. In the revised working model, the process involves three themes: seeing personal relevance of the issue, sensing tensions among perspectives related to content issue or learning process, and exploring the assumptions more deeply

through seeking the agenda or context, linking emotions and ideas related to the assumption, and asking why these personal and social assumptions hold power. These themes are discussed more fully in Chapter 6 on students' experiences of transformative learning, but briefly described below. Supported by an environment that provides students with a different experience of power, through challenging who or what has authority, challenging how the course is organized, and developing relationships, students may challenge previously unexamined, but influential, assumptions that they bring to, or that are present in, the learning situation.

In the revised model, it is through seeing personal relevance in an issue that students bring their experiences to learning and develop their ability to share their views with others. Through starting with learners' experiences (Freire, 1981), a solid bridge is created so that students may travel from where they are to a new level of understanding (Kegan, 1994). Relevance helps to maintain interest and engagement in learning; it also provides scaffolding for developing ability (Vygotsky, 1978) around maintaining new power relationships by keeping student experience as an integral part of the learning process. With their own perspectives as starting points, individuals may develop their own power for self and social change, rather than merely accepting a new ideology. Marton and Booth's (1997) research highlights the importance of relevance for engaging the learner and for providing a link between past understanding and potential new understanding through relating personal experiences to other multiple perspectives.

The revised model expands the concept of tension among multiple perspectives and exploring assumptions (Foley, 1999; Mezirow, 2000; E. Taylor, 1998) to more fully incorporate the issue of power in learning. Through challenge to traditional power relationships in the classroom, students have a different experience of power, one in which they are more active and interactive participants. Rather than a particular catalyst experience that draws attention to specific assumption differences for individual students, the experience of new power relationships affords students access to a variety of personally relevant issues, tension among perspectives, and opportunity to consider underlying, powerful assumptions in a supportive, shared environment.

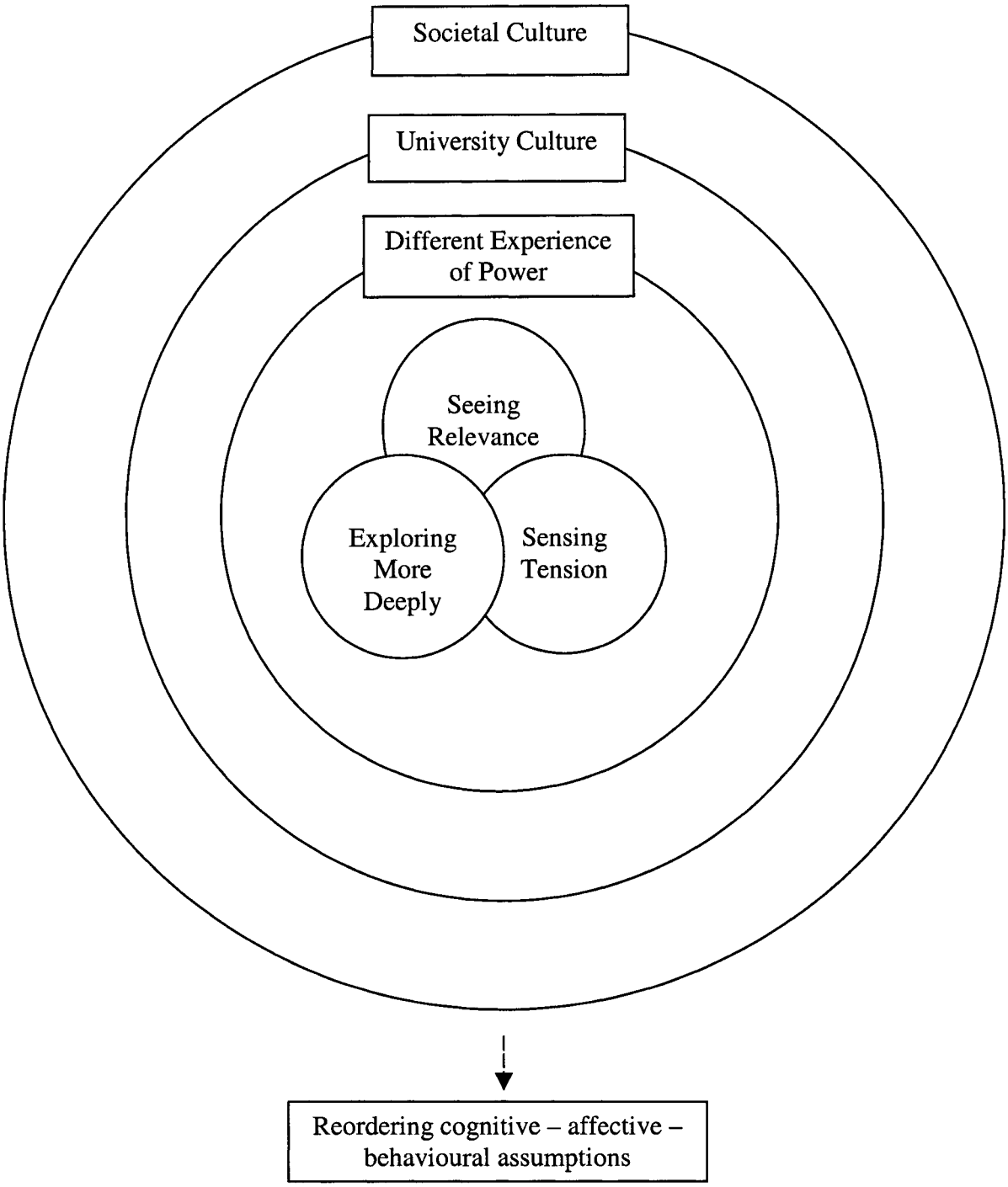

Figure 2: Revised Model

Issues and perspectives relevant to learners involve experiences comprising both cognition and emotion. Moving beyond transmission of factual information, sharing relevant perspectives with others involves thoughts with their integrated emotions. Tension among perspectives in this model is a cognitive-emotional response experienced individually and as a group, rather than disagreement about which information is more accurate or a sense of discomfort resulting from such information.

In challenging ideology, a different experience of power provides a space for learners to more deeply explore underlying assumptions that maintain the status quo. When courses connect to students' experiences, these assumptions are not limited to the course content; assumptions in the classroom, university, and wider society also open up for discussion. New power relationships bring into view not only content issues in the course, but also assumptions underlying traditional approaches to classroom teaching and learning, normally unexplored assumptions about the meaning and purpose of university, and taken-for-granted societal assumptions that influence students through university and classroom practices and through other aspects of their daily lives. In this model, I contend that these unexplored assumptions are powerful, in part, because they are not merely cognitive; based in experience and social learning, rather than in cognitive learning of cultural rules, they involve emotions. Exploring underlying assumptions involves considering why we think, feel, and act the way we do and what previous emotional-cognitive experiences hold sway. Challenging powerful ideology involves experiencing new power relationships in which students are constructors and participants in a new process of social—cognitive-emotional—learning. According to Marton and Booth (1997), learning that taps relevance and explores multiple perspectives can result in a change in the individual-world relationship; this is not individual learning and change but a change in relationship with one's social world.

In the revised model, the three aspects of ideology challenge—seeing personal relevance, sensing tensions among perspectives, and exploring the assumptions more deeply—do not form a linear prescription for challenging ideology. While relevance has been described as an initial motivator in the learning process (Marton & Booth, 1997), I think it is more likely that the process is dynamic with interplay among relevance, sensing tensions, and exploring assumptions more deeply as classroom relationships and

understanding of the issues develop. As well, I do not think there is only one possible starting point. While relevance may be the initial aspect in the process for some students or in some classrooms, sensing tensions might be the starting point (as suggested in Mezirow's model or Foley's work). Likewise, the process of exploring more deeply a topic that is not seen initially by students as relevant to their lives may be the initiator of the process.

The result of such exploration can be what Brookfield (2000, p. 139) calls a "fundamental reordering of assumptions...a shift in the tectonic plates of one's assumption clusters." The revised model uses Freire's (1981) concept of praxis—reflection and action—to explore assumption reordering that students in the present study describe. This reordering process can involve reflection as cognitive-affective assumptions are reordered, as seen, for example, in opening up to new ideas and feelings, seeing more connections among ideas and issues, understanding issues more deeply, or expanding one's self-social concept. This reordering process may also involve action as cognitive-behavioural assumptions are reordered. This may include discussing issues and feelings with others, actively seeking more information to increase understanding, putting insights into practice, or making life changes. A different experience of power allows students to see themselves differently rather than just incorporating new ideas or actions into their lives. Rather than inculcation of a different way of thinking or doing things, reordering assumptions involves the potential for deep changes in learner self-concept including changes in sense of self-social efficacy—"beliefs concerning their agentic power of self change" (Bandura, 1997, p. 53) and social influence.

Chapter 5: Courses, Professors, and Students

In this chapter I introduce each course, its professor and its students. I briefly describe the courses, as summarized in Table 1, to provide a basic orientation for the introduction of courses, professors and students that follows. Following descriptions of the individual courses, professors and students, Table 2 provides a brief summary of course characteristics: philosophy, aims, features, resources, activities, and evaluation processes.

As stated in the previous chapter, courses were chosen for this study to provide a range of topics, disciplines, and course activities while offering student-centred approaches to teaching and learning. Table 1 summarizes similarities and differences across course design and implementation. Three courses participated in this study: a course on sustainability (listed as Economic and Environmental Sustainability in university information); a course on indigenous peoples (listed as Special Topics: Historical Geography of Canada); and a course on human relations (listed as Psychology of Human Relations). The sustainability course is an interdisciplinary course developed for the current academic year by four departments across campus—Biology, Business, Economics, and Political Science—to provide students across campus the opportunity to explore sustainability issues from economic and environmental perspectives. The course on indigenous peoples is a new special topics course offered by the Geography Department through the Faculty of Arts to explore in depth historical and current issues facing Canada's indigenous peoples and the policies that shapes their lives. The human relations course is offered for its sixth year by the Psychology Department through the Faculty of Science to explore research on a range of controversial psychology topics in the field of human relations, such as stereotypes, prejudice, gender roles, and personal relationships.

New courses and established courses offer different advantages and challenges for students. New courses offer the excitement of a new topic and a chance to be part of something different; since there are no previous students to ask about the course, they carry assumptions about the structure being less set and more open to development and students' input. Established courses have a track record and previous students to consult when deciding whether to take the course; they carry assumptions of a more well-defined

structure that, while not necessarily as open for negotiation, will not challenge students' expectations. In smaller universities, like the site of the study, a new course may feel like less of risk for students than they would in larger settings. It is likely that, by third and fourth years of study, students will have had the professor in previous classes or know many students who have. Due to student-professor interaction in the smaller departments on smaller campuses, students are also likely to feel more comfortable contacting the professor to ask about a new course.

Table 1: Overview of Courses

	Sustainability	**Indigenous Peoples**	**Human Relations**
Course Title	Economic and Environmental Sustainability	Special Topics: Historical Geography of Canada	Psychology of Human Relations
Brief Description	Discussion of sustainability from multiple perspectives	Indigenous peoples and policies in Canada	Controversial issues around stereotypes, gender, relationships
Years Course Taught	New course	New course	5 years
Course Discipline(s)	Interdisciplinary: Biology, Business, Economics, Political Science	Geography	Psychology
Course Type	Elective	Elective	1 of 4 options for required senior research course
Course Prerequisites	3rd year standing and permission of instructor	3rd year standing and intro geography and research courses	3rd year standing and intro psychology and research courses
Student Major	Biology, Business, Economics, Political Science	Geography	Psychology
Students in class (Year of Study)	12 in section in study (3rd & 4th)	12 (3rd & 4th)	27 (3rd & 4th)
Gender: F/M	3 / 9	6 / 6	24 / 3
Professor: Gender	M	F	F
Professor: Years Teaching	30	15	7
Professor: Faculty /Department	Professional Studies/ Business	Faculty of Arts/ Geography	Faculty of Science/ Psychology

The courses on sustainability and indigenous peoples are elective courses; the human relations course is one of four options available for Psychology major students to meet the requirement for a senior research lab course. As senior courses, all three courses

have the prerequisite of third year standing, requiring earlier introductory and research courses in their discipline; the sustainability course also requires permission the course instructors for the section (of four sections, each taught by a different professor) in which students wish to enrol. Students taking these courses are mostly majors in the discipline of the course; in the case of the course on sustainability, that means there are majors in Biology, Business, Economics, and Political Science. While the course on indigenous peoples and the section of the sustainability course that participated in this study have 12 students each, the course on human relations has 27 students this year (a significant increase from 12-15 students in previous years). The course on indigenous people was the only one with a balance of female and male students; the sustainability course had mostly male students and the course on human relations had mostly female students.

Professors in the study work in different faculties and departments across campus. The section of the interdisciplinary course on sustainability that participated in this study was taught by a professor from Business in the Faculty of Professional Studies. The course on indigenous peoples was taught by a professor from the Geography Department in the Faculty of Arts and the course on human relations was taught by a professor from the Psychology Department in the Faculty of Sciences. Two of the professors are women and one is a man; there is a range of teaching experience from 7 to 30 years. This length of time teaching on campus might influence student responses in courses; even without having taken any previous courses from professors in the study, most students in their discipline will likely be aware of their reputations. From informal conversations with students at a number of universities, it seems that students frequently go into courses with expectations about what professors expect and what students can expect from professors who have been teaching on campus a number of years. Students have a sense, based on the experiences of other students in the professor's courses, of whether a particular course is likely to be interactive or lecture based, of the level of work usually required, and of how the professor interacts with students and grades course work.

Because my intention in this study is to focus on student perspective of the learning experience, I describe what students said in their interviews when I provide information on student background in this chapter. When providing information on the professors and the courses in this chapter, I indicate the sources of the information.

Interdisciplinary Course—Economic and Environmental Sustainability

The Course and the Professor

According to his biography and interview, Philip, a tenured professor in the School of Business, has been teaching at this university for 30 years. Over the years, he has served in a variety of capacities both within the university community—including administrative and student advisor roles—and within the larger community. He has taught a range of courses from introductory economics and business statistics to senior level and graduate courses in environmental economics and business management. He has received a number of teaching awards over the years. His research interests are environmental Economics and teaching of Business; he presents his research in different venues on topics including aquaculture management, primary industry in Canada, third world development, and globalization.

During his interview, Philip described his perspective on teaching and learning. He thinks that however well researched or well intentioned, there is no objective presentation of facts. Philip describes knowledge across disciplines as dynamic and constructed, each discipline adding to the larger picture and allowing students to build on the discipline-specific canon they have learned. Discipline knowledge is, thus, just the beginning of the thinking process. He sees university students as active learners, and notes that university is a privileged time that offers opportunities to ask tough questions. In all his courses he feels it is important to be well prepared, enthusiastic about the topic, and interested in students' development. He contends it is important to talk about how you feel, using bolstering arguments to support this view; neither emotion nor cognition alone provides a sufficient base for exploration. Because he thinks that students are sometimes reluctant to engage in this type of exploration, he says it is important for professors to act as models. Philip noted that while the course on sustainability does not directly address gender issues, he values the way in which women bring thoughtful perspectives to class that reflect emotional and social aspects of issues. While his discipline has been historically male-dominated, business schools now have more women students than in the past. He notes that women seem more likely to want to discuss difficult issues and listen and work for solutions together.

Philip also talked about the development of this new course through the planning

of four professors from departments across campus—Business, Political Science, Biology, and Economics. The departments involved decided to let students use the credits from this interdisciplinary course towards their electives in any of the four disciplines involved. Students needed permission from one of the four professors to register for his or her section of this elective course; this, he says, meant that students were told what the course was going to be like before they registered and it allowed professors to decide if the course was likely appropriate for individual students. Philip notes that this course holds both exciting teaching and learning opportunities and challenges. He is aware that some students feel affirmed in their perspectives on the issues, while others feel ill at ease when they explore issues and their perspectives more deeply. He describes this as a very "messy model" that he is following compared to students' usual, more structured experiences in university courses, and while they are more used to closure at the end of a course, if successful, this course will open up intractable questions.

Philip described a number of aims for the course during the interview. He notes four main aims: to increase awareness of environmental and economic sustainability problems; to increase knowledge of these issues through considering multiple perspectives; to develop responsibility for critical, thoughtful responses; and to challenge discipline-focussed perspectives that can preclude seeing other possible views and questioning the way we organize collective living. In working toward these goals, he says he wants students to explore course issues in depth without feeling overwhelmed by the size of the problems involved or by their sense of individual responsibility for them. While he wants students to feel safe in class discussion, he also wants them to feel challenged.

Philip's comments and the course outline describe how the course is structured. The course moves away from a more traditional lecture format; it attempts to look at issues of sustainability by linking students' experience, previous knowledge, and interests with both economic and environmental perspectives. Through providing sufficient structure for students, he attempts to create a class in which students feel safe to explore issues that they might never have thought about before. The course has three components: weekly discussion, weekly research project sections, and biweekly guest presentations. Students meet weekly in their small groups of 12-15, with the professor they have chosen

for the term, for 90 minutes of discussion around two texts—one presenting an environmental perspective and the other an economic perspective. In so doing, concerns are raised and discussed and new questions developed. Students also choose one of four projects facilitated by the professors for 90 minutes each week of group work. Project topics include conservation biology, fisheries, genetically modified food, and water resources. All students are required to attend six evening sessions by speakers from a variety of community and interest groups and submit a written response for each. Over the semester, students design, research, and prepare a group report and presentation on their projects. At the end of the course, project presentations are made to students in all four sections of the course.

Cindy

Cindy is a 21-year-old fourth year Business student. She has a strong background in science but, by the last year of high school, didn't know what she would do with science in terms of a career. At the same time she had an economics teacher who encouraged her math abilities and worked with her on more advanced economics. She identifies herself with the geographical area where the university is located, and with the university, having attended events at the university with her family as she grew up. The university offered a very strong business program and ultimately she wanted to do business in this geographical area, so she saw this university as the logical choice. She will pursue a career as a chartered accountant following graduation.

She has a strong business sense, having had a paper route since age 8 and working 30-35 hours per week in jobs related to her accounting courses during university. As an off-campus student, she has been much more focussed on her program and her relationship with her marriage partner than on the social aspects of campus life. She says she is pretty closed minded in the sense that she works on her business program and "doesn't always have time to open up to other things" [8-4].

Although she did not have a knowledge base in the course topic, she was impressed by the enthusiasm and the amount of work the professors designing the course were putting into it. She has taken many courses with Philip and notes she would take any course that he teaches. The different approach with four professors from four disciplines was also appealing. She brought to the course both love and knowledge of the

geographical area of focus, excitement about the course, and an outgoing personality.

David

David is a 21-year-old fourth year Business student. He chose this university to stay in the province, although he had originally accepted a scholarship offer from another university. He has a strong background in science and switched to Business just before university. Although he has always considered himself open-minded, he values facts and proof and is inclined to see things from a practical perspective that has been developed through annual summer work experience in which he has responsibility for over 100 staff. While he plans to pursue a Masters degree, he wishes to work for a year in a variety of settings to widen his experience and help him decide on an area of specialization.

He chooses his work and courses through careful thought. This course was not one that he normally would take as it was seen as an environmental course. Knowing the professor well and trusting his judgment were definite factors in taking this course; he feels the professor sold him on the course. The approach with four professors from four disciplines offered something different than the standard lecture course and he hoped this would pique his interest.

He came into the course with assumptions that economics was an adequate frame for exploring issues; that, as popular belief promoted, we were in a poor environmental state; and that students who were environmentalists would not be open to discussing his point of view. Along with an economic perspective, he sees himself bringing to the course common sense, curiosity, leadership and group work experience, and a willingness to play devil's advocate while being cautious about pushing his beliefs on others.

Tim

Tim is a 21-year-old fourth year Business student. He chose this university due to its reputation and size. His family moved to the area to be close to the university. He started university in Computer Science but switched his first year because it was not what he had anticipated and he didn't like it. Some professors suggested Business as an option and he has loved the program and its people-orientation. He sees this change of program as a big step in meeting new people and changing his expectations of university life. He feels he has learned so much and had a great four years. He loves school and exploring ideas and sees himself going on to study law or teaching.

He considers communication extremely important and enjoys working with others and doing group work. He chose the course on the basis of knowing the professor. He also knew most of the students in the class through the campus newspaper and other courses. He says he brought a hard-core business perspective and experience in campus politics, as well as work on the university newspaper, into the course.

He sees himself as having a capitalist perspective, but has respect for others' opinions. He came into the course with the assumption that environmentalists were inflexible in their opinions, while business students could see the importance of both capitalism and sustainability. He appears to have based some of this opinion on previous interactions with a vocal student environmentalist associated with the newspaper. He did not see compromise between economists and environmentalists as possible on such a touchy subject as sustainability.

Mark

Mark is a 21-year-old fourth year Economics student. He chose this university, to a large extent, based on the scholarship offered. He expected university to be socially and academically challenging; he has found to be true. He has a strong background in science and switched from Chemistry to Economics after his first year. While he came into the program with pretty strong math skills, which are important in economics, he says he had taken only one introductory Economics course and really did not have good sense of what the field involved. His expectations have evolved and become more focussed on career possibilities. While he plans to pursue a Masters degree in Economics, he wishes to work first and is applying for research positions.

He chooses courses that broaden his perspective; he values having a fairly liberal education. Knowing the professor from previous courses and trusting his judgment were definite factors in choosing this course. He also thought the new way of teaching this first-time course would be interesting. This course fits with his interests in the environment and development, and his thesis topic. While taking this course, he was also in a special topics class on developmental economics with another student from this course. He also saw the course relating to his work on the campus newspaper, since the newspaper covers environmental issues. He came into the course with a well-developed sense of sustainability; he thinks in terms of a sustainability framework and uses this

framework to understand new information that he encounters.

Matt

Matt is a 22-year-old fourth year Business student. He was familiar with the university from attending summer camps and chose this university based on reputation and technology use. He feels he has gained a fairly well-rounded education and valuable skills within the Business school, as he had expected. He has always had an interest in business and took economics classes in high school. He had originally planned to study business and economics and then complete an Education degree. He likes business and is excited now to enter the work place upon graduation. He sees himself starting work in media and eventually working his way into marketing.

He knew the professor from past courses and informal interactions on campus and has great respect for him. He was sold on this course by the professor's enthusiasm for the different approach it offered. He liked the way the professor described the course during its planning stages in the summer. His past experience with non-business electives left him feeling like a visitor in situations that did not encourage outside opinions or challenges. Within his business courses, he has been involved in a lot of group projects, but these have usually involved dividing work up among the members and consolidating the project at the end, rather than working on the entire project as a group and sharing viewpoints. He brought an ongoing interest in economics to the course, but feels he brought little knowledge of sustainability issues although his father works in forestry. He does, however, keep up with current events and opinions. He came into the course with the popular assumption that the data available showed that the environment was in a very poor state.

Geography Course—Special Topics: Historical Geography of Canada

The Course and the Professor

According to her biography and interview, Amanda, a tenured professor in the Geography Department, has been teaching for 15 years, 7 of them at this university. She has developed courses that use technology in innovative ways both within and beyond the classroom and developed course software systems to support active student learning. She has taught a range of courses from introductory undergraduate courses in geography to

senior level course on policy and governance. Amanda conducts research around technology use, social policy, governance, and indigenous peoples, which she presents internationally.

During her interview, Amanda described her perspective on teaching and learning. Amanda has always believed that active learning is essential, but during sabbatical the previous year she rethought her teaching philosophy and practice. She considered what pedagogies universities can support to engage students more fully in learning and decided to push her approach to teaching even further than in the past. Amanda says she has moved out of the more traditional role of information giver to that of a player with students in developing deeper understanding of the issues they study. She believes that it is important to develop curious minds with mutual understanding and respect. She does not believe in debating issues; instead, she promotes collaboration to gain deeper and more thorough exploration. Likewise, she does not see learning as forcing content into students' heads but as exposing the subjective value dimensions of the issues involved so they can see multiple views on the issue and develop their own understanding. She believes it is her responsibility as a professor to create a classroom culture that nurtures these aspects of learning. Amanda notes that she brings a feminist perspective to all the courses that she teaches. In a discipline that has been historically male-dominated, she considers gender as very important for exploration of issues. She is also aware of interplay between gender and technology; she believes women are likely to be more involved and comfortable with online discussions and more effective in choosing words when searching for information online.

Amanda also talked about the development of this new course. Amanda notes she has always taken her teaching responsibilities very seriously; she attempts to build challenging and supportive relationships in the classes she teaches. She has taken a leap into new territory for this course by having students set their own agendas and deadlines, and shape their learning process through the questions they raise and their subsequent group exploration. While realizing the importance of this flexible format in supporting her course goals, she is aware that students are used to depending on structure set by professors and wonders if students will see this course as disorganized. As well, she is aware that the extensive use of technology in the course creates new learning demands.

She has developed course organization and expectations so that technology is not merely an add-on to traditional teaching resulting in overload for either her or her learners.

Amanda described a number of aims for the course during her interview. Amanda's aims for students in this course include learners developing as effective writers, excellent learners, informed citizens, and individuals on the voyage of self-discovery. Amanda wants students to share their learning and experiences; listen to indigenous peoples' views; bridge consensus so individuals are not left at polar opposites on issues; and put assumptions and stereotypes on the table and step back to see the multiple perspectives. Amanda contends that while students tend to bring lots of assumptions and stereotypes about aboriginal issues, they usually do not bring a lot of knowledge and have not explored their assumptions.

Amanda's comments and the course outline describe how the course is structured. Rather than focussing on the views of the professor in a lecture format or the perspective of an academic book, the course attempts to focus on the lived experiences of indigenous peoples' and assumptions students bring to the class. During the three hours per week of discussion classes, students use multiple sources—news items, current events, and presentations on books they have chosen—to explore, via discussion and internet research, the experiences of aboriginal peoples. Questions raised by students during this process frame how the course progresses. Guest speakers, such as the commissioner of Nunavut, and use of Aboriginal Peoples' Television Network programs and aboriginal films are intended to help students consider indigenous peoples' perspectives. Much activity also occurs outside of class through posting on the course website their reviews of books, websites, and films; editorial comments on course topics; and multi-media essays—all of which become part of the course materials.

Richard

Richard is a 21-year-old fourth year Geography student. He chose this university because of its reputation, his familiarity with it and the area, and the scholarship offered. In high school, he did not know what career he wanted to pursue; through university he expected to find himself and to set himself up for a job. With good marks and a strong background in science, he started in Biology. While "smart kids" were supposed to take sciences, he found an elective in Geography interesting. He had an interest in politics

during high school, but had not thought of it leading to career options. After a year and a half in Biology, he switched to Geography. He is disappointed that he has not developed career plans yet; he is considering teaching, journalism or RCMP as options.

Other than some Mi'kmaq history that he had taken, he had no background in indigenous issues. He came into the course with the assumptions about indigenous peoples that are common in society. He had not looked into the issues or related them to his own experience.

Kristen

Kristen is a 20-year-old third year Geography student. She chose this university because she had a good feeling about the university from early interactions. She was excited about the experience of meeting new people and living in residence, and looked forward to smaller seminar classes and more interaction between professors and students. She was surprised at how large some classes were relative to her expectations. She was also expecting really excellent teachers as she had in some of her high school courses; she has found this to be the case.

She prefers Arts programs and started in History but found an introductory course in Geography interesting and switched her major to Geography after her first year. Although she has an interest in human rights, she has no experience in it and had little Geography background prior to university. She expects to take a year off to travel after her fourth year. She is interested in gaining experience in the human rights field and perhaps returning to university to study international development.

This course was chosen to avoid another course and since she had the professor of this course for another course during the term she decided to take this one as well. While she has a friend who is aboriginal, she says she had essentially no knowledge of indigenous peoples. She notes that she was quite isolated from the issues of aboriginal peoples, although she has never considered herself discriminatory.

Craig

Craig is a 23-year-old fourth year Geography student. He chose this university because of its reputation and his desire to remain in the area in which he grew up. He had no interest in going elsewhere. He had heard a great deal about university from his older brother and looked forward to finding out for himself what it was all about. He values the

experiences of learning and growth beyond book learning and hoped to balance his studies with involvement in other activities.

He had a strong background in Biology and sports from high school and started in the Kinesiology program but did not enjoy it. After an elective in Geography offered the hope of more thinking and less memorizing than Kinesiology, he switched to a major in Geography. As an avid debater with no previous Geography background, he feels he brought a fresh perspective to the program. At first he enjoyed the novelty and variety in the discipline; this has developed into pursuing options for related careers. His interest and enjoyment in the subject have continued to grow and he is looking at positions in municipal government related to his program.

He came into the course with enthusiasm and open-mindedness but also biases about indigenous peoples based on what he had heard in the past. He did not see these biases as "holding much water."

Andrea

Andrea is a 23-year-old third year Geography student. She chose this university because of its reputation and the expectation that it would be larger and she would have more anonymity than back home in the West Indies. Since she had never been to Canada, she felt it would be an excellent opportunity. Although she was at first surprised when campus and class sizes turned out to be smaller and less anonymous than she expected, she has enjoyed the experience very much. She feels that she pushes herself harder than she thought she would in university because of the hard-working and bright students she has met. Through her university experience she has been gaining greater interest in international relations and expects to apply to law school after her fourth year to study international relations.

