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A Theory of Curriculum Development in the Professions: An Integration of Mezirow's Transformative Learning Theory with Schwab's Deliberative Curriculum Theory

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Running head: TRANSFORMATIVE-DELIBERATIVE CURRICULUM THEORY

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A transformative-deliberative curriculum approach can lead to curricula that target

transformation in curriculum processes, classroom experiences, and professional work.

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A DISSERTATION

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This is to certify that the dissertation entitled:

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To God be the glory. Great things He has done.
Fanny Crosby

Be transformed by the renewing of your mind.
Romans 12:2b

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Abstract

A hundred years ago, the problem with professional education was that it lacked a sound scientific foundation and opportunities for clinical practice. Throughout the past three decades, discussions on graduate professional education have focused on how to improve the theory/practice continuum, either through new formats or strategies, or by emphasizing one over the other. However, with the new century, new problems have emerged within the professional education arena. This dissertation has focused on two main problems in graduate professional education in the early 21st century: students are focusing too much on technical expertise and not enough on becoming transformed into authentic professionals who serve the public good; and educators are using technical expertise to plan for technical learning without intentionally planning for their students to transform into genuine professionals, or those who profess their expert knowledge for the public good. Both problems stem from deeply held assumptions that the rational, cause/effect linear approach is the best way to plan curriculum and the best way for students to learn. This dissertation demonstrates that both assumptions are flawed.

This study proposes in a new theory, one which integrates the learning theory of Jack Mezirow with the deliberative curriculum theory of Joseph Schwab to break the technical/rational grip on curriculum work and professional education. Graduate professional education needs to be transformative, and in order for that to happen, curriculum planning must be done in a deliberative fashion. The new transformative-deliberative approach to curriculum planning can be implemented by using the Curriculum Caucus Guide, a heuristic developed to help educators use this new approach to curriculum work and to begin to effect needed change. The electronic version of the dissertation is accessible at the Ohiolink ETD center http://www.ohiolink.edu/etd/.

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"There has never been a time when the quality of professional education was more important, or more subject to question, than the present" (Sullivan, p. 27, 2005).

Chapter 1: Introduction

Professional education is in a critical period. The historical connotation of the term *professional* with a commitment to the public good has been gravely influenced by the notion of technical professionalism or careerism. Students in graduate professional schools often learn specialized knowledge and technical skills without a deep and transforming experience that leads them to understand what it means to "profess" their values, beliefs, passions, and concerns for the public good. Being professional also means being able to listen carefully and to be able to question their stereotypes and assumptions about their work (Sullivan, 2005, p. 216). Pedagogy and curriculum design processes have come from the paradigm of technical rationality, caught in a hopelessly unending pendulum swing between theory and practice. The focus of change has often been to introduce new teaching strategies or delivery formats, which usually emphasize one need over the other—knowledge or skills, rigor or relevance, science or application. Trying to find the right balance has hindered educators from seeing a deeper need to plan for learning that includes knowledge and skills, but takes students to a higher level, that of transformation into professionalism. Reforms have been suggested continually throughout the past three decades. However, Sullivan said as recently as last year "Professional renewal has to begin in professional education, or it will have no lasting future." (Sullivan, 2005, p. 24). Also during the past three

decades two theories have emerged, that if brought together, can help educators effect the type of change necessary for graduate professional education. The purpose of this study is to integrate transformative learning theory with deliberative curriculum theory in order to propose a heuristic that can contribute to the reform of graduate professional education.

CONTEXT OF GRADUATE PROFESSIONAL EDUCATION

Almost a hundred years ago, one of the most significant events in the history of graduate professional education took place. Flexner (1910) conducted an exhaustive study of medical schools in the U.S. and Canada that served as a wake-up call for many of them. The findings were not without merit. Many medical schools, so-called, had arisen throughout the two nations by the 1870s, but often with few resources other than professors, and the teaching was for the most part didactic. For some of the schools, the curriculum often lasted only nine months, and no applicant who could pay his fees or sign his name was turned away. While a good number of the schools had loose university affiliations, many did not. For the most part, they were primarily private ventures, money-making in spirit (Flexner, 1910, p. 7). There is little wonder why an American economist and sociologist, Veblen (2005/1918), advanced the notion that professional and vocational schools should be removed from the universities, claiming that their aims, methods, and achievements were "foreign to the higher learning" (p. 19). He felt that for universities to subject themselves to the "vocationalism" of training men for work rather than educating them for life would lead the schools into "hopeless discredit" (p. 31).

However, Flexner's report noted that one school, Johns Hopkins University, stood out as an exemplar for its unique combination of didactic and clinical teaching. According to the report, the laboratories were unexcelled, and the hospital was an admirable example from the standpoint of both public service and pedagogic efficiency (Flexner, 1910, p. 235). Five years later, Flexner

proclaimed Johns Hopkins a leader in medical education, setting a new and stimulating example precisely when it was most urgently needed (Warren, 2000, p. 257). Due in part to his study, and the dramatic advancement of scientific knowledge at that time, the idea of including professional schools within universities was validated, and the integration of a strong scientific or theoretical foundation with clinical teaching became a central tenet of professional education, whether through internships as in medicine, dentistry and education, or vicariously through case studies as in business and law.

What started out as a discourse on integration of didactic and clinical teaching has developed into a full-fledged century-long discussion on the tension between theory and practice. A quick perusal of the literature reveals the language used to portray how the pendulum has swung back and forth through the years. One reads about how moving professional education into universities tended to emphasize the science aspect, and often the "foundation" became separated from practical application (Curry & Wergin, 1993, p. 324). Or there was an overemphasis on practice, resulting in a "how-to-do-it" procedure that limits students in adapting to changed conditions (Mayhew & Ford, 1974, p. 5). In 1974, it was said "problem solving should be a central focus of the professional curriculum" (Mayhew & Ford, 1974, p. 80). Nearly a decade later, Schön warned against the tendency to learn merely how to apply solutions to problems, or what he called "technical rationality," and encouraged practitioners to embrace an epistemology of reflection-in-action, as a way of integrating theory and practice (Schön, 1987; Schön, 1983). Thus, "theory competes with practice, and an emphasis on values often is at odds with the acquisition of technical proficiency" (Shulman, 2004, p. 537).

Graduate professional education continually moves back and forth along the continuum of theory and practice. However, the responsibility of the professional is not to simply apply

theory to practice, but to, "transform, adapt, merge, synthesize, criticize, and invent" (Shulman, 2004, p. 534). Shulman maintains that to be professional, one must be able to *profess* through service, understanding, practice, judgment, learning from experience, and community (Shulman, 2004, p. 530). Sullivan (2005) pointed out that the public believes that professionalism rests upon a fiduciary basis, or a foundation of public trust, and thus professionals enter into a social partnership that demands both accountability and responsibility. Indeed, to become a professional is more than joining an occupation; it is assuming a civic responsibility (Shulman, 2004, p. 23). Traditionally, professionals have been viewed as those who have vocations or callings for the public good. Sullivan extended the definition of a professional by saying that this calling requires a "capacity for initiative and judgment" creating a lifetime of "creative invention" as well as labor (Sullivan, 2005, p.15). Professional schools must address the professional identity of students, their way of thinking, and their sense of self that shapes their beliefs, values and assumptions. They need to be equipped to make judgments in the face of uncertain situations with conflicting values and ethical stances, in a social and cultural context (Harris, 1993a, p. 51).

Professionals need to know how to reflect on their own assumptions so that they can learn from failure (C. Argyris, 1991). Furthermore, they need to learn how to learn, which often means unlearning (Schein, 2004, p. 321). Schein developed much of his organizational culture and leadership theory from Lewin's system of structural change. Lewin proposed that a disequilibrium needs to be created that goes beyond the reinforcement of assumptions that are already in place. He called this disequilibrium *unfreezing* and stated that it leads to transformative change (Schein, 2004, p. 320).

Sullivan pointed out,

There has never been a time when the quality of professional education was more important, or more subject to question, than the present…The unmet need is to ensure that these new forms of work and education recognize that there is no successful separation between the skills of problem solving and those of deliberation and judgment, no viable pursuit of technical excellence without participation in those civic enterprises through which esoteric knowledge and skill discover their human meaning. In these developments, we can glimpse the possibility of transforming for the better professional thinking and practice, along with the benefits such changes can bring. (2005, p. 27-33)

In essence, graduate professional education needs to develop students beyond *knowing* (theory) and *doing* (practice) toward *becoming* transformed, i.e., being more critically reflective of the premises of their worldviews, open to and inclusive of other perspectives, and thus more capable of making sound judgments in the face of uncertainty. This approach will transform students as well as the field of professional education. How can educators plan for and create programs that will not neglect the knowing (theory) and doing (practice) aspects of the curriculum, but will also focus purposely and intentionally upon helping students to transform into *being* professional, those who answer the call to serve the public good through deliberative and transformative practices?

TRANSFORMATIVE LEARNING THEORY AND DELIBERATIVE CURRICULUM THEORY

Two theories have emerged in the past thirty years which, taken together, promise to assist in helping educators to develop the type of graduate professional curricula that will not only help students develop their knowledge and skills as professionals, but will also help them to actually become those who profess for the public good, those who will *be* professionals in the

truest sense of the word. Mezirow's transformative learning theory focuses directly upon how an individual confronts disorienting dilemmas that challenge tacit, taken-for-granted, personal paradigms of assumptions, beliefs, and values, and wrestles with them in a supportive community of discourse to arrive at more inclusive, open, permeable points of view (Mezirow, 2000). His is a learning theory, one that speaks to the importance of individuals facing their own hidden assumptions in order to grow and develop. Schwab's deliberative curriculum theory informs the process of reflective inquiry in which to design curricula. It requires the consideration of the widest possible variety of alternatives to be most effective (Schwab, 1978/1970, p. 319). Schwab's curriculum theory includes important ideas about what is included as part of the curriculum and how to deliberate in non-linear, complex, fluid ways aimed at identifying the desirable, and at either attaining the desired or altering the desires (Schwab, 1978/1970, p. 291). These two theories will be explicated below and connections will be made to graduate professional education.

<div style="text-align:center">Transformative Learning Theory</div>

Thirty years after Mezirow first described it, transformative learning theory is now the most empirically researched theory of adult learning. Mezirow differentiates between technical or instrumental learning, learning to control or manipulate the environment or other people (Mezirow, 1996, p. 163) and communicative learning, seeking the meaning and significance of their assumptions, beliefs, and values. Mezirow says that adults are trapped by their histories, in need of the ability to reflect upon their taken-for-granted assumptions that are the products of years of socialization and experience (1978). An adult learner's most important responsibility is perhaps the questioning of assumptions. This is adult learning—when the learner can examine the previously held presuppositions, the frames of reference that lie below the surface of one's

awareness, and critique those positions in ways that allow for change and growth. When this happens, their "taken-for-granted frames of reference become more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action" (Mezirow, 2000, p. 7-8).   Often, transformative learning is a major structural shift in consciousness as a result of reflecting critically on the frames of reference one holds. According to Mezirow, this type of learning is not simply a heightened sense of new understandings; it involves changing mental models or shifting worldviews.

Mezirow agrees that students need instrumental learning—learning how to do things and how to solve problems. However, he points out that many educators think that this kind of learning is the only kind. They get stuck in a traditional, "normal" way of doing things, as Kuhn would say (Kuhn, 1986). Typically, programs with this orientation define educational objectives in terms of specific behaviors, previously determined by a task analysis and a needs assessment. These types of programs usually have a fixed sequence of exercises or modules and they proceed in a linear fashion, from explanation, demonstration, practice, test, and feedback. This is what Mezirow calls a "technicist approach" which spawns concepts such as competency-based education, management by objectives, criterion-referenced evaluation, and empirical/analytical research (Mezirow, 1991, p. 213).

Contrary to the technicist approach to learning for adults, Mezirow says that creating conditions of learning that would foster transformation is the cardinal goal, the central purpose, and the heroic promise of adult learning. He maintains,

There is an egregious assumption that the acquisition of knowledge or attainment of competencies will somehow automatically generate the understandings, skills, and

dispositions involved in learning to think autonomously. However, there are different

processes of learning involved and different forms of appropriate educational

intervention. (Mezirow, 1997, p. 9)

Mezirow states boldly "transformative learning is not an add-on. It is the essence of adult

education" (Mezirow, 1997, p. 11).

During the past thirty years, significant empirical studies have been published in peer-

reviewed journals, describing and explaining elements of transformative learning theory. Eleven

of those studies include some aspect of the professions or graduate professional education. One

looked at medical education (Goldie, Schwartz, & Morrison, 2005), another focused on nurses'

experiences moving from RN to BSN (Marita, Leena, & Tarja, 1999), one studied the group

learning experiences of in a graduate course for education administration professionals (Scribner

& Donaldson, 2001), another included graduate students who were studying adult education

along with counselors (Boyd & Fales, 1983), two focused on students learning ecological or

environmental issues (Feinstein, 2004; Lange, 2004), three looked at transformative learning

among adult educators (King, 2002; Kreber, 2005; Lyon, 2001). One other study looked at life

mission as it relates to transformation, which seems akin to the vocation or calling idea of being

a professional (Kroth & Boverie, 2000).

Despite the research, Mezirow's theory of transformative learning is still widely

unrecognized and not intentionally used in graduate professional program designs. A perusal of

the indexes of general books on professional education reveals the absence of Mezirow's name

(Goodlad, 1984; Curry & Wergin, 1993; Eraut, 1994; Hoberman & Mailick, 1994; Haworth,

1996; May, 2001; Shulman, 2004/1998; Sullivan, 2005). Even though Cranton has written

extensively on using transformative learning theory for professional development in higher

education (Cranton, 1996), and Brookfield has urged faculty to engage in critical reflection (Brookfield, 1995), there seems to be a general lack of awareness of the theory and a lack of understanding of how to foster transformative learning in graduate professional education.