Andrea came from the West Indies with an interest and involvement in politics. She had taken legal studies and civic studies in high school and has always enjoyed thinking about issues in history, geography, and politics. She says she thrives on politics; she is a member of a political party in the West Indies of which, she proudly notes, her aunt is an officer. She has been a quiet student who listens carefully, but has not been comfortable speaking up in classes. She is aware of the diversity that she brings to the program at this predominantly white university. While she did not have knowledge of

Canada's indigenous peoples, as a Black woman, she came into the course very aware of the struggles of her own people.

Psychology Course—Psychology of Human Relations

The Course and the Professor

According to her biography and interview, Carolyn, a tenured professor in the Psychology Department, has been teaching for seven years. She has been active in helping to redesign the department's program of studies over the past several years. The redesign was aimed at increasing the number of courses offered that have research components and requiring all majors in the program to take advanced research courses. She has taught introductory courses and the research methods course required by all students wishing to take senior level courses. This experience gives her a solid working knowledge of the challenges faced by students in understanding and using appropriate research methods and by professors in providing engaging and effective research experiences. Carolyn's own area of research is applied psychology with emphasis on workplace relationships.

During her interview, Carolyn described her perspective on teaching and learning. Carolyn believes it is important for students to see that topics are "messy" with affirming and disaffirming information on each side; each of us needs to critique research data to decide what we "buy." She considers knowledge to be dynamic and constructed, rather than a body of knowledge owned and passed on by the discipline. Students, according to Carolyn, are active learners and constructors of knowledge that they can share in the class; they are also developers of research that extends the information gained from other researchers. She sees exploring how research relates to real life issues and students' personal concerns as key because the interplay between personal experience and empirical research encourages deeper thinking on important issues. She also believes that if you are going to understand research, you have to do research. Carolyn notes that most students she teaches do not have strong gender awareness; they sometimes say they have thought a great deal about gender when it is raised as an issue or topic. Carolyn does not feel gender is a particularly defining issue in her own self-concept and believes from her observations in classes that most of her students are like her in this regard.

Carolyn also talked about the development of this course. With student and

faculty input, she developed the course five years earlier and has been adapting it each year to incorporate feedback from students taking the course and new research and teaching approaches. She notes that it is challenging to cover multiple aspects of research sufficiently for student understanding within the limits of one term. This year she has adapted the course, which usually has 10-12 students, to accommodate 27 students. With the increase in class size, it is harder to maintain full class interaction and gauge students' understanding by their discussion in class. With the larger class size, students who are uncomfortable speaking in class do not tend to participate in the larger class discussions. Even outgoing students, who are more active in contributing their personal experiences, are less talkative in integrating experience with research in the assigned articles. She sometimes has the feeling students are waiting for her to provide the "right" answer. Rather than responding by lecturing, Carolyn incorporates numerous group activities and smaller discussion groups to encourage increased participation and integration of research and personal perspectives. She feels that students are likely to gain deeper understanding through discussion, activities, and conducting research than through listening to lectures.

Carolyn described a number of aims for the course during the interview. She wants students to understand there are lots of interesting real world issues and concerns, and that they can be involved in raising and discussing important and controversial topics and developing research to explore these issues. She wants them to think about complex issues and research that they might not have thought through before. Students need not throw their hands up in despair or confusion about complex issues; while research does not have all of the answers, it has some tools to start exploring the issues and concerns. She wants students to appreciate that they can come up with research questions and use their questions to build on previous research. She wants them to develop skills in researching their questions and critically considering their own and others' findings and perspectives. She wants students to think about their personal experiences and research on issues, so they can see how different issues and the research on these issues relate to their lives.

Carolyn's comments and the course outline describe how the course is structured. Rather than a more traditional lecture format, the course attempts to look at research and social issues from the students' perspective by linking experience with research findings

on human relations issues such as prejudice, stereotyping, personal relationships, and gender roles. She notes that it is an intense course with a discussion component and a lab component. During the three hours per week of discussion classes, Carolyn raises questions related to the research articles that she assigned students and incorporates small group discussion, problem solving, debates, and activities that illustrate and clarify concepts and research findings. During the weekly two-hour lab component, she assists small, self-selected groups in developing and trouble-shooting aspects of research projects of their choosing around course topics. In so doing, students raise and discuss new questions and develop new research. Over the semester, students design, implement, and prepare reports for projects using four different research methods, as well as writing for non-psychology audiences.

Theresa

Theresa is a 23-year-old fourth-year Psychology student. As an international student from Eastern Europe, she chose this university, with encouragement from her parents and teachers, as a means of experiencing a different culture and gaining more independence. She has been surprised at the diversity of cultures in Canada. She found it was hard in the first two years to cope with being away from home and with differences in culture and language. She maintains close contact with friends from home who are living in Canada and with friends and family back home. Her fluency in English was not sufficient for fully understanding Psychology courses. Although she was not sure she could manage it, she switched to an English degree and then back into Psychology when she was more proficient in English.

Theresa came into the program with experience and interest in working with children with disabilities. She originally thought of becoming a child psychologist and, more recently, a social psychologist; her topic for her undergraduate thesis is international conflict resolution—a topic of interest because of the ongoing conflict in her homeland. In her last year of the undergraduate honours program, she now realizes the number of years of further schooling needed and is not sure if she has the stamina required to complete a PhD. Following convocation and a year off school, she hopes to continue in Psychology or in Social Work at the Masters level. She came into the course with background knowledge in social issues and research methods from previous courses.

She knew Carolyn from a previous course on workplace relationships.

Lauren

Lauren is a 24-year-old fourth-year student. She chose this university, in part, because it allowed her to live at home while attending university. She has always enjoyed learning and been strong academically, focussing on sciences in high school. She has always known that she wanted a career in which she could help other people, perhaps in a medical profession. From a course in high school, she thought that psychology also looked interesting. She completed a double major in Biology and Psychology and worked for a year as a research assistant before returning to complete an Honours Psychology degree. She is now in her final year of the program and planning for the future.

She has considered a number of options for future education and career. As a straight A student, she expected to find the process of continuing her education fairly straight forward. Her plan to become a health psychologist fit with her strengths and interests in biology and psychology and her desire to work with individuals with chronic and life-threatening illness. A change in her life outside of school has caused her to re-think her plans. Within the past year, she became engaged to be married. Her future husband has established himself in the local area in a family business and is unable to re-locate his work while she pursues further education in a specialized health psychology program offered at only a few universities. This has left her uncertain of her future education and career paths. With her experience as a research assistant, she came into the course with strong research skills, along with interest in applied psychology and background knowledge from a course in social psychology. She knew Carolyn from a previous course in research methodologies.

Jenny

Jenny is a 20-year-old fourth year Psychology student. She came to this university in part because of family connections to the area. She has found meeting people in university from all across the country and with different backgrounds an interesting experience. She was 17 years old in her first year of university and sees one of the benefits of university as offering a time to grow up.

She had read a lot in high school about people with different problems and was interested in what motivates people. She found a high school psychology course very

exciting and thought she would become a clinical psychologist. Her interest remained in university but she realized the time commitment for the required education. She has rethought her expectations of an undergraduate degree and feels she is more realistic now; she does not believe she has the personality to be a clinical psychologist or the willingness to put in the time it takes for a PhD. Overall she thinks the program has been a good choice in giving her good analytical, research, and writing skills, and skills in dealing with people. She plans to find work close to home to pay off her student loan and perhaps pursue further education at some point in time. Jenny came into the course with background in research methods from previous courses. She describes herself as accepting and liberal and having an awareness coming into the class of stereotypes. She sees her age group as more open and less prone to stereotypes and prejudices than older age groups. She knew Carolyn from a previous course in organizational psychology.

Table 2: Summary of Course Characteristics

	Sustainability	Indigenous Peoples	Human Relations
Course Philosophy	University is a privileged time; it is important to explore difficult questions from multiple perspectives that include feelings and supportive arguments.	Collaborative exploration of underlying assumptions through multiple media has potential in aiding development as a student, individual, and citizen.	Exploration and integration of personal experience and research, and learning to do research allow students to be informed users and creators of research.
Course Aims	Exploring difficult sustainability issues from a variety of perspectives; understanding that large questions do not have easy or discipline-specific answers.	In a safe environment, help students to put their assumptions and stereotypes on the table and look at competing perspectives about indigenous peoples.	Looking at controversial social topics by evaluating the research and exploring their own experiences on these issues; developing research to explore issues further.
Course Features	-4 sections with one professor leading each section for the discussion component -4 sections for research projects -fisheries, conservation biology, genetically modified food, water resources -6 evening guest lectures across areas of interest -Student research presentations to all sections	-Students choose one of five possible books to review and discuss with class -Use of art and literature -Journaling; posting editorials -Integration of discussion and online context information -Developing multi-media essays	-Integration of research and personal beliefs and experiences on controversial social topics of public concern in discussion component -4 small-group research projects designed by students in lab component -Writing for non-psychology audience
Main Resources	-2 texts—from economic and environmental perspectives -Guest presenters -Online and community resources for research project	-Books—most by aboriginal writers -Films by aboriginal peoples -Guest speakers -Aboriginal Peoples' Television -Online documents and sites -News reports -Course website	-Assigned research articles -Professor-prepared discussion summaries -Online resources for research -Student-located research articles -Community resources for research projects -Computer statistical programs
Major Activities	-Discussions and activities -Responding to guest presentations -Major group research project, report and presentation	-Student presentations -Guest presentations -Class discussion and seeking information online -Developing individual and group projects	-Collaborative research projects -Group discussions, debates, activities
Grading / Evaluation	Group project; discussion activities; plenary session responses; final exam	Weekly contributions to website; journal; collaborative research project; major research essay; no exam	4 student-designed research projects; midterm and final exam on discussion component of course
Role of Gender	Not course topic or lens; professor values ability of women students to consider emotional and social aspects of issues in historically male discipline.	Indigenous women most marginalized—interaction of gender, race, and class explored; gender important lens for all topics; professor brings feminist perspective.	Topic explored within course; professor does not see gender as key in her self-concept or see most students as very gender aware; most psychology students are women.

Chapter Six: Students' Experiences of Transformative Learning

In this chapter I describe the process of engaging in transformative learning. Early in the interview, I asked students about their experiences by noting, "Students talk about having many different experiences in their undergraduate courses in university. They talk about experiences that made them aware of something they hadn't thought much about before that helped them see things in a different way or changed their attitudes about something" and then asking, "Can you tell me about any experiences in this course [course name] that have opened your eyes to an issue or that have changed your attitude(s) in some way?" I then asked, "How did this experience occur for you?" and used prompts as needed ("feeling sense of discomfort around the issue/situation; talking with others about the experience/issue; learning new skills related to the experience/issue; learning information related to the experience/issue; rethinking your assumptions/attitudes; changes in your actions; changes in your usual behaviour; changes in your way of thinking/talking; changes in your attitudes; changes in how you see yourself as a person").

Students in each class talked of ways in which these experiences occurred. While each story was unique, there were themes across the stories of individual students and across classes. Across classes, three consistent themes were (1) seeing the relevance of the topics or issues; (2) sensing tensions among ideas, perspectives, positions, or expectations; and (3) digging deeper to understand the issues more fully than before. By using these descriptors I do not mean to imply a linear process, discrete separation of the themes found, or a particular prescribed order. I appreciate that any division into elements of the experience is artificial and some of the uniqueness of the experience for individual students is lost in the process. The themes, however, help in exploring similarities and differences among courses.

Because my intention in this study is to focus on student perspective of the learning experience, I describe what students said in their interviews. Student comments are in keeping with what I observed in classes that I attended and with statements made by the instructors during their interviews. For clarity as to source, I specifically note when, rather than discussing what students described, I am including my own observation or interpretation or a comment by one of the professors that I feel helps in further

understanding student experience. I present each course as a separate case for the first research question on the experience of transformative learning, using the revised model as the framework. I believe presenting results in this way will help the reader to better understand the transformative process for students in each course.

Interdisciplinary Course—Economic and Environmental Sustainability

Seeing Relevance

Students in my sample from this elective course have backgrounds in Business or Economics. Since they take many similar courses in completing their programs, they bring similarities in terms of perspectives. More specific points of relevance in the course, topic or issues vary, however, as these relate to students' lives and values. For most of the students, the initial connection with the course was through a professor they respected and whose courses they enjoyed in the past. Students were required to talk with the professor to get permission to take the course. I believe from student comments that this provided students with a good sense of what the course would be like and the fit between the course and their interests. In the process they were struck by Philip's enthusiasm and interest in the topic. They thought the new format of the course would add interest and breadth to their programs. This course offered the opportunity to expand their learning experience—something the students interviewed considered valuable and relevant to their goals in university. The topic was also of great interest to the students. As one student noted,

> The people who took this course took it because they really are interested in it; they didn't just fall upon it as a random elective. It was something that people were interested in talking about. [9-11-2]

Beyond this more general interest in the course, students talked about personal connections to the topic that made the course relevant—both initially and as the course progressed. For several students the format and topic of the course were particularly appealing because of their love of discussion and interest in controversial issues. As members of the campus newspaper or student government, they had considered the topic of environmental sustainability, although they had not taken a course in it previously. Two of the students had a parent who worked in an area of sustainability. Although both said they had not appreciated the importance of such work until they had taken the

course, they considered learning more about parental work a positive motivator for learning more.

For most of the students interviewed, the topic was also relevant in terms of future plans. For one student learning more about the province in which she had spent happy times and in which she hoped to eventually work had strong appeal.

> Normally our courses are taught on such a global level that we think "that won't affect me" or "that won't affect someone I know." And one of the classes looked at the river I grew up by; I fished in that river and I swam in that river. And for them to look at whether that river is going to be there 20 years from now, all of the sudden hits a nerve inside of me. [4-7-1]

Another student noted that he had always thought that businesses need to consider environmental issues, but he had not had other courses that dealt with that issue. For a third student, this course fit with his interests in environment and development, and with his thesis topic. Two students noted that the course offered a unique opportunity to explore their experiences and attitudes. Through past work experiences, they had concluded that while the ideal was fine, it often was not practical. As one student commented, "[It] is easy to say we should do this [and]...I don't disagree that [environmental sustainability] would be ideal but we can't, so let's be realistic" [5-5-1]. As well, although they felt discussion was important, they thought the gap between ideal and practical for this topic made indepth, productive discussion unlikely. "In the real world you get people together in a room and they won't talk to each other because of their opinions" [7-3-3].

Sensing Tension among Perspectives

Amid the interest and discussion in the course, students were surprised and felt ongoing tension around the presentation of the two sides of the sustainability issue. The texts presented opposite views of sustainability—one economic and one environmental. Guest speakers presented opposing and sometimes seemingly extreme views. One speaker pointed out that the same data were being used by both economists and environmentalists to support their arguments, and students needed to make up their own minds about the issue. Two views using the same data base challenged students' assumptions about the data-backed correctness of either side of the debate. As one

student noted, "I hadn't realized that looking at the hard data that everyone else looks at too, you could actually argue the other way" [11-4-2]. From student comments, I believe this created tension within students and a new dimension in their interactions—the line between their opposing positions based on data was no longer intact.

There was also surprise at the text presentation that things were not as bad as they had been told. Business and economics students described this as creating a new sense of possibility, "because you are taught and it is blasted into your head that the environment is going to hell, that we are going down hill fast" [11-4-2]. They also observed, however, a sense of discomfort for environmental students in the class. The strength of emotion became apparent to one student while listening to the expression of strong opinions in class or when a guest speaker with extreme views created cringing in some of the students: "I could see during the [guest] presentation... that the environmental students were just turning in their seats trying to hold back their emotions" [11-6-1]. Tensions in debating the sides of the issue also involved having to open up as business students to hear strong opinions from non-business students. As one student commented, this was "a course where people may not have said what I wanted to hear or thought what I wanted to think" [4-18-1].

Breaking free of established perspectives was not easy; to the end of the course some students in the class seemed unable to believe information contrary to their original view. The two main sides competing for authority on the issue formed the basis for debate, discussion, and joking. In the process, there was an assumption that students knew each others' positions, resulting in surprise and increased tension when an individual expressed a view contrary to what was expected. For one student this involved tension he felt during discussion over realizing, contrary to his assumption, that environmental supporters were open to discussion and compromise.

> I thought it would be like going in and trying to have an argument with a wall. I have had interactions with people like that before....And that certainly changed throughout the course, realizing that... at least they are open minded to my side. [15-12-1]

Another student was surprised during a guest presentation when an environmental student sided with him, rather than the environmental guest presenter.

> For [the environmental student] to say there is a grey area is very different. Instead of sitting five seats over he is right beside me. I was really surprised and I guess I see him in a different light now. It was a wake up call. [7-6-7]

As the course progressed, students felt they were moving toward compromise on issues that had divided them. There was a sense that they were attempting to move beyond one side being correct and that they "needed to start to think about making a difference [environmentally]" [4-19-3]. Within this sense of developing community and responsibility, there were new tensions. It was not easy to "break free of the notion of there always being an answer—how do you study something if it doesn't have an answer?" [4-22-5]. One student was confused when, near the end of the course, small discussion groups in class did not agree on the priorities for addressing environmental problems. While he could see the value of the different priority lists presented, he thought that there would be a standard answer to the problem by that point in the course. Another student also felt frustration at not having a definite direction to follow to improve situations discussed: "It was frustrating...because you still don't really know where to go with it" [5-9-1].

Exploring Underlying Assumptions

The class spent a great deal of time digging deeper into the data that were presented in the both texts, discussing the two dominant views in class, and hearing personal experiences related to the issues. One student noted that using the text that presented a non-standard interpretation of the data "really makes you stop and think. These are facts but there's obviously some bias behind that. And you think about what the bias was" [9-8-1]. Through discussion, they could "look at people's opinions and dissect them and find out what their perspective is" [9-20-3]. Unlike other elective courses in which students can feel like visitors rather than contributors, another student noted that in this class "you could really put it out on the table and nobody would degrade your comments or your opinions" [11-6-7]. Having both sides presented allowed indepth discussion and debate.

> I found I swayed a lot in class, just by the opinions that I heard, and back and forth and sitting on the fence and fall[ing] off the fence on one side and climb[ing] back up to fall off the other side. [11-13-2]

Through this process he found that he had a chance to more fully hear other opinions; he came in with his "own ideas and came out with others' ideas" [11-8-6].

Business students and environmental students worked together to understand each other's perspectives and group positions without trying to "convert" the other; they were "learn[ing] to see from each other's point of view" [4-9-1]. There was willingness to share both their "ignorance and [their] ideas" [7-4-5], using joking as a way of creating comfort around touchy issues and moving towards compromise. From their group interactions, they were able to "see that people are willing to compromise" [7-8-5]. The open sharing allowed exploration of agendas and underlying beliefs on both sides—digging for clarification and implications. Through the process, one student found that many of his ideas were inaccurate; through questioning other students he dispelled a lot of myths, gained a lot of factual information, and heard the basis for multiple perspectives.

"[A]sking and answering the why question" [7-11-2] helped students understand why individuals felt so strongly and how to adopt some of the insights brought to the table. "Understanding why others thought as they did was really fundamental" [4-18-2]. This allowed students to broaden "horizons to things we take for granted or we don't realize" [4-4-5]. Through class discussion, one student thought further about his strong opinion that one ought not to support companies with whose practices you disagree. He found that he and the environmentalists were closer in principle than he realized, but unlike them, he was not putting his values into practice. This was surprising to him and encouraged more openness to environmental views that he had considered too idealistic, as well as movement toward seeing others' beliefs as possibly different, but not of lesser value, than his own.

Students were regularly challenged by the speakers and the texts to make informed decisions. Exploring data and the claims made about them revealed more ambiguity than they had expected. Definitive answers and simple solutions to problems appeared to move further from their grasp. Rather than depend on an outside authoritative answer, students found they needed to make up their own minds. Through exploring experiences and assumptions more fully, students realized with greater clarity that a right versus wrong approach that pitted groups against each other was not helpful for such

complex problems. As one student described the process, students came to realize "that we'd have to work together; ...it wouldn't be just one discipline or one country or one organization. We have to work together in order to come up with these ideas that will sustain our resources" [11-7-4].

Geography Course—Special Topics: Historical Geography of Canada

Seeing Relevance

Special topics seminar courses at this university offer a number of advantages: smaller class size, a topic that holds particular interest to the professor, and the chance to focus on a topic in more depth. What these courses lack are a description in the university calendar, opinions from students who have taken the course in the past, and a descriptive title, due to space limitations, in course listings. While students can contact the professor about the course, many assume what the course will be like and attend the first week of classes to make their decision about taking the course. This course, Historical Geography of Canada, was a special interest course in which a number of the students guessed incorrectly about the topic of study.

> With that course, when I registered the name was "Historical Geography of Canada," so I thought it was a seminar, and I thought maybe it was like a current events class and that would be really interesting. And then the first day [the professor] said what it was about. I was taken aback. [2-2-5] I can remember the first day when [the professor] said it is all about studies in indigenous peoples and everyone kind of rolled their eyes. I just didn't really know what to expect and I can remember talking to one of the girls in the class and she said, "What's up with this? I didn't expect this." And I agreed. [2-3-6]

Unlike the other two courses in the study, students in the course on indigenous peoples did not describe finding the topic initially relevant to them. As an elective course in their major discipline, the course could help broaden students' perspective in their field of interest. But beyond being surprised at the gap between title and presumed topic, most students interviewed initially questioned that the topic was relevant to them. With little interaction with aboriginal peoples, they thought of indigenous peoples "as over there and [having] their own problems" [2-3-2]. For some it seemed like a limited topic that did not relate to their personal experiences or to their notions of an important topic in their

discipline. As one student noted, "I just never personally thought that you could do a whole course on that [topic....My roommates] couldn't believe that I [was] taking a class on this. Everyone that I mentioned it to was just kind of sceptical" [2-4-5].

The course on indigenous peoples did not connect initially with students as a topic of interest; however, the way in which the course was structured did. Students described being interested in this course because it offered a different format than they had in most of their other courses. One student noted that if the course had used a more traditional format, "I wouldn't have taken it" [2-6-6]. The format described by the professor and experienced by students early in the course was more in keeping with the vision they had of university learning and offered them opportunities to learn in different ways, both individually and as a group. As one student noted, "There are different ways of getting people interested I guess. This course asks you what your way is of getting interested" [15-13-6]. While the chance to explore technology in new ways appealed to some students, the chance to bring their own views into a discussion format appealed to others. While the topic did not initially strike students as relevant to their education, the relevance of the ways of learning in the course drew them into exploring the topic.

It was through the experience of digging more deeply into the topic in multiple ways that relevance developed around the topic. According to one student, "I think it is like a frontier that hasn't really been touched and that is kind of intriguing to some people" [15-13-6]. The developing relevance fed continuing exploration through multiple resources and perspectives. "Everybody that was in the class kind of [thought the topic was] odd at first, but as time went on...[thought] that it was neat" [2-4-5]. A sense of excitement developed as new appreciation for the topic grew and involvement increased.

For some students, interest came in the form of reconsidering personal interactions with aboriginal people and the limits of personal knowledge. In his last year of high school, one student had a hockey team-mate who was aboriginal and whose father was chief of the local band. He visited the family on the reserve on several occasions and had great respect for the family and the values they lived. Although he sees their friendship as a positive experience, he did not really understand anything about reserve life or aboriginal issues at the time.

That is one thing you learn right away—how little knowledge you have of the

> people around you and that is kind of scary coming from this area and not knowing anything about the people who are your neighbours. [15-3-5]

Likewise, another student who has a friend who is aboriginal said, "The course was almost a shock to me because I don't know much about indigenous people" [8-2-9]. As an international student, a third student's knowledge of Canada's aboriginal peoples was limited coming into the course, but a strong connection developed between the struggles faced by aboriginal women and the struggles she experiences as a Black woman.

> I would think, being a Black female, that we are the only young women in the world going through so much. We have to overcome so much; on top of just being females, it is also being a Black person. It is not [so] difficult that you can't do it, but sometimes you hit a point where it is really, really hard. And it is nice to be able to relate that to what the indigenous women are going through. [16-4-3]

In spite of his initial questioning of the topic, one student found "after the first couple of weeks...it was more like, 'I want to know more about this.' I think that maybe the whole class thought that" [2-3-4]. A sense of personal relevance developed as students began researching projects of their own choosing. For one student, this involved researching women and abuse after reading a particularly moving autobiography by an aboriginal woman. The book had been one of the options on the course reading list. For another student, engagement in the topic included an ongoing correspondence with a government contact at the Department of Indian and Northern Development to learn more about a Royal Commission in the early 1990's on aboriginal peoples in Canada.

Sensing Tension among Perspectives

The tensions described by students around their assumptions and knowledge fall into two broad categories: how they and others saw aboriginal people, and course process. Students were shocked at what they learned in the course; the information was not in keeping with information they had heard in the past or with their assumptions about aboriginal people. Reading an autobiography by an aboriginal woman was eye opening for one student.

> So the beginning [of the book] was very emotional....She was crying and emotional and it hits you. And, oh my gosh, it is something you had never really

> thought of. But the sad thing for me when I was reading it, and other people in the class who read it said this too, that when you are reading it you are saying, "You know, is she really that discriminated against?" Just because it is something we had no idea about. You have to take yourself away from who you are and realize it maybe is that bad. [8-11-1]

As another student noted, "Considering that Canada [is] a first world nation it was really, really shocking for me to know that [such discrimination] is still going on" [16-3-8].

Activities in class offered opportunities for students to see the tensions. A visit with the Honourable Peter Irniq from Nunavut for an informal tea time during class engendered deep respect for Mr. Irniq and for indigenous peoples among students. It also provided comparisons with guest speakers in other courses in terms of both assumed status and values presented.

> And then [in another course] we met the husband of the Governor-General and it was a totally different setting with bodyguards everywhere and you couldn't come into class after a certain time. You were told to be on time. You couldn't be late or you wouldn't get in. And then when you walked into the building the body guards were asking where you were going....And I am thinking to myself, just last week I met the *Honourable* Peter Irniq and he was all by himself. He was all by himself! It is totally a paradox. It is quite evident [from the number of bodyguards] that one is [considered] more important than the other. They are both officials of Canada. And I am [wondering] how is it that this man of such magnitude travels by himself while another needs 17 or 18 people with him. And that is another thing—[Mr. Irniq] told us to call him Peter. Wow! Is that right? We had tea and it was totally different. [16-12-3]

Another student also had an opportunity to compare the visit from Mr. Irniq, this time with an aboriginal man speaking in another course who described the importance of aboriginal peoples integrating business practices into community life to ensure band self-sufficiency. The tension between the more traditional values that Mr. Irniq described, and that students had been discussing in the indigenous peoples course, and the business values espoused by the visitor to the other course brought to light the student's own former assumptions and stereotypes about aboriginal life and his ignorance of the

challenges facing aboriginals in maintaining their values. Awareness of stereotypes they held or the knowledge they lacked was also described by other students as a source of tension and "almost a feeling of guilt. [Wondering] 'How could I not see that?' " [8-3-4].

Beyond the content of the course, students experienced tension around differences between their expectations of university courses and the structure of this course. Although they "worked on the outline together in class...[and] it was definitely collaborative" [15-6-3], they were also being asked to take part in the course in more involved and less traditionally structured ways than they had in other courses.

> At first, being experienced here at university, I had some serious reservations. It seemed a bit whimsical for me at first, not to have that sort of structure that I expected...it was kind of scary...I thought there was a catch at first. [15-5-8]. [It] was a tad bit awkward, I would say, for some people to embrace a course where they had [three or] four years prior of never, ever saying a word in class and got out with straight A's. When someone asks you to put yourself on the line a little bit, I think that was big for them. [15-7-11] Because there were always courses...for the first three years—professors just want you to do the work and not put any kind of analysis into it....And if you don't take advantage of [what this course has to offer], it is really one of those instances where you are not going to get anything out of it. [15-5-2]

Use of technology throughout the course to gather up-to-date information and perspectives also created tension when students realized that they had access to information about indigenous peoples that the subjects of their inquiry had difficulty accessing.

Exploring Underlying Assumptions

In digging deeper and looking at underlying assumptions, course content and the way in which the course was structured blend. Students talked about both how they explored the issues around aboriginal peoples and how they were learning in a manner different than they had experienced in other courses. It is not possible to completely separate out students' comments on process and content. The interweaving remains in place due, in part, to the way in which the professor integrated course content and process. Students seemed to appreciate this integration as they became involved in the

course.

> I find in this course that it is a different type of education and if you think about it is more like an aboriginal type of education. It is based more on interactions...not so much where the professor is a professor but more that they are guiding you through the material....I think that is the class I have probably learned the most from. [8-5-1]

Students identified the underlying assumptions of this learning process as they looked beyond their expectations of university learning from past experiences and examined more deeply this new learning experience. Their comments speak of a new awareness of teaching and learning and of themselves as contributing learners. One student noted,

> That class taught me to think about things differently and just to have more of an open mind and when you hear about an issue not to just take it and say that is the issue. But to explore the problems and ask some questions and do some research and try to learn about the problem, not just say this is it and this is what it is. There is more there. Just to [ask], "Why is this the problem? Why is this the solution? Maybe, what could be done differently?" [2-4-11]....Not that some of the other [courses] couldn't have had that element, but [they were] more just straight lecture [with] people asking questions about the information the professor presented and then the professor would answer it and then he or she would continue on with the lecture. With this class, if someone brought up a good question, we would explore it and that would be the issue. I never really had a class like that. It is almost like she had no real plan; she let us go where we wanted to go. [2-5-3]

Although the structure of the course appeared loose compared to other courses, students found that it offered unique opportunities. One student noted, "It was structured... in a way that you could explore and develop thoughts. I think that is really important" [8-11-9]. Time to explore ideas and to express them helped students learn to "communicate better [and to see] that writing and the use of language alone can bring down barriers that are so large" [16-6-5]. Students valued getting closer to each other's opinions and experiences and became aware that through the materials they used they

were also getting closer to "first hand knowledge given to you by the actual individuals" [16-9-1].

> For example, we were allowed to choose a movie to watch...[with] indigenous people acting and indigenous people producing and executive produced by indigenous people. So you understood that everything you were learning was of the indigenous culture [and] you couldn't help but soak it all in. I think that is what made it more interesting; that is why we appreciated the class so much. [16-9-3]

Students found the course exciting; they also found it challenging as they rethought their views and the biases around them. This was not easy for students more used to being given answers. Finding information was only a first step in the process of digging deeper.

> [For] this class you had to go the next five or ten steps to figure out the meaning, or who created it, or the creator's background [15-11-6]....because when you work your way back, everything started from something and it started from this person and where were they coming from and why wouldn't they have the same biases as we do? And once you figure out that you have these biases, which you figure out pretty early in the class, then you shouldn't have a problem with looking up different authors and where they come from. But people often don't do that. And that is where the teacher came in and definitely helped out and said you have to look up the author. And for weeks on end when people didn't look up the author, she would say you have to look up the author and that is where teaching occurs. [15-12-2]

The course asked students to consider new ways of seeing things, "breaking down the stereotypes and getting to the root of the problems" [2-3-1]. One student commented, "[the professor] pushed us to explore gender issues and inequalities, [and] gender stereotypes" [2-5-1]. Through this process they were exploring their own beliefs and also values and practices that affected the lives of aboriginal people. For example, one student noted that they were "[t]rying to figure out why [life on the reserve] has moved from being the woman as dominant in the house to having a lot of wife abuse" [2-10-9]. Another student noted that a "friend who is aboriginal...said that sometimes the

stereotypes are true and in the class you learn about why it is like that" [8-9-9]. Beyond the critical thinking involved in the course, students also described emotional challenges in looking at difficult issues without the comforting distance experienced in other courses. Students described distress and hopefulness.

> I have learned that there are indigenous peoples who have made excellent long-term goals and have achieved those goals for themselves... They are righting things themselves and that is comforting. I also learned that there is still a lot that they are dealing with and that was a bit sad. [16-6-3] Going into the course I got distressed sometimes, like when we were talking about aboriginal laws that in some ways hindered them. Of course, it made you depressed or a little bit upset. [16-7-5]

Psychology Course—Psychology of Human Relations

Seeing Relevance

Like students in the other two courses, students in this course share discipline perspectives. The three students interviewed have social science backgrounds and have taken other courses, related to applied social issues and research, which explore issues similar to those in the human relations course. Students share common areas of relevance related to their interests in Psychology as a profession and their original desires to continue in the field: one as a professor, one as a researcher/practitioner, and one as a clinical psychologist. They also bring personal backgrounds that make particular topics relevant to them. Each student described a different course topic as key in the process of exploring her assumptions.

For Theresa, a course topic—prejudice—related to her honours thesis on international conflict resolution. As an international student from a country with ongoing conflict, she noted

> I always thought about these different sorts of issues like prejudice. I just find it really interesting because of my background. [1-3-1] The prejudice issue made me think more of my own views on the subject and at the same time we had things going on back in my country. [1-3-5]

News from back home was not good. Her parents were warning her that she might not be able to return home at the end of her degree as she had planned, due to increasing

conflict. Discussing prejudice in the course raised new questions for her about her past upbringing, current experience as an international student, and future possibilities.

For Lauren, a research project around future career plans struck a personal chord. At the beginning of the course, students introduced themselves and told the class what they planned to do after convocation. She was surprised to hear that many students did not know what they would be doing. As a final research project, groups were assigned a different method of exploring this issue further. This project was particularly relevant in light of the turmoil she was feeling about her own career plans. She had known what she wanted to do, but things were changing following her engagement.

> [The small] number of programs is a problem also. And I'm limited now,...I'm kind of stuck [here]. I really wanted to go to [university in another province] but I knew that that wouldn't have been good for the marriage because that was a 5-7 year PhD program and he wouldn't have been able to get a job [there]. [3-5-2]

Jenny found the topic of stereotyping particularly engaging. She considered herself to be informed about stereotypes and to be open-minded about others' experiences and beliefs. She thinks of herself "as a rather accepting and liberal person" [14-13-7]. She has generally considered the older generation more narrow-minded and unaware of research that refutes assumptions undergirding their stereotypes. She also saw her own generation as more knowledgeable and open-minded. In particular, because she has lesbian friends whom she believes would make good parents, the issue of stereotypes related to gay and lesbian couples as parents was relevant to her. This became the topic of a research project she and her project group developed.

Discussing the issues in class or in their research groups highlighted the connections between topics and students' backgrounds, concerns, or beliefs. All three students seemed surprised by the strong connection between an issue discussed in class and their lives. As one student noted, "I guess I wasn't expecting it" [1-15-7].

Sensing Tension among Perspectives

For each of the students interviewed, a topic hit a nerve as it tapped into significant life events or self-perceptions. Each became uncomfortable when others in the class seemed unable to share her perspective or fully understand the personal experience or emotions behind the perspective. The tension for the three students shared a common

tone of personal exploration, within the context of group discussion, and consideration of how personal experiences and feelings compare with those of others.

Theresa found during class discussion that her lived experience of prejudice was not in agreement with North American classmates. In their discussion in class, other students appeared to think that people could choose or not choose feelings of prejudice. From her perspective, considering the history and current living conditions in her country, she was not able to see how this could happen: "When I said in class that I am prejudiced against these people, I knew that people were thinking this is just too much and you can get over it. But for me, it is just impossible" [1-5-2]. When she told the class that she was prejudiced, she realized how large the differences in perspectives were. In her description I hear and feel tension between the class's rational analysis of prejudice and her emotional experience of it.

For Lauren there was renewed tension during the research project at the end of the year on career paths for psychology majors, as she considered her concerns about her own career decision-making process. Her assumptions about being able to follow her chosen career path were not in keeping with assumptions she had for her future role as wife. She does not feel that postponing marriage or being away from her partner for the length of a PhD program are her best choices. Further, she wishes to have time home with young children in the future.

> I feel that I am getting old and if I'm going to be spending up to 7 years in a PhD program—at some point I want to have children and I don't know if I should do that while I'm in school or whether I should wait until I graduate. If I wait until I graduate, then I'll have a family right away and that will be a disadvantage for a career. [3-10-5]

During her group's study, Jenny found that their undergraduate participants, like older adults in previous studies, did not approve of adoption by homosexual couples. This finding was unexpected: "We were surprised because at the undergrad level most young people are pretty liberal about most things" [14-4-4]. The finding created a sense of tension between the research findings and her assumption that she and others of her generation were informed about stereotypes and more accepting and liberal than older adults. This discrepancy between her views and those of others mirrors tension she felt

during class discussions on other topics.

> And the hardest thing was when...your personal experience was the exception. To sort of be "I don't agree with that because that is not what happened to me"...it is very hard to reconcile those differences....We were discussing schools and I had not had the same experiences as others and I was like, "No—that is just wrong." [14-13-3]

Unlike the courses in sustainability and indigenous peoples, in which students talked about moving towards developing consensus, the students interviewed in the human relations course focussed more on personal quests for self-understanding while feeling at odds with others about an issue. It is important to note that these students did not describe other students in their course as negative, oppositional, or unsupportive; in fact, they refer to using the group both as sounding board and comparison point for their developing self-awareness. The path to greater self-understanding, however, has elements of loneliness for these students in proportion to the life relevance of the issue under discussion. Course topics have tapped into ongoing tension around important life assumptions. Lauren noted,

> Every time I try to bring [concerns about combining children and career] up with somebody else in psychology, they just kind of look at me and say, "why are you worried about that?" I don't know why no one else is concerned about these things. [3-11-5]

Exploring Underlying Assumptions

Digging deeper for those interviewed in the human relations course meant both group discussion and personal exploration. One of the reasons Theresa came to Canada was to explore other cultures and perspectives. The topic of prejudice was not a new one to her, but the perspective of her North American classmates about prejudice brought feelings, thoughts, and experiences she had into a different light. She says, "I guess I'm prejudiced against [those] people and I guess I was trying to get over that and improve myself, but after we talked in class I realized some of the reasons I couldn't change" [1-3- 4]. The prejudice to which she refers was evident to her when she considered an experience on campus in which she had agreed to be part of a video on international students.

> I went for the [video] shoot and I had to shoot with a guy [from the conflict country]. I couldn't do it, even just that simple task. I didn't have to be friends with him, but still....I just was thinking I have to leave. It is a shame because I've had friends from all over the world because I met them here and I'm fine. [But with this person], it's like I was taught I'm not supposed to do this and now it is just automatic. [1-13-1]

This automatic response was not one the Theresa hoped to keep, but, while classmates thought differences could be overcome, she realized that the "long history behind these issues" [1-4-1] made that difficult. And as she noted, it is not just history that keeps the prejudice alive: "[In] Canada, you have all these different cultures, and people can be together and be fine, but...[at home] I know that if I drive and I go in the wrong [area], I'm going to get killed" [1-9-4]. Past history, current conditions with which she and her family lived, and recent changes that could affect her future were all involved in her perspective. As news from home increased and the class discussion continued, she came to a new insight.

> I was seeing [prejudice] in a different light than other people. More or less the discussion in class was focussing on differences among people and I was focussing on situations and past history. They were thinking of color or race but they were not thinking about war and these kinds of situations. [1-4-6]

In considering the differences in upbringing, lived experience, historical context, and current dangers, I do not see Theresa seeking a comforting rationale for maintaining her prejudice; she was trying to understand herself in relation to others, and was moving toward an understanding of the power of experience in developing assumptions that influence both her feelings and behaviour. With her insight on the differences in perspectives, she started rethinking the literature for her thesis, the history as told by "the other side," and the influence of the social class roles assigned to the other culture (as maids and construction workers) in creating a sense of superiority in her country folk. She also started wondering if there was some way she could help Canadian students on campus to better understand the issues and the tensions.

Through research for the project on careers, Lauren explored her own experience and those of other students. She learned that other members of her research group also

did not know what they were doing after graduation. The group interviewed staff at the university career centre. They were told that many fourth-year students do not have a career plan in mind. The research project challenged her assumption that she was completely unique in this situation and provided a group with whom she could talk. It also raised further questions about issues that are unique for her.

> [It] is nice, I guess, to know that I am not the only one dealing with [career] issues. But nobody else seems to have the same issues with family. I mention it to other people but they can't see why I have that problem, because they don't have a problem with having kids when they are in school or they are not [engaged or] married or they don't know when they are going to have kids. [3-11-3]

In the process she considered more fully the differences among traditional social role assumptions, many of which she holds, and assumptions of other young women her age—"someone I was talking to...is planning on having her partner stay home with the kids, so it is not going to slow down her plans" [3-14-7]. As a top student, Lauren saw her academic ability as an indication for success in her career plans and assumed that her plans would work out well. Concerns over balancing family life with education and subsequent career have brought to the table her feelings and thoughts about being "limited now" [3-5-2]. Things are not falling into place as she had imagined prior to engagement, leaving her to rethink multiple assumed roles that marriage raises for her and the gender issues they highlight.

> For men it is not an issue of when they have kids—it is not going to put their careers on hold. It is a lot more difficult for women to have children. I do want to stay home with my kids, which not everyone does. I think that is another issue [for me]. [3-14-7]

Alone and with her group, Jenny thought further about the reasons for their research findings on adoption by homosexual couples, relating the findings to personal experiences and looking further in the research literature for possible explanations. Her group explored why university students in their study responded as they did and thought about other research designs that might shed light on the issue. Individually, Jenny's belief about older adults being more inclined to use stereotypes was not supported by their research project, leaving her to consider the assumptions she held about older adults.

She also thought further about her own use of stereotypes. She realized that, in spite of her education,

> Sometimes I do have a hard time because you have to fight the urge to stereotype someone [because] it is easier. Sometimes you find yourself guilty of using it, even though it doesn't feel good. [14-13-7]

She thought further about how "it is very hard to reconcile those differences" [14-13-1] between personal experience and research findings or between the personal experiences of different individuals. She is aware that, like others, she has biases and sometimes gives added weight to particular information "just to hold on to your [own] perception" [14-13-3]. As she dug deeper into the issue, the conflict around choosing to explore the context of events and experiences of others as an educated, thoughtful person or to fall back upon social stereotypes came to the fore. Although she is pleased with her skills at critically thinking about research findings and other information, and she promotes the value and need for critical analysis, she also realizes that using stereotypes "helps you get through your day-to-day life a bit easier. That is when the 'ignorance is bliss' [saying] really hits home. If I didn't know [better] I wouldn't feel so guilty. [14-14-2]

Summary

It is the beginning of Mezirow's (2000) model, that has little detail and about which there has been little subsequent research, which was the intended focus of the present study. This was the focus for several reasons. In the limited time of thirteen weeks of a university course, transformative learning, if it occurs, is likely to be just starting, rather than reaching the endpoint on which Mezirow focused. From previous research, it was also not certain that students in the traditional undergraduate age group would report transformative class experiences; while Herbers (1998) and King (1997) note that one third of their students reported transformation in a higher education course, most were mid 20s to mid 40s in age. In the limited timeframe and with this younger population, I hoped to capture early engagement in transformative learning. I believed this would aid understanding of an unexplored aspect of transformative learning, link transformative learning to the issue of engagement in university, and provide insights on

developing as a constructor of meaning at an age that has received relatively little attention.

In focussing on the beginning of engagement in transformative learning, the original conceptual framework developed for the study considered the influences and interactions that connect the learner, the classroom environment, and the catalyst or trigger event to potentially result in what Mezirow calls a disorienting dilemma. The original model (see Figure 1, page 45) was intended to explore the dynamics and interactions as students start to engage in the process of transformative learning and how students explore these interactions and their assumptions as transformative learning begins. The aim was not to test which specific characteristics of the class promote transformative learning; the aim was to explore the social process of learning and environmental influences in the process.

In light of the powerful experiences described by students, my original model was developed further in keeping with literature that considered issues of power, emotional and cognitive aspects of learning, and individual and social change. In the revised working model (see Figure 2, page 59), engaging in the process of transformative learning involves seeing personal relevance of the issue discussed; sensing tensions among perspectives related to issue content or learning process; and exploring the assumptions more deeply through seeking the agenda or context, linking emotions and ideas related to assumptions, and asking why these personal and social assumptions hold power. Rather than a particular catalyst experience highlighting differences between specific assumptions, as proposed in the original model (Figure 1), a different experience of power within classroom relationships was seen as supporting students' access to a range of personally relevant issues, opportunities to share and explore multiple perspectives, and an environment to consider underlying assumptions.

While Mezirow's (1975, 2000) model focuses on a personally relevant event that leads to transformation, students in my study talk about a more encompassing process of transformation. While students described particularly meaningful events throughout the courses, these events seem to be more like examples to describe a process that was different than they had experienced in other courses. For example, having an environmental student agree with him was a meaningful event for a business student in

the course on sustainability. Rather than initiating a transformative experience, however, this event was described by the student as part of a larger process in learning about compromise around contentious topics. He seemed to use this event in his interview as one of the examples to explain, in concrete terms, how the process had occurred for him. Other students in the class who shared a sense of surprise about compromise offered their own examples; although the relevant experiences offered as examples were different, the process of learning was similar.

In keeping with Freire's (1981) emphasis on starting with learners' experiences, students noted the role of relevance in maintaining involvement and interest. Rather than seeing course topics as abstract issues, students were able to relate the topics to their own experiences and lives. In all three courses, the professors encouraged making connections among course topics and students' own experiences, and selecting issues for in-depth work that students found interesting and personally relevant. Being able to see course topics as personally relevant encouraged students to bring their experiences to course learning and to share their perspectives with others. The courses were about real issues for students; because they were sharing their experiences, rather than merely facts they had learned, they brought both their thoughts and feelings for discussion.

Students across all three courses described tensions among the perspectives raised in the course. Unlike Mezirow's focus on the negative feelings associated with a disorienting dilemma, students in the present study described feelings of support even when discussing difficult or controversial topics. While some students spoke of discomfort, they did not focus on negative feelings such as guilt, shame, or anger that Mezirow (2000) describes. Their responses were more in keeping with Coffman's (1989) work which found "more inclusive feelings of intense surprise" in the process of transformation (cited in E. Taylor, 2000, p. 291). The tension among perspectives seemed to promote further exploration and struggle to understand the differences among perspectives, as suggested by Foley's (1999) work in community settings. For many students there seems to be movement beyond "critical dissonance" that can result in cynicism and immobilization and "interrupt the effects of...experience" (Cochran-Smith, 1991, p. 304) to "collaborative resonance" and using experiences of "working together to re-invent ...structures, alter roles and responsibilities, and recreate curricula....In a

community based on co-labour, each individual's opportunity to learn from [the experience] is intensified and enriched by the questions, struggles, and triumph of every other individual" (Cochran-Smith 1991, p. 307). Tension among perspectives involved both cognitive and emotional response, rather than dispute about which information is correct or a sense of discomfort resulting from awareness of new or conflicting information. From student comments I get a sense of energy to move forward, rather than the sense of defeat that Mezirow (1995) describes as a motivator for change.

Learners across courses described digging deeper to explore underlying assumptions related to the course content, the learning process, and the role of different knowledge bases. Exploring assumptions involved individual and group consideration of thoughts, feelings, and behaviours that had been previously unexamined. Through exploring their experiences and those of others, students asked why these unexplored assumptions were present and powerful, and considered ways in which previous emotional-cognitive experiences influenced current perceptions, feelings, and actions. Rather than being an individual process as implied by Mezirow's model, a social process was described by students that built on sharing experiences and working to understand assumptions underlying experiences. The process was social in several ways: reflection revolved around social experiences; social interactions aided further consideration of individual viewpoints; and group collaboration was used to create new understanding for the group. While power is not addressed in Mezirow's model, descriptions by students in this study highlight awareness of the power involved in unexplored assumptions as they dug deeper and discussed different experiences and perspectives.

While reading the stories of students within each class, I noticed that while participants in all three courses described all three components—seeing relevance, sensing tension among perspectives, and digging deeper into issue assumptions—within each class, there seemed to be different emphases in student comments on the components. For the human relations course, the stories highlight very personal connections to topics such as prejudice or career or discrimination discussed in class. For the sustainability course, students talked more about the tensions felt among perspectives when environmental views and economic views seemed irreconcilable. Students in the course on indigenous peoples focussed more in their interviews on the process of digging

deeper, with internet, readings, and information from aboriginal peoples, to understand more fully the issues and assumptions about the struggles indigenous people face. These emphases on the part of students are in keeping with the philosophy, aims, and activities of the courses, although the professors did not necessarily use the terms I have used for the themes found. For the human relations course, one aim was to connect research with lived experience and help students to see how personal experience informs understanding of research and how research provides a lens for considering personal experience. In the sustainability course, one aim was to highlight the multiple perspectives among students and across academic disciplines, rather than depending on discipline assumptions to provide answers for complex issues such as sustainability. For the course on indigenous peoples, one aim was to explore beyond language and authority based on personal status, cultural norms, or having been published in the academic literature, to take a closer look at the contexts, assumptions, and agendas involved.

As noted earlier, I do not see the three components identified in students' comments on engaging in transformative learning as comprising a linear process with discrete components in a particular prescribed order. From student descriptions, it appears that the process might move among the components in keeping with student past experience and interactions in the current learning situation. For example, the course on indigenous peoples did not start with students seeing relevance in the course topic; topic relevance seemed to develop as students engaged in the process of digging deeper and sensing the tensions among the information they were finding and the assumptions that they had prior to the course about indigenous peoples. The relevance of particular topics in the course on human relations seemed to have been fueled by tensions the topic raised for students around personal concerns they brought to class, promoting further exploration. Students in the course on sustainability came into the course with a sense of the relevance of the topic to themselves or their careers. During the course, the tension among perspectives appears to have led to digging deeper to understand the issues more fully. For all courses, the process did not appear to conclude after each component had made an appearance on stage for its monologue; from student descriptions, there seemed to be interplay among components, like a conversation with each component prompting the others. Within the limits of the small sample in this study, student descriptions allude

to a transformative process that is "evolving and spiraling in nature" (E. Taylor, 2000, p. 290), rather than a linear model as proposed by Mezirow (1975; 2000). The process in the courses in the present study seems to fit better with E. Taylor's (2000) contention that "[b]ased in the present research it seems that the journey of transformation is more individualistic, fluid, and recursive than originally thought" (p. 292).

Chapter Seven: Reordering Assumptions

In this chapter I provide short descriptions of how students described their reordering of affective-cognitive-behavioural assumptions. In designing the study and interview format, I did not focus on the endpoint, as Mezirow's model does, but on the beginning of the process. While my intent was to explore initial engagement in the process of transformative learning, I believe including this information provides a look at the impact students see these courses having for them; it gives a fuller picture of student experiences and provides insights for future research.

Near the end of the interview, I asked students what changes had occurred for them as a result of participating in the course. I asked, "What has happened since the original experience [that opened your eyes an issue or that changed your attitude in some way]?" I then asked prompt questions as appropriate: "Have you looked for more information on the topic/issue; explored other related topics/issues; joined or left any groups or activities; changed your lifestyle; changed your plans for university or career?" Students also commented spontaneously earlier in the interviews about changes that had occurred for them as a result of their experience.

In considering changes they attribute to the course, students described both reflection and action. Across courses reflection with reordering of cognitive-affective assumptions included opening up to new ideas and feelings, seeing more connections among ideas and issues, understanding issues more deeply, or expanding self-social concept. They also described changes in action reflecting reordering of cognitive-behavioural assumptions. This included discussing issues and feelings with others, actively seeking more information to increase understanding, putting insights learned into practice, or making life changes. Rather than just talking about incorporating new ideas or actions into their lives, students described new ways of seeing themselves as more responsive and responsible in their interactions. In this chapter I discuss changes that students described in their interviews—what they see themselves as taking with them from this course—without assumptions on my part about when these reorderings occurred in the course and without incorporation of my observations or interpretations.

Interdisciplinary Course—Economic and Environmental Sustainability

Cindy

Cindy sees herself as more open and aware of ideas and perspectives from across campus. She realizes she has had a learning experience that was quite unusual. Her new awareness has helped her to connect with her education, family, and life more fully. In the past she focussed on her work and grades to the exclusion of much social interaction on campus. Course marks, for the first time, were not important. Through the course she made interesting connections with others in the classroom—"we learned to understand one another and our thoughts" [19-3]. She now has an understanding of environmental issues in ways that make connections among disciplines and students across campus and interconnections among business, politics, economy, and consumers that she had not realized through her business program. She is aware that we all need to work together if we are going to develop solutions. She also now deeply appreciates the environmental aspects of her father's work. Cindy sees herself as someone who is able to look at more than one side of an issue now and actively seeks new information. She has changed environmental practices in her life at home and work by making time in a very busy schedule, and sees herself as someone spreading all that she has learned through the contribution of others in the course. "I'm very glad to have learned their experiences and their knowledge and what they are going to do with their lives and where I want to take mine now" [18-2].

David

David describes himself now as more open to others' views and able to see that there is more than one answer. He came into the course wanting to be more open and change some of his opinions. Through the course he found that things need not always be approached from an economic perspective, and that issues and data may be viewed from multiple perspectives. He thinks that he "knew that before, but there is knowing, and there is understanding and accepting" [6-3]. He is aware that lively and enjoyable discussion around opposing views is possible through openness and compromise and is aware he played an active part in creating this class experience. He sees himself as moving from being able to support his own perspective to being able "to explore the other side and see where they come from and the underlying beliefs behind them" [13-1].

He hopes "that attitude will carry through" into other parts of his life [13-1]. He has a better sense of why he believes what he does and has better understanding about living his values of corporate responsibility. He is making connections between his new understanding and other courses that he is taking. While not actively seeking further information, he is more aware of environmental issues in the world and notices and reads related news items.

Tim

Tim describes himself as more open to others' views and less likely to make an uninformed assumption that things are black or white. He came into the course with the assumption that environmentalists were inflexible in their opinions, while business students could see the importance of both capitalism and sustainability. During the ongoing two-sided discussions in class, he found not only that environmental students were open to discussion, but also that business students had substantial variation in their opinions, in contrast to their apparent united front. He is now aware that not only discussion among opposing views is possible, but also "that compromise is possible" [17-5]. He has a better understanding of why individuals believe what they do. He sees himself not taking things at face value and is interested in reconnecting with a vocal student environmentalist for further discussion, now that he knows compromise is possible. While not actively seeking new information, he feels he is more aware of environmental perspectives and is more apt to read articles he notices on the issue.

Mark

Mark describes himself as more open to others' views, and better able to see where these views are coming from and why not everyone agrees. He is also aware of compromise coming from disagreement and discussion around opposing views. He sees connections among many of the concepts from this course and the other courses or activities. He is using the attitude developed in the course of questioning writers' agendas and biases for his work on the student newspaper. He sees this as essential in courses, as well, to gain perspective and balance. Other than a philosophy course, this is the first course he has had that looked behind the facts for the perspective. As a result of ideas presented in the course, he changed his thesis plans. He is actively seeking new information as he explores more fully in his thesis issues raised and understandings

developed in the course. He has changed daily practices such as composting and recycling practices, and life plans regarding his post graduation career. He has found it exciting to see connections between the course and other parts of his life; this seems to have been a course that consolidated a great deal of his previous thinking and development. He says, "It's turned out to be a pretty life changing class, I guess. And I wasn't expecting [that]" [23-5].

Matt

Matt describes himself as more open to others' views. He says "it completely changed the way I think about different [issues], particularly environmental issues" [10-7]; he understands now that data can be viewed from more than one perspective. He is now aware that discussion and compromise among opposing views are possible. He feels challenged to make informed decisions rather than going along with the mainstream beliefs about data and realizes the necessity of working across disciplines to develop solutions. He sees that "a global shaky balance is a scary thing. It's not just everyone doing their part; you have to come together" [10-7]. While not actively seeking further information, he feels he is more aware of environmental perspectives and is more apt to read articles he notices on the issue. He is also more aware of practical issues such as composting and recycling. He shares information and has discussions with his girlfriend and his father who works in forestry. He believes the lessons learned in this course will be useful in the future when he is in the position of choosing a workplace that is environmentally responsible.

Geography Course—Special Topics: Historical Geography of Canada

Richard

Richard describes himself as more open and empathetic toward indigenous peoples. He no longer sees indigenous peoples or their issues as separate, and has fewer stereotypes. He feels he has more knowledge and understands the circumstances and influencing factors better. He also has a larger sense of his own learning process through using different approaches than he has experienced before. He says he thinks about things differently, explores issues further rather than accepting initial ideas or information and looks for alternate solutions. He now actively participates in the learning process, although he had

never been comfortable speaking up in class before. While not actively seeking new information, he is more aware of indigenous issues and notices related news items. He has also been considering how he might use what he learned. He sees himself as someone who, if he becomes a teacher, could interact differently with minority students and "could maybe encourage my students to think differently, think more, [and not] just take it as it seems" [12-4].

Kristen

Kristen describes herself as more informed and understanding of the lives of indigenous peoples. She sees herself as more open-minded with greater empathy for indigenous people's situations and fewer stereotypes. She thinks differently about things and explores issues more deeply; she is happier with herself now she pays attention to details that she didn't before and doesn't have stereotypes that she had before. She is aware of the personal development she has experienced in the course and feels that this is an important aspect of education. She sees herself as someone who can be real in the classroom when discussing difficult topics and be a friend and committed contributor to her classmates. She feels she has developed personally through exploring and developing her thoughts in the course. She is actively seeking new information related to indigenous people and feels she is now less tolerant of those who are discriminatory. She thinks the course has had an impact on her in ways that will affect her in the future.

Craig

Craig describes himself as more open and understanding of the lives of indigenous peoples. He is more aware of how little we tend to know about the people around us. He has been rethinking his assumptions and is no longer content with his former unexplored understanding. He has been actively assessing information he hears from others by thinking through the biases and the deeper issues involved in situations. He sees himself as a person who has been growing from his university experiences and is humbled by what he has learned, who can apply and share practical knowledge of issues that can be of benefit to others, and who thinks about things differently. He has a fuller sense of how he learns and the role that others play in this process. He also has a different sense of himself as a learner who is able to develop beneficial professional relationships with professors and contribute to the functioning of a class as a learning community. He

is actively seeking new information through government agencies and considering new career possibilities related to aboriginal peoples' government.