Deliberative Curriculum Theory

In the same way that transformative learning theory responds to the "technicist" approach to a linear type of learning, so deliberative curriculum theory was born out of a reaction to what came to be known as the Tyler Rationale (Tyler, 1949), a linear, administrative procedure for curriculum development. Tyler's four basic phases to curriculum development have dominated the field for decades. The educator was to follow these steps: first select and define learning objectives; second, select and create appropriate learning experiences; third, organize the learning experiences to achieve maximum cumulative effect; and fourth, evaluate the curriculum. However, many scholars in the curriculum theory field no longer see the problems of curriculum as "technical" problems, that is, problems of "how to." Instead, the problems are really "why" problems, which means what was before only something to be solved, now it is something to be understood and resolved. In essence, the field of curriculum theory has transformed from curriculum *development* to curriculum *understanding* (Pinar, Reynolds, Slattery, & Taubman, 1995, p. 8). Systematic ways of creating linear curricula have given way to deliberative inquiry (Reid, 2006).

Discourse and dialogic exchange is used to work toward understanding within the framework of transformative learning much like discussion and deliberation is used within the deliberative curriculum theory framework. Deliberation emphasizes a process of reflective inquiry for building curriculum. Schwab, who first articulated the theory in parts during the 1950s and 1960s, but more so in 1970, was a prominent educator who had been greatly

influenced by the curriculum ideas from Teachers College at Columbia University and the

University of Chicago. He retired from the latter as professor of education in 1974. He was

greatly influenced by Dewey's style of philosophizing, in which it is said he renounced "any

intention of 'proving' in favor of moving men [sic] to reconstruct and test by practice" (Schwab,

1978, p. 171). By 1970, he had developed a framework he called "the practical—a language for

curriculum" (p. 287). Interestingly, he felt the curriculum field itself had become moribund

because of an overemphasis on theory, but that the problem was not that it needed to simply shift

its focus to application. Instead, "he viewed curriculum problems as practical problems about

choice, action, educational policy, and practice in complete, unique, complex situations, in which

belief systems play a central role" (Harris, 1993a, p. 42). This was a reaction against Tyler's

basic principles of curriculum design and evidence of Dewey's influence. Schwab noted as early

as 1959 that, for Dewey, "the effective 'learning situation' is not the one which leads by the

quickest, most comfortable route to mastered habit and attitude, used precept and applied

knowledge, but the one which is provocative of reflection, experiment, and revision" (Schwab,

1978, p. 173). Schwab applied this idea to curriculum development. The deliberative process of

curriculum inquiry came to be seen as a recursive practice involving multiple stakeholders who

consider varied points of view that would continually lead to the practice of inventing and

reinventing positive learning experiences for students. Figure 1 illustrates the difference between

the systematic process and the deliberative process of designing curriculum as described by

Schwab.

Figure 1 Basic Premises of Schwab's Theory: The Theoretic Versus The Practical

VS.

Intellectual
Or
Theoretic Work—State
of Mind,

Moral
Or
Practical Work—State
of Affairs,

Evaluate Means and
Ends, which can change

Determine Objectives

Plan Instruction

Conduct Instruction

Evaluate Instruction

Seek to Understand
Different
Perspectives of the
Commonplaces

Deliberate on
Action

Deliberate to arrive
at the Mean of the
perspectives

Process is fixed, pre-determined,
and Systematic

Process is recursive, dynamic, and asystematic

Chapman, 2007

When Schwab used the word, "practical" he was not referring to "practice," or to doing more of what is in the left side of Figure 1. In fact, he maintained that the field had come to rely on this systematic theory and practice approach to curriculum design too much and needed to break away into a recursive, dynamic, asystematic way of thinking about curriculum.

Schwab was helpful in broadening the definition of curriculum from being subjects students studied or teachers taught to what he called four *commonplaces* of equal rank: the learner, the teacher, the milieu (of the learning environment and from which the learners come), and the subject matter (p.371). Subject matter representatives could include experts of the field who are not teachers such as practitioners, future employers, members of boards of certification, journal editors, etc. None of the commonplaces could be omitted without omitting a vital factor in educational thought and practice. Neither should one be emphasized over another, which he believed to be the flaw of many curriculum trends, such as the student-centered curricula of Progressivism or subject matter curricula of the more recent decades.

Harris (1993, pp. 41-42) believed that the deliberative curriculum inquiry process is beneficial for graduate professional education. Curry substantiated this position by contrasting the deliberative curriculum inquiry process with the traditional empirical/analytic approach to developing curriculum (Westbury, 1994, p. 38), pointing out the stark difference. For instance, in the empirical/analytical approach, there is usually only a small subset of faculty who work on a hierarchical ordering of facts, concepts, and principles, in the structure of traditional academic programs, led by discipline experts. But within a deliberative curriculum inquiry, the participants include many faculty, some students, and some practitioners, who embark on a process of discovery and consensus, seeking integration, being led by an expert in deliberation. The

curriculum specifications are ordered by practice and all who participate have a sense of ownership.

Engaging educators of graduate professional education in deliberative curriculum inquiry, using the four commonplaces is a promising approach to curriculum design. It could assist them in challenging their assumptions, beliefs, and values about the four commonplaces. This challenge could lead to disorienting dilemmas, as Mezirow would suggest, as their consciousness would be raised regarding the learning process, that it can and should be more than technical learning and should focus more on deep understanding of one's hidden assumptions, beliefs, and values. As they reflect upon the premises of their beliefs and assumptions, engage in discourse, and deliberate, they will be able to embark upon a more constructive approach to curriculum planning than the traditional empirical/analytical approach, leading to curricula that would foster the transformation and development of students to not only be able to know things and do things as professionals, but who would *be* professionals.

The Study

Being a professional, or one who *professes*, as Shulman said, through service, understanding, practice, judgment, learning from experience, and community means that one becomes a leader—not necessarily a positional leader, but a personal leader. This goal requires more than theory and practice. Heifetz (1994) wrote that it is common to train people to solve technical problems with technical solutions, but to prepare them to embrace ambiguous or uncertain challenges and to engage in adaptive work is the most important aspect of leadership development.

Adaptive work consists of the learning required to address conflicts in the values people

hold, or to diminish the gap between the values people stand for and the reality they face.

Adaptive work requires a change in values, beliefs, or behavior. (Heifetz, 1994, p. 22)

Until now, there have been no efforts to integrate transformative learning theory and

deliberative curriculum theory into a model or heuristic that would assist educators in developing

graduate professional education programs. The purpose of this study was to integrate the two

theoretical perspectives to create a new synergistic heuristic to aid educators in designing

graduate professional education programs that will be more inclined to develop those who are

truly professionals and meet the current demands upon the professions. Faculty will also likely

need transformative experiences, themselves, because most are used to the dominant way of

creating curricula in higher education today—using the Tyler Rationale. Using a deliberative

inquiry for curriculum design and purposefully planning for experiences to foster transformation

for students will likely be a disorienting dilemma for most.

The literature demonstrates a need for professional education to reform—to become more

focused on communicative types of learning rather than instrumental learning, more centered on

helping students make judgments in the face of uncertainty, and more aligned with helping

students examine their presuppositions so that they are willing to accept the calling of being a

professional and to serve the public good. Calls for reform also center on curriculum design, and

the need to include multiple stakeholders with equal voice, to have an ongoing diagnosis of the

curriculum, and to deliberate and make decisions based on what is best in particular situations.

However, the literature does not reveal any connection of the two theories that would assist

professional educators in transforming graduate professional education—transformative learning

theory and deliberative curriculum theory.

Chapter Two: Literature Review

Structure of the Literature Review

The goal of this dissertation was to create a new theory by integrating two existing theories. In order to carefully, appropriately, and effectively accomplish this goal, the literature review accomplished two things: it examined the theories thoroughly and modeled the process of developing the theories. All theories come from other theories, ideas, experience, logic, and creative imagination. The presentation of each theory needs to model the development of each theory. How they were developed exemplifies how I developed my new theory. Therefore, the process I used in describing each theory is as follows—the epistemological development of the theory is described, i.e., what and who informed the theorist's development of the theory. Was it experience, research, and ideas from philosophy, psychology, and sociology? Whose writings did the theorists read, and what experiences did they have? How did these ideas, writings, and experiences influence the development of the theory? Second, what empirical research has been done on the theory and published in peer-reviewed journals? How was the research conducted? What were the methodologies for researching the theory and why? Understanding the methodologies of research on the theories illuminates the type of theory it is. For instance, if most of the research is qualitative and phenomenological rather than quantitative, perhaps this phenomenon exists because the theory itself is more of a constructivist theory focused on understanding and construing meaning rather than verifiability and validity. Finally, what did the critics say about their theories and how did the theorists respond? Thus, this three-step process was used to look at both Transformative Learning Theory and Deliberative Curriculum Theory— analyzing its epistemology, research, and critique, and these same three steps were included in the 10-phase process I developed for integrating the two theories in chapter four.

Transformative Learning Theory

Part one of chapter two defines and describes Mezirow's transformative learning theory. First, its epistemological development is explored. Next, empirical studies published in peer-reviewed journals in the past thirty years on the theory are analyzed. Finally, what Mezirow's critics have said and how he responded is examined. The scope of the literature review will be limited to Mezirow's view of the theory (which is decidedly Western), rather than looking at other domains, such as the spiritual, Afrocentrist, or planetary domains of the theory (Taylor, 2005).

Deliberative Curriculum Theory

Part two of chapter two provides a brief discussion of how the focus of curriculum theory moved from curriculum development to deliberative inquiry. Attention is given to four different approaches to curriculum development: systematic, radical, existential, and deliberative (Reid, 2006), and a case is given for using deliberative inquiry for professional education. The intellectual contributions to the theory from Aristotle and Dewey are explicated. Furthermore, program planning, as found in the adult education literature, is compared to deliberative curriculum inquiry. This background offers a context for understanding deliberative curriculum theory as it developed in the past few decades. This section will discusses research that has been conducted on the theory, and how it has been used for graduate professional education. Attention is given to what Schwab meant by the *practical* curriculum process, deliberation, and the four commonplaces: the teacher, the student, the milieus, and the subject matter.

Graduate Professional Education

The third and final section of chapter two defines and describes more thoroughly the terms *profession* and *professional* and discusses how the concept of the professional has

developed over the past century. It explores a brief history of professional education, and it chronicle the cries for reform over the past six decades, the need for professionals to be able to move beyond competence to proficiency and expertise by examining their presuppositions, learning how to deal with uncertainty, and to answer a higher calling than careerism—a call to serve the public good. Suggestions for reform provided through the decades are explored and a correlation will be provided to show how these suggestions relate to both transformative learning theory and deliberative curriculum theory. Based on this literature review, it is evident that an integration of the two theories can help to resolve some of the curricular and pedagogical issues facing professional education.

Chapter Three: Methodology

This is a theoretical dissertation, and as such the methodology chapter is dedicated to explicating why and how I built a new theory. In order to do a theoretical dissertation, I must first uncover the nature of theory—what it is, why it is important, how it serves professionals, how theories have been developed throughout history, how to develop a theory of integration, and how to assess a theoretical model.

It is my position that theories are always predicated upon ontological and epistemological assumptions. Therefore, this chapter follows two cardinal questions related to theory building throughout history into a framework for building a theory of integration today: First, what is the ontological position of the theory, or how does the theorist answer the question, "What is the essence of reality?" Second, what is the epistemological approach to building the theory, or how does the theorist answer, "How can we know what we know?" The answers to these questions determined whether this theory of integration will be from a positivist or constructivist perspective.

Attention was given to a particular theory of theory building: generative theory, which is designed to uncover and dismantle conventional assumptions. It seeks to reinvigorate the theories of the past, redefine or recontextualize their meanings and find the potential opportunities they afford (Gergen, 2001, p. 165). Gergen calls this activity *dialogic* in that academic discourse and practice percolate outwards, and the discourses and practices of organizations filter back into the academy (p. 165). In this aspect, generative theory is very much like transformative learning theory, which relies upon discourse and dialogic exchange, and deliberative curriculum theory, which, of course, calls for full participation in deliberation.

After determining the foundation for the theory, the chapter defines, describes, and analyzes different styles, kinds, and functions of models. The type of model that was developed was determined. The chapter culminates with a ten-phase framework for theory integration that I developed, which was used to create a new theoretical model or heuristic demonstrating the synergy that is produced when transformative learning theory and deliberative curriculum theory are brought together.

The word heuristic is used here purposely for several reasons. First, the term comes from Greek origin meaning, "serving to find out or to discover," and it is an approach to a problem that is necessarily incomplete, given the knowledge available, but is nonetheless useful for guiding thinking and making decisions (Hertwig & Todd, pp. 450). One of the basic premises underlying this dissertation, and explicated in the second chapter, is that the linear, seemingly unproblematic approach to curriculum design and instruction is a misleading premise that can often lead to incorrect and even hegemonic practice. For me to design a new theoretical model as *the* theory to fix the problem would be ironic, antithetical, and inappropriate for the goal. Instead, this new theory must embrace the uncertainty and complexity of the teaching and learning

endeavor. In the same vein that Einstein promoted a heuristic regarding his quantum view of light in 1905, saying he could not be sure it was correct, but he knew it made a significant contribution to science (Hertwig & Todd, p. 450), I believe the integration of these two theories will not be the only answer to solve the problems of professional education, nor would it be problem free, but I believe it will contribute significantly to the advancement of true professionalism among graduating students.