Andrea

Andrea describes herself as having a sense of connection with indigenous women and their experiences. She connects this new understanding to courses she has been taking following the course on indigenous peoples. She also notes that she has come "out of the box" [7-7] and is now speaking up in class, which she had never done before this class. This seems to relate to a sense developed in the course of valuing opinion for what it has to offer, rather than based on perceived status of the speaker. She describes herself as an optimist and sees this course as affirming her hopefulness and faith in people to correct difficult situations they face but did not create. She sees herself as a positive shaper of the developing relationships within her friend group and as being more open to others. To her friends, she has become a spreader of information and of hope that she has gained from the class. She has also maintained connection with new friends she made in the course. She is both seeking further information on course topics and connecting course insights with other aspects of her life. She wants to make her presence felt in her community and seems intent on practicing lessons she has learned through the course.

Psychology Course—Psychology of Human Relations

Theresa

Theresa describes herself as having more understanding about different ways of seeing the issue of prejudice. Through her lived experience, she considers the long history of conflict, while class members think of prejudice more in terms of current racial situations that can be resolved. The process has "made [her] realize things about [her]self and about how people from outside [the situation] see prejudice" [8-2]. While she focuses on the feelings associated with the experience and history of prejudice, class members focus more on thinking about and problem-solving particular incidents of prejudice. She seems to have a more definite sense that "it is easy to say just try to get along and it is different being there" [8-2]. She sees herself as someone in the process of thinking and feeling her way through a very large personal and social issue, considering how she has changed and stayed the same during her international experience in Canada, and trying to

fit the understanding she has gained into her life in ways that allow for realistic change in the future. She continues to gather new information on conflict and prejudice as she further develops her thesis with these new insights. As well, she wishes to become involved on campus to help educate Canadian students about the experiences of international conflict.

Lauren

Lauren describes herself as more open to discussing with others her career plans and the roadblocks she faces. She seems more aware of the distance that can exist between assumptions and lived experience. She understands that assumptions she held about the rewards of high achievement at university do not necessarily fit with assumptions about her roles in other aspects of her life. She is open to hearing others' perspectives on her life choices and assumptions around marriage, wishing to stay home if she has children, and pursuing a profession. She has a better understanding of how her experiences fit with those of other students and significant ways in which they are similar and different. She is more aware that others share similar concerns but also more aware of the limitations she has accepted because of gendered social roles and personal wishes around family and career. She is in the process of reordering her assumptions about particular careers and balancing career and family, and is actively seeking input from others who have similar situations regarding career and family.

Jenny

Jenny describes herself as more open-minded about her own stereotypes and about seeing the similarities in stereotypes across generations. She is less sure that her generation is more open-minded than the older generation and has a better sense of how her experiences fit with those of other students. She sees herself as a competent and creative developing researcher who has brought together in this course lessons learned through her previous years of study. She seems more aware of the sometimes uncomfortable relationship between research findings and personal experience and the limitations of depending on one alone. She sees her group's research as important and thinks it warrants further expansion. Having developed and conducted research in this course, she sees herself as someone who questions what she hears especially as it relates to research claims. While not actively seeking new information on topics discussed in the

course, she thinks she is sensitized to the issues and will notice them more when they come up in the news or in conversation.

Summary

Although early engagement in, rather than endpoint of, transformative learning, was the focus of the study, students described changes that had occurred as a result of the learning experience in these courses. Their descriptions are in keeping with a "fundamental reordering of assumptions" described by Brookfield (2000, p. 139). In keeping with Freire's (1981) concept of praxis, involving both reflection and action, students described changes in assumptions that involved cognitive-affective reflection—such as becoming more open to new ideas and feelings, making new connections among ideas and issues, understanding issues more deeply, or expanding the way in which they see themselves in relation to others—and cognitive-behavioural action—such as discussing issues and feelings further with others, actively seeking more information on the topic, putting insights gained into practice, or making life changes.

These changes are not described as simply accepting another's view or approach and substituting it for one's own former beliefs or actions. For example, many students noted that they had become more open as a result of their experience. From their comments, I have a distinct impression that their increased openness is informed and intentional, rather than reactive or passive. I heard stories of interest, excitement, and a sense of new engagement with their lives that envisions hope, connection with others, and individual and social action through involvement on campus and in future work. Students described making well-considered, informed changes in ways that alter their self-world relationships (Marton & Booth, 1997). What I hear in student descriptions is not an increase in knowledge or awareness only. The classes sound as if they have not only opened new vistas, but also helped students to develop skills and attitudes for further engagement in transformative learning. Student descriptions reflected a sense of developing agency in changing themselves (Bandura, 1997), rather than having been changed by others. In their descriptions I see both increased self-efficacy (Bandura, 1997) and self-social efficacy through development as a learning group.

Because students did not indicate when during the course these reorderings occurred, and I did not specifically ask, I am not able to differentiate between events

occurring during ongoing development of the course and those that are end-of-course outcomes. From the way students responded to my questions and the timing of the interviews at the end of the course, I believe they interpreted my questions as asking for a summative evaluation of the course experience. This does not mean, however, that students were describing events that took place only at the end of the course. While linear, temporal thinking might be convenient for discussing processes that have definable beginnings and endings, it is less helpful when considering the process of transformative learning. For example, I do not see the issues described by students in the course on human relations as starting in the course or ending when the course ended. I expect from Lauren's comments that she is involved in ongoing changes and reordering of assumptions as she discusses balancing career with marriage and family with others and continues to look for suitable graduate programs. Comments from other students across courses also indicate engagement in thinking, feeling, and actions related to course issues which is ongoing rather than limited by the end of the course.

Further, while I believe, from my analysis of data and my understanding of the literature, that reordering of assumptions occurs after exploring assumptions more deeply, exploring assumptions could occur at any point in the course and could occur a number of times in a course around different issues or as a deepening process of individual, smaller group, or class development of understanding. For example, in the sustainability course, students described challenges and reordering to layers of assumptions throughout the course around rigid positions among environmentalists, data use supporting only one answer, the improbability of compromise on controversial issues, and having definitive answers for complex problems. It sounds from student comments that different students explored these assumptions at different times and more than once during the course by a number of students. Thus, I think it is likely that examples of reordering assumptions that students described occurred for them at different times during the course, rather than just at the end.

This raises questions about the notion of sequential order in learning and in process models such as Mezirow's. For this broadly exploratory study, I did not ask questions about when changes occurred. Coming at the end of the model developed for this study, the reordering of assumptions might appear to be a final outcome taking place

at the end of the process or the end of the course. Although this placement in the revised model diagram implies linear progress—from pre-intervention state, through intervention, to outcomes and completion—I believe from students' comments that reordering of assumptions is more likely part of, and needed for, the iterative process of transformative learning. For example in the course on indigenous peoples, I see mutual support in the reordering assumptions through challenge to assumptions around the source and types of materials appropriate for study in an academic setting and uninformed stereotypes about indigenous peoples. Each of these challenges builds off of the other; as students came to see materials by indigenous peoples, rather than just academic texts, as appropriate sources of information, they found their stereotypes of indigenous peoples challenged. Equally, as they rethought their assumptions around indigenous peoples through course discussion, they became more open to challenging the sources of information that might be important to consider in academic learning. Rather than a linear process, I see in students' descriptions an iterative process that draws students into deeper exploration and potentially greater challenge of their former assumptions.

The process involves "brave acts, even if it is exercised in what appears to be the most theoretical of domains" (Barnett, 1997, p. 22). Unlike more traditional courses, learning in a new experience of power is "messy" and more demanding. Knowledge provided by the discipline cannot, in and of itself, offer answers for complex individual and social problems; banking more of the accumulated academic knowledge, which is often measured as an end-of-course outcome, is not sufficient. While I believe, from their interview comments, that students had substantial interpersonal and structural support in these courses, I think changes in affective-cognitive-behavioural assumptions were likely needed during the learning process for students to accept the challenges offered and remain engaged in course development, as well as their own development. Within the frame of this exploratory study, questions around the timing, sequencing, and interactive nature of reordering of assumptions are left to my reflection on student comments and suggestions in the literature. Student perceptions of timing of changes could shed light on the process of the transformative learning; I will consider this when designing interview questions for future research.

Chapter Eight: Facilitating Transformative Learning

This chapter examines the second research question of this study: What factors contribute to transformative learning for traditional age undergraduate university students? I asked a number of questions during interviews to get an understanding of the influences on the experience students had had in the course. First I asked a general question: "What do you think were the factors that influenced you in this experience?" This was followed by more specific questions, that included prompts (shown in brackets), relating to "aspects of the class" (teaching/learning activities, teaching style, interaction with instructor, interaction with peers, interaction between instructor and peers, teaching materials, technology use, ideas that stick with you); "things that happened outside of this class around the same time" (other courses, experiences on campus outside of class, work experiences); and the influence of "family/friends/social networks." Themes identified across the three courses are presented.

Across courses, three main themes emerged around factors facilitating students' transformative experiences in the classroom: considering multiple perspectives; shaping course experiences; and developing relationships. Two these were related to Burbules' elements of challenging power: considering multiple perspectives was related to Burbules' concept of challenging authority, and shaping course experiences was related to Burbules' concept of challenging course organization. The initial themes emerged during data analysis; returning to the literature, I could see how Burbules' (1986) work on challenging power provided a framework for thinking about these factors. While using this framework was not necessary for describing the themes, I believe it helps clarify connections among factors that have been frequently described separately in the literature. Together I see these three facilitators as supporting a different experience of power in the classroom.

It is important to note that the three themes that I describe are inter-related, as are Burbules' concepts around challenging power relationships. To see them as separate implies that one could add some elements to classroom learning independent of others. I do not see this as likely in light of student comments. For example, from students' descriptions, I think that challenging who or what has authority would have been seen by students as merely an exercise, if there were no corresponding challenge to how

organization of course work occurred. Without these two elements actively pursued in the course, I doubt the level of relationship development that students described would have taken place. In connecting students' lives to the classroom, all three elements of power needed to be experienced by students. From reflecting on students' comments, I see this different experience of power as powerful in supporting transformative learning because it was "real" rather than a topic for rational discussion or independent of their current course experience. For the purpose of analysis in this chapter, the three elements are described as if they were separate, when they are not. This process is meant to allow later discussion of ways in which the emergent themes relate to literature around supportive environments for engagement in transformative learning and consideration of the role of discrete student-centred courses. While teasing apart these elements can aid exploratory analysis, it is important to keep in mind the interconnections in student descriptions and classroom observations.

Each of the three themes, with the sub-themes each contains, is considered in turn. Because my intention in the study is to focus on student perspective of the learning experience, I describe what students said in their interviews. Student comments are in keeping with what I observed in classes that I attended and with statements made by the instructors during their interviews. For clarity as to source, I specifically note when, rather than discussing what students described, I am including my own observation or interpretation or a comment by one of the professors that I feel helps in further understanding student experience.

Considering Multiple Perspectives

Many student comments referred to a shift in these courses from a focus on the professor as one who gives students information to a class where many other voices, experiences, and knowledge bases were shared. Being able to consider the course topics and issues from these multiple viewpoints was described as key for most students in their engagement in the transformation process. Related to Burbules' (1986) concept of changing power relationships by challenging authority, this theme—considering multiple perspectives—involves examining who and what is given authority. All three subthemes describe opportunities to move away from more traditional authority in the classroom, located with the professor or the cannon of the discipline, to more open consideration of

other viewpoints. Considering multiple perspectives brings to the foreground the potential authority of other, less acknowledged, constructors of knowledge, including students themselves. Students described three ways in which their experiences were facilitated and supported through considering multiple perspectives. First, students noted a change from the more usual role of a professor within a course. Second, they commented on the range of sources used through materials and resources that brought multiple views. Finally, they described the importance of discussion of personal views rather than a focussing on an instructor-presented, text, or discipline point of view.

Changing Roles

The professors in all three courses were described by their students as moving out of the more traditional roles of lecturer and main provider of information to act as facilitator or guide for learning.

In the sustainability course, students described Philip as taking on the role of facilitator rather than lecturer. An example that a number of students mentioned was that Philip brought in news items related to course topics at the start of classes. In the classes I observed, these added different views from the media and started discussions comparing media views with perspectives taken by the texts. According to Philip, in his role as facilitator, he was careful not to present the economic side of the debate with which he was most familiar or to present one-sided views that might lead students to assume that one view was the "correct" or most valued perspective. While Philip offered his opinion on issues, students said they considered his as one of many opinions, rather than the opinion that mattered most in the course. As one student noted, "you knew your ideas were valuable to [the professor] and...you don't have to agree with him...even though his opinions are valuable too" [11-10-1]. Since students knew that the final exam would ask for student opinion supported by evidence, they said they did not assume that the final word on any topic was the professor's.

In the course on indigenous peoples, students described Amanda as acting as a guide rather than a lecturer; Amanda encouraged and facilitated open and increasingly informed discussions during class time, rather than lecturing. Being "allowed to talk and communicate back and forth" [16-8-9] moved the emphasis toward student input and opinions, rather than depending on the professor as the voice of authority. Amanda also

offered her opinion, but students saw this as another opinion to consider and build upon, rather than the required perspective; they felt comfortable actively disagreeing with her in class. As one quiet student noted, "You [could] say, 'Well, Professor [name], I disagree,' whereas in some other class if you disagree you would not have the nerve to say it and you just stay quiet" [16-13-3]. In classes I observed, Amanda moved around the room, asking and encouraging questions, and guiding the interactive process as students explored information from multiple sources, including the internet. One student noted that the change from focus on the professor to focus on student learning "was just kind of revolutionary, yet [this way of learning] has been around for so long" [15-3-7].

Students in the human relations course noted that rather than using a lecture format, Carolyn acted as a facilitator. During the class component of the course, she asked and answered questions, encouraged comparison of research and personal experiences related to the topic of discussion, and helped students to think further about the issues. Likewise, during the lab component of the course, Carolyn helped student groups explore different topics and research designs by being a thoughtful and accessible sounding board and source of feedback. Rather than making lectures the focus of the class component of course, she set up numerous smaller group activities, such as debates, skit development, and issue exploration. Students noted that Carolyn used more debates, discussions, and activities in various sized groups than in other classes they had taken. In the sessions that I observed, Carolyn facilitated small group work by moving from group to group, answering questions and encouraging multiple ways of seeing the issues under consideration. Information and ideas from small group discussion and activities were brought back to the larger group for further discussion. Another way in which Carolyn encouraged active discussion was to take the focus off of note taking; Carolyn made summary notes of key points in the discussion for each class and distributed them for review and further discussion at the beginning of the next class. Students appreciated this: "[It] just made it more interesting; you could engage yourself more....Because usually [during lectures] when you have to take notes, you concentrate to take everything down and you don't really listen; you just copy" [1-6-7].

Including a Range of Sources

Beyond taking on different roles in the courses, all three professors used different sources of information—from print texts and journals through internet to external resource persons and student experiences—to provide students with a range of perspectives to consider. Rather than providing sources that built on or supported a particular point of view, all three professors attempted, according to students, and in the classes I observed and materials I examined, to offer differing, often conflicting perspectives for students to consider and discuss.

In the sustainability course, two textbooks were used; these took contrasting perspectives representing the two main sides of the sustainability issue, environmental and economic. Students noted that not having a standard text with one perspective encouraged challenging and debating of ideas. It also opened up the concept of opinion and bias, according to students, since the texts used similar information sources for developing and presenting very different arguments. The opportunity to complete the discussion sessions and group projects with different students and professors from different disciplines encouraged appreciation of multiple sources of valid knowledge, rather than fixing authority with one discipline base or with one course instructor or one group of peers. During evening plenary sessions, guest presenters from different interest and community groups brought a variety of divergent opinions to the course; these in turn highlighted shifting student alliances around opinions expressed and new issues for exploration during classes. For the group project aspect of the course, students used a variety of resources including internet, academic journals, interviews with specialists, and field trips to explore a more specific topic in depth. The information gathered and synthesized by the groups was presented back to all students in the course and to the university community during one of the evening plenary sessions.

In the course on indigenous peoples, formats other than academic texts or publications were used as legitimate means for exploring issues: non-academic books, movies, autobiographies, internet sites by and about aboriginal peoples, government documents and representatives, and student opinion, presentations and online contributions. Rather than using a standard text which all students read, Amanda offered five possible options, most written by indigenous people. Students were required to read

one of these and report back to the class on their chosen book. Since students in the class read different books, these in-class summaries and discussions provided unique views that students would not otherwise explore. Reading different course books of students' choosing provided a wide variety of information and perspectives for discussion that is not possible if a course uses a standard text "which is often not up for debate" [8-6-9]. Many students commented on finding and using information by aboriginal peoples as important in the experience of engagement in transformative learning. They noted that they felt they were connecting with real experiences of aboriginal peoples, through aboriginal writings, video productions, internet sites, or guest presenters. Students described this as a moving and humbling experience, much different than reading a text about aboriginal peoples. "And you felt it; you could relate to the work....It was first-hand knowledge given to you by the actual individuals" [16-9-1]. Students were also creators of material used in the course, through presentations on their topic of interest, posting reviews and editorials on the course web site, and bringing experiences, book summaries, and information to class for discussion.

In the human relations course multiple sources of information were used, rather than a textbook. According to Carolyn, she chose a variety of journal articles to provide a broader array of perspectives on a wider range of topics than she found available in the texts she previewed. Topics within the course were discussed for several classes using different articles as starting points. For the research labs, students described tapping a variety of resources including journal articles on previous research on the issue, internet resources to consider current human relations issues and to develop research ideas, computer statistical programs for analysis, and resource people for interviews and information related to the research topics. Because Carolyn emphasized relating research to students' lives, student experiences and ideas developed during small group work and discussion in class or in research groups became essential resources. Students noted that these added greatly to exploring ideas presented in the other resources and materials used in the course.

Discussing Personal Views

Across classes, students talked about the importance of focussing on student discussion of ideas. Through discussion of the multiple sources of information used in

larger class interactions and the many projects and small group activities, students were able to voice their views and hear others' perspectives. Discussions of ideas, concepts, and personal experiences and views were given authority. A variety of activities were used in each course that promoted discussion; these are discussed further in the section on shaping course experiences. In this section I focus on discussion as it influenced student experience. Discussing personal views brought another valuable resource to the course.

For students in the sustainability course, discussion was considered extremely valuable and "of the utmost importance" [4-11-3], as it allowed them to understand each others' perspectives and experiences, something most courses do not focus on. The personal seemed to have the ability to bring home points that were just facts in the texts. One student noted,

> We would be talking about air pollution and the poor air quality around the world but then someone would speak up and say, "You know, I spent a couple of weeks in Bombay and the air was so bad that my hair turned grey." And then all of the sudden it is not in the textbook anymore; it is the girl sitting next to me who told me about that. [4-23-1]

All students interviewed from this course spoke of the positive impact of discussing the perspectives of students from "different disciplines and different places" [7-12-3]. As one student noted, "I don't get to sit with a lot of those students and hear their views and be open to their ideas" [4-6-1]. It also allowed students to see the variation in perspective within disciplines "when you get down to specifics" [7-4-9] that students had not been aware of through their other courses.

Students in the course on indigenous peoples valued perspectives that other students brought forward because these added a new level of understanding to issues raised. The "personal touch" provided by the materials used and course interactions "really changes the outcomes of the class" [8-6-1]. Through the process, students developed an understanding of others' viewpoints and personal experiences. As one student noted, "It was just really neat to be able to know what other people are thinking and say 'that's a good point' or 'I've never really thought about that' " [2-8-7]. Another student concurred, noting, "All the knowledge I learned [from other students] was pretty much invaluable" [15-9-2].

In the course on human relations, student perspectives and experiences related to the topics provided valuable resources for discussion as well. Students described interactions in the class and open discussions of personal examples related to the research in readings as factors in their experiences: "...with a discussion and the professor asking students [questions], it made you think more" [1-6-7]. In the research component of the course, having small groups for research development and implementation also encouraged discussion of personal perspectives around topics that groups found particularly interesting. Brainstorming and problem-solving in research groups to develop research ideas and designs brought new views, experiences, and questions to the discussion. In the class discussions I observed, research findings were used as a way of thinking more deeply about personal experiences and viewpoints, and personal experiences and viewpoints were used as a way of understanding and challenging published research findings.

Shaping Course Experiences

Many student comments referred to a shift in these courses from a focus on the professor as the organizer responsible for course functioning and success to a focus on students as active participants in creating and furthering what happened in the course. Related to Burbules' (1986) concept of changing power relationships by challenging organization, this theme—shaping course experiences—involves the way in which learning was organized. All three subthemes describe opportunities to move away from more traditional classroom organization, in which the professor's decisions, plans, and actions determine how the course unfolds, to more active roles for students in course development and group functioning. This theme brings to the foreground the potential for student input, planning, and collaboration in developing a learning environment that considers individual and group learning. Rather than a more independent experience of individual learning or learning that was overly dependent on the professor, students talked about creating shared learning experiences. Students described three ways in which their experiences were facilitated and supported through shaping course experiences. First, more than in other classes they had taken, these course encouraged participation in decision-making about the learning experience. Second, students described multiple opportunities for working collectively on tasks, rather than

individually. Finally, they described a process of collaborating for success involving decentralized responsibility, rather than focussing responsibility for success on the instructor.

Making Decisions

Students were actively involved across courses in the way learning unfolded through the decision-making process. In different ways, students had a say in what they would learn and the process involved.

In the sustainability class, students chose which section they wished to be in for the discussion class (four different professors) and then separately for the project groups (four different group projects lead by one of four professors); they noted that, in this way, they could choose professors and project topic, as well as expand their interaction with different student groups and the points of view they heard. Throughout the course, they were involved in making group decisions about the projects they developed. During the plenary session in which students presented their projects to all classes in the course, I heard stories of the interactive processes students used in deciding how to go about searching for and integrating material from across disciplines, perspectives, and sources around complex sustainability issues.

Students in the course on indigenous peoples were active in decision-making throughout the course. Through a "collaborative" process [15-6-3], the class determined the format for the course outline and how they would set their own deadlines and adapt the course to their own interests and needs. Choosing their own topic for their in-depth paper and presentation meant more personal relevance and interest: "It was based more on what we wanted to learn about....With our papers we could look into whatever we wanted and we could really focus on what we were interested in" [8-5-3]. As well, they had multiple options in terms of the book they chose to read and report on for the class, the movie they viewed, and the approaches and resources they used for information gathering. As one student noted, "It just made it more enjoyable, because you get to pick and choose....I've always thought if you are going to learn something, you learn it better if you want to and you are interested" [2-6-5].

Participative decision-making was strong in the research lab component of the human relations course. Students chose their own research groups and could change

these, if they wished, to complete different projects with different groups. Carolyn noted that groups worked well as teams and most groups stayed together throughout the term. In their project work, student described designing projects in keeping with group interest; although they were told which type of research methodology they were to use for each project, they chose the topic and developed the research details at suit their interests.

Working Collectively

Across courses, there was a shift from students maintaining a more passive role toward students being more actively involved in the learning process, working collectively and collaborating with each other to create shared learning experiences.

Students in the sustainability course worked collectively during discussions in class and on their group projects, which they presented to all sections of the course. One important aspect of this cooperative process in class discussion involved students representing the environmental and economic sides of the sustainability issue. Students enjoyed the give and take of the interaction and often role-played their sides to challenge each other to explore their positions more fully. Being able to hear different views and see different personalities in class was interesting for students; "It was just an atmosphere where people had different opinions, but they explained themselves and you really take a lot from that" [9-5-5]. Working collectively also occurred during class small group work: students worked together to share information and ideas, developing a joint response for the larger class on an assigned sustainability problem. Another aspect of collective effort involved the group projects developed around a particular issue of sustainability during the project classes. Unlike group work in other courses that often involved dividing up a project for individual input and little collaboration, students described these projects as depending on actively discussing possible approaches and incorporating multiple strengths and knowledge bases.

Students in the course on indigenous peoples also described working "just like a team" [15-7-6] in discussing issues and gathering and sharing information through multiple activities and from multiple sources. One student noted that this was the first course that he had taken that did not revolve around the professor teaching; through in-class research and research on their individual topics, students developed expertise in their particular areas of interest which they shared with the class. Students noted that,

guided by Amanda, they learned "a broad range of information" [8-3-8] that combined the knowledge and research of students and contact with other students' thinking. One student commented

> I am a quiet person most of the time. And in this class I could not contain myself....If you see me in another class, I am not like that at all. But in this class it was the other way around; it was an interactive class. And I totally appreciated it. [16-7-7]

During this interactive process, class discussions around issues raised by current events or student questions and comments led to new questions or impasses where students needed more information to think further about the issue. When this occurred, Amanda suspended discussion and the class searched for information or insights using different sites they located on the internet. Students shared the new information that they gleaned from a variety of perspectives with the class and discussion resumed.

Throughout the human relations course, students worked in small groups developing skits, preparing for debates, and considering controversial issues for presentation to the larger class. Using a variety of activities organized by the professor, students worked together to think and talk about "real" issues. Through working collaboratively with different smaller groups of students and as a larger class, students examined multiple perspectives on topics from different researchers in the literature and from each others' personal experiences, rather than just hearing what the research literature describes or hearing the professor's perspective on these topics through lectures. Working collectively was also essential for research projects. Rather than directing the process, Carolyn facilitated student collaboration. Through their work on research projects, students were actively shaping group learning through developing topics, research designs, and implementation strategies.

Sharing Responsibility for Success

Beyond shaping course experience through input on course structure and working together on projects that the professors initiated, students actively engaged in sharing responsibility for its success. Rather than a passive sense of responsibility for their own success in a course directed by a professor, students described an active sense of responsibility as both individuals and groups members. Instead of leaving the

responsibility for success to the professors, I get the impression from student interviews across courses that there was a different level of engagement in the learning process and a different sense of ownership of the process and the outcomes. Across courses, students described their awareness of the value of students' contributions, their influence in how learning unfolded, and their desire to help the course succeed.

Students noted that the sustainability course, unlike most other courses they had taken, focussed on students as learners and the experiences and opinions they brought to the course. By contributing their ideas and experiences, students created a larger, shared knowledge base. Once on the table, these experiences and ideas were available for group exploration and further understanding. No longer the isolated perspective or experience of individual learners, this collective understanding could be used and developed by all. Rather than seeing these as views that needed defending or as finished items of knowledge, they were used as building blocks for constructing new viewpoints. Students took responsibility for encouraging others' contributions, exploring agendas and underlying beliefs, and challenging ideas to create greater understanding. Likewise, through creating a presentation on their group topics for other students in the course, students worked together to increase not only their own understanding, but also the understanding of all those in the course. Students talked about a strong desire to help others understand their views, since the course was "really about sharing our experiences and our knowledge" [4-18-1]. They talked about sharing responsibility for this new course with a respected professor: "We are all trying to see this course succeed" [4-12-3].

In the course on indigenous peoples, shifting the focus of activity from instructor to students encouraged students to share responsibility for providing information and discussing issues. Differences of opinion were not only shared and valued, but were essential as students found and read different materials than class mates, rather than relying on a standard text. As one student commented, the perspectives of other students "were really appreciated because there is no way I would have learned that without them there" [15-8-11]. There was a sense of shared responsibility for course success which one student summed in noting,

> So you put in the extra effort. In larger classes, you don't really know the professor and it doesn't have the same effect....I think it is that you know [the

other students] and you don't want to let them down either and you don't want to let the professor down. [8-12-8]

In the human relations course, students shared responsibility through bringing their differing experiences and views to the larger class discussion, helping others to understand their views in smaller activity groups, and working with their research groups to develop projects that showcased their collaboration and their joint development as researchers. As one student noted, "I think we were all interested in the outcomes and I think we were all really proud of [our project] because we put so much time into it and it was kind of inventive and we ended up getting an excellent mark on it. And I was thinking that someone should [build on our work] for their thesis" [14-11-2].

Developing Relationships

Beyond elements of challenging authority and organizing learning differently, students described interpersonal aspects as being important in their experiences. While this is not a category described by Burbules (1986), this theme—developing relationships—involves support students described as important for taking on new roles, exploring new ideas, and discussing personal experiences and perspectives. Unlike challenging authority, and organizing learning differently, which focus more on cognitive considerations and behavioural changes, this theme focuses more on the emotional facilitators that students described. All three subthemes describe opportunities for developing positive interactions and social supports for individual and group learning and change. This theme brings to the foreground the importance of the emotional and interpersonal in challenging power in the classroom; it highlights interaction among emotional, cognitive, individual, and social learning and change. Students described three ways in which their experiences were facilitated and supported through developing relationships. First, students noted the importance of knowing each other. Second, they commented on developing a sense of trust in each other. Finally, they described developing respect through the course.

Knowing Each Other

Across courses, students talked about the importance of knowing the professor and other students at the beginning of the course or as the course progressed.