Secondly, using a heuristic to make a decision is closely aligned with the work of transformative learning and deliberative curriculum inquiry. The goal of transformation is to help adults form more open, permeable habits of mind that lead to *actions* based on inclusivity. The goal of deliberation in curriculum work is to make decisions, to choose *actions*. Using a heuristic causes curriculum workers to engage in the very deliberations over decisions that must be made in order to create a dynamic curriculum, representing various viewpoints. Gestalt psychologists spoke of heuristic reasoning as that which conceptualized "thinking as an interaction between inner mental processes and external problem structure" (p. 450). As such, those engaged in using a heuristic would be cognizant of their environment, looking around, as it were, and analyzing the problem, taking in this information, which is restructured and reformulated by inner processes. Those inner processes are formed by context and experience, which inform and influence decisions. In essence, the work of using a heuristic is much like the work of transforming and deliberating. Therefore, it was a fitting approach for this study.

By using a heuristic, I acknowledge the fact that curriculum planners and educators are influenced by the inner processes of their brain and the environment in which they live and work. Therefore, my own personal experiences and biases are important to address. Chapter three closes with a discussion of my positioning in doing this research. Almost a hundred years after

Flexner singled out Johns Hopkins University as an exemplar of graduate professional education, I find myself as an instructor and the Director of the Center for Teaching and Learning at Johns Hopkins. My primary role is to assist faculty in designing or redesigning curricula to create new programs in the School of Professional Studies. I also do consulting for other schools that wish to engage in deliberative processes to create new curricula. Furthermore, I am a graduate of a professional school not associated with a university (a seminary), and I also hold a degree from a graduate professional education program from a university. I teach adult education courses for graduate education students and ethics for graduate business students, and I have a passion for helping students transform by fostering transformative experiences for them.

Chapter Four: The New Theoretical Model

In chapter four, I worked through my ten-phase framework for building a theory of integration. The framework is as follows:

1. Establish the theory-builder's ontological and epistemological beliefs and values. (Habermas, 1971; Kaplan, 1998; Mezirow, 1996)

2. Choose a theoretical paradigm for inquiry based upon ontological and epistemological beliefs of the inquirer. (Habermas, 1971; Mezirow, 1996; Olds, 1992)

3. Identify the gap, lack, problem, need, question of interest, or other type of phenomenon for inquiry.

4. Choose the kind, style, and function of a model to be used. (Barbour, 1974; Kaplan, 1998).

5. Research the theories that may deepen the phenomenon in question. (Bentz & Shapiro, 1998).

6. Use generative efforts to reinvigorate theories of the past, redefine or recontextualize their meanings to be used in new ways. (Gergen, 2001)

7. Reflect upon published empirical research on the theories being studied and integrated. (Bentz & Shapiro, 1998)

8. Reflect upon the theory-builder's own experience and practice that informs the theories being integrated. (C. Argyris & Schön, 1974)

9. Use "creative imagination" to develop an image—a model, metaphor, or some other image to demonstrate the synergy, integration, and new and deeper understanding of the situation or phenomenon. (Barbour, 1974; Kaplan, 1998; Kuhn, 1986; Olds, 1992)

10. Assess the theoretical integration and/or model with a variety of criteria. (Barbour, 1974)

The eighth phase will be my opportunity to bring personal experience to bear upon the new integration of the theories. Four vignettes of my experience in leading deliberative curriculum design sessions in a variety of contexts were used to analyze experience and allow it to inform the development of the new synergistic heuristic. In this way, the theory integration project is not without input from experience, i.e., it will not be theory in isolation. It will be informed by my own experience.

The ninth phase of the theory-building framework was the creation of a heuristic to serve as a scaffolding device to assist educators in using both transformative learning theory and deliberative curriculum theory to design graduate professional education programs that will yield students who will not only know what they need to know for their field, and be able to perform requisite skills, but who will also *be* transformed professionals. The heuristic took the form of the Curriculum Caucus Guide. In essence, it will help educators to implement a deliberative

process that will encourage transformation. Finally, I assessed the new theory according to the rubric I designed in chapter three.

Chapter Five: Implications

The final chapter of this dissertation is the "so what" chapter. It describes implications of the new theory for the field of graduate professional education, five major accomplishments of this study, a discussion of the problems likely to be encountered in its implementation and suggestions to help with those problems, and an extrapolation of how the heuristic could be used in other educational domains. The dissertation closes with a look at questions evaluation studies could address.

Chapter 2: Literature Review

Because there are calls for a reform of graduate professional education, this chapter will argue that the integration of transformative learning theory with deliberative curriculum theory will provide a heuristic to transform its epistemological purposes, curriculum designs, and methodological processes. That is, my position is that it is not enough to merely argue more theory, less practice or less theory, more practice. Nor is technical expertise equivalent to professionalism. True reform of professional education will not come until the epistemological roots of professional education endeavors are rediscovered, re-examined, and to some extent, uprooted. It is not enough to tamper with methodological strategies or trendy techniques for the classroom, such as problem based learning (PBL) or case study methods. Instead, this study will go deeper and begin with philosophical presuppositions about what the aims of professional education are, how transformative learning theory would significantly contribute to changing the experience of students and faculty beyond theory and practice and help them to achieve higher aims, and what deliberative curriculum theory contributes to planning professional education.

TRANSFORMATIVE LEARNING THEORY

Brief History of Adult Learning

The purpose of this section is to situate transformative learning theory as described by Mezirow within the context of adult learning in the U.S. The field of adult learning will be discussed in a broad and general way, acknowledging that while many disciplines and figures contributed to the growing field throughout the past century, there were key contributors and turning points that led to a defining of the discipline.

John Dewey

Eight years after Johns Hopkins University opened its doors, one of its most renowned graduates earned his doctorate in philosophy. It was 1884, and his name was John Dewey. While at Johns Hopkins, he studied logic under Charles Sanders Pierce who planted the seeds of philosophical pragmatism, psychology with G. Stanley Hall who became a distinguished child psychologist, and philosophy (particularly Kant and Hegel) with George Sylvester Morris, who emphasized the organic nature characteristic of German Idealism. These professors left an indelible mark upon their student, who has been called the single most influential philosopher of education the U.S. has produced. His impact on all forms of education has been immense (Elias & Merriam, 2005, p. 54).

Dewey reacted to the "traditional" ways of educating children at the time, which was marked by subject-matter focus and proper classroom conduct being handed down from the past in which students must be docile, receptive, and obedient (Dewey, 1938, p. 18). He was fascinated by the phenomenon of experience, and he pointed out the schools of his day had lost the practical meaning that it had borne since the time of Plato. It ceased to mean ways of doing and being done to, and became the name for something cognitive and intellectual. It meant the apprehension of material, viewing the mind as purely receptive. The idea was that the more passive the mind, the more likely objects would impress themselves upon it. The impressions made upon the mind were called "sensations" and thus empiricism became a doctrine of sensationalism—or a doctrine that identified knowledge with the reception and association of sensory impressions. John Locke, one of the most influential empiricists, held that the mind is a blank piece of paper (tabula rasa) with nothing on it at birth as far as contents or ideas are concerned (Dewey, 1916, p. 267-268).

Dewey sought to correct this one-sided view by teaching that experience is primarily an active-passive affair, not solely cognitive, and that the measure of the value of an experience lies in the perception of relationships or continuities to which it leads up (Dewey, 1916, p. 140). By leading up, Dewey meant that the student must reflect back to the meaning of the experience for significant learning to take place. The stimulus to thinking comes from determining the significance of some act (performed or to be performed) and anticipating the consequences. If those consequences are not known, then a hypothesis is set up, existing conditions are carefully scrutinized, and the implications of the hypothesis are developed—an operation Dewey called *reasoning* (Dewey, 1916, p. 151). Emphasis on the scientific method while at Johns Hopkins University no doubt contributed to Dewey's understanding of epistemology, i.e., students do not just receive information. Instead, they experience things, reflect upon those experiences, and think about them in ways to construe meaning. Hence, Dewey's writings were marked with these themes—experience, reflection, and reasoning.

Furthermore, Dewey believed that teachers were not just purveyors of information, but rather shapers of experiences for students to promote their growth.

> A primary responsibility of educators is that they not only be aware of the general principle of the shaping of actual experience by which by environing conditions, but that they also recognize in the concrete what surroundings are conducive to having experiences that lead to growth. Above all, they should know how to utilize the surroundings, physical and social, that exist so as to extract from them all that they have to contribute to building up experiences that are worth while. (1938, p. 40)

Therefore, Dewey was centrally interested in the growth of students, not just their acquisition of knowledge. He viewed the cardinal role of educators as one that supervised the growth and

progress of their students; hence he promoted "progressivism" as opposed to the traditional paradigm at that time—one of passive, docile students receiving information. The traditional approach focused on the subject matter; the progressive approach made the students the focus. He also urged the participation of the learner in the learning process. This student participation was not only in the class activity itself, but was to also take place to some extent in the actual planning of the experiences.

> There is, I think, no point in the philosophy of progressive education which is sounder than its emphasis upon the importance of the participation of the learner in the formation of the purposes which direct his activities in the learning process, just as there is no defect in traditional education greater than its failure to secure the active co-operation of the pupil in construction of the purposes involved in his studying. (1938, p. 67)

Dewey advocated a sense of using student ideas for planning, or self-directed learning. Critics of progressivism felt this focus on students disempowered educators and led to dangerous outcomes, but Dewey sought to correct this overreaction by elaborating on the role of the teacher further. He said that these plans are a cooperative enterprise, not a dictation, and that while the teacher's ideas are not a "mold for cast iron results", they are the starting points to be developed into plans through contributions from the experience of all engaged in the learning process.

> The development occurs through reciprocal give-and-take, the teacher taking but not being afraid also to give. The central point of this is that the purpose grow and take shape through the process of social intelligence. (1938, p. 72)

Dewey's ideas of progressivism, along with the importance of student participation and self-directed learning, experience, reflection and reasoning are still being discussed in every level of education almost a hundred years after he began writing. Though he wrote primarily with

children in mind, adult educators have long since found his ideas to be seminal to the birth and development of the field. Indeed, the roots of Dewey's thoughts can be traced through the development of the adult learning field from its inception with Eduard Lindeman.

Eduard Lindeman

Lindeman, a friend and colleague of Dewey, has been called the most influential leader among those who established adult education as a field in the U.S. (Mezirow, 1991b, p. 196). Lindeman was principally concerned with education for life rather than education for vocation. He felt that education conceived as a process coterminous with life revolves around non-vocational ideals. "Its purpose is to put meaning into the whole life" (Lindeman, 1926, p. 5). Like Dewey, Lindeman also eschewed authoritarianism and subject-focused teaching. He said, "Authoritative teaching, examinations which preclude original thinking, rigid pedagogical formulae—all of these have no place in adult education" (Lindeman, 1926, p. 7). Rather than subject-focused teaching, he promoted a situation-approach to education, in which the learning process is at the outset given a setting of reality. He agreed with Dewey that experience is of utmost importance for learners and said it is the resource of highest value for adult education.

Lindeman also explored the notion of power and freedom in education. He felt that humans could not be free from nature, but could sense freedom with nature. For individual freedom, he advocated that the learner first look within, in the same way a psychotherapist guides clients to self-discovery and personal growth. Herein is the best kind of power, according to Lindeman, not to have power over another, but to have "power with" knowledge. Knowledge is a chief aspect of power, and genuine power is wisdom. To include knowledge of the self, the student must go beyond Bacon, who equated knowledge with understanding cause and effect, to Socrates, who said, "Know thyself" (Lindeman, 1926, p. 30).

Carrying the notion of power and freedom a step further, Lindeman said that intelligence, power, self-expression, and freedom come to have meaning only when we see them as cooperating as a functioning whole, or an integrated personality (Lindeman, 1926, p. 53). However, this pursuit for personal integrity does not elevate individualism over a social organism. On the contrary, learners are caught within a social milieu, according to Lindeman, and must learn how to function within groups, societies, organizations, and the like. No doubt, individual interests will conflict with those of others, and sparks will fly upward.

> And, conflicts between groups will occur so long as interests are variable. Education for
> collective life begins when interests are intelligently scrutinized and validified, and since
> interests are continuously in growing personalities, this validifying process must continue
> as long as we regard ourselves functional beings. (Lindeman, 1926, p. 101)

Lindeman, then, was concerned about education for life, not just for vocation or job training. He saw the importance of helping learners look inside themselves and to create meaning through the development of personal integrity and participation within society. He advocated the use of a situation-approach focus to adult education, rather than a subject-matter approach. It could be said that it was Lindeman who first took many of Dewey's concepts and applied them to adult education.

Malcolm Knowles

After being educated at Harvard, where he had been influenced by the philosophy of Alfred North Whitehead, Knowles began to work for the National Youth Administration (NYA) in Massachusetts. He created courses for young adults to take that would give them the skills employers were looking for. It was here that he met Lindeman, who also worked for NYA, and whose book, *The Meaning of Adult Education*, greatly influenced Knowles. He went on to earn a

masters degree at the University of Chicago, where he was particularly influenced by the work of Carl Rogers, a humanist. Eventually he earned his Ph.D. from the same school in 1960. In 1959 he accepted a faculty position at Boston University in adult education.