For the sustainability class, knowing and being known added greatly to promoting

comfortable participation in this first-time course. About three-quarters of the students knew the professor from previous courses they had taken with him. They considered knowing and being known by the professor in a new course important. As one student commented, "When you are taking a chance, you want to take it with someone who already knows you" [5-3-1]. The professor knowing most of the students and many of them knowing each other through previous courses or work on the campus newspaper added a personal dimension that many students felt was important when discussing opinions in class. Knowing others and feeling known was not static; it was a process that developed over the course, including those who had not known others at the beginning of the course. One student noted he was comfortable presenting his point of view even though he did not know anyone coming into the class and felt he was not as well read as the environmental students or the students on the campus newspaper.

While students in the indigenous peoples course did not talk about knowing each other or the professor before the course started, they did talk about the friendships they developed through "being part of something different" [8-12-6]. One student noted, "I think there is more of a connection in that class than I have had in any of my other classes because I know everyone's name and I'm real in that classroom and I think you do build almost friendships" [8-12-6]. "I... would say I have made friends in it that I wouldn't have made in another class" [8-12-8]. Another student noted that "people became friends in the space of four months and you have possibly a life-long friend" [16-9-7]. Students also talked about knowing the professor better than in other classes and described this as developing "a personal relationship with the professor" [8-12-4]; realizing that "the professor is your professor, but she is also a friend" [16-11-3], and developing "a good professional relationship" with the professor [15-12-6].

The students interviewed from the human relations course all knew the professor through previous courses. This created more comfort during class discussions of personal experiences, in seeking advice for research projects during the lab component of the course, and in approaching Carolyn with questions outside of class time. Students felt comfortable exploring new options and bringing questions and concerns to Carolyn as they developed their projects. This allowed students to take chances with their research design, knowing that Carolyn would help them avoid costly pitfalls. Knowing other

students in the class or in smaller work groups was also important. For one student, self-introductions at the beginning of course helped to break the ice in getting to know each other. Once in small research groups, students got to know each other quite well and were comfortable discussing issues that were more personal. As one quiet student noted,

> I don't know if I would have been comfortable bringing [the issue] up [with the whole class] unless somebody else said it and then I would be able to agree. I personally don't like talking to the big group. [3-12-5]

Trusting Each Other

To risk offering an opinion that others may not hold or describing an experience that is personal or unique requires trust (Ellsworth, 1989). Across these courses, students described developing a sense of trusting others and of being trusted. Student interviews provide examples of the basis and the experience of trusting each other.

Students in the sustainability course described a number of ways in which trust developed in the course. They felt they could trust Philip because of his trustworthiness in the past. Having had him in previous courses, they believed he would make this course, with its new format and structure, fair for students, as he had in past courses they had taken with him. They also described ways in which they felt trust in voicing their opinions in class. First, Philip modelled support for students expressing their views and respect for diverse opinions; at the same time he modelled challenging one's own and others' viewpoints in respectful ways. In this atmosphere, students were willing to "go out on a limb because [the professor] was always there to back you up" [7-11-2] in the thinking and discussion process. Second, Philip did not favour one side of the debate or present extreme views. While many students expressed this opinion, the importance is captured in one student's comment:

> Those extreme views had to come from outside of the professors and outside the university. If the professors had represented the extremes, it would have been hard to have both sides in the dialogue in class. You may be more intimidated in class; you don't want to go up against a professor. [5-12-30]

Students presented sides of the issues during class discussions, while guest presenters were likely to raise and represent more extreme views. Because these extreme opinions, or even support for one side over the other, did not come from Philip, students felt

comfortable sharing their ideas without fear of having to defend them against the position of the professor.

Trust among students was also described; everyone brought different perspectives that they were willing to share. In the classes I observed there seemed to be a sense of trust that others would be open in discussion to hearing different views and experiences. Although emotional, contradictory information might be presented, there was a sense of lightness in the way students interacted with each other, joking about incongruities in their positions. One student explained this openness during his interview: "If one of us wasn't really comfortable with something, we'd talk about it" [9-6-7]. Comfort in discussing and joking lead to greater questioning by learners of their peers, and compromise in spite of strong opinions, according to students; deeper exploration of issues occurred with a sense of being able to move from one's own view to another's, without having to be defensive about one's own position or about changing it. Students trusted that they would receive support from others in the class.

In the course on indigenous peoples, students also described a developing sense of trust as they got to know each other better and worked together. Individuals who would not normally speak up in class said they felt comfortable, in part, because they knew that "even if someone [was surprised by what you said] you knew it was okay because they would speak up and counter it" [8- 11-5]. This took the pressure off having to be right and created a discussion of ideas and experiences instead. For one student, trusting involved presenting her thoughts on a deeply emotional, personal account by a Mohawk woman that she read for class. In the account, she knew she was getting to hear the personal stories of aboriginal peoples, and realized the importance of being "real" in sharing opinions and ideas. I get the impression that the developing sense of trust and the support from other students and Amanda allowed her to do so; students talked about developing trusting relationships within the class and Amanda's emphasis on student personal development and supporting others' development and learning.

As with the sustainability course, students in the course on indigenous peoples described developing a trust such that students were comfortable developing new interactions with the professor. They talked about being comfortable disagreeing with the professor's opinions, as they would with other students' opinions. Trusting each other

was also described in opening up and identifying learning or career goals to the instructor. As one student noted, "You are putting yourself on the line, but I think in order to get something real out of it, [professors] have to be real with you as well" [15-20-2]. In their descriptions, I see trust among students and the professor and openness for others' opinions increasing throughout the course, allowing greater connection with others and sharing of a unique learning experience.

Students in the human relations course did not talk directly about trust as a factor in their experiences; however, their comments about class willingness to share personal experiences indicate to me that trust was involved. In the classes I observed, most students appeared comfortable contributing examples from their lives that related to the research topics being discussed, either during large class discussions or in smaller activity groups. Sharing personal experiences requires trust that others will not respond negatively to narratives of past experiences. Trust is even more important when the experiences discussed are currently distressing as they were for two of the students interviewed. In spite of the inner turmoil they had around these life events, both of these students noted that they discussed these events and their perspectives on them in the course.

Respecting Others

Beyond knowing each other and developing trust, students across courses also described a developing sense of respect that facilitated their experiences. Different facets of respect were described by students, including respect for the understanding being offered, for their development as effective teams, and for others.

Amid the joking in the sustainability course, there was also a sense of being heard with respect for the contribution made to class understanding. Being able to connect the information and perspectives in the texts with real life experiences of other students was seen as valuable for developing new understanding. Students found the texts were informative, but "the bigger thing is having the personal aspect of it, being able to talk to the other people in the class and hearing what they have to say" [7-10-1]. Class interaction, as students worked together to understand multiple views and learn from each other, was described as respectful: "we all respected each other" [7-3-3]; "everyone was respectful" [7-3-5]. Students in the sustainability course also talked about having great

respect for Philip; one student noted she would take any course that he taught.

In the course on indigenous peoples, students talked about the respect evident in course interactions and for indigenous peoples. Contributions made by other students were considered "invaluable;" students noted that they could not have learned what they did in the course without these contributions of information and personal perspectives. Students also spoke of respect for what they had learned from Amanda in the course and mutual respect between professor and students. As one student noted, this respectful professional relationship with the professor involved the encouragement, positive reinforcement, and useful, candid information she provided: "It is a definite respect" [15-18-6]. Students in this course also described respect that developed for the authority of lived experience and for indigenous peoples. One student noted that

> Meeting [an indigenous guest speaker] for this course was wonderful—a lot of respect. We all did research on him before he came so we would all have understanding of his past and what he has done for his people and the rest of Canada. [15-15-1]

Two other students commented on gaining respect and admiration for a female aboriginal author they had read for the course. Another student commented, "I think if you were in that class, there is no way you came out not respecting the indigenous people of Canada" [16-11-6].

In the human relations course, students also valued the support provided by the professor and the contributions made to the learning process by other students. With Carolyn's support and encouragement, students developed their own questions and research to explore their questions. In the classes I observed, both Carolyn and students demonstrated respect for others' opinions. Rather than seeing research findings as either right or wrong or researchers as authorities whose work was not to be questioned, the class saw the work of researchers' as valuable resources to be explored, questioned, and built upon as students constructed new understanding. Personal experiences were not relegated to positions of lesser value or authority, but were heard and discussed with respect for the contribution they made to understanding research and developing collective knowledge further. As one student noted, "[For] different topics a lot of people had their own personal experiences to share...Listening to others' opinions makes you

think more about the topics" [1-6-5].

Summary

Burbules' (1986) work on challenging power provided a framework for considering the second research question on factors facilitating transformative learning through examining who or what has authority and how power relationships are implemented in the classroom. Through challenge to traditional power relationships in the classroom along these dimensions, students described a different experience of power. Across courses, three main themes emerged, two of which were related to Burbules' elements of challenging power: considering multiple perspectives—related to challenging authority, and shaping course experiences—related to course organization. A third theme, developing relationships, focused on interpersonal support.

Through change in the traditional role of the professor, using a wide range of information sources, and discussing their personal views, students considered multiple perspectives and challenged the traditionally assumed authority of the professor, discipline, and academic knowledge. Students were actively involved in shaping course experiences through participation in decision-making about the learning experience, working collectively on tasks, and collaborating for success through decentralized responsibility. This challenged the more traditional organization of courses involving individual learning or dependence solely on the professor for course direction and success. Beyond challenging authority and organizing learning differently, as described by Burbules (1986), students described emotional, interpersonal aspects of developing relationships as facilitating their experiences through knowing each other, trusting each other, and respecting others. These developing relationships provided needed support for taking on new roles in the course and bringing personal experiences and perspectives forward for discussion.

These findings are broadly in keeping with learning conditions described as desirable: a sense of safety, openness, and trust; a learner-centred approach; participation and collaboration; exploration of alternative perspectives (E. Taylor, 2000); active listening; reciprocity and cooperation; lack of domination; withholding judgment until the other's point of view is understood (Mezirow, 2000); and challenge and support (Kegan, 2000). Findings in the present study support E. Taylor's (2000) review of research

indicating the importance of relationship elements, such as trust, friendship, and support, in the process of transformative learning, in contrast to Mezirow's emphasis on rational discourse. Feelings of support, trust and safety; listening to others' perspectives and experiences; sharing responsibility and authority; and a sense of equal contribution in discussion and knowledge creation have also been noted by Barlos (2000) in describing the experience of older doctoral students in a transformative learning program. Framing facilitators within the context of power relationships offers a more specific way of thinking about factors that are often described in quite general terms; it provides a frame for considering interaction among elements and adds some detail around what these positive-sounding course attributes might involve in the classroom and how they fit within students' experiences. This frame also offers a starting point for reflecting on an issue raised by E. Taylor (2000) when he noted that the role relationships play in transformative learning is not known.

Before moving on to the third research question, I think it is important to highlight the interactive process that I see in students' comments on facilitators of their course experiences. First, from student descriptions, I see these facilitators not as static characteristics of the learning environment that are put in place at the beginning of the course, but as developing processes over the course. While they may be initially encouraged by the plans and actions of the professors, they become interactive experiences in which students are co-creators rather than passive recipients. For this reason, I have used verbs to indicate action, rather than nouns to imply environmental characteristics. Second, sub-themes are inter-related; each offers a part of the picture around considering multiple perspectives, shaping course experiences, or developing relationships. When professors moved out of the more traditional role of information giver, there was greater opportunity created for exploring other sources of knowledge and discussing students' personal experiences and perspectives. Working collectively in these courses involved making individual decisions about the contributions students were willing or able to make and group decisions about how work would progress; this involvement seemed to lead to taking on more responsibility for success of group projects and course process and outcomes, according to student descriptions. Knowing, trusting, and respecting were related feelings in students' comments, although they did not specify

how each developed relative to the others. I sense that it is through knowing others that students across courses developed the trust needed to risk further openness and develop the respect possible for knowing others on a deeper level. Third, as noted at the beginning of this chapter, the themes presented are inter-related and separating them, while helpful for analysis, is artificial. This is evident when attempting to describe each without undue overlap with other themes. Actions described in each theme support actions across the other themes. For example, from student comments I believe that discussing personal views was facilitated by knowing and trusting each other and working collectively rather than independently. Developing respect for the contributions made by others likely reinforced further sharing of personal views, increased engagement in group work, and greater knowledge of and trust in others. I do not believe that any of the main themes individually would likely have been sufficient for supporting the transformative learning experiences which students described; each seemed to provide necessary inter-related support. The interrelationships among components of transformative learning and elements of supportive environments are discussed further in the next chapter.

Chapter Nine: Role of Student-Centred Courses

This chapter explores the third research question about the role of discrete student-centred courses in the process of transformative learning. For this question, I return to the literature and to Mezirow's model to help frame the findings for the three courses in this study. Mezirow's original study considered significant life experiences creating dissonance for women and their subsequent transformation through college re-entry programs designed to assist women in changing their lives (Meziow, 1975). Likewise, Freire's interventions with community groups involved specific learning around social action related to learners' lived experiences of inequity. Starting the current research study, I realized there was a distinct possibility that thirteen-week courses, designed for the liberal education of traditional age undergraduate students and not dealing with specific social action issues, might play a very small role in the process of transformative learning. While I had conducted an initial pilot study that indicated that transformative experiences were possible during the undergraduate university career, I had not looked at transformative experiences occurring specifically within courses. Of themselves, particular courses may not tap important elements that support and facilitate the transformative experience. With the findings from the first two questions of this study indicating engagement in the process of transformative learning within individual courses, the third question explores student-centred courses further. Beyond providing facilitative factors described in the literature or identified in student interviews in the second research question of the present study, what role do student-centred courses play in the experience of transformative learning?

Considering the critiques of Mezirow's model helps to highlight important aspects of student-centred courses because these critiques focus on elements that others see as insufficiently explored in Mezirow's work but central in developing further our understanding of transformative learning. Each of the three major critiques fits with themes emerging from the data; in fact, it was the strong sense I had from students' interviews of developing power, incorporating emotion into traditionally cognitive learning, and integrating individual and social elements that prompted me to rethink my original framework and dig deeper into the literature and the critiques of both Mezirow's and Freire's work. Using the courses in the present study as examples, I explore the ways

in which student-centred courses offer students opportunities for a different experience of power, integration of emotion and cognition in learning, and linking individual and social change. A fourth issue, gender, is also considered as it relates to the process of transformative learning. Gender offers another lens for considering power, emotion and cognition in learning, and individual and social change. It is interesting to note that gender roles and assumptions were part of Mezirow's (1975) original study of re-entry programs for women in the early 1970s; the third step of the transformation process in his original work involved "critical assessment of sex-role assumptions and a sense of alienation from taken-for-granted social roles and expectations" (p. 12). The exploratory nature of this study and the limited sample size allow initial glimpses into each of these four issues that warrant further exploration in future research. I believe that exploring these four issues helps to integrate the experiences that students described in this study, highlight the role that discrete student-centred courses play in transformative learning, and increase understanding of issues raised in the literature.

As with earlier chapters, my intention is to explore issues as they relate to students' perspectives. Although I am integrating relevant information from the literature and my own reflections, I describe what students said in their interviews. For clarity as to source, I specifically note when, rather than discussing what students described, I am including a comment by one of the professors that I feel helps in further understanding student experience or my own observation or interpretation.

A Different Experience of Power

Reviewing student descriptions of the process of transformation and the factors that facilitated that process, I gradually became aware that students were describing a different experience of power within the classroom. Through this reflective process I also came to appreciate more fully the critiques of Mezirow's model for its lack of emphasis on power. Students in the three courses described a number of features that provided support for the transformative experiences they had during the term. Clustering themes noted in the transcripts around facilitators and the transformative experience, I found a fit with the categories Burbules (1986) discussed when describing how more equitable relationships can be developed in the classroom. Burbules' discussion is brief in describing the possible changes in authority, organization, and ideology, but it highlights

who and what is given authority and how interaction is organized in a more ideal learning environment such that status quo assumptions may be challenged. In such learning environments, there is less conflict of interest and negative power impact (Burbules, 1986). While Mezirow's model does not consider issues of power sufficiently (E. Taylor, 2000) and Freire's philosophy of education highlights class power struggles (Weiler, 2001), Burbules (1986) offers a framework that considers challenges to power in multiple ways applicable to the courses in this study.

Moving away from one person—often the instructor or some other recognized expert—or textual source as the authority dominating discussion and directing thinking, all three classes in the present study moved to more "open, informed discussion" and "sharing [of] information" (Burbules, 1986, p.108). While hearing multiple perspectives and discussing the ideas presented, students considered the source of the information and considered who is qualified as an authority on the issues explored. Participants also described how course organization supported increased student involvement in the class and facilitated their experience. Students were involved in the process of shaping course experiences through "participatory decision-making," working on "collective tasks" rather than individual projects, and sharing "decentralized responsibility" for how classes progressed (Burbules, 1986, p. 108).

It is important to note at this point that all of the instructors stated they had as one of their aims changing the patterns of classroom interactions such that they would be seen less as the authority in the classroom and more as a facilitator of active student learning. Having said that, it is equally important to note that this was not an abdication of responsible authority on their part (Shor & Freire, 1987) or an attitude that any interaction was appropriate. Instructors were aiming for greater depth of understanding of the issues and processes in the course (McLaughlin & Talbert, 1993), and greater student involvement in developing that understanding. I do not see, in these courses, instructors aiming for another method to facilitate traditional teaching and learning; instead, according to student comments, they were giving and asking for more as they aimed for qualitatively different means and ends.

In their comments, students indicate their awareness of the changes from the more traditional lecture format in which professors offer pre-packaged acceptable answers, to

learning that explored multiple sources of information, brought students' experiences to the discussion, and altered classroom roles for the professor and the students. Along with open, informed discussion of multiple perspectives including students' personal experiences and views, students took more active roles in these courses through involvement in decisions about course focus and process, participation in collective tasks and projects, and taking on more responsibility for course success for others and for themselves. How the course progressed was as important as the content of the course. Students described the importance of knowing, trusting, and respecting each other for engaging in the new roles and experiences offered; these provided essential interpersonal support for opening up and contributing ideas, discussing the perspectives brought to class, and being involved more fully in the experiences that developed. In students' descriptions, the more cognitive-behavioural elements—informed discussion from multiple perspectives and shaping learning experiences—were integrated with more cognitive-affective aspects—knowing, trusting, and respecting.

With this support, courses challenged ideological assumptions—the third element Burbules (1986) considers—at different intersections with the social environment. For the course in human relations, students were involved in challenging research assumptions and personal assumptions by using one source of information to inform and explore the other; personal experiences provided a tool for digging more deeply at assumptions underlying research approaches and findings, while research served as a means for exploring often unexamined personal assumptions. This allowed students to move away from an either-or dichotomy toward interaction between, and integration of, examined elements of both potential sources of authority. In the process they were, in essence, challenging the artificial division between discipline knowledge and the knowledge that comes through individual experience. In the course on sustainability, two main discipline perspectives were used as foils to challenge the divisions usually maintained between knowledge bases from separate disciplines in academic settings. Students described this as the first time they had experienced comparison and integration of discipline knowledge bases in a course. In the course on indigenous peoples, multiple sources of information available in the larger social sphere and from those who are normally the object of academic research were used to compare and contrast with

assumptions and knowledge within universities. This challenged the division of knowledge based on production in academic or non-academic settings. Professors in more tradition courses stand as representatives for research, discipline, or academic knowledge. I see the professors in the study courses acting to change roles for themselves and their students and attempting to break down assumed divisions—between disciplines, experience and research, and the academy and the larger social environment—that can act as barriers to transformative learning.

The ways in which these three challenges to power—authority, organization, and ideology—were connected in students comments leads me to an appreciation of their relationship and the need for challenging authority and organization if transformative learning, involving challenges to ideology, is to occur. By course professors moving out of the role of designated authority and decision-maker responsible for course success, spaces were created for students to be more active contributors to learning content and process. Students had the chance to not only explore multiple perspectives beyond ones the professor brought to the course, but also to bring their own resources and experiences and make decisions as to how information sources were used. With more focus on student contributions and involvement and less focus on the professor's knowledge and direction, there was also space for students to develop different relationships with each other, the professor, and others involved in providing course information. Together, I see the challenges to authority and organization and developing relationships providing a supportive frame of "whose view is valid," "how things are done here," and "who is involved in the experience" which allowed challenging ideology in these courses to move beyond rational discussion that raises awareness of injustice in the world to the level of a transformative experience. Without the changes students described in the courses that challenge authority and organization and provide supportive relationships, discussion around ideology would remain theoretical. However interesting, it would be discussion about power and underlying assumptions of the status quo. Beyond having discussions about power, students in the courses in the present study describe a different experience of power.

Challenges to authority and organization and supportive relationships facilitated the beginning of engagement in transformative learning; they supported what could be a

daunting task for students within a course setting—examining and reconsidering assumptions they held. Rather than a banking model of education that focuses on facts, excludes emotion and individual connections to the topic, and thus avoids possible tension among perspectives, in challenging authority and organization within the context of supportive relationships, these courses embraced the interconnections among emotion and cognition, and individual and social learning held by experience. This inclusiveness supported transformative learning by more fully engaging students through making topics relevant, accepting and encouraging exploration of the tensions among perspectives, and scaffolding individual and group consideration of underlying assumptions.

Integrating Emotion and Cognition in Learning

Mezirow's model has been critiqued for proposing an overly cognitive model that views the role of emotion in learning in very limited ways. References to emotion in the beginning of Mezirow's model occur when he describes the discomfort of the disorienting dilemma in the first step of his model, and the negative feelings that result from self-examination in the second step of his model. As noted in the literature review, while emotion is described, it is separated from cognitive elements which form the core of the model and lead to action to learn new skills and knowledge that are needed to implement a plan to integrate new perspectives into one's life. This conceptualization of emotion in learning is, perhaps, not surprising in light of the context and learners that Mezirow (1975) studied. The women enrolling in college re-entry programs had often faced a difficult circumstance such as the death of a partner, divorce, or loss of family income. These disorienting events occurred prior to enrolment in the program Mezirow was studying; they were separate, usually unpleasant events in the transformation process Mezirow described. Likewise, the negative emotions associated with self-examination are in keeping with a sense of being unprepared to meet the challenges faced by women who had lived the socially sanctioned role of homemaker or who had feelings of anger, guilt, fear, or shame around the situations in which they found themselves. Discussion of emotion and cognition by traditional age undergraduate students in the current study differs in significant ways from Mezirow's (2000) discussion of the process of transformation around these three constructs—discomfort of

disorientation, the association of self-examination and negative affect, and separation of emotion and cognition.

First, Mezirow (2000) describes the discomfort of disorientation that individuals experience at the beginning of the transformation process. Some students interviewed in the present study also spoke of discomfort. For students in the course on human relations, the course topics that they found most relevant tapped particular, individual issues that they brought into the course; these issues were associated with an ongoing sense of discomfort that they wished to resolve. For this group, there were trigger topics in the course related to issues of importance in their lives outside of class. While students interviewed seemed to have developed new understanding during the course around the issues, the concerns did not start in the course; they were brought to the course. A student in the course on indigenous people also referred to discomfort early in the course, in keeping with Mezirow's description of individual discomfort.

> I think discomfort is a good word. It is when you think you know something or you think you know sort of everything and then you find out you don't; you have almost a feeling of guilt. How could I not see that? [8-3-4]

For this student, having a friend who was aboriginal and yet knowing so little about aboriginal issues created discomfort. Students experiencing such discomfort were more like students that Mezirow describes in that they were bringing a concern with them that the course highlighted. In raising these issues as topics, the courses provided an opportunity to acknowledge and explore ongoing concerns or areas of discomfort.

For most students in the present study, the question about "feeling a sense of discomfort around the issue or situation" did not prompt discussion of the individual discomfort that Mezirow describes. It initiated discussion about how comfortable they and other students were with the process or how supported they felt in considering even difficult situations or issues. This is not to imply that they did not experience tension or see tension among perspectives evident in classmates. The tension, however, was frequently described as exciting and shared. Since others were sharing in the issues, the process, and the tensions they experienced, there seems to have been a balancing effect for students across courses between the tension felt or discomfort experienced and a sense of safety for engaging in the exploration process. According to students, this was,

in part, due to knowing others and being known by the instructor and other students, and feeling heard with respect if not agreement. The emotions and tension experienced were shared and supported; they became another aspect of the learning process occurring in the course.

The difference between Mezirow's description and the descriptions of most students in this study may lie in the learning community developed around the issues explored in these courses, with group support for concerns raised. Mezirow's students were alone, rather than in a supportive learning group, when the disorienting dilemma occurred and initiated seeking out the college re-entry programs. Unlike Mezirow's re-entry students, most students in my study were not facing negative or challenging life changes that initiated engagement in the process of transformation. Even for students within the human relations course and for the student in the course on indigenous peoples, considering the discomfort of the life situation with others in the course was likely possible because of the support demonstrated by the class. While Mezirow's students experienced the disorienting dilemma leading them to seek program support, I think that students in the courses I studied experienced support that provided a space for exploring disorienting dilemmas.

Second, Mezirow (2000) notes that the sense of disorientation highlights the need for change, and leads to self-examination involving feelings of anger, guilt, fear, or shame. Increased awareness in Mezirow's scheme is associated with negative feelings only; these negative feelings seem to act as motivators for change. Some students in my study spoke of negative feelings: guilt about using stereotypes or not living espoused values, or sadness at the discrimination faced by indigenous peoples; these feelings, however, seemed balanced with pleasure at the understanding gained. For example, guilt about using stereotypes or not living espoused values was balanced by valuing new awareness and a sense of possibility for change. Likewise, sadness at the challenges faced by indigenous peoples was balanced by hopefulness on learning of the progress indigenous peoples have made and a positive sense of connection with indigenous people. From student descriptions, there was not just one emotion expressed at a time or only negative feelings; emotion in the negative direction seemed balanced by positive emotions during the process of gaining awareness.

Overall, the general emotions described by students as awareness increased in the course on sustainability were excitement and surprise at the process and what they were learning. In the course on indigenous peoples, the predominant feelings were respect for indigenous peoples, excitement, and surprise at the depth of the topic and the unique shared experience of learning. For the course on human relations, the developing feelings, amid concern related to their life situations were feelings of satisfaction with development of self-understanding and of connecting their education more deeply with their lives. Rather than the sense of having a mirror held up by the course and seeing oneself as inadequate, with resulting shame or guilt as Mezirow describes, students' descriptions are more in keeping with the image of encountering a new window that allowed students to see how connected they were to the issues explored in research and class discussion, and with the larger social world. Rather than seeing their individual reflections, they could see their place and the place of their concerns or perspectives in a larger context.

Rather than fear, shame, or guilt, students across courses described feeling safe to explore often difficult or emotional issues and share their views with others. They did not feel they would be judged negatively by the professor or, of equal importance at the undergraduate level, by their peers. I did not ask students specifically about the sense of safety they described. I have the sense from further reflection that the interpersonal relationships developed through knowing, trusting, and respecting each other, as well as the challenges to traditional authority through considering multiple perspectives and the challenge to course organization through active involvement in shaping the course facilitated the sense of support and safety described. This supportive learning process was associated by students with a sense of possibility and excitement.

Third, Mezirow's model seems to separate cognitive processes from emotional responses; while emotion and cognition are both included in his model, they appear to act in separate steps of the transformation process. This reflects the dichotomy between emotion and cognition in much of the literature on education, with cognitive processes as primary and more defined, and emotion frequently seen as a source of motivation for cognitive engagement in learning. Boler (1999) notes that "explicit attention to the subject of emotion appears only rarely in educational histories and theories" (p. 31).

While this separation may not be surprising in light of our inadequate understanding of the emotional process of learning and of the process of transformative learning, it is limiting. Students in the present study do not describe separate cognitive and emotional processes. Although they are more used to traditional classes that focus on cognitive learning, students described both emotion and cognition throughout the learning process in these courses. Students described issues explored as real, important, and relevant parts of their lives, rather than cognitive information to be accepted and learned. Related to the revised model for this study, emotion and cognition were integrated in the supports that facilitate the transformative process, as well as within the process of looking for and reflecting on underlying assumptions. Likewise, students described both cognitive-behavioural and cognitive-affective outcomes resulting from their course experiences.

For all three courses in this study, emotion and cognition seem to be linked through the process of more deeply considering experiences of students in the class and of other individuals and groups. Lived experiences comprise both emotion and cognition; effort is required to separate emotion from cognition when mining lived experience to produce factual information about experiences. The effort in these courses seemed to be directed to building together new, larger experiences from thoughts and feelings brought by students and by the learning resources they used. In this way, I see emotions and cognitions being integrated further through the process of transformative learning, rather than separated as suggested in Mezirow's model.