Knowles is best known for popularizing the notion of *andragogy*, a European concept that meant the art and science of helping adults learn, as opposed to pedagogy, the art and science of helping children learn. Prior to the 1970s educators who focused on adult learning depended primarily on research and philosophy about learning in general and applied it to adult settings. In 1970, several publications began to shift the focus to a unique way of thinking about how adults learn (Houle, 1996; Kidd, 1973; M. S. Knowles, 1970; M. S. Knowles, 1973). The best known of theses publications is the work by Knowles on andragogy, which posits five basic assumptions about the adult learner as someone who

1. has an independent self-concept and who can direct his or her own learning

2. has accumulated a reservoir of life experiences that is a rich resource for learning

3. has learning needs closely related to changing social roles,

4. is problem-centered and interested in immediate application of knowledge, and

5. is motivated to learn by internal rather than external factors. (S. B. Merriam, 2001, p. 5)

However, since the 1970s and 1980s, much debate has taken place over whether andragogy is a legitimate theory of adult learning. Some children can easily fit into the andragogical model, being self-motivated, self-directed, interested in immediate application, etc., and some adults may need more extrinsic motivation, external direction, and may be less inclined to apply what they learn right away. Even Knowles backed down from his original position and later called

andragogy a set of assumptions about adult learners. Andragogy appears to be mostly situation specific and not unique to adults (S. B. Merriam & Caffarella, 1999, p. 275).

During the 1970s, another very important educational discourse that was gaining strength in the U.S.—behaviorism. Within this framework, learning was defined as a change in behavior and teaching was viewed as a set of steps to identify what was to be learned, arrange the conditions for learning, and evaluate whether it was learned. This was the systematic approach of instructional technology. Through task analysis, it could be determined what skills, knowledge, and attitudes needed to be learned, and instructional design plans could be made to translate those needs into objectives. Behavioral objectives, long lists of competencies, and performance agreement between objectives and assessment became prevalent. The underlying assumption of this school of thought was that learning must be both predictable and observable (Pratt & Nesbit, 2000, p. 119).

Podeschi says that the 1970s saw a bridging of the behaviorist technical rationality and humanistic self-fulfillment, which focused on professionalized techniques rather than on philosophical beliefs, and was exemplified by Knowles (Podeschi, 2000, p. 616). The implications of merging behavioral and humanist perspectives into an instrumental approach are far-reaching even today.

> The real significance of Knowles is that his popularity in the U.S. mainstream adult education field during the 1970s and 1980s reflects a deeper cultural merger of behaviorist and humanistic technequism in American institutional life. With a drive toward professionalization, this syndrome promoted a bureaucratic individualism that further dichotomizes technical means from philosophical aims. And rather than subsiding now, this cultural current is gaining force. (Podeschi, 2000, p. 619).

One of the weaknesses of andragogy, besides the fact that it was not really a theory and its assumptions could not be assigned solely to adults, is that it tended to focus on individualism rather than community, neglecting the an emphasis on democratic education, such as promoted by Dewey, or a social awareness, emphasized by Lindeman.

Robert Gagne

While andragogy and behaviorism were both gaining in popularity, yet another discourse began to take hold in the world of adult education—cognitive learning. This school of thought had elements of behaviorist thought because it emphasized the computer-like aspects of the human brain with inputs and outputs. It also promoted learning as the storage and retrieval of information, short term and long term memory, speed of processing, types of intelligence, and effects of age on processing (Pratt & Nesbit, 2000p. 120). Perhaps the most influential model of teaching adults that came from this approach was Gange's notion of instructional systems design (ISD)(Gagne, Briggs, & Wager, 1992). Also influenced by behaviorist assumptions of prediction and measurement, ISD was particularly capitalized upon by the military, industrial, and corporate worlds for training purposes. With the notion of systematic, linear learning, computer-based instruction (CBI) became possible, and training programs were mass-produced or eventually put the Internet.

Paulo Freire.

Different from behaviorism, humanism, or cognitivism, radicalism also appeared on the adult education scene in a significant way in 1970 when a landmark book was published—*Pedagogy of the Oppressed* (Freire, 1970). Freire was a Brazilian Marxist who viewed human beings as unfinished and always in the process of becoming, always creating culture and history by combining reflective activity with actions (Elias & Merriam, 2005, p. 154). He believed that a

culture of silence, either through ignorance or education, led to oppression. The oppressors need to be freed as much as those being oppressed.

Freire warned against the notion of banking education in which students are mere containers or receptacles to be filled by the teacher who makes deposits. The meeker they are, the better students they are. The more the students work at storing deposits entrusted to them, the less they would develop a critical consciousness which would lead to change and transformation of their world (Freire, 1970, p. 71-73). Critical consciousness is achieved through a process of conscientization, a radical denunciation of dehumanizing structures, accompanied by an announcement of a new reality to be created. "It entails a rigorous and rational critique of the ideology that supports these structures and is brought about not through intellectual efforts alone but through praxis, the authentic union of action and reflection (Elias & Merriam, 2005, p. 157).

Summary of Adult Learning Context

Dewey laid the foundation for adult education by ushering in progressivism with its emphasis upon student-focused rather than subject-based instruction, experience, reflection, reasoning, and democracy in education. Lindeman birthed the field of adult education by applying Dewey's ideas to adult learning. He emphasized that education is life, not something one does to prepare for life, and therefore education should focus on how to help students grow. He focused on situation-based learning rather than subject-based learning, power with (not over) one's environment through intelligence, and personal integrity to participate in democracy.

The contributions of Knowles seem to have been both advantageous and problematic. The benefit of his work was that he clearly established the field of adult education as its own discipline by his use of the term andragogy. His assumptions about adult learners also helped adult educators to focus on humanistic elements of teaching adults. However, its focus on

individualization and its combination of behaviorist notions of professionalized techniques seems to have shifted the focus to more technical aspects of the enterprise, rather than on the philosophical and epistemological issues.

Cognitivism and behaviorism combined to offer the corporate, industry, and military worlds a seemingly unproblematic, linear, atomistic approach to training and learning. Gagne's principles of ISD was a model quickly adapted to computer based instruction for large numbers of people, shifting the focus back to the subject matter, away from individual students, and largely neglected the experience the adult learners brought to the learning endeavor.

Freire had a totally different passion—a critical stance upon all the educational programs for adults that kept people stuck in their class structure. He felt the teachers who perpetuated oppression over the students were just as much in need of liberation as the students. He railed against the notion of banking education in which the teacher's ideas are deposited into the head of students, and he called students to critical consciousness through a process of conscientization, a radical denunciation of human structures that limit freedom from oppression. He sought social transformation through a rational critique of ideology structures that dominated the masses.

The decade of the 1970s was a watershed era for adult learning with the work of Knowles, Gagne, Freire, and others. However, it was Mezirow (Mezirow, 1978b) whose work in this decade and the years to follow would become the most important theorist of all for adult learning. It was he who researched and developed a theory that he would come to call "precisely what adult education is about" (Mezirow, 1995, p. 55). Building on the work of Dewey, Lindeman, and Freire, and conducting his own research, he integrated his theory with other

philosophers, psychologists, and learning theorists to crystallize the distinguishing factor between learning for children and learning for adults.

<p align="center">The Development of Mezirow's Transformative Learning Theory</p>

This section will discuss how Mezirow developed his theory of transformative learning: his personal experiences, his nationally acclaimed research, key figures and ideas that influenced his thinking as he developed his theory, and criticism he received and to which he responded. Mezirow does not pretend to have a solidified, finished theory. Instead, he calls it a "theory in progress," (Mezirow, J. & Associates, 2000).

<p align="center">*Early Influences*</p>

It is no surprise that one of the things that led to development of transformative learning theory was a transformative learning experience Mezirow experienced himself. In the 1960s he was very involved as an adult educator focused on fostering democratic social action through adult literacy programs and community development in the United States and in many developing countries. He had developed a sense of identity around the image of being a social action educator. However, when he read the writings of Paulo Freire and Ivan Illich in the early 1970s, which challenged his presuppositions regarding adult education for social action, particularly his lack of awareness of the deep-rooted power in the community development process, he confronted a disorienting dilemma of his own that led to a deep and profound change in his perspective on adult education (Mezirow, 1991b, xvi-xvii).

Another event that contributed to the genesis of transformative learning theory was his wife's experience when she decided to go back to college to complete her undergraduate studies after being away from formal schooling for some time. She, too, experienced a perspective transformation, which led to a new career and life style. Her dramatic transformation piqued Mezirow's interest to understand this phenomenon that led to a profound change in her way of

seeing the world and her place in it. Therefore, he launched an large national study of women's community college re-entry programs, using a grounded theory approach to research the phenomenon of what he would later call *perspective transformation* (Mezirow, 1991b, p.168).

The study looked at women returning to college after a hiatus to participate in specialized reentry programs. He and his co-workers conducted structured interviews with 83 women in 12 programs in New York, New Jersey, California, and Washington, with 50 alumnae of the programs and with the professionals operating the programs and similar ones on 24 other campuses (Mezirow, 1978b, p. 168). From this study, Mezirow inductively delineated the concept of perspective transformation (a term used interchangeably with transformative learning in this dissertation) and identified 10 phases of the experience,

1. A disorienting dilemma

2. Self-examination with feelings of guilt or shame

3. A critical assessment of epistemic, sociocultural, or psychic assumptions

4. Recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change

5. Exploration of options for new roles, relationships, and actions

6. Planning a course of action

7. Acquisition of knowledge and skills for implementing one's plans

8. Provisional trying of new roles

9. Building of competence and self-confidence in new roles and relationships; and

10. A reintegration into one's life on the basis of conditions dictated by one's new perspective. (Mezirow, 1991, p. 168)

Transformative learning theory addresses the structural shift of consciousness that one can experience when confronted with a disorienting dilemma. When values, beliefs, presuppositions, or structural ways of seeing the world are confronted with something very different, challenging deeply held ideas and ways of being, adults are faced with a disorienting dilemma. The dilemma is that they can either reject this idea that does not seem to fit their way of thinking or their habit of behavior, or they can grapple with the strange idea causing them to re-evaluate their beliefs and worldviews. This experience causes emotional stress, but it can lead to transform their perspectives. This process is uncomfortable, and it often takes time for adults to process new ideas with deeply held beliefs and frames of reference beneath the surface of their thinking (Mezirow, 1991).

A final significant influence on the beginnings of this theory was Mezirow's connection to Roger Gould, a psychiatrist with whom he spent part of a sabbatical studying how adult learners who were in difficult life transitions could overcome childhood learning impediments through transformative learning experiences. The psychological dimension to his theorizing has its roots here, in knowing and working with Gould, and in understanding how the field of psychotherapy could inform adult learning theory (Mezirow, 1991b, p. xvii).

Mezirow states that these four events—his and his wife's perspective transformation experiences, the national research project, and his work with Gould in the field of psychotherapy—particularly influenced his involvement in developing the theory. Therefore, personal experience, relational experience, empirical research, and a connection to and a validation from another field of study seemed to coalesce for Mezirow and lay the foundation for a theory he would describe two decades later as, "in progress" (Mezirow, 2000).

Besides Freire, many other writers have influenced Mezirow throughout the years. It would be a daunting task to list everyone whom Mezirow quotes in all his writings. This section seeks to focus on those thinkers and researchers whose contributions seem most salient to the theory. Early on, in his first publication on the theory, he reflects on the excitement he felt because the findings from his research resonated with the writings of so many others.

> The discovery of perspective transformation as an inductively derived theory of adult development is exciting because it is echoed in the rich literatures of existentialism and phenomenology, psychoanalytic theory, developmental psychology, and constructionist theory in sociology, as well as in the perspectives of Thomas Kuhn and Michel Foucault, the writings of Hegel, of the early Marx, of Paulo Freire, and of the psychologically oriented critical theorists. (Mezirow, 1978, p. 55)

A footnote to this statement lists twenty writers and documents these "echoes" to perspective transformation. Hidden down in the bottom of the list is the name, J. Habermas. This is the first reference to Habermas and his ideas that would become a regular part of nearly all of Mezirow's subsequent writings explicitly or implicitly.

The Influence of Philosophers

Jurgen Habermas

The impact of the writings of Habermas on Mezirow cannot be overstated. Mezirow probably refers to the ideas of Jurgen Habermas more frequently than any other source throughout almost three decades of writing. While Habermas is from the Frankfurt School of Critical Theory, Mezirow is not a critical theorist per se, although critical theory has significantly influenced his thinking. In fact, it is in his article entitled, "A Critical Theory of Adult Learning and Education" (Mezirow, 1981) that he introduced Habermas more fully and calls him the most influential thinker in Germany in the 1970s. But it is not just critical theory in general that

Habermas gives to Mezirow. Instead, it is his distinction between instrumental and communicative learning and his description of the universal, ideal conditions for rational discourse that have so profoundly contributed to Mezirow's theory (Mezirow, 1991b, p. xiv-xv), concepts explained more fully below.

Habermas was influential in calling attention to the fact that positivism, or the notion that the scientific method can be applied to social science research unproblematically, essentially brought an end to the need for epistemology (Habermas, 1971, p.67) and in its place emerged a philosophy of science. This shift in the way humans perceive knowledge and how one can *know* had a dramatic philosophical impact on communicating in general and on learning in specific (Habermas, 1984, p.3). Positivism and logical positivism (the emphasis of scientific method with logical reasoning) emphasized an instrumental- rational way of knowing and eschewed what could not be known through the senses and logic as inconsequential. Habermas called this concept a cognitive-instrumental rationality, that has, through empiricism, deeply marked the self-understanding of the modern era (Habermas, 1984, p. 10).

By differentiating between instrumental and communicative learning, Mezirow says that Habermas provided a foundation for formulating a comprehensive theory of adult education (Mezirow, 1981, p. 16). Habermas delineated between what he called "realistic" and "phenomenological" ways of knowing in this way.