In all three courses, through exploring experiences there was a move away from the transmission of information about experiences toward seeking connections among information and lived experience, appreciating the tension among perspectives, and exploring underlying assumptions. The emphasis was not on cognition rather than experience or experience without informed consideration. The courses did not seem to "assume experience as authoritative or inherently 'real' or 'true'...but "introduce[d] analytical approaches that frame emotional experience as a 'window' into ideology" (Boler, 1999, p. 123). In the course on sustainability, students were encouraged to discuss their experiences, thoughts, and feelings related to the topics. In the course on indigenous peoples, speakers, films, and books brought indigenous experience—both thoughts and feelings—closer to students and integrated students' experiences, with both

thoughts and feelings, in exploring these alternate sources. For the course on human relations, student experiences were considered integral in exploring research findings around controversial and often emotional topics. These approaches provide examples of encouraging the class to "invite emotions as part of critical and ethical inquiry" (Williams, 1977, cited in Boler, 1999, p. 23). Incorporating experience into these courses also provided links between individual change and social change.

Linking Individual and Social Learning and Change

The third interrelated opportunity that these courses provided was that of integrating individual and social learning and change. Rather than individual and social aspects of change being viewed as dichotomous, they were viewed as mutually supportive in a change process involving individual and social aspects of learning. A number of students across courses described much of university as involving an independent process of learning facts about events and experiences, rather than interdependently learning from experiences as they had in these courses. Learning about and learning from are quite different processes.

> Whereas learning about an event or experience focuses upon the acquisition of qualities, attributes, and facts, so that it presupposes a distance (or, one might even say, a detachment) between the learner and what is to be learned, learning from an event or experience is of a different order, that of insight....But precisely because insight concerns the acknowledgment of discontinuity from the persistence of the status quo, and hence asks something intimate from the learner, learning from requires the learner's attachment to, and implication in, knowledge. (Britzman, 1998, p. 117)

Courses in this study aimed to help students learn from their experiences, asking for new participation by students and new connections between individuals and their social world. These courses, students contend, moved away from more usual formal academic learning. They moved away from education as information transmission (Freire, 1981) to personal involvement with knowledge discussed.

Those interviewed refer to these courses, unlike traditional courses, as focussing more on the students than the course content. I do not think this means, however, that individual process and change overshadowed social issues and the potential for social

change. Although this was a highly personal experience of learning from rather than learning facts about issues, students interviewed in this study do not describe just an individual process of change. Nor were they involved in discussing social changes that occurred in the world as if these were separate from themselves. Instead, in their descriptions, I see them engaging in an integrated process of individual and social change. The focus of these courses, according to both students and professors, was not implementing specific social actions, as was the case with Ellsworth's (1989) course around racial inequity on campus. Starting with the students and the perspectives that they brought to social issues allowed each course, in its own way, to link students more solidly with social issues, as well as offering an opportunity for students to be part of creating social change within the classroom. While, at first, these activities may not seem as lofty as attempting to directly influence the larger social environment, for example, the university campus in Ellsworth's (1989) case, they did allow students to successfully experience change both within and beyond themselves, which Ellsworth's course, in spite of its good intentions, apparently did not. The different experience of power in the courses in this study provided a model of possibility for working toward individual and group change.

While students described these courses as more personal, they also noted that courses provided safety for group process, something Ellsworth (1989) describes her course as lacking. Greater personal relevance and involvement encouraged students to contribute to constructing new understanding for all. Risk-taking was supported by structural and interpersonal aspects of the courses—open, informed discussion, involvement in shaping shared learning experiences, and knowing, trusting, and respecting each other as the course progressed. Risk-taking also appears to have been supported in another way; the courses were both more personal in content contributed and less personal in risk of rejection for personal contributions. From students' descriptions, it seems that as individual experiences and opinions were offered, they were put on the table for exploration within the group's care. The personal contribution became part of the course "material" available. Views did not remain as presented or permanently fixed to the individual, but become connected to the group as a resource for further development. Rather than looking to the presenters of ideas to defend

contributions as if they were fully developed and unchangeable, the group used contributed ideas and questions to create something larger. In this way, students were learning from the experiences they and others brought forward to share and learning from the experience of sharing in a different way that was individual and social. This approach seems in keeping with Freire's (1981) practice of community work which, at times, creates some space from the personal to gain perspective as a group and allow development of social, rather than only individual, solutions. The students interviewed described this as a very different type of group work than they had experienced in other classes.

The process of sharing in this manner might explain why most students in these courses do not describe the learning experience as producing discomfort or negative emotions. I suspect they mean that group interaction was comfortable and felt safe due to the structure and support, even when topics held very personal, emotional meanings or were upsetting, such as those around injustice faced by indigenous peoples or around degradation of the environment. That an issue remained unresolved or that students' ideas were challenged or developed further was not uncomfortable in the way it likely would be if students felt a need to defend themselves for their ideas and their experiences. This is in contrast to Ellsworth's (1989) finding that students in her course felt the need to defend themselves from feeling criticized and did not feel empowered by their openness and contributions. From student comments across courses in the present study, even expressions of confusion or uncertainty were respected contributions to the group as they allowed opportunity to explore complex issues more deeply; such contributions appear to be associated with positive feelings of contribution for those who voiced their doubts.

In keeping with Burbules' (1986) work and my revised model, I see integration of individual and social learning and change occurring in the courses in the present study. Support of a different experience of power integrated individual and social aspects through bringing individuals into a different social arrangement to contribute to the group task of experience exploration and construction of new understanding. Linking individual and social aspects of learning and change starts with the sense of personal relevance students noted in the topics and process. While topics explored larger social issues, these were linked to student interests and concerns through discussions of students'

experiences, perspectives, and feelings on the topics. Tension among perspectives involved both individual, personal perspectives, and perspectives presented by individuals but representing viewpoints held in the larger environment of university and society. Digging deeper to consider and question underlying assumptions also linked personal and socially sanctioned assumptions. Comparisons between individual and social assumptions brought to the foreground ways in which individual assumptions have been socially constructed. Through exploring assumptions socially developed by individuals and groups, the apparent gap between individual and social change was bridged to form a continuum. Reflecting on student comments and the literature, I believe exploring underlying assumptions may be the connection between individual and social learning and change; as Brookfield (2000) suggests, the distinction between reflection on external cultural systems such as educational or political systems and reflection on private lives is spurious because individual assumptions develop within the influences of larger social systems.

Beyond examining individual and social assumptions, students described supportive environments and processes that provided opportunities to develop new assumptions as individuals and as a social group. In their active, contributing roles students were engaging in the social change that was occurring in the course as it developed. Students commented on this course process as a transformative experience and many of them were aware of the roles they played in this change from a more traditional university course format. It is not evident from the interviews that students were involved in attempting social change as a group beyond the classroom nor was that an aim for any of the courses; they were, however, making social change within the classroom and learning how to make individual and social change beyond the course. Experiencing different power relations and developing the ability to recreate the experience elsewhere is a developmental process that requires starting where the learner is and supporting individual and group growth of "...critical curiosity, some political awareness, democratic participation, habits of intellectual scrutiny, and interest in social change" which "are realistic goals from inside a dialogic course" (Shor & Freire, 1987, quoted in Brookfield, 2000, p. 145).

Gender and Transformation

One of the areas of potential focus for the present study was around gender. This was chosen as a possible lens to highlight one of the social issues around which power has been critically considered in the literature and power struggles have occurred for individuals and groups in society. As noted earlier, critical reflection on gender role assumptions was part of Mezirow's (1975) original study of re-entry programs for women. These re-entry programs were designed and implemented by women's groups; they encouraged values espoused by the women's movement and used approaches of consciousness raising (Mezirow, 1975). Although specific reference to gender roles did not continue as Mezirow developed his theory for use in other adult education settings, gender has been occasionally considered in studies based on Mezirow's model. Since Mezirow completed his original study, an increasing number of women have been attending university; there are currently more women attending undergraduate university programs in Canada than men (The Canadian Education Statistics Council, 2003). The design of the present study attempted to include gender as a possible variable for exploration.

Consideration of gender was included in the research design to allow exploration of gender from different vantage points. Gender was a factor for consideration when selecting courses, including gender of the professor and their perspective on the role of gender in the course they were teaching. I felt that I had a range of perspectives among the three professors in the study, with one female professor who considered gender perspectives as key in this and her other courses, one male professor who considered himself open to women's issues and women's ways of looking at situations, and one female professor who did not see gender as a lens in her own work and did not see gender as an issue of importance to students she taught in this setting. Thinking about gender when selecting courses for the study also included looking at the percentage of women and men as students in each course considered for the study. In the end, while an equal number of male and female students were interviewed, there was not equal distribution for those interviewed in each course or equal distribution in the courses studied. Limitations in the total number of students interviewed and the gender distribution encourage caution in describing differences seen among students.

To explore the issue of gender from the perspective of students, following an open-ended question on factors that facilitated their experience in the course, I asked specifically what role students thought gender had in this learning process. Prior to the interviews, I had considered a number of possible differences among student responses in relation to professor gender, or inclusion of gender perspectives in content, or student gender. Based on literature on women teachers being more nurturing or more supportive of emotional expression or relational learning (Campbell, 2003; Fisher, 1987; Luke & Gore, 1992), I wondered if there might be differences across courses based on gender of professor. Based on literature on feminist teaching (e.g., Kenway & Modra, 1992; Lewis, 1992; Luke & Gore, 1992; Maher & Tetreault, 2001), I wondered if there might be differences based on instructors' view of the role of gender in the learning process. Because each course dealt with different topics and incorporated gender differently, I wondered if there might be differences in student responses along this continuum.

Based on Herbers' (1998) study on transformative learning, I wondered if there would be gender-based differences in students' emotional expression. In her study of a five-week pre-service course on civil rights, Herbers (1998) notes that women reported a greater range of emotions than men. Although, like Mezirow (1975) she describes identifying and expressing emotion as important in the process of transformative learning, Herbers (1998) did not find differences in transformative learning outcomes among her 18 adult participants based on gender. Likewise, in her survey of 422 adult learners in higher education, King (1997) did not find a statistical difference between men and women on reporting of perspective transformation within the context of educational experience. E. Taylor (2000) contends that Elias' (1993) study, about learning experiences that lead to development of socially transformative leaders, identifies gender differences: learning to develop greater awareness of feelings was an important learning experience for men; confronting authority was important for women (E. Taylor, 2000, p. 300).

In exploring differences within my limited sample based on dichotomous categories of gender, I was not able to support previous research in the literature. Both male and female students in the present study described both emotional and cognitive responses to their experiences. In this limited sample I did not see a pattern in student

perspective based on course topic, student gender, or professor's gender or perspective on gender influence in their course. Nor did I find differences based on dichotomous gender identification in student response to the course, experiences of transformation, or willingness or ability to integrate emotion and cognition or link individual concerns to larger social concerns. While aware of the limitations of my small sample, contrary to suggestions in the literature, I did not find gender as a dichotomous identification variable helpful in understanding students' experiences in this study.

I was surprised by student responses to questions I had about the influence of gender. I was even more surprised when a number of students noted that gender was an issue in other classes, but not in the courses we were discussing. On further questioning, they noted that everyone was treated equitably. I thought that they had misunderstood my question, but on reflection I began to see that their responses moved beyond a dichotomous way of thinking to more subtle and interesting considerations. I believe their responses highlight a broader but equally interesting issue raised in feminist literature—"...the idea of *positionality*, in which people are defined not in terms of fixed identities, but by their location within shifting networks of relationships, which can be analyzed and changed" (Maher & Tetreault, 2001, p. 164, emphasis in original). In these courses, which encouraged students to think about underlying assumptions and consider multiple possible relationships with ideas, other people and power, I think gender became less of a fixed attribute. When students said gender was not a factor, I believe they were saying that gender, as determined by physical classification or by social expectations, did not define class interaction; it did, however, become part of the contextual consideration and allowed digging deeper to explore assumptions.

As students explored their own experiences and those of others outside of the class, gender became one of the multiple elements of positionality in terms of the issues raised. For example, in the course on human relations this meant hearing the voices of the few men in a class of women taught by a woman on topics such as personal relationships—topics that social assumptions hold are areas of expertise and wisdom for women, not men. In the course on indigenous peoples, it meant seeking to understand the perspective of women who are abused and victimized due to their positions in society as women, aboriginal individuals, and poor or homeless. In the sustainability course it

meant awareness of the variation of opinions and emotions, not based on being male or female, but based on multiple previous experiences including socialized gender roles, the historical gender distribution in academic disciplines, and the association of economics with power. Looking at the context of the experiences was essential in understanding the influence of gender among other positionings in these situations. From reflection on student comments and the literature, I believe that, through sharing their lived experiences and exploring the experiences of others, students considered context brought into the courses and gained a deeper appreciation of the influence of gender and other aspects of position.

Rather than gender being a characteristic that defined individuals in the courses or reduced their positions on issues to fit preconceived categories, I see gender becoming another lens for connecting emotion and cognition and linking individual and social change. In this different experience of power, gender was not a tool for separating individuals and groups; it was another interwoven element of experience with its supporting, often unexamined assumptions. As such, gender could open up reflection further for informed exploration. While I was initially surprised at the responses by many students that gender was not an issue in these courses, I think they were telling me that the courses, with their different approach to power relationships, moved beyond the "gendered division of the world into rationality and emotion, public and private, with men the actors in the public world and women the nurturers in private" (Weiler, 1994, p. 76).

I appreciated what students were saying in their comments about the role of gender when I reviewed their comments on the involvement, support, trust, and respect that facilitated exploring multiple perspectives and assumptions. From their comments and my class observations I see that students in the present study were not cast into a role of defending their gender or perspectives or actions attributed to their gender, as seemed to be the case around ethnicity in Ellsworth's (1989) course; rather, they brought to the discussion their experiences and perspectives developed through multiple lenses including gender. Rather than being seen as a source of defensiveness or confrontation, which Ellsworth described, these experiences and perspectives were valued for the contribution they made to further exploring the issues under group discussion or

individual consideration. This is in keeping with Boler's (1999, p. 199) contention: "The best antiracist and antisexist work I have studied and seen in action is not about confrontation but rather a mutual exploration."

In the courses in this study, I see gender as one of the viewpoints that opened up topics more fully for consideration and connected students, individually and as a group, to course topics in new ways. For one of the students in the human relations course, this meant considering the influence of societal roles and relationships based on gender and her own hopes for her future as a professional woman and a mother. For a student in the course on indigenous peoples it involved connecting deeply and powerfully to the struggles and successes of aboriginal peoples through her awareness of their shared experience as "ethnic women." For students in the course on sustainability this included rethinking societal assumptions about differences among men and women in the male-dominated field of business when ecological issues are considered along side economic issues. I have the sense, from students' descriptions, that when the individuals involved shared their thoughts and feelings as they considered these experiences of positionality, it added significantly to understanding the context around course topics being developed in class; it provided an enlarged view for exploring individual and social assumptions.

While specifically exploring gender issues was not the main aim of any of the courses, and gender was not described as an independent influence on the learning process by most students, gender was an aspect of positionality for all students as they brought their experiences, perspectives, and assumptions to the course for exploration. Likewise, gender was part of the positioning of professors and others who entered the course with information and experiences to share. Rather than seeing gender as either a dichotomy or as not relevant (Gillespie et al., 2002), in these courses students used gender as another lens with which to explore important and complex issues more deeply. Further, through developing a new experience of power, integrating emotion and cognition, and linking individual and social aspects of change, all three courses embraced elements of feminist pedagogy in which "experience and emotions are recognized as central to critical inquiry and political transformation" (Boler, 1999, p. 115). Through open exploration of experiences and assumptions "these classrooms demonstrate the capacity to give voice to multiple sources of learning in a context in which students and

teachers share authority by mutual consent...[offering the hope] of authentically challenging traditional hierarchies, or imagining the possibility of genuine social change" (Maher & Tetreault, 2001, p. 163).

Summary

Critiques of Mezirow's model of adult transformation highlight three roles of student-centred courses in the process of transformative learning. Using the courses in the present study as examples, student-centred courses can offer a different experience of power, integration of emotion and cognition in learning, and linking of individual and social learning and change. As described by students in the courses, these are interrelated issues; the new experience of power comprises emotional and cognitive, and individual and social aspects. Students seemed to gain a new appreciation for the power of experience in bringing these aspects into balance in different ways than they normally experienced in traditional courses. In keeping with Freire's (1981) injunction to start with the learner, these student-centred courses connected learning with students' lives. In bringing students' lived experiences into the classroom, the courses focussed not on content to be learned but on student development as thinking and feeling individuals. In providing a different experience of shared learning in the classroom, the courses focussed not on independent learning but on development of interdependent learning as a team. In connecting learning with life, these courses offered students the opportunity to engage more deeply in the learning process, to experience a change in the self-world relationship (Marton & Booth, 1997) in terms of power, emotional and cognitive aspects of learning, and individual and social change.

While challenging students to learn in new ways, these courses provided needed support for engagement in new power relationships (Burbules, 1986) and social learning. Bandura (1997) describes social learning resulting in development of self-efficacy as occurring in three ways: seeing a model demonstrating the activity, hearing vivid stories by those who have performed the activity, and actually performing the activity; having the experience of performing the activity is considered the most effective method. Professors in the courses in this study noted that they value a philosophy of learning by experiencing. This was evident in the classes I observed. Rather than seeing students as passive recipients of well-researched knowledge, the professors modelled engaged

learning for students, preferring to learn with students and act as guides. They offered vivid examples of new ways of thinking about issues through research studies, guest speaker presentations, information from the perspective of the groups being studied, and student stories of experiences. Through their courses, the professors also encouraged active learning by starting with students' interests and ability, and helping students to experience learning differently.

Through offering a new experience of power in the classroom and demonstrating the power of experience, these courses moved beyond dichotomies of emotion versus cognition, individual versus social learning and change, and dichotomies around gender. As Miller and Stiver (1997) note of cognition and emotion, "Attempting to focus on one to the neglect of the other diminishes peoples' ability to understand and act on their experience" (p. 212). From their study of just communities in classrooms, Rader, Piland, and Pascerell (2002) concur,

> Prohibiting emotional expression hinders learning because, when we are conditioned to suppress emotions in public—to privatize our feelings—we are forced to stay clear of any issue that deeply matters to us. Moreover, in distancing ourselves from our own feelings, we become less able to respond to others. (p. 161)

In the courses in this study, emotion was not a "present-absence" (Boler, 1999, p.19). With experience kept intact, emotion and cognition were not dichotomous; they were integral in the experiences students brought, providing context to perspectives, and integral in the process of reflecting on experiences within the class. Likewise, while Mezirow is critiqued for his focus on individual learning and change, courses in this study integrated individual and social learning and change through "mutually growth-fostering relationships" (Miller & Stiver, 1997, p.42). Through opening up to others and expressing their thoughts and feelings, students "engaged *together* in the thoughts and feelings in this situation....[resulting in enlargement of their] own feelings *and* thoughts and the feelings and thoughts of the other person" (Miller & Stiver, 1997, p. 29, emphasis in original).

Gender in the courses in this study was also not considered a dichotomous variable. Students brought their multiple positionings to the course through the

experiences they shared with each other. As well, the complexity of situations was considered through multiple lenses, including gender. As Gillespie et al. (2002) describe in their study of women university students in an undergraduate course on race and privilege, courses in the present study moved beyond seeing gender as "a determinant and explanation of human behavior" or "dismissing it as a determinant of how people are treated....[to recognize] the complexities of context [that] predetermine in advance the meanings and realities of one's identity and experiences" (p. 241). In moving away from either-or approaches, emotion and cognition, individual and social learning, and gender were integrated into a different experience of power and offered a larger context and frame for considering the power of experience. In the next chapter, I discuss further the power of experience in transformative learning and the role of the university in supporting transformative learning.

Chapter Ten: Conclusions

In this chapter, I provide a brief summary of the study; consider further the concept of power in transformative learning as it informs the findings in this study and connects findings with the literature; note the limitations of this study; discuss the implications of the study for practice and theory around the role of universities in transformative learning; and suggest directions for future research.

Summary of Findings

The purpose of this study was to examine student engagement in transformative learning in an undergraduate university setting. Mezirow's (1975, 2000) model of transformative learning has formed a base for discussion and development over the past several decades. Critiques of Mezirow's model note the lack of attention given to emotion, social learning and change in favour of cognition, individual learning and change. As well, critiques note that issues of power are not sufficiently addressed in Mezirow's model. Further, although transformative learning has been described in adult learners through participation in university graduate and teacher education programs, it has received little attention in relation to traditional age undergraduate students. This is surprising in light of the developmental potential of traditional age students and purposes attributed to university education. Mezirow's model and the discussions it has raised provide a starting point for considering transformative learning issues in the undergraduate university setting.

In keeping with suggestions for future research on transformative learning (Taylor, 1998, 2000), this study uses other theoretical models for comparison to consider further Mezirow's model of transformative learning, focuses on aspects of Mezirow's theoretical model in depth, and considers how transformative learning is fostered in the classroom setting. The present study does not test Mezirow's model, explore all components of his model, or adopt many of the viewpoints presented in his theoretical development of the model. Rather, it focuses on the beginning of engagement in transformative learning for a volunteer sample of traditional age students across three undergraduate courses in a liberal arts university setting. In keeping with concerns and issues described around Mezirow's theory, Freire's philosophy of education, and other gaps in the literature, this exploratory study was designed to examine three main

questions: 1) What are traditional age students' experiences of transformative learning in an undergraduate liberal arts university setting? 2) What factors contribute to transformative learning for traditional age undergraduate university students? and 3) What role do discrete student-centred courses have in the process of transformative learning?

As noted in the chapter summaries, three themes emerged around engaging in the process of transformative learning for traditional age undergraduate students: seeing the relevance of the topics or issues; sensing tensions among ideas, perspectives, positions, or expectations; and digging deeper to explore underlying assumptions, agendas, and contexts more fully. In keeping with Freire's (1981) emphasis on the importance of connecting learning with life, students were able to relate the topics or issues to their own experiences and lives. Personally relevant topics encouraged students to bring their experiences to course learning and to share their perspectives, thoughts, and feelings with others. Students across all three courses described tensions among the perspectives involving both cognitive and emotional response, rather than either arguments about whose knowledge bases or facts were correct or unresolved emotional discomfort. Unlike Mezirow's focus on the negative feelings of shame, anger, fear, or guilt associated with a disorienting dilemma, students in the present study described positive feelings of excitement, respect, safety, and group support even when issues were contentious. While feelings of discomfort were sometimes described, feelings of surprise and excitement seemed to promote further exploration and struggle to understand the differences among perspectives. This is in contrast to the sense of defeat that Mezirow (1975) describes as motivating learner change. Learners across courses described digging deeper to explore underlying assumptions related to the course content, the learning process, and the value of knowledge bases considered. Exploring assumptions involved individual and group consideration of thoughts, feelings, and behaviours that had been previously unexamined. Through exploring experiences, students asked why these unexplored assumptions were held, and considered the influence of previous emotional-cognitive experiences on current perceptions, feelings, and actions. Rather than being an individual process as implied by Mezirow's model, descriptions by students in the present study highlight a social process that built on sharing experiences and working to understand the

assumptions underlying the experiences. Students described changes in assumptions, as a result of their experiences, that involved cognitive-affective reflection—such as becoming more open to new ideas and feelings, making new connections among ideas and issues, understanding issues more deeply, or expanding the way in which they see themselves in relation to others—and cognitive-behavioural action—such as discussing issues and feelings further with others, actively seeking more information on the topic, putting insights gained into practice, or making life changes. This is in keeping with Freire's (1981) concept of praxis, involving both reflection and action.

Burbules' (1986) work on challenging power provided a framework for considering the second research question on factors facilitating transformative learning. Across courses, three main themes emerged with two themes related to Burbules' elements of challenging power. The first, considering multiple perspectives, related to Burbules' concept of challenging authority; and the second, shaping course experiences, related to Burbules' concept of challenging traditional course organization. A third theme, developing relationships, focused on interpersonal support. Students considered multiple perspectives and challenged the traditionally assumed authority of the professor, discipline, and academic knowledge through change in the traditional role of the professor, using a wide range of information sources, and discussing their personal views. Students actively shaped course experiences and challenged the more traditional organization of courses, involving individual learning and depending on the professor for course direction and success. Students participated in decision-making about the learning experience, worked collectively on tasks, and collaborated for success through decentralized responsibility. Students also described how developing relationships through knowing, trusting, and respecting others facilitated their experiences. These interpersonal aspects provided support for taking on new roles offered in the courses and discussing personal experiences and perspectives.

Within the examples provided by the courses in the present study, student-centred courses offer opportunities for a different experience of power, integration of emotion and cognition in learning, and linking of individual and social learning and change. From their descriptions, students seemed to gain a new appreciation for the power of experience in bringing emotional and cognitive, and individual and social aspects into the

course in different ways than they normally experienced in traditional courses. In bringing students' lived experiences into the classroom as an integral part of learning, course focus moved away from content to be learned toward student development as thinking and feeling social individuals and interdependent learners. Through tapping into the power of experience, these courses moved beyond dichotomies of emotion versus cognition, and individual versus social learning and change, as well as dichotomies around gender. Through the experiences they shared with each other, students brought their multiple positionings including gender to the course; they considered complex situations through multiple lenses.

Power Revisited

Throughout the analysis and writing of this research project, I have gone back again and again to various literatures and the data in this study in an attempt to understand why the stories that students told of their classroom experiences seemed so powerful to me. For this research project, I was hoping to uncover, in spite of the lack of description in the literature related to Mezirow's (1975, 2000) transformation theory, some evidence of the beginning of engagement in the process of transformative learning for traditional age undergraduate students. I hoped that, beyond occurring in graduate courses on diversity or equity or in programs structured to promote transformative leadership, transformative learning was possible in undergraduate courses for traditional age students. I hoped to see some aspects of interaction in the classroom that might provide support for starting to engage in transformative learning at an important developmental time in students' lives. I hoped that findings from this exploratory study might provide a reason for pursuing further a theory and practice around transformative learning in undergraduate education at a time when universities already feel pulled by multiple demands from external and internal stakeholders. My hopes were realized for all of these aspects in the study. What I had not expected was to be so moved by the stories that students told me. Returning to the literature, once again, I found a description by Tisdell (2001) of a teaching incident that she found deeply moving. In considering her experience, I explore the research findings and implications of the present study further.

Tisdell (2001) describes a critical incident that was powerful for her and her students in a masters level course she co-taught on diversity. During class discussion of a

student-led presentation, interaction among students focussed on a very personal and painful story by one of the adult learners. The emotional story of racial murder of a parent did not lead to anger or separation of students along racial lines; it brought students together in a shared, powerful experience. Tisdell describes this incident as "one of the most powerful in my experience as a teacher" and explores "what made it so powerful" (p. 149). Referring to French's (1986) work, Tisdell considers elements of "power over" and " 'power with,' or power that comes from within" in the experience in her course (p. 149). These elements provide helpful points for another look at power in my own study.

Power Over

Tisdell (2001) contends that it is important to be aware that "the mechanisms of 'power over' [that] are structured into the very fabric of society [and seen] in the structural power relations based on gender, race, class, sexuality, and ableness in nearly all institutions of society" (p. 150) are also present in higher education. As well, she notes that "power over" is seen in institutional "position markers" (p. 151) that allow power over students by faculty by virtue of their knowledge of their discipline and their tenure within a university system in which both the institution and the students see professors as having power over students. In the courses in the present study, positionality due to hierarchical power within the university was assumed by students through years of experience, throughout their educational careers, that supported more traditional student and teacher roles in the learning process. Something that stands out for me in students' descriptions is the surprise they felt at their experiences in the courses in this study in comparison to expectations based on previous course experiences. Across courses, instructors noted that they attempted to design interaction in courses to move away from more traditional roles for themselves and their students. I see professors supporting this interaction by helping to create an experience that challenged power around authority, organization, and relationships. Rather than critiquing inequitable power within the educational system or in society around a particular social issue, as Tisdell (2001) describes around race in her course, students in courses in the present study described ways in which they were active in experiencing different power relations around institutional position and knowledge.

Although I cannot be sure from analysis of the data in this exploratory study, I suspect, from thinking further about the data in light of Tisdell's (2001) discussion, that the interrelationship among challenge to authority, challenge to organization, and developing relationships reflects the membership of these themes in a larger category—addressing power over. For the course in human relations, for example, addressing positional power over involved expanding consideration of discipline knowledge base and research to incorporate student experiences related to topics, and active roles as questioning researchers to develop both new knowledge and new relationships with other students and the professor. For the sustainability course, addressing power over involved exploring information from across disciplines, more interactive roles for students, professors, and others with environmental and economic interests, and new relationships with those outside of students' major, to develop understanding that was larger than an individual or a discipline could provide alone. For the course on indigenous peoples, addressing positional power moved consideration beyond the boundaries of the university to explore new ways to build knowledge and to develop new roles and relationships within the classroom and with the larger community. In each course, the power of position—power over—that limits who or what is authoritative, the roles of different players, and the relationships within the learning process was actively challenged so that learning could be reconstructed.