> From one perspective the telos inherent in rationality appears to be *instrumental mastery*, from the other *communicative understanding*. Depending on which aspect is the focus of attention, our analysis can lead in different directions. The two positions may be briefly elucidated as follows. The first, which for the sake of simplicity I shall call the "realistic," starts from the ontological presupposition of the world as the sum total of what is the case

and clarifies the conditions of rational behavior on this basis. The other which we can call

the "phenomenological," gives a transcendental twist to the question and reflects on the

fact that those who behave rationally must themselves presuppose an objective world.

(Habermas, 1984, p. 11)

Thus, Habermas created a case for a theory of communicative action because, he said, not

all knowledge can come from empiricism and logic if one holds to a subjective view of reality.

Language must be used to communicate meaning and understanding. Hence, in the same way a

natural scientist observes data, a social scientist can interpret language. Hermeneutics is a

methodological tool that allows an investigator to explore meaning and understanding.

Postmodernism focuses on situated learning and contextual, local analyses. From this

perspective, truth is local, provisional, and changing (Brookfield, 2000a, p. 47). This position

goes against Habermas's ideas of a universal rationality that can be used for constructive,

meaningful dialogic exchange. Most postmodernists would prefer a statement such as,

"arguments held to be true for us at this time." However, Mezirow defends Habermas's position

that the rationality of processes of reaching understanding is universal because, he says, it is

unavoidable (Mezirow, 1990b, p. 11; Mezirow, 1995, p. 56-57). Furthermore, Mezirow makes an

important distinction about Habermas's ideas, i.e., rational discourse, in which knowledge claims

are validated through consensus is different from opposing systemic forces, such as a monetary

system or bureaucracy, which create constraints on free and full participation in rational

discourse. In these cases, communicative action does not confront the problem of power

imbalance; but rather, the so-called consensus perpetuates class structure. In this sense, adult

education is different because it is concerned with resisting the hegemony of the systems

(Mezirow, 1995, p. 57) and not with simply building consensus.

Another important contribution Habermas made to transformative learning theory is his differentiation between empirical-analytical theories from reconstructive theories, such as those developed by Chomsky, Piaget, and Kohlberg. "Reconstructive theories seek to explain universal conditions and rules implicit in linguistic competence, cognitive and moral development, and the nature of human communication" (Mezirow, 1996b, p. 166). This is exactly what Habermas did with his theory of communicative action (Habermas, 1987, p. 2) and, thus, Habermas's theory of communicative action is a reconstructive theory, as is transformative learning theory. That is, Habermas did not set out to prove a hypothesis, or to build a logic model. He sought to reconstruct understanding through a model of universal rationality, hermeneutics, and communicative action. Transformative learning theory is similar in that it is not built upon a hypothetical-deductive model to prove that adult learning should take place in any particular way. Instead, it seeks to enable learners to construct understanding through dialogic exchange and interpretation of frames of reference.

Critics charge that transformative learning theory fails to adequately take into account local culture and structural inequalities: specifically that it fails to account for economic and cultural power relationships (Cunningham, 1992), does not account for context (Clark & Wilson, 1991), erroneously places the role of the adult educator outside the educational experience (Newman, 1994), and emphasizes rational over emotional aspects of the learning experience (Taylor, 2000). However, Mezirow aligns the theory with Habermas's view of the universality of rational discourse processes and says that adult educators can take the theory and use it to investigate, assess, and guide local practice. The theory is a foundation upon which educators may build their philosophy of adult education.

Paulo Freire

As Mezirow noted in describing the four early events that significantly influenced his thinking about transformative learning, Paulo Freire's writings created a disorienting dilemma for Mezirow himself. Freire's writings were influential on two levels—effecting transformation and instructing on transformation. As Mezirow began to look at adult education through Freire's lens, he began to see the need to help students question their taken-for-granted assumptions about their place in the world and the power structures that keep them in those places. From his first publication and throughout many of his writings, Mezirow refers to Freire's notion of conscientization (Mezirow, 1978b, p. 103; Mezirow, 1978, p.55), a term previously discussed in this chapter. Mezirow uses Freire's work as an example of transformative learning (Mezirow, 1990b, p. 16; Mezirow, 1991bp., 215; Mezirow, 1996b, p. 167; Mezirow, 2000, p. 23). He extends Freire's theory by saying that it is through conscientization that learners can reach a level of participating fully in dialogic educational processes that focus on validity testing of assumptions concerning social norms, cultural codes, and ideologies that foster dependency and oppression (Mezirow, 1991b, p. 136).

However, Mezirow clarifies two points of departure with Freire by stating first that for Freire, transformation is *social* transformation (Mezirow, 1991b, p. 136). For Mezirow, the transformation is *personal*, which however, is always a social process and which can and often does lead to social transformation. The second point of departure concerns the type of critical reflection required for conscientization—solely sociolinguistic (Mezirow, 1994, p. 232)—versus the three different types of critical reflection Mezirow says students can use for transformation—sociolinguistic (upon mechanisms by which society and language arbitrarily shape and limit our perception and understanding), epistemic (upon assumptions about the nature and use of knowledge), or psychological (upon ways of feeling and action that cause us pain because they

are inconsistent with our self concept or sense of how we want to be as adults). (Mezirow, 1991b, p. 119). Therefore, Freire did not go far enough with critical reflection as far as Mezirow is concerned. He had a sole focus—on social reform and social justice. Mezirow's concerns are more specific—for individual learners and their varied needs for critical reflection. The difference between Freire and Mezirow might be summed up by saying that Freire was primarily concerned with expressing an education philosophy, but Mezirow focused on creating a learning theory (Mezirow, 1994, p. 230). This is an important distinction because Mezirow keeps the focus on the learner and the learner, which takes place in social contexts, but still occurs individually with no predetermined direction for the transformation. Freire's view is more general, looking to radically change power structures in society to transform it toward a particular end. Mezirow's focus on individual transformation, a learning theory, is more germane to this study than Freire's critical stance against power structures within society, a philosophy of education. Mezirow tells us how people transform. Freire tells us why and to what society should transform.

John Dewey

For Mezirow, it was John Dewey who did the seminal analysis on reflection, and transformative learning theory builds on that analysis. What Dewey calls "reflection," Mezirow calls *validity testing*. Dewey saw reflection as a process that involves looking at the way we have consciously, coherently, and purposefully applied ideas to strategize and implement solutions to problems. This process follows the hypothetical-deductive model, which is integral to instrumental learning. It was fitting for Dewey to use reflection in the context of instrumental learning and hypothetical-deductive problem solving because such logic was so successful in the natural sciences and because he was so influenced by the scientific method in his doctoral work at Johns Hopkins. Dewey did advocate, however, for a review of the evidence supporting

conclusions. For instance, he defined reflective thought as, "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusion to which it tends" (Dewey, 1910, p. 9). This review process leads to the creation of the premises upon which assumptions rest. What Dewey did not do is clearly differentiate between different types of reflection, i.e., reflecting upon content, process, and premises. However, his writings clearly show his focus on critiquing presuppositions in that he referred to the awareness of problem situations as a "pre-reflective" stage. Mezirow says that application of reflection to this pre-reflective stage of awareness is *premise reflection* (Mezirow, 1991b, p. 100-102).

Karl Popper

Born in Vienna in 1902, Popper was a Jewish philosopher who fled Germany during the rise of Nazism. After some time in New Zealand, he spent most of his career in England where he developed a polemic against logical positivism. He utterly refuted the ability of scientists to come to observations without what he called "myths" which made up their presuppositions. Popper maintained that they bring theoretical interests, conjectures, anticipations, and background theories to their observations. He called this their frame of reference or *horizon of expectations* (Popper, 1963, p. 62). By this term, Popper meant the sum total of expectations adults have, whether they are conscious or subconscious, explicit or implicit. For him, learning is not filling in gaps of knowledge, but rather, the change in a structure of our expectation. Therefore, new knowledge resulting from problem solving is a correction rather than an extension of prior knowledge. Mezirow states that Popper's work anticipates transformative learning theory (Mezirow, 1990b; Mezirow, 1991b). However, it is important to note that Popper's use of problem solving takes issue with the hypothetical-deductive model of problem

solving, which promotes hypothesizing, holding some variables constant, and testing others—a systematizing of filling in the gaps of knowledge. Popper's views are similar to Gestalt psychology, in which a problem is a difficulty in achieving a goal. The main premise from this psychological framework is that the gestalt is changed under the pressure of a problem, so that the previously held gestalt must change to a new one. The process of changing a gestalt is called *insight*, which involves a *recentering* of a gestalt so that the problem is redefined, including a potential solution. While Gestalt psychology is similar to Popper's view of learning as a change of perspective, it is different because Popper includes the idea of negating past beliefs and transforming to new beliefs (Mezirow, 1991b).

In the same way that Popper's views differed from Gestalt psychologists, his idea of negation of previously held ideas and frameworks for thinking is an important departure from Piaget's developmental theory. Piaget believed that humans develop skills in order to better manipulate the world (Piaget, 1967); Popper saw learning as something humans are compelled to do by the search for a coherent and complete horizon of expectations. It could be said, then, that while Piaget focused on the growth of intelligence, Popper was mainly concerned with the generation of knowledge. Piaget held that growth in intelligence *may* include some negation of previously held beliefs, but Popper saw negation as a *central force* of progress. For Piaget, gaining higher level skills does not involve the rejection of lower level skills. On the contrary, lower level skills are built upon for higher level skills. While skills can be ignored, they cannot be rejected, and hence Piaget's formal operations stage is based upon a hypothetical-deductive logic of problem solving (Mezirow, 1991b). This is a significant point because so much of traditional problem-based learning is instrumental in nature, and not communicative. Hence, Mezirow states that instrumental problem solving needs to be distinguished from problem

solving within transformative learning. The latter focuses on communicative learning, on understanding what others mean or in transforming meaning. Problem solving, for Mezirow, then, goes to the heart of solving the problem of reconciling our experiences with our frames of reference, not hypothetical-deductive problem solving.

Popper felt that knowledge does not come from sensation, but from new concepts, developed from the conflict between general ideas and particular new experiences. In this sense, he valued the process of dialectic reasoning (Popper, 1963, pp. 419-451), however, he warned that very ideologies that led to the wide use of the dialectic, Hegelian and Marxist, wound up dogmatizing their positions (Popper, 1963 pp. 443, 450). According to Mezirow, Popper's *general ideas* are analogous to Mezirow's use of the term, *meaning perspectives*. Therefore, adult learning includes the continuous testing of our most fundamental assumptions, not merely the testing of our attempts to extend our knowledge (Mezirow, 1991b). This is a critical point to Mezirow's theory. What Mezirow does not capitalize on is Popper's warning that even the dialectic method can lead to dogma. Mezirow's idea regarding the need for "ideal conditions of discourse" (Mezirow, 2005, p. 2) is strengthened by Popper's warning.

One point of departure Mezirow has with Popper is with his notion of the "myth of the framework" by which he means that learners become trapped by their radically different perspectives making communication impossible. Mezirow contends that adults can always enter into rational discourse, even if it is difficult to do so, because there is overlap between meaning perspectives in terms of observations, concepts, problems, or standards that allow us to enter into dialogue (Mezirow, 1991b, p. 50).

The Influence of Psychologists

Roger Gould

Gould, a Freudian psychoanalyst and a friend and colleague of Mezirow's, proposed an epigenetic theory of adult development (Mezirow, 1990b, p. 16), which Mezirow referenced from his earliest writings (Mezirow, 1978, p. 17) to his more recent publications (Mezirow, 2000, p. 17). Gould provided a Freudian view of psychological premise distortions (Gould, 1978; Mezirow, 1991b, p. 143). According to Gould, many adults have hidden prohibitions, caused by emotionally charged or traumatic episodes involving a perceived threat of withdrawal of love, frightening physical punishment, or humiliation or shame (pp. 14-15). These prohibitions can block learning, and affected adults can often detect that they are not functioning well, that something is prohibiting them from functioning well. This concept of self-trying-to-function-well is a fundamental context of adult learning. In order to gain the loss of function, the learner must take appropriate action, despite the fears of disaster. This leads to what Gould called the *analysis of regret* because while the learners know they should take certain actions, they hesitate to do so because of fears that they will regret it. In order to recover functionality, learners need to be helped to understand the psychodynamics of their situation and critically reflect upon the presuppositions causing the dysfunction. Learners can have strong feelings that impede action, which must be dealt with before transformation can take place. Thus, because of Gould's influence from a psychotherapy point of view, Mezirow came to see transformative learning as a process that may involve progressively greater risk taking in deciding action steps (Mezirow, 1991b, p. 140-141).

Robert Boyd and J. Gordon Myers

In the same way that Gould provided a Freudian lens through which to view transformative learning, psychologists Boyd and Meyers presented a Jungian perspective (Boyd

& Myers, 1988). This framework used different components of the self to explain what happens in a transformation. The self is made up of the *ego* and *archetypes*, (instincts and primordial patterns within the collective unconscious), *shadow* (personality configuration other than those chosen to be developed), anima and animus (the feminine part of men and the masculine part of women), and *persona* (the public personality). The central issue for Boyd and Meyers is whether the learner is learning to develop dialogues between the ego and other components of the self, awareness and understanding of cultural symbols and how they impact their lives, and awareness and understanding of the processes of symbolization. Therefore, the chief responsibility for the adult educator, according to Boyd and Meyers, is to help learners with the inner dialogue and questioning of the current way they see reality (Mezirow, 1991b). The contribution Boyd and Meyers make to transformative learning theory is emphasizing the significance of presentational awareness and the centrality of the self in transformative learning (Mezirow, 1991b).

Jerome Bruner

Jerome Bruner, a prominent cognitive psychologist, made use of Piaget's concept *decentration* to talk about how learners move through a series of transformations toward the ability to analyze things from a perspective that is more and more removed from one's personal or local perspective (Bruner, 1971, p. 147; Mezirow, 1978b, p. 104; Mezirow, 1981, p. 15; Mezirow, 1991b, p. 147). The salient aspect of Bruner's research, as it relates to transformative learning theory, is that several cultural dimensions in the use of language have been found to correlate with the ability to achieve decentration. If some cultures discourage the development of the self-awareness that is crucial to decentration, then, "these same deprivations and their consequent constraints must, ipso facto, pertain in adulthood," (Mezirow, 1991b, p. 148).

Bruner's point on memory, that we forget what we do not structure, has implication for the process of transformation (Mezirow, 1995, p. 48). Structuring and restructuring are at the

heart of learning for Mezirow. Mezirow uses the word "construe" to describe the activity of structuring thought from memory which justifies affect, based upon the biographical and historical perspectives of the learner. Learning, in this case, is the construal of a previously structured interpretation into a new interpretation.

Mezirow lists Bruner's four modes of meaning making: (1) establishing, shaping, and maintaining intersubjectivity; (2) relating events, utterances, and behavior to the action taken; (3) construing of particulars in a normative context; and (4) making propositions (Mezirow, 2000, p. 4). However, Mezirow says this list is incomplete. According to Mezirow, transformative learning theory adds a fifth and essential mode of making meaning—becoming critically aware of one's own presuppositions, hidden assumptions, and tacit expectations and those of others and assessing their relevance for making meaning. In this case, Mezirow saw not just an echo of transformative learning theory, but a gap that the theory could fill.

Daniel Goleman

Probably the most obvious contribution Goleman makes to Mezirow's theory is his notion of emotional intelligence. Mezirow says that in order for adults to participate effectively in discourse and transformative learning they must have emotional maturity, or awareness, empathy, and control—what Goleman called "emotional intelligence" (Mezirow, 2000, p. 11; Mezirow, 2003, p. 60).

Prior to the popularity of emotional intelligence, Mezirow recognized other substantial ideas of Goleman that contributed to the understanding of transformative learning theory. Specifically, Goleman propounded that we trade off perception and cognition for the relief from the anxiety created when we experience something that does not readily fit into the meaning structures we have. In other words, when the experience is too strange or threatening to the way

we usually think, we tend to block it out or rely upon psychological defense mechanisms to provide a more comfortable explanation (Mezirow, 1990b, p. 4). Because adults need to avoid threatening information, a narrowing of perception emerges—or blind spots—what Goleman called "lacunas" (Goleman, 1985, p. 107; Mezirow, 1991b, p. 51). Goleman said that every act of perception is an act of selection, and adults tend to exchange diminished attention for lessened anxiety. Mezirow quotes Goleman's following three premises for this thesis.

- The mind can protect itself against anxiety by dimming awareness.

- This mechanism creates a "blind spot," a zone of blocked attention and self- deception.

- Such blind spots occur at each major level of behavior, from the psychological to the social. (Mezirow, 1991b, p. 18)

Furthermore, according to Goleman, schemas are very powerful structures. They guide analysis of sensory input, sometimes simplifying and organizing, and sometimes deleting what is not deemed salient. In this way, schemas are like "lions at the gates of awareness' and " the building blocks of cognition" that make up the rules and categories that effect new experiences (Goleman, 1985; Mezirow, 1991b, p. 49). For Mezirow, Goleman's use of "schema" relates to transformative learning theory's use of habits of expectation or meaning schemes. These interpretations are generalized and tend to become self-fulfilling prophecies.

Perhaps the most salient point Goleman made related to Mezirow's theory is that the cardinal human need is being able to comprehend what is undistorted by the defensive avoidance of anxiety and for teachers or coaches who will not collude with their denial, self-deceptions, or their shared social illusions. Goleman said that this is the function of investigative reporters, "whistle-blowers," ombudsmen, grand juries, and therapists. Mezirow adds to Goleman's list by

underscoring the purpose of his seminal book "It is the thesis of this book that this list must be extended to include all those concerned with the education of adults," (Mezirow, 1991b, p. 51).

Gisela Labouvie-Vief

Mezirow states that it is Gisela Labouvie-Vief's (1994) work that most explicitly identifies the central role of perspective transformation in adult development (Mezirow, 1991b). According to Labouvie-Vief, human development is divided into two phases. The first phase is birth and adolescence, which consists of decoding certain biological automatisms and the encoding of cultural automatisms. This first phase provides structure and a sense of autonomy. After adolescence, however, the second stage is initiated, marked by a re-examination of these automatized structures and the cultural-symbolic assumptions behind them. Within this stage, adults re-interpret their early ways of being as simply a mere living out of social expectations. Hence, autonomy is not simply a rejection of interpersonal dependence, but more importantly, a time of examining the restricted thoughts and actions based on one's childhood and adolescence experiences and relationships. This phase of development implies a breaking and changing paradigmatic ways of thinking rather than perpetuating them. Psychologists believe that this phase usually takes place between the ages of 35 and 55. Labouvie-Vief's position is that adults who do not negotiate this crisis well have rigid and highly defended thought patterns (Mezirow, 1991b).

Patricia M. King and Karen Strohm Kitchener

Kitchener's work contributed to Mezirow's thinking about cognitive processing. Mezirow used Kitchener's three levels: the first is where individuals compute, memorize, read, and comprehend; the second is metacognitive, where they monitor their own progress and products as they engage in first-order tasks, and the third level is what she calls epistemic

cognition, which has to do with the reflection on the limits of knowledge, the certainty of knowledge, and the criteria for knowing (Mezirow, 2000, p. 5). Mezirow says that transformative learning pertains to epistemic cognition. When Mezirow talks about distortions of meaning perspectives, he qualifies this position by saying that rather than distortions, at times it might be more accurate to refer to such earlier ways of knowing as less developed rather than distorted. Reflective judgment is developmentally more inclusive, differentiating, permeable, and integrative (Mezirow, 1990a, p. 15).

But how do learners develop reflective judgment? Mezirow's transformative learning theory is supported by the research done by King and Kitchener and the stages of development they subsequently formulated. Mezirow says that these researchers reserve the use of the term, "reflective" to describe the adult reasoning characteristic in Stages 6 and 7, which are the following:

Stage 6   Abstract concepts of knowledge can be related. Knowledge is actively constructed by comparing evidence and opinion on different sides of an issue; solutions are evaluated by personally endorsed criteria.

Stage 7   Abstract concepts of knowledge are understood as a system. The general principle is that knowledge is the outcome of the process of reasonable inquiry for constructing a well-informed understanding. (King & Kitchener, 1994, p. 17)

It is important to note here that it is at these levels of cognitive development that knowledge claims are understood in relation to the context in which they were generated. In this case, context can mean many things: historical or biographical factors pertaining to a belief or knowledge claim, or to a taken-for-granted paradigm, system, or canon in which the belief is

rooted. Mezirow says that as far as transformative learning theory goes, this description of reflection as the active construction of knowledge claims, understood within the context of their origins, is a description of what happens when learners critically reflect upon their assumptions.

But when do individuals develop reflective judgment? King and Kitchener offer evidence from their extensive research that reflective judgment increases both with age and education (Mezirow, 1991b, p. 127). This finding substantiates Mezirow's position that perspective transformation is uniquely an adult function since the process relies upon the capacity to engage in critical-dialectical discourse involving the re-evaluation of assumptions and expectations supporting beliefs, values, and emotions (King & Kitchener, 1994, p. 187; Mezirow, 2003, p. 60). Thus, it seems that individuals attain reflective judgment only in adulthood, making a strong case for using adult education to facilitate reflective judgment. Thus, King and Kitchener's work is an important substantiation of Mezirow's position that perspective transformation is unique to adulthood (Mezirow, 1991b, p. 127).

Mezirow departs from King and Kitchener, however, regarding their interpretation of Dewey's concept of reflection. His main point of contention seems to be that King and Kitchener did not differentiate between the criteria of reflective thought involved in validating knowledge in the instrumental domain from the communicative domain. Nor is Kitchener's model open to distinctions among functions of reflection. However, they succeed, according to Mezirow, in suggesting that a "qualitatively superior perspective can serve as an educational objective" (Mezirow, 1991b, p. 128).

Other Developmental Psychologists

Mezirow notes that there are other developmental psychologists whose research seems to validate the premises of transformative learning theory. Belenky, Clinchy, Goldberger, and

Tarule studied how women develop their epistemological approaches, which seems to validate the notion of passing through a sequence of increasingly complex epistemological forms or perspectives (Belenky & et al., 1986; Wiessner & Mezirow, 2000). Likewise, Robert Kegan sees adult development as movement through five transformations throughout the life span. Each transformation moves the person to a more complex epistemological perspective (Kegan, 1995; Wiessner & Mezirow, 2000). While these theories validate a change in perspective, Mezirow's point of departure focuses on the movement through epistemological stages. Transformative learning theory, as Mezirow describes it, does not focus to stages of development, but rather on, "the process of meaning becoming clarified, a focus on the potential for greater control over thinking, feeling, and will as the organizing concept" (Wiessner & Mezirow, 2000).

Sharan Merriam explored Mezriow's position on adult development more fully by proposing that adults must already be at a mature level of cognitive functioning in order to engage in the transformational learning process (Collard & Law, 1989). This is an interesting conundrum—how do adults experience transformative learning and move along the continuum of stages of development if they need to be at more advanced levels of development in order to experience transformation? To this point, Mezirow says that while there is a widely agreed upon consensus that the more fully developed learner has moved through several developmental forms to arrive at the highest potential for understanding, and that this occurs only in adulthood and perhaps not in most adults, this speaks to the capacity or unrealized potential for transformative learning. However, Mezirow contends that the role of adult education is to help these adults acquire the insight, ability, and disposition to realize this potential in their lives (Mezirow, 2004). Furthermore, Mezirow notes that there is inadequate evidence that the stages of cognitive or epistemological development exist in other cultures. In 1994, Mezirow said, "Perspective

transformation is the engine of adult development," (Mezirow, 1994). Ten years later, he elaborates by saying, "I have preferred to think of development in adulthood as *learning— moving through phases of meaning becoming clarified*" (Mezirow, 2004). The work of Baltes (1997) and Pearlin (1989) seem to substantiate Mezirow's position on adult development. For Baltes, development is connected with the basic architecture of the life course, which involves the person's increased need for culture throughout the life span and the decreasing efficiency of culture with age (Baltes, 1997, p. 377). The connection with culture for development is congruent with Mezirow's recognition of the need for a community of discourse. Pearlin's focus was on stress and how adults cope with multi-layered stress situations (Pearlin, 1989, p. 254), suggesting that rather than set stages through which adults move in the life span, it is constellations of stressors that lead them to transform. This supports Mezirow's notion that the disorienting dilemma can lead to transformation.

The Influence of a Philosopher and a Psychologist

Chris Argyris and Donald Schön

Argyris is a psychologist; Schön is a philosopher, and their individual and collective works have contributed to Mezirow's thinking. In discussing the role of the adult educator, Mezirow borrows from Argyris's idea of using participative or action research (Mezirow, 1990a, p. 357), which would support democratic processes for discourse. But, more important than processes for discourse, Argyris and Schön supported and contributed to Mezirow's ideas with their theory of *double loop learning* (Argyris & Schön, 1974). Developed in the context of professional development, they proposed that managers have developed two kinds of theories-in-use: Model I and Model II. Within Model I, learning is single loop, i.e., instrumental learning about strategies or tactics for achieving one's own objectives. There is little critical reflection

about the values and assumptions that underlie behavior (Mezirow, 1998a, p. 193). Contrary to purely instrumental learning, Model II creates a work situation in which people can exchange valid information, private dilemmas to shared inquiry, and make public what Model I keeps private and undiscussable. Hence, Model II allows for double loop learning (Mezirow, 1990a, p. 370-371).

Mezirow was particularly interested in a series of practica that Argyris and Schön created for their students at Harvard and MIT in order to foster movement of their students from Model I learning to Model II learning. The students were required to go beyond the typical case study approach to problem solving (Model I) and inquire into the nature of interpersonal theories-in-use and the factors that facilitate and impede movement from Model I to Model II. They were asked to describe the meaning of the situation, the strategy they devised to deal with it, and what they would actually say or do. This method was called, "decomposition" (Mezirow, 1990a, p. 371). In this type of learning experience for their students, Argyris and Schön provided conceptual models, criticized students' interpretations, and demonstrated the type of behavior they and their students would like to see.

Furthermore, Argyris and Schön created a heuristic for functioning in Model II learning: couple advocacy of your position with inquiry into the other's beliefs; state the attribution you are making, tell how you got it, and ask for the others' confirmation or disconfirmation; if you experience a dilemma, express it publicly (Mezirow, 1990a, p. 371). Thus, collaborative learning is a recurring theme of emancipatory education, which fosters transformation, according to Mezirow. Students need to learn about the internalized inhibitions that keep them from moving to a Model II orientation. To do so, Argyris and Schön had them write and share papers about the fears and problems they experienced when they tried to operate within a Model II framework.

This process of reflection is an important component to the double loop learning theory and a strong connection to transformative learning theory.