This integrated challenge to power over brings to mind Freire's (1981) description of teachers being students and students being teachers. Rather than students having a different learning experience because instructors had designed and directed a different learning experience, students across courses in my study described themselves as partners in the process. In Tisdell's description I also see her as a partner—a "teacher-student with students-teachers" who "become jointly responsible for the process in which all grow" (Freire, 1981, p. 67). Tisdell does not take credit for what happened in the course, "Even though I can say this was the single most significant experience I have had in a classroom as a teacher or a student, I know that as a teacher, I probably would not even now facilitate such an experience" (p. 161). In contrast to Mezirow's (1990) call for adult educators "to encourage [social] critique and at the same time keep it as rational as possible" (p. 206), Tisdell (2001) describes her powerful course event as "uniting of

emotion, passion, and critical analysis...facilitated by three students, not by either of the teaching partners" (p. 155). Likewise, the surprise that students expressed in the courses in my study seems to reflect, not a passive, rational observation of course events directed by the professor or a sense of individual goal achievement, but active engagement in the creation of shared experience. Across courses, students talked about the role they had in making the class a unique experience for themselves and others, and expressed appreciation for the essential contribution of others in the experience. In Freire's (1981) terms, they were students-teachers engaged in the learning process in a course with a teacher-student. As such, compared to more traditional university courses, roles changed along with interpersonal relationships and location of authority.

Power With

In addressing power over and providing a framework of new roles, relationships, and knowledge and authority exploration, I see the courses in this study supporting the development of " 'power with,' or power that comes from within" (Tisdell, 2001, p. 149). Power with is the other side of the power coin that fits with the process of transformative learning in the present study. While facilitators in these courses, which challenged authority and organization and aided development of interpersonal relationships, addressed power over, the process of transformative learning offered the opportunity to develop power within. According to Tisdell (2001), "getting in touch with the second type of power—power from within" involves "activating a sense of agency—an ability to act and make things happen" (p. 152). Tapping into a sense of agency might be an accurate description for the adult learners in Tisdell's course, who were also teachers. I think, from students' comments in my study, however, that *learning to develop* power within might be a more accurate description for traditional age undergraduate students.

In discussing transformative learning, Kegan (1994, 2000), and King and Kitchener (1994) contend that it is well into adulthood that reflective judgement occurs. Mezirow concurs, noting that "[a]lthough adolescents may learn to become critically reflective of the assumptions of others, becoming critically reflective of one's own assumptions appears to be much more likely to occur in adults" (Mezirow, 2000, p. 26). Likewise, K. Taylor (2000, p. 159-160) notes that "[a]dult learners engaged in this [transformative] process are actively questioning heretofore invisible assumptions about

self, society, role, and responsibility that were internalized at the transitions between adolescence and young adulthood (Kegan, 1994)." For traditional age undergraduate students, these statements imply, not an activation of abilities already present (Tisdell, 2001) but learning to develop these abilities—to develop power within.

Student descriptions of surprise at their learning experiences and excitement about development and change they had not expected highlight for me developing power within and making new connections among emotional, cognitive, individual, and social aspects of learning in formal education. Because activities required students to engage in new ways of learning, "[r]ather than depend on information *about* something, learners were encouraged to *experience* something" (K. Taylor, 2000, p. 163, emphasis in original). In keeping with K. Taylor's (2000) discussion of development of constructive or re-constructive ability, I see students in my study describing learning how to know differently, and developing a new relationship to knowledge (Kegan, 2000), one that moves beyond individual banking of cognitive, semantic information. In connecting course topics and process to their lives, experiencing the tension of multiple views rather than absorbing a prescribed perspective, and considering the assumptions underlying the perspectives, I see learners across courses engaging in the process of learning to "become transformative agents of their own education, cocreators of knowledge and curricula" (Brookfield, 2000, p. 137); I see them developing power within.

Kegan's (1994, 2000) descriptions of development from the third order of consciousness, the order of most traditional age university students in Kegan's view, to the fourth order is particularly interesting, in light of the integration of emotional, cognitive, individual, and social elements of learning students described in courses in the present study. At the third order of consciousness, feelings, abstract ideals, cultural values, and social expectations "that get uncritically internalized and with which one becomes identified" (Kegan, 2000, p. 59) both allow and limit students' perspectives. While individuals at the third order have learned to identify with and be influenced by others' feelings and by cultural values, they have not developed the ability to examine and make choices about these socializing influences. At the fourth order of consciousness, individuals can develop as authors of, rather than remaining embedded in, emotions and belief systems that have explained and influenced their lives (Kegan, 1994).

The potential at the transition from third to fourth order underscores for me the importance of integration, rather than separation, of emotional, cognitive, individual and social aspects of learning through which students can transform their self-world relationship (Marton & Booth, 1997).

If emotions and social norms hold sway over traditional age undergraduate students, as Kegan (1994, 2000) suggests, in ways that limit critical reflection on the power they comprise, reinventing power (Escobar et al., 1994) involves learning to critically reflect on emotions and socialization in ways that integrate emotional, as well as cognitive, aspects of one's relationship to larger social systems. Students across courses described themselves and others becoming more aware of and more reflective on their thinking and feeling, and on their individual concerns and shared issues. Through an iterative process of transformative learning, students across courses described developing a sense of self-social agency within the course setting, as active constructors of knowledge and shared experiences, as well as within other areas of their lives. Examples include wanting to help other students understand prejudice and international conflict (in the human relations course); discussing with friends a new-found empathy with indigenous peoples around struggles faced as ethnic women (in the course on indigenous peoples); and appreciating the possibility of discussion with others who have very different views of environmental concerns (in the sustainability course). What I see in students' descriptions and class observations is in keeping with the concepts of Souvaine et al. (1990) around transformation: rather than distancing of individuals from their thoughts or feelings or focussing on differences or separateness from others, there seemed to be greater experiencing of emotion and cognition, and individual and social concerns; more sharing of these with others; and more reflection on the experience of interactions with others.

Because of the exploratory nature of the study, I did not question students on the timing of events in the course related to challenging power over or developing power within. From further thinking about the interviews and classroom observations, I get the impression that students are describing an interactive process in their experiences in which facilitators, which challenge power over, and transformative learning, which develops power within, were mutually sustaining. In the first place, challenging power

over offers space for developing power within. For example, across courses students described discussing personal views, making decisions about course process, and knowing others and being known as offering content and process that made courses more personally relevant. Through exploring a range of resources, sharing responsibility for success, and the developing trust, tensions were felt around differences in viewpoints and new roles and relationships. Changing roles for professor and students, working collectively, and developing respect for others opened opportunities for digging deeper to underlying assumptions around the process and the authorized content of learning. In the second place, I suspect that engaging in the process of transformative learning and developing power within strengthened students' developing ability to challenge power over. For example, in the course on human relations, seeing course topics and discussions as relevant to one's current and emotional experience likely increased awareness of developing relationships in the class and a sense of knowing others. Seeing personal relevance also seemed to provide incentive for further consideration of multiple perspectives brought to class, and increased involvement in shaping course experiences through decisions about project choices and working collaboratively to help others to understand their views and consider the issues further. In the sustainability course feeling, rather than avoiding, the tensions around the two main perspectives seemed to increase discussion of personal views, working collectively to build on the views shared, and taking responsibility for successful interactions. Staying with the tension also seemed to increase trust in the support that others would provide in facing future tensions. In the course on indigenous peoples, success in digging deeper seemed to increase respect for indigenous peoples and each other, interest in working collectively, and comfort with tapping multiple sources of information. In students' comments and class observations, I see these two processes—challenging power over and developing power within—building upon each other.

Power Over and Power With

Discussions of power and transformation in the university setting have frequently been linked in the literature to a focus on "structural power relations based on gender, race, class, sexuality, and ableness [present] in nearly all institutions of society" (Tisdell, 2001, p. 150). In considering the inequity in society and within courses, focus on one or

more of these "mechanisms of 'power over' " (Tisdell, 2001, p. 150) offers students an opportunity to rethink their assumptions and their experiences around these issues. The hope is that this new understanding will translate into social action beyond the course (Tisdell, 2001). Courses in the present study did not have as their main focus these elements of societal inequity. Rather than discussing inequities in society that are carried into the classroom, students and professors worked together to address the power differential between students and professors or other knowledge authorities. In student descriptions of their course experiences, I see positional inequity, described by Tisdell (2001) as part of the structure of university, addressed around roles as knowledge constructors within the classroom and the university.

Rather than supporting more traditional student and teacher roles in the learning process, these courses challenged power over in terms of authority, organization, and interpersonal relationships. Likewise, they offered the opportunity to develop power within through the process of transformative learning. For traditional age undergraduate students, both addressing power over and aiding power within are needed for development as knowledge creators in new relationships with others. Rather than passing on information that confers status to students as "possessors of [the] official knowledge" (Tisdell, 2001, p. 155), I see the courses in this study helping students to develop power within to critique discipline, academic, and popular knowledge and become co-constructors of new knowledge and meaning that consider underlying assumptions and context. In doing so, I believe these course moved from maintaining power over students to challenging power over students and developing power with students. By addressing the positional power within university structure, these courses also opened a space for exploring context—the multiple positionings, such as race, gender, and class—that students bring into the learning experience.

One way in which power over, rather than power with, is exercised in formal education is through decontextualization. "Freire emphasizes the idea of self-liberation, proposing a pedagogy whose task is to unlock the intrinsic humanity of the oppressed" (Aronowitz, 1993, p. 13). Intrinsic humanity does not involve an abstract concept but brings to mind living persons as individuals and group and social members, always experiencing and bringing their past experiences into present experiences. Those who are

oppressed in some way are, in part, decontextualized—significant aspects of their lived experiences are not permitted in the interaction. In a knowledge economy and in settings which aim to develop knowledge, such as educational institutions, oppression, or power over individuals which limits developing power within, occurs when the experiential knowledge that individuals and groups bring with them—their context—is invalidated by considering it only, if at all, in an abstract way. An "official knowledge" (Tisdell, 2001, p. 155) is the focus of learning, rather than the relationships among discipline, academic knowledge, and lived experience (Shor & Freire, 1987).

In settings in which students cannot bring their experience, except in an occult manner or as overt resistance, or in which experience is not used for further exploration, there is short-term and long-term harm. In such situations, teachers successfully model for learners the dismissing of others as valued contributors in considering shared problems and creating shared solutions. University instructors may unthinkingly impose factual knowledge on students, ignoring their "intrinsic humanity" (Aronowitz, 1993, p. 13) in having experience with and insights on problems, and in being contributors to solutions. When this happens, students are removed from the process of knowledge construction in a present situation and blocked from ongoing development as contributing knowledge constructors—"students internalize values and habits which sabotage their critical thought" (Shor, 1993, p. 29). When the focus of learning is gaining information without involving contextual experience that students bring to the classroom, students are involved in a learning experience which "under-develops most students" (Shor, 1993, p. 29).

In challenging power over students, the courses in this study moved away from oppressive education through decontextualization. Challenging authority and course organization and developing relationships opened spaces for sharing personal experience about issues being discussed; students described sharing of experience as encouraged, valued, and instrumental in developing further understanding. According to students, these contributions, which brought context to theory and research, made the courses unique and exciting. Much of the valuable learning that occurred and transformative experiences described are attributed by students to the personal experiences shared by, and with, other students. Through developing relationships of trust and respect, students

described being comfortable in the role of sharing their experiences. In contributing their experiences to the collective course content, students noted that they were working with "materials" that were very relevant to them. This sharing did not provide merely the opportunity to speak in class or offer examples to reinforce discipline knowledge. Rather I see sharing of student experiences as bringing to discussions variation and tension inherent in personal perspectives and a wealth of opportunities to dig deeper to examine differences and similarities in the contexts and assumptions related to discipline knowledge bases and personal experiences.

The Power of Experience

One of the most powerful parts of the learning experience for students across courses, according to interview comments, was the opportunity to share significant aspects of their context—their experience—with each other and use their experiences to develop course learning. Power relationships, in these non-traditional courses, were used to support students' full experience—involving emotion and cognition, and individual and social learning—rather than prying cognition from emotion to engage in rational discussion of discipline constructs, social issues, or individual or group experiences, or to focus on feelings without cognitive reflection. Emotion and social interactions are described in the courses as part of the experience that students brought to class for discussion and that individuals outside the class who are involved in the issues brought through their presentations; these became part of a different experience of power that did not exult or exclude emotion or social learning and change but brought together emotional, cognitive, individual, and social aspects of learning using multiple perspectives and positionings of experience.

Across courses in this study, there was less focus on content retention and more on the process of exploring concepts, issues, experiences, and new ways of learning. Appreciating that absorbing facts is not the goal of learning, courses attempted to connect topics and issues to students' lives and experiences, so that topics were relevant to students and students had opportunities to discuss their viewpoints and explore the unexamined assumptions that support these viewpoints. Through having a different experience of learning which integrated student context, rather than focussing on learning factual knowledge, students had models for different ways of understanding issues, as

well as support for developing as constructors of knowledge for themselves and with others.

While experience was important, from students' and professors' comments, I do not think that experience was incorporated into the study courses for its own sake: "This privileging of experience over critical understanding works against the very premises of Freirean pedagogies and other critical approaches to schooling" (McLaren & Tadeu da Silva, 1993, p. 69). Unexamined experience can become overwhelming; if emotion is separated from thinking about the experience and feelings become the primary focus, sharing experience can become merely cathartic rather than a process of exploring issues more deeply (Fisher, 1987). Students described using the experiences they brought in conjunction with discipline concepts and approaches to reflect more fully on issues. From student comments and my observations in classes, incorporating experience in courses in the study did not mean shifting to individual learning and potential change at the expense of group or social learning or change. While learners in the study brought valuable experiences that supported individual learning, they also were engaging in group learning that was more than the sum of individual learning: "through their interaction they have created something new together....[and they were] enlarged by this creation" (Miller & Stiver, 1997, p. 38). Many students commented that they could not have learned what they did in these courses without the input of, and sharing of experiences with, other students in their course.

Reflection on experience does not appear to be an academic adjunct in these courses; nor, according to students, was it intended to aid incorporation of factual matter into memory or to identify correct answers to questions and concerns. Instead reflection on lived experience brought the emotional, cognitive, individual, and social aspects of previous learning and socialization into a new light. According to McLaren and Tadeu da Silva (1993),

> Whereas memorizing tries to recall what was, and memory dreams of discovering the master code—the Rosetta Stone—with which to uncover the correct interpretation of the past, remembering is a critical and redemptive mode which attempts not to understand the past better but to understand it *differently*...[in a way that] provides us with an ethical and political vantage point not for

> recovering or discovering the past but for *entering dialogue with the past.* Remembering in this instance conceives of history not as a constraint on the present but rather as a 'source or precondition of power' that can illuminate our political project of emancipation. (p. 75, emphasis in original)

This form of student empowerment supports a different reading of the world, with authority for interpretation less in the hands of others and more within the grasp of learners. In clarifying underlying assumptions, there is the possibility of creating different power relationships in both the present and the future. Experience holds the opportunity for changes in power relationships because remembering "not only demystifies the present...but it also carries traces of future possibility in its reconstruction of the present moment" (McLaren & Tadeu da Silva, 1993, p. 77). From reading of the literature and the descriptions by students in the present study, I believe reflection on experience is potentially powerful through the integration of emotional, cognitive, individual and social learning.

Considering how emotion and cognition, and individual and social learning are integrated in experience has not been a focus in transformative learning literature. Since transformative literature focuses on adult learners, in whom reflective ability might already have developed, such integration may be seen as less important than other adult learning issues. In working with traditional age undergraduate students, who are learning to engage in the process of transformative learning, understanding the process is very important if instructors are to provide support for learning in keeping with students' abilities and potential. Supporting this developmental learning experience involves supporting engagement in the integrated aspects of emotional, cognitive, individual, and social learning. This does not involve looking for ways, as suggested by E. Taylor (2000), to use emotion as a tool in the way he describes Brookfield using critical reflection for rational transformative learning, or exploring how learning might occur without conscious cognitive involvement (E. Taylor, 2001). Nor does it mean adding emotional or social aspects, as if they were separate, to traditional learning experiences. Rather, as Martin (1985) contends, "[t]he general problem to be solved is that of uniting thought and action, reason and emotion, self and other" (quoted in Kenway & Modra, 1992, p. 153). Through challenging power over and supporting developing of power within, courses in

the present study brought the power of shared experience, with its interconnections among emotion and cognition, and individual and social learning, to the classroom.

Limitations

It is important to remain aware of what this exploratory study can and cannot offer toward understanding a very interesting but very complex teaching-learning interaction. There are a number of limitations when discussing the findings of this research; these include sample size and purposive sampling technique, course selection, site selection, and retrospective data collection. While offering an opportunity to consider the learning process in an undergraduate university setting, the small sample of twelve students from three courses within one university does not support generalization to other students or settings. The students who volunteered to be interviewed did so in response to an invitation to students who had learning experiences in the course that had opened their eyes to an issue or that had changed their attitude(s) in some way. This purposive sample allowed exploring experiences common to students interviewed; extrapolating the views of the students interviewed to other students in their classes would be unfounded. In light of the differences that students bring to the learning situation, those interviewed may have had unique experiences that others in the class did not. This research does not provide an answer to the question of whether most traditional age undergraduate students engage in transformative learning. While student descriptions of the experiences and the facilitating factors in the classes provide a picture of more than individual, isolated experiences, they do not imply that a transformative process was shared by all or most students in the courses in the study or that other students sharing in a transformative experience in these courses would describe the experience in a similar manner. Students who volunteered for interviews may represent a sub-set of students inclined to wonder about the issues addressed in the interview questions that I provided to students before they agreed to be interviewed. In light of the research aim and the lack of a previous research base to draw upon, however, this exploratory study with student volunteers allows consideration of what transformative learning is like for those who experienced it across the three courses, and provides a starting point for discussion and further research.

Course selection in this study is also a limitation in understanding transformative learning in a university setting. In part, the types of courses and the topics could be said

to influence how teaching and learning were structured. Although the courses were drawn from across faculties, the topics for the classes in this study could be said to be more broadly within the social science arena. The topics, as well as the goals of the disciplines within the social sciences, may be more amenable to discussion of social issues. On the other hand, topics such as research on human relations, the history of indigenous peoples or economic and environmental sustainability could be presented and learned in a variety of ways, from learning important information to discussing the implications and assumptions around this information. As Shor and Freire (1987) note, dialogue takes a great deal of energy and is not the best choice when transferring information is the aim. The courses in this study were chosen because they were student-centred and covered a variety of disciplines, rather than for their focus on social concerns. Within the timeframe of data collection, I was not able to access courses in maths or physical sciences. The course sampling limits understanding across the full range of course offerings in undergraduate education and needs consideration in future studies.

Use of one site for this study also limits generalization to other settings. Although the site was chosen among smaller, predominantly undergraduate university settings facing similar challenges, it has unique characteristics by virtue of its history, geographical and community setting, faculty research interests and approaches to teaching, and student population backgrounds. With the amount of variation possible among these aspects, universities can be matched only in general terms or on a limited number of variables. The experience of the students interviewed at the site in this study may be, in part, due to unique aspects unexplored in the study. Without further study, it would be inappropriate to assume that the experiences described at this setting would be described in other settings. The study does, however, offer a starting point for further research.

Although a model has been developed for this research and revised in light of data analysis, the study is exploratory rather than explanatory. Students described factors that they see as influencing their experiences within the courses. Likewise, they described changes that have occurred in their feeling, thinking, and action since the course experience. Causal inferences, however, cannot be made in light of the non-random sampling and retrospective data collection. Although not the purpose of this study to

examine end-point outcomes of transformative learning, this study is limited in that it does not follow student response over a longer term to understand the outcomes of students' learning experiences and the relationship of these outcomes to the process. The study has explored some of the issues raised by critiques of transformative learning and issues addressed in reviews of research on Mezirow's theory of transformative learning. As with any model, the model in the present study provides one way, among many possible ways, of discussing the data. It does not provide a "test" for the proposed framework; at best, it provides glimpses of a complex social and individual experience that are worthy of further research.

Implications for Practice and Theory: The Role of University in Transformative Learning

In this section I wish to place the learning experiences described by students in the present study within the larger context of undergraduate education and consider what might be needed within the university to support the type of learning described by students in this study. Students and faculty were not asked for their input on this question; I am extrapolating on the basis of changes and challenges facing universities identified in literature discussed in Chapter Two and comments by students and faculty in this study. In considering the practices in universities that might support reinventing power in higher education (Escobar et al., 1994), I use concepts from the model developed in this study to frame reflection on the role of the university. I see issues around power relationships within the university setting as similar to issues in this study for student engagement in transformative learning. I discuss the need to address elements of power over, in terms of three potential areas for challenge: to the authority of cognition that separates emotion from cognition, and individual from social learning; to organization that separates the purposes within universities; and to relationship patterns that separate individuals and inhibit relationship development across disciplines. I then discuss the potential, through support provided by these challenges, to develop power within to transform the university.

Challenging the Authority of Cognition

In defining their personal values and exploring previously acquired and often unquestioned values, traditional age undergraduate university students are in a unique

developmental phase that can be supported in university by both modelling new ways of exploring issues and introducing a range of thought-provoking ideas (Pascarella & Terenzini, 1991), such that content and process of learning allow a new experience of learning. In light of this opportunity, "[h]igher education...cannot be seen as purely cognitive, but has to be seen as experiential: the development of critical reason calls for the development of whole persons. [However, this] observation alone runs against the grain of most of our practices in higher education" (Barnett, 1997, p. 22). Focussing on elementary and secondary education, Hargreaves (1998) concurs, noting the authority currently given to cognitive learning when he contends that "[in] terms of the content of educational reform, Government and administrators must incorporate the emotional dimensions of teaching and learning into learning standards and curriculum targets for students, and into professional standards or competencies for teachers and administrators" (p. 332).

The call by Barnett (1997) and Hargreaves (1998) to incorporate emotional dimensions into learning is problematic. There has been little theory or research to guide the process of integrating emotion with cognition in education (Boler, 1999). In both theory and practice, the emotional component of learning is the least understood. The need for including the affective component in learning has been described from a number of perspectives (e.g., Bandura, 1997; Brophy, 1990; Byrne, 1996; Crites, Fabrigar, & Petty, 1994; Donald, 1997; Francis, 1993; Gardener, 1993; Halpern, 1998; Root-Berstein & Root-Berstein, 2000), but these have not been integrated to inform educational theory or practice. While many important discussions relate to the affective domain of learning, understanding has progressed unsystematically (Price, 1998). Most discussions separate learning into cognitive and affective aspects, rather than integrating these through the lived experiences of learners; in doing so, there is also separation of individual and social learning and change. This is not in keeping with the integration seen in transformative learning in the present study or likely needed for development at the traditional age of university students.

In bringing together emotion and cognition and individual and social learning through the incorporation of students' experiences, courses in this study moved away from a "semantic view of knowledge" (Fensham & Marton, 1991, cited in Marton &

Booth, 1997, p. 174), that decontextualizes what is learned and offers a "bookish academic curriculum or a dehumanizing vocational program" (Shor & Freire, 1987, p. 137) to learning that offered opportunities to engage more fully in the learning process. Contrary to Rader, Piland, and Pascerell's (2002) contention that "students learn to disconnect from others and from creative, compassionate, empowered parts of themselves in college" (p. 147), and the observation of researchers (e.g., Donald, 1997, Hu & Kuh, 2001; Rolfe, 2002) that disengagement from learning is a growing problem of students in university, students in the present study described how engaging they found learning in the study courses. Across courses, students talked about their developing interest in the issues raised and in the process of interaction with others. They noted that they wanted to learn more and discussed what they were learning with others outside of class. Students who would not normally feel comfortable participating in class described themselves as both actively involved and instrumental in how course learning evolved. Students in the study contrast this level of interest and involvement to other courses they have taken at university; many students noted their surprise or excitement at how engaging the issues and processes were. What is of particular interest, relative to this discussion, is the creating of space for emotion and experience in the more traditionally cognitive arena of university learning. There is a sense across courses that students were bringing more of themselves and sharing more ownership for individual and group learning than they had in most other university courses.

Challenge to the authority of cognition is not a call for substituting experience, emotion, or social learning for cognition; it is a call for integration. The examples in this study of engaged learning through incorporating student experience to integrate emotion and cognition, and individual and social learning offer incentive for further exploration. At a time when student development may be most amenable to integration of affective and cognitive aspects of experience into learning (Kegan, 1994), educators do not have strong theory- or research-based guidance for practice. Miller and Stiver (1997) note that "[it] is significant that there does not seem to be a common word in our language to convey the concept of 'feeling-thoughts' or 'thought-feelings'—that is, thoughts together with their accompanying emotions" (p. 27). Likewise, we seem to think in terms of separation, rather than integration, when talking about individual and social learning and

change. In challenging the authority of cognition within the university setting, I see a possibility for moving beyond the dichotomies around emotion and cognition, and individual and social learning that limit transformation of our perspectives on teaching and learning for students at this important developmental age.

Challenging Separation of Purposes

One of the problems facing universities is the separation and competition among purposes of vocation training, individual development, and preparing students for participation as democratic citizens (Spies, 2000). As noted in the literature review, "knowledge and skills necessary for employment and to build careers" (Downey, 2003, p. 11) can become emphasized during times of decreased resources (Gumport, 2002) and increased demands for market awareness and accountability (Rhoades, 2000). Tension among the goals for training for future work, individual development of university undergraduates, and societal change "does not mean abandonment of the goals of social justice and empowerment" or "our own histories and selves" (Weiler, 1994); it calls for consideration of ways to more fully understand and integrate training, individual, and societal aspects of universities goals within the learning process. Within the courses in the present study, students described transformative experiences as influencing their decisions about future work through developing skills and thinking further about professions; their development as individuals, learners, and friends; and their ability to contribute to social change. Rather than describing course experiences as focussing on one purpose to the exclusion of others, students in the course on indigenous peoples described learning valuable research skills and attitudes about indigenous peoples that would be used in future work, for example in teaching or in government and policy work; seeing themselves as having developed personally, in terms of challenging prejudice or being willing to actively participate in class; and developing as more informed citizens concerned about the issues of indigenous peoples. Students in the human relations course talked about developing professionally as psychology researchers; developing individually in terms of their concepts of themselves around issues in the course; and becoming more informed about social issues and better able to work toward change in the future. Students in the sustainability course described gaining knowledge about sustainability and developing skills in exploring conflict that will help in decision-making

and reaching compromise in future work situations; seeing themselves as active constructors of knowledge and contributors to learning and group development; and developing as more informed, responsible citizens of the planet. In these courses, student descriptions indicate integration, rather than separation, of purposes of the university.

Seeing the importance of "open[ing] up new institutional spaces in which students can experience and define what it means to be cultural producers capable of both reading different texts and producing them" (Giroux, 1999, p. 110-111) does not mean abandoning the passing on of discipline knowledge that could provide a valuable lens. Instead it calls for using "good sense not to reject the old just because it is old [but] accepting what is valid in both old and new" (Freire, 1976, quoted in Roberts, 2000, p. 134). Transmitting discipline knowledge and procedures is valid in coursework for the professional development of students wishing to pursue the discipline further or to understand discipline research and information used in a variety of day-to-day situations. Within courses in the present study, discipline rigour was described by students and faculty as important for supporting learning to be knowledge constructors in the courses. In the course on human relations, this involved teaching and practicing accepted psychology research approaches to explore issues of personal and social interest. In the sustainability course, knowledge and perspectives of several disciplines needed to be accurately represented to highlight the similarities and differences involved and to integrate knowledge bases to create new understanding. In the course on indigenous peoples, concepts and theories used in geography provided a basis for exploring the lived experiences and concerns of indigenous peoples. As well, learning to effectively gather and assess in depth information about indigenous peoples using technology sources was key in bringing a broader perspective and context information into university learning. Across courses, discipline knowledge and skills were integral in opening spaces and providing a frame for exploring issues within those spaces.

For courses in disciplines other than those in the present study, integrating discipline knowledge and procedures with discussion of multiple perspectives and underlying assumptions would also be appropriate. For example, calculating the flow rate and efficiency of a fluidized aquaculture biofilter may be important for engineering students wishing to develop effective, sustainable solutions to aquaculture pollution.

Learning this skill may not be directly enhanced by discussion of social concerns. Considering the larger issue of aquaculture from environmental, economic, and community social perspectives, however, could be an excellent use of the energy required for sustained, thoughtful discussion (Shor & Freire, 1987), and an appropriate part of the education of engineers. While every course will have its own mix of interaction patterns and aims, across the university I see a need for courses, and parts of courses, that explore the often unexplored assumptions of research, disciplinary or academic knowledge if "[s]tudents, individually and collectively, [are] to realize that transformatory potential themselves" (Barnett, 1997, p. 5). The examples in this study of course learning integrating multiple purposes of university learning highlight for me the need of further exploration of how courses address, and possibly integrate, university purposes. In challenging the separation of purposes within the university setting, I see a possibility for moving beyond a view of university purposes as competing for limited time and resources to exploration of a more complementary view as a way of approaching some of the changes and demands facing universities.