Argyris and Schön differentiated types of reflection—on discovery, invention, and production—to help students with the complexities of analysis. The theorists also developed three approaches to coaching: joint experimentation, "follow me!," and the "hall of mirrors." The hall of mirrors approach is apropos for Mezirow's idea of inquiring into their own and their other's changing understandings. It is important to reveal implicit ideas—to make them explicit to others in discourse. Otherwise, those ideas are likely to remain tacit (Mezirow, 1990a, p. 372-373).

Besides the connections and contributions of double loop learning to Mezirow's theory, Schön provided other helpful ideas for Mezirow. One of those ideas has to do with the different traditions of using metaphors (Schön, 1983). According to Schön, one tradition treats metaphors as anomalies to be overcome in order to make possible the formulation of a general theory of reference or meaning. But the other tradition treats metaphors as central to the task of accounting for our perspectives on the world, both as a certain kind of product—a perspective or frame, a way of looking at things—and a certain kind of process by which new perspectives come into being (Mezirow, 1991b, p. 81). Metaphors that help people create new perspectives are what Schön calls "generative metaphors." Mezirow says that because so much of what we communicate and what we understand others to be communicating to us is construed metaphorically, it is imperative that we become aware of and critical of tacit generative metaphors (Mezirow, 1991b, p. 82).

Another idea from Schön that Mezirow found to be interesting is his "reflection-in-action" term to describe the way professionals deal with uncertainty, instability, uniqueness and

value conflict. Schön argues that the traditional model of "technical rationality," with the application of knowledge to instrumental decisions is generally at odds with reflective action (Schön, 1983). Furthermore, thoughtful reflection upon one's action can sometimes be intuitive, much like a jazz musician's improvisation or a professional athlete's subtle adjustments in the middle of performance (Mezirow, 1991b, p. 113).

Finally, Schön's idea of framing problems is useful for transformative learning theory. Problem solving turns into a "frame experiment," where the practitioner uses a frame to probe the situation metaphorically in search of an interpretation, then adjusts according to feedback (Schön, 1983). Thus, framing and reframing problems becomes an experiment in shaping new meaning perspectives (Mezirow, 1991b, p. 114).

Influence from a Physical Scientist

Thomas Kuhn

Mezirow includes Kuhn, a physicist, in the lengthy "echoes" footnote of his first report on transformative learning theory (Mezirow, 1978, p. 58), and although he does not quote Kuhn in his journal article of the same year, he uses the term personal *paradigm* to describe what he means by *meaning perspective* (Mezirow, 1978b, p. 101). He explains in his book that while Kuhn described the notion of paradigmatic transformations as they relate to scientific revolutions, it is what Mezirow calls a counterpart to the process of perspective transformation. For Kuhn, *paradigm* was a word that referred to a collection of ways of seeing, methods of inquiry, beliefs, values, and attitudes that influence the conduct of scientific inquiry (Kuhn, 1986). Mezirow says the term has come to mean the same as model, conceptual framework, approach, and worldview (Mezirow, 1991b, p. 46). The notion of transformative learning is analogous to Kuhn's paradigm shift. Mezirow says that personal as well as scientific shifts can

redirect the way we engage the world (Mezirow, 1990b, p. 12-13). According to Mezirow, another contribution Kuhn makes to transformative learning theory is that he validates the role of discourse concerning the conditions of inquiry and when findings do not fit the prevailing theory within the scientific community (Mezirow, 1996a, p 166).

<div align="center">*Influence from an Anthropologist*</div>

Gregory Bateson

Bateson was a voice from anthropology, and one of the strongest social science voices in the twentieth century. He opposed social scientists who reduced everything to mere matter and he reintroduced the notion of the "mind" into scientific equations with his seminal work, *An Ecology of Mind*. For Mezirow, he provided ideas about the functions of psychological frames (Bateson, 1972). Related to what Mezirow calls premises, for Bateson, the frame becomes part of the picture, and thus, learning involves changing the entire frame, not just what is inside the frame (i.e., changing, not merely adding). Therefore, for Bateson, learning is changing contexts, not just adding content. His epistemological stance is predicated upon the belief that adults create their own world and look at reality through their own presuppositions, premises, and expectations. Bateson states that all learners have inescapable biases, or parochialisms. For him, the moral question is for learners to think about which biases to be dogmatic about (Mezirow, 1991b).

Another aspect of Bateson's learning theory that contributes to the understanding of transformative learning is his notion of four levels of learning. *Zero Learning* (Bateson, 1972, p.284) refers to an extension of a pre-existing habitual response. It is not possible to be creative or to make an error in this level. *Level I* learning is learning about those habitual responses, but what Mezirow calls meaning schemes or perspectives do not change. This type of learning might

include thoughtful action without reflection. *Level II* learning is learning about contexts (what Mezirow calls meaning schemes). This could include learning through cultural assimilation or it may include learning about our premises, although there is no awareness of changes of premises. This level of learning relates to Mezirow's content and process reflection, processes by which meaning schemes are transformed. Finally, *Level III* learning involves a transformation, such as a religious conversion, Zen experience, and psychotherapy. Learning III, for Bateson, is about the context of contexts, and implies learning that involves a change in the whole assumptive frame of reference (Bateson, p. 293; Mezirow, 1991b). Hence, Bateson was pioneering transformative learning theory.

Influence from an Educator

Edward Cell.

Edward Cell, a learning theorist and professor of philosophy at Sangamon State University in Illinois, also developed four different levels of change that take place either separately or together (Cell, 1984; Mezirow, 1991b). *Response learning* involves changing the way we are prepared to respond, or by using a new response in place of an old one, including trial and error kind of learning. This also includes conditioned responses and rote learning. *Situation learning* involves changing the way we interpret a situation. This can include active or reflective interpretation. Cell makes a very important distinction between active and reflective interpretation: active interpretation can be creative, but it involves our prejudices, distortions, and provincialisms. On the other hand, reflective interpretation involves correcting distortions in our reasoning and our attitudes (Mezirow, 1990b). *Transsituational learning* takes place when adults learning how to change their interpretations of a situation. This is a metacognitive action of reflecting on the power and ability to reflect. Finally, *transcendent learning* is the ability to

modify concepts or create new ones for interpreting individual situations. Mezirow states that

Cell's differentiation of reflective learning into transsituational and transcendent categories is a

helpful contribution to the development of transformative learning theory (Cell, 1984, p. 40;

Mezirow, 1991b).

Influence of Critics

Another source of influence that has impacted Mezirow's epistemological development

of the theory has been his critics. From reading most of his writings since the development of

transformative learning theory (see reference list), it is obvious that Mezirow practices what he

preaches. He is open to engaging in discourse regarding disagreement and the criticism of his

ideas. He welcomes honest, polite debate, and responds with kindness and professionalism.

Social Theory and the Ideal Conditions of Discourse

Collard and Law wrote a critique on Mezirow's theory, focusing on his use of

Habermas's ideas. Stating that Mezirow's claim to have a theory is premature, their main

contention was that he fails to provide a comprehensive theory of social change. Another

concern they raised was that Mezirow creates a paradigm of language, but fails to acknowledge

the difficulty of fostering conditions of ideal learning in a social environment in which there are

inequalities (Collard & Law, 1989).

Mezirow responds to these critiques as if he were striving for dialogic exchange in order

to better understand each other (Mezirow, 1989). He reiterates his point that there is a central

role of the construct of meaning in adult education, and that this is what is missing in other

theories of adult learning. Habits of expectation have come to serve as meaning structures and

they determine the nature of perception and cognition. Hence, he was not trying to create a

comprehensive theory of social action; his focus was on how individuals learn within the context

of a community of discourse. Learning is always part of a context, and therefore never separate

from some type of social action. He gives the example of the women's movement in which

hundreds of thousands of women experienced individual transformations, subsequently and

automatically joining a social group of people who shared the same experience. This learning

was both individual and social. However, social action is not the only goal of adult education.

Furthermore, he says that educators do not set out to achieve a particular political agenda—this

would be indoctrination. The bottom line is that there are many different types of social action

and many types of transformative learning experiences. Transformative learning that stems from

psychological or epistemological changes in perspective may not necessarily lead to social

change (Mezirow, 1989, p. 174).

Collard's concern about how Mezirow used Habermas's instrumental, communicative,

and emancipatory learning seems to have led him to reconsider this aspect of the theory.

Certainly by 1998, at the First National Conference on Transformative Learning, held at

Teachers College, Columbia University, Mezirow states that the comments of Sue Collard led to

> changing the identification of what was originally identified as three major domains of
>
> learning—instrumental, communicative, and emancipatory (as adapted from
>
> Habermas)—to recognize the last as a process that pertains in different ways to both
>
> instrumental and communicative domains. (Wiessner & Mezirow, 2000, p. 345)

Regarding the ideal conditions of discourse, Mezirow argues that this was intended as a

social and educational standard—not a description of reality. There are always all types of

systems and structures that impede this ideal, but it is the standard toward which educators must

strive. "The ideal is significant only as a standard against which to assess educational and social

practice. I have never suggested that it be considered as either an existing circumstance or a fully attainable goal," (Mezirow, 1989, p. 171).

In 1992, Cunningham also argued that Mezirow does not account for economic and cultural power relationships in his scheme of adult learning (Tennant, 1993). However, Mezirow refutes this claim by saying that he discusses hegemonic ideology, false consciousness, and other roles and practices that make up sociolinguistic premise distortions. Furthermore, Mezirow states that Cunningham seems reluctant to accept the validity of distorting epistemic and psychological assumptions and the existence of variables between reflection and social action. Put simply, according to Mezirow, Cunningham dichotomizes social and personal transformation and aligns herself with the former as the goal of adult education. He retorts that this is a false dichotomy, which distorts the process (Mezirow, 1992, p. 252).

The Role of Context and the Unified Self in the Theory

Clark and Wilson contended that Mezirow failed to account for context (Collard & Law, 1989) in his theory. They claim that he did not develop the implications of the contextual dimension, and in fact, limits the role of context in transformation. They further stated that he gave no serious examination to the impact of the socio-cultural context on the process of transformation (Collard & Law, 1989). However, Mezirow responded that cultural context is literally embodied and gives meaning to the very meaning perspectives central to the theory (Mezirow, 1991a). Mezirow grants that his critics are correct in emphasizing the relationship between social theory and learning theory, saying he tried to show how the, "internal dynamics of adult learning operate within the cultural context and how critical reflection, discourse, and action can change culturally assimilated assumptions and premises that distort understanding and give learners greater control over their lives (Mezirow, 1991a). It is our cultural frames of

reference that we change when we experience transformation, and according to Mezirow in 1991, there may be no other learning theory that addresses such a change. It is curious that in Mezirow's writings he does not seem to refer to the work of Bandura who developed a social learning theory, where both the learner and the environment in which the learner operates are relevant (Merriam & Caffarella, 1999p. 260). Bandura's work seems to support transformative learning theory in relation to the need for dialogic exchange.

Clark and Wilson also charged that Mezirow builds his theory on the concept of a unitary self rather than upon the notion of a self that is not unified and stable, but is fragmented and contested. To think of a unified self in the transformation process is problematic for Clark and Wilson because how individuals think about and understand themselves is shaped by language and culture, which are socially constructed and controlled by those in power (Clark & Wilson, 1991, p. 80). Mezirow argues, however, that this speaks directly to the function of transformative learning—i.e., as adults reflect upon these forces that have impacted their premises, they realize that they have come to believe certain things because of certain aspects of language of culture, or powerful entities in society (Mezirow, 1991a). In this vein, Mezirow does not negate the fragmentation of the self, but rather, argues that transformative learning helps students to see those other parts of their identity and assists them in transforming.

Children versus adults

Cunningham also criticized Mezirow's premise that adults learn differently from children, saying that in some situations children can become as critically reflective as adults. She goes on to say that perhaps Mezirow's attempt to make a theory of adult learning might be self-motivated to create power and status for a profession (Tennant, 1993). To this criticism Mezirow asks Cunningham for evidence for her position and reiterates his argument that children must

learn the rules of society before they can raise questions about the principles upon which the rules are predicated. He also calls forward the work of adult development researchers to buttress his argument—Kitchener and King, Labouvie-Vief, and others, stating that their research provides empirical evidence that it is only in adulthood that we can raise questions about our presuppositions and arrive at reflective judgment, or to be able to accept rational discourse as a means of validating beliefs (Cunningham, 1992, p. 250).

Change or Growth

Tennant argued that Mezirow fails to distinguish between transformation as a structural change or as part of the normal psychological pattern of development (Tennant, 1993, p. 37). Mezirow answers this by saying that Tennant's views are simply different from his, and elaborates,

> I do not think we gain insight by dichotomizing "developmental shifts" and "developmental progress". It seems to me that developmental progress occurs through "shifts"—transformations in both meaning schemes and meaning perspectives—toward the acquisition of meaning perspectives and schemes which are more inclusive, differentiating, permeable, and integrative of experience. (Mezirow, 1994, p. 228)

The Role of the Adult Educator

Newman criticized Mezirow's view of the adult educator. He says that Mezirow views this role as one of an outsider who helps learners to question and who stands apart from the social action (Mezirow, 1994, p. 231). Mezirow explains that he did not say in his writings that the educator is separate from the social action. He sees the adult educator as one who should strive to stay outside the dominant culture to be better able to see taken-for-granted assumptions

for what they are—those presuppositions upon which adults need to critically reflect. However, the educator is very much a part of the social action of discourse (Mezirow, 1994p. 231).