Developing Relationships

Without integrated theory and research to frame learning that currently is not well understood, support for transformative learning in undergraduate university is unlikely. Exploring complex questions around supporting deeper learning for students requires different approaches that integrate, rather than separate, individuals, discipline knowledge bases, perspectives, and experiences. At an organizational level, separation of faculty members through the structure of disciplines within universities contributes to a lack of understanding needed to develop needed research and theory, lack of collaboration on classroom approaches needed to use the knowledge and experience of different individuals and disciplines, and lack of support for faculty efforts. In the interviews with professors in this study, I hear deeply committed individuals who care about their students and students' development as individuals, learners, and citizens through the university experience. In their conversations they talk about their ongoing exploration of what teaching and learning means. I do not get the impression that teaching is just a job; they are living out important values through teaching. Maintaining this level of commitment requires informational and social support. In the same way that the learners

in their courses needed feedback and support for the new roles they undertook, I see the instructors needing support for their role as teacher-student (Freire, 1981). While I cannot be certain that these three professors have never discussed their approaches to teaching with each other, each noted that they did not have others across disciplines, or even within discipline in one case, with whom they discussed teaching issues on a regular basis. While they noted the importance of such conversations and a desire to be involved in these on an ongoing basis, they cited time constraints in balancing teaching, research, and service, and lack of an established process on campus for such an endeavour as limiting factors. Addressing separation of individuals across disciplines would involve building a sense of knowing, trust, and respect across disciplines within the university; such relationship development could support working collectively to share teaching practices and concerns and to develop research, as well as to explore purposes, roles, and underlying assumptions across the university.

Challenges facing universities highlight interactions among the formal and informal structure of the university, faculty, and students. "[U]niversities are challenged to develop and implement policies that will drive quantum shifts in attitudes and activities in large and complex organisations that may exhibit considerable inertia to change" (Nunan et al 2000, p. 94). While Kezar & Eckel (2002) found that university change strategies seemed most effective when they were in keeping with the culture of the institution, the perspective of administrators, rather than those of instructors or students, has been used in developing goals (Patterson, 2000). According to Lueddeke (1999), faculty seldom feel part of a participatory process that considers their experience in decisions around planned change. Developing a sense of trust and awareness of support for risk-taking (Darling-Hammond, 1990) through greater faculty involvement is important if universities are to respond, rather than merely react, to the complexities they face. In developing a sense of knowing, trust, and respect across disciplines within the university setting, I see a possibility for moving beyond separate efforts to understand and practice transformative teaching and learning, and to deal with the changes facing universities toward support for transformation and developing of power within.

Transformation—Developing Power Within

While the importance of education "that engages students in...pursuing deeper understanding of their world" is noted by McLaughlin & Talbert, (1993), they also contend that

> difficult and exceedingly complex questions arise about the kinds of institutional or policy arrangements necessary to enable such teaching, the kinds of resources necessary to build the requisite knowledge and commitment among teachers, and the changes required in existing arrangements. These questions largely are unanswered and not even well understood. (pp. 7-8)

Differences between Mezirow's (1975, 2000) theoretical model and findings in the present study around emotion and cognition, and individual and social learning and change, highlight the separation between theory and practice that Gore (1993) identifies in the split between social vision and instructional practice of feminist and critical pedagogies. This separation is not a minor point; it can limit critical reflection on the process and content of instruction.

> Without paying particular attention to our specific practices of pedagogy—those which have constructed what we are today *and* those toward which we aim our educational and political dreams of different societies—we might altogether overlook the ways in which pedagogy operates, and, furthermore, the pedagogies for which we argue so earnestly and sincerely will remain inconsistent with the pedagogies of our arguments. (Gore, 1993, p. 157, emphasis in original)

This inconsistency is not a matter of neglecting to practice what we promote or theorize. There are gaps in our understanding of the process of student engagement in transformative learning, gaps which will likely only be addressed through collaborative research and practice efforts across disciplines. Extrapolating from the present study with students, supporting such collaboration requires challenging power over and engaging in transformative change in the university.

If change is to be transformative, rather than merely adaptive to external pressures (Doring, 2002; Fairweather, 2002; Manicas, 2000; Neubauer, 2000; Rhoades, 2000; Rolfe, 2002), roles, organization, and relationships within the university need consideration. In part, challenging current power relationships around the authority of

cognition, separation of university purposes, and separation of disciplines could support developing transformative power within the university. Through considering relevant issues in mutual concerns; staying with the tension produced by multiple ways of seeing issues; and digging deeper to ask why and think through traditionally valued, but perhaps unexplored, agendas and visions across campus, assumptions underlying stated aims could be examined. In discussing higher education organizations, Gumport (2000) emphasizes the importance of exploring assumptions related to demands for change: "The question of whether the organization *can* respond should be preceded by the question of whether or not it *should* respond to whatever is demanded by the resource relationships on which it depends, for an entirely different kind of organization may result" (pp. 85-86).

In light of the changes affecting universities and the potential for transformative learning among undergraduate students, clarifying values and purposes within individual institutions and within undergraduate education in general is needed. Without this process, administrators are unlikely to create policy, support initiatives, assess programs, or reward efforts in ways that reflect the true aims of the university (Patterson, 2001). Through challenging power relationships and developing power within, universities may "create a different power from which it is possible also to create a different academic policy" (Escobar et al, 1994, p. 144).

Future Research

Mezirow's work has drawn attention to the value and challenges of considering transformation in more formal educational settings than Freire's (1981) work. Mezirow (1975, 2000) described transformation from the view of a more diverse group of learners who did not share background, perspectives, and social action goals, as did Freire's community learners. In expanding the purview of transformative learning to include formal education, I think Mezirow opens up a space for discussion. He does not, however, offer a model that explicitly examines interactions among emotion, cognition, individual and social learning, and power. In the present study, Mezirow's (2000) definition of transformative learning was too broad to provide a sufficient frame for exploring transformative learning in undergraduate university courses with traditional age students. I suspect this is due, in part, to the unique developmental age of traditional

university students. While Mezirow's model offers a starting point for thinking further about transformative learning, it leaves a significant gap in examining classroom practice. The exploratory nature of this study offered the opportunity to consider if engagement in the early components of transformative learning was possible with traditional age undergraduate students, what that process involved, the facilitators of the experiences students described, and the role of discrete, student-centred courses in the process. The broad sweep provided by this study indicates the potential value of further exploration. By considering the experience of traditional age undergraduate students who are learning to engage in the process of transformative learning, the present study considered issues of power, and integration of emotional, cognitive, individual, and social elements of learning in a new light. Future research needs to expand on the exploration in this study in terms of sample, methodology, and linkage to other research and theory.

This study leads to a number of interesting questions that warrant further research around who experiences transformation. What is not known from my purposive, volunteer sample are answers to questions such as prevalence of experience, the importance of year of university study, and the influence of student positioning. Because of the small sample recruited for this study, I do not know whether most students would have described similar experiences in the courses involved. While those interviewed felt that others in the course had similar experiences to their own, they were asked to speculate based on what they saw and heard; in light of the importance of individual perspective on relevant issues involving both individual and social learning and emotion as well as thinking, the experience of others from their perspective needs exploring. It is important to know whether the experiences described are limited within courses to certain students. That is, are there positionings or past experiences that students bring to courses that prepare them in some way for engaging in transformative learning or inhibit engagement? Sampling for future research needs to involve more students within courses to help elucidate for whom, in terms of number of students and background, engagement is likely. Sampling also needs to expand to include students at different points in their undergraduate career to consider if engagement is more likely as students reach upper years. While it appears from the present study that engagement in transformative learning is possible, future research needs to explore for whom it is likely. Understanding the

experience of a wide range of university students is needed before recommendations or policies intended to apply to the wider student population can be developed.

Expanding research also involves developing methodology further, including greater variation across course types and university sites, using other research designs to tap student experience, and integrating learner and instructor perspective. Course type needs to be expanded for future research to include larger classes, courses that use a lecture format, and disciplines beyond those that are broadly social sciences. Such courses may not use discussion, which appears to play a significant role in engaging in transformative learning in this study and in previous theoretical discussion of and research on transformative learning. While I have had informal conversations with undergraduate students in different universities who have enjoyed or found interesting courses in sciences or maths, or large classes using lecture formats, this does not mean that engagement in transformative learning was occurring. Likewise, it is not known how other course topics or formats might help prepare students for subsequent engagement in transformative learning. Considering the role of non-discussion courses for future engagement in transformative learning experiences is as important as exploring if and how transformative learning occurs in courses whose main aim is not discussing social issues. While I believe the active exploration of research and development of research skills in the present study alludes to multiple influences and possible ways of engaging in transformative learning, further research is needed that taps into a wider variety of courses.

Other aspects of research design also need consideration to gain a fuller view of student experience. In part this involves what is asked of students, how it is asked, and when. This study did not directly ask students about their perceptions of emotional and cognitive aspects, individual and social processes of learning and change, or how they saw power relationships influence their experiences. In light of the importance of these elements in the present study and the lack of integration in other research, these would be useful questions to ask. These broader categories relate to the relationships among classroom interaction, discipline, and university. Examples of issues for further study include discipline requirements and expectations for core and elective courses, developing effective work teams when group work is graded, and evaluation processes in

courses when professors attempt to alter power relationships. Providing more direct questions around issues raised in this study may help focus on issues that are not typically explored from student perspective or less likely to be raised spontaneously in student comments. Developing quantitative measures to supplement students' narratives of transformative experiences could also be helpful, not only for gathering data across greater numbers of students in a course and across courses and university sites, but also for providing concrete, standard terms against which students may compare their experience. Aspects such as experience frequency and intensity may also be assessed. Lack of definition has been an ongoing problem with Mezirow's transformation theory, with the limited research using different concepts and terms that allow only broad, often assumptive, comparisons across studies.

Longitudinal studies are also needed if the longer-term influence of discrete courses and the role they play in future development in other courses or elsewhere in the larger community are to be considered. While I believe that students in the present study were engaging in the process of transformative learning, the longer-term outcomes of this learning process were not explored by this retrospective study using interviews at the end of the courses. Changes described by students in the present study may reflect the influence of support for trying new behaviour within the frame of the course, rather than a learning change that will transfer, over the longer term, to other courses or other aspects of life. Lack of understanding around the longer-term outcomes is not unique to the present study; the need for extended formats of data collection has been highlighted in reviews such as E. Taylor's (1998, 2000). All three aspects—what is asked, how it is asked, and when—deserve further attention in future research designs.

As well, findings in the current study and previous research and theory developed indicate several theoretical areas that deserve further study. These include three interrelated aspects: exploring the relationships among Mezirow's model and other literatures; defining transformative learning as it relates to traditional age undergraduate students; and integrating further issues of power, emotion and cognition, and individual and social learning and change into models. The present study highlights the need for further exploration to understand how Mezirow's model, and the work that has built on it, and other theoretical and practice literatures inform each other and the process and "the

complexities of transformative learning" (E. Taylor, 2000, p. 318). In this study I have considered two main literatures for framing transformative learning, Mezirow's model and Freire's work on liberatory education. The similarities and differences between these two offer insights into both around the meaning of transformation and the challenges of incorporating power, emotion and cognition, and individual and social learning into models. Other literature and research that helped in thinking through some of the gaps in theoretical understanding, as well as the findings in the present study, deserve further consideration; three areas seem particularly promising. First, the relationship between a different experience of power in courses and students involvement in course work in new, deeper ways highlights the need to explore engagement in learning among university undergraduate students more deeply. Second, post-structural feminist research and theorizing offers approaches and perspectives that could add to understanding the interplay among power, experience, emotions and cognitions, and individual and social learning. Finally, looking at developing brain research offers a third potential option for better appreciating the development that is possible and the support needed by students at a very interesting, but under-researched developmental time. In keeping with the emphasis in this study on integrating multiple perspectives, developing conversations across disciplines and perspectives and theoretical stances could provide "mutually growth-fostering relationships" (Miller & Stiver, 1997, p.42) that could benefit research and practise.

The present study started with a constructive-developmental theoretical stance. This stance brought together for me the potential development in which students could engage in exploring both past social influences and future construction of meaning. It also offered room to explore other multiple interesting perspectives that might inform issues highlighted in the literature around power and emotional, cognitive, individual, and social elements of learning. One such perspective, related to power, was critical pedagogy. I valued much that I read in critical pedagogy and could see how it might add to my analysis. However, I also imagined what feminists might have thought and felt when Freire insisted that women's role in liberation was to support the struggle around class, rather than pursuing or incorporating their own concerns (Weiler, 1990). I can appreciate Freire's concern that in focusing on different directions, division of effort

could possibly reduce emanicipatory gains. As well, I can appreciate the value of confrontational focus promoted in critical pedagogy. Looking for a fit between different theoretical stances raised questions for me: Do we need to stand behind one issue or one theoretical stance if we are to be united to make change? Could there be a suitable compromise reached if I continued to engage in conversation with stances and perspectives whose differences create a sense of otherness in me?

The tension I felt among perspectives could lead to withdrawal to more comfortable knowledge bases, reaffirming my perspective prior to starting this study. Or the tension could lead to escape through pessimism or utopian dreams that Burbules (1990) notes arise from a faith in absolutes. These options did not seem reasonable to me when I considered the experiences that students described. As I read students' comments I was deeply moved by the power in their stories—stories of power developing within individuals and groups to face their responsibility in making the world more just for themselves and for others. The courses in my study were not aimed at fighting for social change around gender, race, or class through critical confrontations of the injustices in society. In many ways, they were ordinary classes that could, and likely do, take place at universities around the world. And yet in their "familiarity" I see "strangeness", not in the topics, materials used, or particular course activities, but in the power of the experiences that students describe and the ways in which emotion and cognition, and individual and social learning are intertwined. Students did not describe just an interaction between their development and the meanings they were constructing in class. They were transforming their awareness of themselves, their relation to others and to their previous knowledge, and transforming the course itself.

In digging deeper not only into the data base but also into multiple and sometimes seemingly incompatible theoretical stances, my original constructive-developmental framework became juxtaposed with other frameworks such as critical pedagogy and poststructural feminist pedagogy. As I continued to dig deeper, I noticed that, rather than being in competition with each other, the stances were now in conversation of a different sort. While I see students developing as individuals, and constructing meaning for themselves and with others in new ways, the constructive-developmental framework now acts for me as a short-form descriptor to mark the place in students' stories that challenge

my previous understandings of individual, group, and societal development and change. In the "strangeness" and the "familiarity" of these courses I find a new space—one in which relationships among theoretical stances may be explored more fully and each can make a unique contribution to appreciating the potential within these ordinary courses. In challenging the authority of one perspective over another and the organization of disciplined knowledge that supports competition to be correctly positioned within an "acceptable" theoretical stance, I have developed different relationships with these perspectives and a new respect for what each offers in thinking about the challenges facing undergraduate students and universities. Through this transformative process, I have learned what one of the students in the study described: a new sense of hope. This is not a hope of finding the truth amid vastly different theoretical positions, but the hope of developing together with others and constructing a new way of understanding past choices and situations and creating new options for the future. In these ordinary extraordinary courses I see hope of responding to the challenge by Giroux and McLaren (1992) to move critical pedagogy beyond criticism of education and its practice to consider how it might be developed and improved.

In his review of research on transformative learning, E. Taylor (2000) noted that "many of the questions and concerns raised about transformative learning cannot be answered by the present model proposed by Mezirow" (p. 317). In light of limitations of research related to Mezirow's work, E. Taylor (2000) recommended four main directions for future research to further understanding around transformative learning: comparison of theoretical models; in-depth analysis of components of the model; exploring strategies for fostering transformative learning; and using different designs and methods of collecting data. I have considered three of these areas in the present study: theoretical comparisons of Mezirow's model with Freire's work to gain insight "in areas that are poorly understood" in Mezirow's model (E. Taylor, 2000, p.317); in depth focus on early engagement in the transformative learning process; and exploring how transformative learning is fostered in the classroom setting. While each of these areas is worthy of studies devoted to it, the present study has touched on aspects of each, providing some input and raising even more questions for future research. Much of the development of Mezirow's model has been through theoretical discussion, rather than through research

that provides a base on which to build further research and further model development. This is a significant limitation for bringing theory and practice together and developing recommendations for course instructors and for universities as they consider the role of higher education into the future. A solid research base is needed to bring together concerned individuals from across disciplines to develop transformative approaches in keeping with undergraduate student development and to maintain important social values central in the aims of university education.

Appendix A: Informed Consent Letter for Instructors

The Ontario Institute for Studies in Education of the University of Toronto

252 Bloor Street West, Toronto, Ontario M5S 1V6
Tel No. 416-923-6641
Fax No. 416-926-4741

Department of Theory and Policy Studies in Education

Date

Dear (name of participant),

I am conducting research for my PhD thesis entitled "Transformational Learning in Undergraduate Education" under the supervision of Dr. Nina Bascia, Department of Theory and Policy Studies in Education, the Ontario Institute for Studies in Education/University of Toronto. The purpose of the research is to explore student learning experiences in undergraduate university courses in terms of attitude development. Approximately 18 fourth-year university students between the ages of 20 and 24 in three courses across disciplines will be participating in the study. Through interviews, I will be looking at how students explore their attitudes and assumptions and the factors in the classroom and on campus that influence this experience.

I would appreciate it if you would take part in a brief (30 to 60 minute) interview, at a time and place that is convenient to you, to discuss your course (*course name*), that you will be teaching this academic year, and participate further in the study if your class is one of the three selected. I hope to interview up to 6 faculty members and select 3 from across disciplines for further participation with the aim of including different subjects and teaching approaches. Once the faculty interviews are completed, I will email you to let you know if I plan to have your class in the study. The interview will focus on your perceptions of student learning and teaching in the course. I have attached a list of interview questions I will be asking. The interview will be audiotaped with your consent to ensure accuracy. Participation in the study is completely voluntary. You may at any time decline to answer any question or withdraw from the interview or other aspects of the study at any time. You may request that any information you have given be eliminated from the project.

If your class is selected to participate in the project, I would like to observe some of your class sessions (approximately 6-8) for this course, examine your teaching plans for the course and materials you will be using, and review my perceptions of the materials with you. Before making classroom observations, I will briefly introduce myself and explain my research project to students in the class. I will be looking for student engagement in learning and class activities, interactions among students and instructor, and student responses to the learning activities. This will provide context information for better understanding student interview responses, as well as potential direction during student interviews related to particular class events.

Near the end of the term, I will again briefly describe to the class the research project and the role of student interviews in the research and ask students who are interested in participating to note their names and email on a sign-up sheet circulated during the last 5 minutes of the class session after you have left the room. Students will be informed that you will not know who participated in the study. I have no intention of evaluating students, instructors, courses or programs, but rather intend to explore the complex process of engaging in this aspect of learning from the undergraduate student perspective.

The information obtained will be kept in strict confidence and stored under lock and key in my home office. Only I and my supervisor at University of Toronto will have access to the raw data. Names

and other identifying information about you or your class or university will be systematically changed. You will be assigned a number that will correspond to your interview and course materials and observations. Identifying codes that could connect you or your class with the changed names will be stored separately under lock and key in the place designated above. All raw data will be destroyed five years after completion of the study.

I do not foresee any risk for those taking part in the study. Names and identifying information will not be used in the thesis or on any documents or records. While you may not benefit directly from the study, the information gained may assist researchers, policy makers and practitioners to better understand learning that occurs in undergraduate education from the perspective of students. You may request a summary of the findings of the study, and a copy of the thesis in full will be available in the OISE/UT thesis collection of the RBW Jackson Library.

If you are willing to participate, please reply by email suggesting a few times in the next two weeks that are convenient for us to meet. I will bring and ask you to sign a copy of this letter and attached consent form when we meet. Please do not hesitate to call me at [phone number] or email me at [email address] if you have any questions or concerns.

Thank you for taking the time to consider participating in this research.

Sincerely,

Phyllis Harvie

I am willing to take part in the research project entitled "Transformational Learning in Undergraduate Education." I understand that my participation is completely voluntary. I accept the conditions of confidentiality as outlined and understand that I may withdraw from the study at any time. I have been given a copy of this consent form.

_____ _____

Signature Date

Please initial if you agree to have your interview audiotaped._____

Please initial if you wish to receive a summary of the research findings via email._____

If you have any questions or concerns about this study, please contact the investigators:

Phyllis Harvie
PhD Candidate,
Theory and Policy Studies in Education
OISE/University of Toronto
[phone number]
[email address]

Dr. Nina Bascia
Professor,
Theory and Policy Studies in Education
OISE/University of Toronto
[phone number]
[email address]

Appendix B: Interview Questions for Instructors

1. Why did you think students choose to do their undergraduate education at this university?
2. Why did they choose this program of study? This course?
3. What kinds of experiences, learning or understanding do students bring with them that relate to this program of study? To this course?
4. How would you describe the teaching-learning process in your course?
5. Beyond understanding the material, what are your main aims for students in this course?
6. How do these aims fit with your philosophy of learning? Your approach to teaching? The overall aims of the program?

Students talk about having many different experiences in their undergraduate courses in university. They talk about experiences that made them aware of something they hadn't thought much about before that helped them see things in a different way or changed their attitudes about something.

7. Can you tell me about any activities or approaches that you use in this course to try to open students' eyes to an issue or help them explore their attitudes or assumptions in some way?
8. Tell me about aspects of the class that you see as most influencing this experience for students
   - -teaching/learning activities
   - -teaching style
   - -interaction with instructor
   - -interaction with peers
   - -interaction between instructor and peers
   - -teaching materials
   - -technology use
   - -introduction of new ideas
9. How do students respond to your efforts to encourage exploration of attitudes or assumptions? What variation do you see in student response?
10. What effect do you think technology has in this process?
11. What role do you think gender or gender issues have in this process of exploration?
12. Would you like to add any further comments?

13. Why did you think students choose to do their undergraduate education at this university?
14. Why did they choose this program of study? This course?
15. What kinds of experiences, learning or understanding do students bring with them that relate to this program of study? To this course?
16. How would you describe the teaching-learning process in your course?
17. Beyond understanding the material, what are your main aims for students in this course?
18. How do these aims fit with your philosophy of learning? Your approach to teaching? The overall aims of the program?

Students talk about having many different experiences in their undergraduate courses in university. They talk about experiences that made them aware of something they hadn't thought much about before that helped them see things in a different way or changed their attitudes about something.

19. Can you tell me about any activities or approaches that you use in this course to try to open students' eyes to an issue or help them explore their attitudes or assumptions in some way?
20. Tell me about aspects of the class that you see as most influencing this experience for students
    - -teaching/learning activities
    - -teaching style
    - -interaction with instructor
    - -interaction with peers
    - -interaction between instructor and peers
    - -teaching materials
    - -technology use
    - -introduction of new ideas
21. How do students respond to your efforts to encourage exploration of attitudes or assumptions? What variation do you see in student response?
22. What effect do you think technology has in this process?
23. What role do you think gender or gender issues have in this process of exploration?
24. Would you like to add any further comments?

Appendix C: Informed Consent Letter for Students

The Ontario Institute for Studies in Education of the University of Toronto

252 Bloor Street West, Toronto, Ontario M5S 1V6
Tel No. 416-923-6641
Fax No. 416-926-4741

Department of Theory and Policy Studies in Education

Date

Dear (name of participant),

I am conducting research for my PhD thesis entitled "Transformational Learning in Undergraduate Education" under the supervision of Dr. Nina Bascia, Department of Theory and Policy Studies in Education, the Ontario Institute for Studies in Education/University of Toronto. The purpose of the research is to explore student learning experiences in undergraduate university courses in terms of attitude development. Approximately 18 fourth-year university students between the ages of 20 and 24 in three courses across disciplines will be participating in the study. Through interviews, I will be exploring how students explore their attitudes and assumptions and the factors in the classroom and on campus that influence this experience.

I would appreciate it if you would take part in a semi-structured interview of approximately 1 hour at a time and place that is convenient to you. I have attached a list of general interview questions I will be asking. The interview will be audiotaped with your consent to ensure accuracy and later transcribed to paper. You will be given the opportunity to review a copy of the transcript and make changes, clarifications and deletions to your statements. I will email your transcript to you as soon as it is typed (within three weeks of the interview). Please email the transcript back to me with any changes marked using the tracking changes option in the word processing program within two weeks of receipt of the transcript. Participation is completely voluntary. You may at any time decline to answer any question or withdraw from the interview at any time. You may request that any information you have given be eliminated from the project. I have no intention of evaluating students, instructors, courses or programs, but rather intend to explore the complex process of engaging in this aspect of learning from the undergraduate student perspective.

The information obtained will be kept in strict confidence and stored under lock and key in my home office. Only I and my supervisor at University of Toronto will have access to this raw data. Names and other identifying information about you or your class or university will be systematically changed. You will be assigned a number that will correspond to your interview. Identifying codes that could connect you or your class with the changed names will be stored separately under lock and key in the place designated above. All raw data will be destroyed five years after completion of the study. No one will be told of your participation in the study. While I will be asking instructors in this study to provide copies of course materials and for permission to sit in on classes, I will not be asking them any questions about you or discussing individual students with instructors.

I do not foresee any risk for those taking part in the study. Names and identifying information will not be used in the thesis or on any documents or records. While you may not benefit directly from the study, the information gained may assist both researchers and education professionals to better understand learning that occurs in undergraduate education from the perspective of students. You may request a summary of the findings of the study, and a copy of the thesis in full will be available in the OISE/UT thesis collection of the RBW Jackson Library.

If you are willing to participate, please reply by email suggesting a few times in the next two or three weeks that are convenient for us to meet. I will bring and ask you to sign a copy of this letter and attached consent form when we meet. Please do not hesitate to call me at [phone number] or email me at [email address] if you have any questions or concerns.

Thank you for taking the time to consider participating in this research.

Sincerely,

Phyllis Harvie

I am willing to take part in the research project entitled "Transformational Learning in Undergraduate Education." I understand that my participation is completely voluntary. I accept the conditions of confidentiality as outlined and understand that I may withdraw from the study at any time. I have been given a copy of this consent form.

_____ _____

Signature Date

Please initial if you agree to have the interview audiotaped._____

Please initial if you wish to receive a summary of the research findings via email._____

If you have any questions or concerns about this study, please contact the investigators:

Phyllis Harvie
PhD Candidate,
Theory and Policy Studies in Education
OISE/University of Toronto
[phone number]
[email address]

Dr. Nina Bascia
Professor,
Theory and Policy Studies in Education
OISE/University of Toronto
[phone number]
[email address]

Student Interview Questions

1. Why did you choose to do your undergraduate education at this university?
2. Why did you choose the program that you are in?
3. What expectations did you have coming into university, what did you hope to get out of the experience?
4. Do you still have your original hopes and expectations that you brought to university? Are they starting to come true? Have they changed?
5. What do you expect to do after graduation?
6. What kinds of experiences, learning or understanding did you bring with you that relate to your program? To this course?

Students talk about having many different experiences in their undergraduate courses in university. They talk about experiences that made them aware of something they hadn't thought much about before that helped them see things in a different way or changed their attitudes about something.

7. Can you tell me about any experiences in this course [course name] that have opened your eyes to an issue or that have changed your attitude(s) in some way?
8. How did this experience occur for you?
9. What do you think were the factors that influenced you in this experience?
10. Tell me about aspects of the class that you see as most influencing your experience
11. Do you think that most people responded as you did or did others respond differently to the class?
12. What effect do you think technology has in this process?
13. Tell me about the other things that happened outside of this class around the same time that you thought were significant to your experience?
14. How have your family/friends/social networks played a role in this experience?
15. What role do you think gender has had in this process?
16. What has happened since the original experience?
17. Would you like to add any further comments?

Appendix D: Interview Questions for Students

18. Why did you choose to do your undergraduate education at this university?
19. Why did you choose the program that you are in?
20. What expectations did you have coming into university, what did you hope to get out of the experience?
21. Do you still have your original hopes and expectations that you brought to university? Are they starting to come true? Have they changed?
22. What do you expect to do after graduation?
23. What kinds of experiences, learning or understanding did you bring with you that relate to your program? To this course?

Students talk about having many different experiences in their undergraduate courses in university. They talk about experiences that made them aware of something they hadn't thought much about before that helped them see things in a different way or changed their attitudes about something.

24. Can you tell me about any experiences in this course [course name] that have opened your eyes to an issue or that have changed your attitude(s) in some way?
25. How did this experience occur for you?
    [-feeling sense of discomfort around the issue/situation
    -talking with others about the experience/issue
    -learning new skills related to the experience/issue
    -learning information related to the experience/issue
    -rethinking your assumptions/attitudes
    -changes in your actions
    -changes in your usual behaviour
    -changes in your way of thinking/talking
    -changes in your attitudes
    -changes in how you see yourself as a person]
26. What do you think were the factors that influenced you in this experience?
27. Tell me about aspects of the class that you see as most influencing your experience
    [-teaching/learning activities
    -teaching style
    -interaction with instructor
    -interaction with peers
    -interaction between instructor and peers
    -teaching materials
    -technology use
    -ideas that stick with you]
28. Do you think that most people responded as you did or did others respond differently to the class?
29. What effect do you think technology has in this process?

30. Tell me about the other things that happened outside of this class around the same time that you thought were significant to your experience?
    [-other courses
    - experiences on campus outside of class
    - work experiences]
31. How have your family/friends/social networks played a role in this experience?
32. What role do you think gender has had in this process?
33. What has happened since the original experience?
    [-Have you looked for more information on the topic/issue?
    -Have you explored other related topics/issues?
    -Have you joined or left any groups or activities?
    -Have you changed your lifestyle?
    -Have you changed your plans for university or career?]
34. Would you like to add any further comments?

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