Affective Learning versus Critical Reflection

In more recent years, a several different researchers have challenged Mezirow's emphasis on the rational aspect of learning at the expense of a clear understanding of how emotions and feelings impact the transformation process (Taylor, 2000, p. 303). Taylor pointed out that while Mezirow mentions the emotions the women in his original research experienced, he explores the two concepts—rational and emotional—separately and fails to examine the relationship between them. Mezirow responded by saying that there is a need for,

> a more holistic conceptualization of the transformative learning with greater emphasis on the central role of feelings, learning that takes place out of one's focal awareness, the importance of relationships, and the role of the collective unconscious in looking beyond the self and recognizing others. (Wiessner & Mezirow, 2000, p. 344)

This section described how Mezirow developed his theory of transformative learning—his experience, research, other theories and philosophies that contributed to his thinking, and how his critics led him to respond and clarify his positions. The next section will look at empirical research published in peer-reviewed journals that reveals how the field of adult learning has begun to respond, one way or another, to Mezirow's theory. The criteria used to select the articles from within peer-reviewed journals was that the authors must have cited Mezirow in their article, it must have been an empirical study, not theoretical, and it had to describe the methodology.

Research on Mezirow's Theory

The next segment of this chapter reviews the empirical research articles on transformative learning theory as developed by Mezirow that have been published in peer-reviewed journals since that time. Studies were chosen which referenced Mezirow's theory of transformative learning, provided an empirical methodology, and were published in peer-reviewed journals. Taylor's analysis of the research (1997, 1998) and call for more studies to move from the dissertation stage to being published in journals was used as a framework to analyze the number of studies conducted, the types of designs used, and what has been learned about the disorienting dilemma, the role of critical reflection, context, affect, and diversity. A summary of findings is listed in Table 1. This review is limited to empirical research published in peer-reviewed journals on transformative learning or perspective transformation as Mezirow framed the theory. The date qualifier of greater than 1975 was used, since that is when Mezirow's seminal work was published by *Adult Education*. Four main indexes were used— Psychinfo, ERIC, Education Abstracts, and, finally, Academic Business Index (ABI/inform), since there seemed to be a strong connection between transformative learning theory and organizational learning theory. Bibliographies of articles, particularly Taylor's exhaustive treatments of the state of the research on the theory were mined. The Social Sciences Citation Index was used to see who had cited Mezirow. Some of the 151 dissertations with the term "transformative" or "transformational" learning in the title available on ProQuest Dissertations and Theses were skimmed, particularly the literature reviews. A saturation point seemed to be reached.

In 1997, Taylor pointed out that less than 10% of the 39 empirical studies he critiqued had been published in major journals, and only one empirical study had been published in the Adult Education Quarterly since Mezirow's original study appeared in 1978 (Taylor, 1994). This

review discovered a total of 38 empirical studies published in refereed journals since Taylor's 1994 publication. There were 151 dissertations completed with "Transformative Learning" or "Transformational Learning" in the title since 1997. Some of those studies may have been theoretical, and examining each dissertation was outside the scope of this literature review. However, it seems that even if there were only 100 empirical dissertations completed, it could be said that there is now a larger percentage of research studies being published in major journals compared to unpublished dissertations than there was eight years ago, perhaps even by as much as 20% more.

There has been a gradual increase in empirical studies on the theory, especially since 1998. In 1978, there was one study, as also in 1983, 1994, 1995, and 1996. In 1998 and 1999 there were two. Three were conducted in 2000, eight in 2001, and four or five each in the subsequent years to date. It seems that Taylor's call for more empirical research to be published in major journals has been heard. However, the theory is not widely popular and much work still needs to be done.

Table 1 Thematic Analysis of Research on Transformative Learning Theory

YEAR	AUTHOR and TITLE	DESIGN	DISORIENTING DILEMMA	CRITICAL REFLECTION	CONTEXT	AFFECT	DIVERSITY
1978	Mezirow, J. *Education for perspective transformation: Women's re-entry program in community colleges*	Qualitative; structured interviews, field study, Grounded Theory	Women realized culture had defined and delimited their self-conception; "painful reappraisal of current perspective"	Understanding and Action interact to produce an altered state of being	Women's Re-entry to College	Women's movement had created a supportive environment for transformation to occur	Women returning to college in the 1970s; 12 "diversified" programs from across the nation; 24 additional programs; 314 mail responses
1983	Boyd, E. M., and Fales, A. *Reflective Learning: Key to Learning from Experience*	Qualitative; Sequential interviews, individual interviews, Written questionnaires	"Inner Discomfort"	Process of Reflective Learning is key element of perspective transformation. Identified 6 stages similar to Mezirow's 10 phases	Learning from Experience	Not discussed.	21 graduate students, 12 counselors, 69 adult educators, 9 counselors
1994	Taylor, E.W *Intercultural Competency: A Transformative Learning Process*	Qualitative; Interviews	Cultural Disequilibrium	Nonreflective and Reflective Orientations	Intensive Intercultural Experience	Intense emotions caused by cultural disequilibrium	8 Euro-Americans, 3 African Americans, 1 Hispanic

YEAR	AUTHOR and TITLE	DESIGN	DISORIENTING DILEMMA	CRITICAL REFLECTION	CONTEXT	AFFECT	DIVERSITY
1995	First, J.A. and Way, W.L. *Parent Education Outcomes: Insights into Transformative Learning*	Qualitative; Hermeneutical Phenomenological	Ideas may run counter to what was expected	Participants learned to think critically	Capacity for critical reflection important for workplace	Participants claimed to become more loving parents	8 women: 4 African American, and 4 Caucasian
1996	Grant, M. Timingham, J. *Perspective Transformation and Gender: Issue Facing Mature Age Aboriginal Students*	Qualitative Longitudinal Over 4 years Semi-structured Interviews	To be able to go to university acted as a disorienting dilemma—	Participants reflected on New opportunities, roles, responsibilities	Family unit and changing societal roles as a result of university education was important context for transformation	Feelings of connectedness to family relationships was challenged by responsibilities of university study	Yes Aboriginal People 20, 16 women 4 men

YEAR	AUTHOR and TITLE	DESIGN	DISORIENTING DILEMMA	CRITICAL REFLECTION	CONTEXT	AFFECT	DIVERSITY
1998	Marita, P., Liimatainen, L., Kettunen, T. *Nurse' self-reflection via videotaping to improve communication skills in health counseling*	Qualitative; Interviews, written evaluations	No Discussion	Compared Nurses' counseling evaluations to Mezirow's levels of Reflectivity (J. Mezirow, 1981)	Nurse communication with patients	Self reflective working method in counseling could guide nurses to understand feelings of patients	Finish Nurses
1998	Courtenay, B.C., Merriam, S.B., Reeves, P. M. *The Centrality of Meaning-making in Transformational Learning: How HIV- positive Adults Make Sense of their Lives*	Qualitative; Semi-structured Interviews	Catalytic Experience: External and Internal Triggers	Mezirow's Step 2, "self-examination with feelings of guilt or shame" much more prominent role in meaning-making	Emotional attachments form a part of the context for assumptions	Assumptions are not simply cognitive without regard to feelings or attitudes	11 Caucasian, 6 African American, 1 Hispanic

YEAR	AUTHOR and TITLE	DESIGN	DISORIENTING DILEMMA	CRITICAL REFLECTION	CONTEXT	AFFECT	DIVERSITY
1999	McDonald, B., Cervero, R.M., Courtenay, B.C. *An Ecological Perspective of Power in Transformational Learning: A Case Study of Ethical Vegans*	Qualitative; Phenomenological Case Study	Could be "nagging doubt" rather than point in time	Power relations created communicative distortions	Meaning and experience cannot be understood outside of context	Mezirow's work does not address the role of power in the transformative process	Age Diversity: 12 participants Ages 23 to 85
1999	Ball, G.D.S. *Building a Sustainable Future through Transformation*	Qualitative Retrospective, Questionnaire to screen participants; conversational interviews	"Disequilibrium" or "Disorientation" or "Earth-shattering" or "totally different"	Not a deliberate, intellectual, rational process	Transformative experiences were not in isolation from other life experiences; enlarging engagement with the other	Role of passion and intense emotion is central; Strong feelings; to realm of spirit	Age Diversity: participants from early 20s to early 80s

YEAR	AUTHOR and TITLE	DESIGN	DISORIENTING DILEMMA	CRITICAL REFLECTION	CONTEXT	AFFECT	DIVERSITY
2000	Courtenay, B.C., Merriam, S.; Reeves, P.; Baumgartner, L. *Perspective Transformation Over Time: A 2-year Follow-up Study of HIV-Positive Adults*	Qualitative Longitudinal Semi-structured Interviews	Diagnosis of illness	Perspective Transformation Permanent; Meaning schemes change	Turned 30 or 40 years old, perhaps important times for life transitions	Changes in perspective regarding future, self, and HIV	14Participants, 8 Caucasian 5 African American, 1 Hispanic
2000	King, K.P. *The Adult ESL Experience: Facilitating Perspective Transformation in the Classroom*	Mixed Method Learning Activities Survey for 208 participants; 28 follow-up Interviews Retrospective	No Discussion	Should be encouraged to foster perspective transformation	Learners are not isolated from their prior experience and life context	Perspective Transformation extends across language, cultural, and personal domains	Wide range of ethnic and racial diversity
2000	Kroth, M., Boverie, P. *Life Mission and Adult Learning*	Qualitative, Grounded Theory 3 interviews of each of 5 participants over 3 month period	Transformation begins with disorienting dilemma such as, "a life event, an adult education experience, or a new or revised life role	Awareness building of personal purpose	Transformative Learning can be fostered through helping learners examine their life mission and its assumptions	Assumptions surrounding life purpose are powerful whether they are known. Reinforces Taylor (1997, p.52)	5 Participants, Wide range of professions represented

YEAR	AUTHOR and TITLE	DESIGN	DISORIENTING DILEMMA	CRITICAL REFLECTION	CONTEXT	AFFECT	DIVERSITY
2001	Benson, A., Talmadge, G. Tallman, J. *Viewing Online Learning through the Lens of Perspective Transformation*	Qualitative Case Study Retrospective 4 participants	No Discussion	Online courses should be designed to promote critical reflection and rational discourse	Context of online learning was very different for each of the participants	No discussion	No discussion
2001	Christopher, S., Dunnagan, T. Duncan, S.F., and Paul, L. *Education for Self-Support: Evaluating Outcomes Using Transformative Learning Theory*	Qualitative 34 participants Interviews, Statistical Analysis of Demographics	No Discussion	Changed perspective came about as a result of a better understanding of self	Focused on context. Goal was to help welfare recipients to move to independence through employment and self skills	Transformative Learning was fostered through learner-centered methods, positive learning environment	29 women, 5 men

YEAR	AUTHOR and TITLE	DESIGN	DISORIENTING DILEMMA	CRITICAL REFLECTION	CONTEXT	AFFECT	DIVERSITY
2001	Danforth, M.M., Glass, J.C., Jr. *Listen to my Words, Give Meaning to my Sorrow: A Study in Cognitive Constructs in Middle-Age Bereaved Widows*	Qualitative Narrative Interviews	Emotional Dissonance	Grieving as a process of meaning construction	Transformative Learning may help people going through bereavement	Perspective Transformation included affective understanding, use of intuition, reliance on faith or development of trust, was relational and interactive	6 Women, ages 51-58
2001	Eddy, P. *The Story of Charlotte: An Adult Learner's View of Higher Education*	Qualitative Phenomenological	Cumulative Transformation, not dependent upon a disorienting dilemma	Construction of meaning was more congruent with cognitive constructivism than social constructivism	Drew from past experience and larger social context	Selected negative experience to describe	1 Participant

YEAR	AUTHOR and TITLE	DESIGN	DISORIENTING DILEMMA	CRITICAL REFLECTION	CONTEXT	AFFECT	DIVERSITY
2001	Lyon, C.R. *Hear Our Stories: Relationships and Transformations of Women Educators who Work Overseas*	Qualitative Heuristic, Interpretive paradigm	Culture Triggers; Trigger events and supporting relationships changed according to chronological stages of experience	Emphasis on relationships and support rather than on critical reflection	Different Cultures, and Leaving home, new host culture, returning home; Role of professional overrode their status as women in host country	Relationships are very important	13 participants 2 African American 11 White, Ages 21 to 78 All Women
2001	Scribner, J.P., Donaldson, J.F. *The Dynamics of Group Learning in a Cohort: From Nonlearning to Transformative Learning*	Qualitative	Group dynamics may cause tensions	Groups that may learn in critically reflective ways, but may not complete requirements	The context of group learning can mitigate against deep learning	Decision-makers and leaders are thrust into a collaborative situation and experience stress	7 Participants 4 males, 3 females; 6 White, 1 Asian American
2001	Zeigahn, L. *Talk about culture online: The Potential for Transformation*	Qualitative Study of Discussion of an Online Graduate Course	Intercultural miscommunication	Explored, "Nonreflection," "Reflection," and "Premise Reflection"	Online context created some transparency; requires attention of instructor	Students need a "safe place" to discuss cross-cultural issues	9 European Americans, 1 African American, 1 Asian American

YEAR	AUTHOR and TITLE	DESIGN	DISORIENTING DILEMMA	CRITICAL REFLECTION	CONTEXT	AFFECT	DIVERSITY
2002	Baumgartner, L.M. *Living and Learning With HIV/AIDS: Transformational Tales Continued*	Qualitative Longitudinal Semistructured interviews	Chronic Illness	Perspective Transformation is permanent, Meaning schemes continue to change	Transformation led to a need to serve others	Social interaction is integral to the transformational learning process	11 of the original participants, 7 men, 4 women
2002	Carter, T.J. *The Importance of Talk to Midcareer Women's Development: A Collaborative Inquiry*	Heuristic Inquiry, Participants were Co-Researchers	No Discussion	Journal writing helped women to become cognizant of tacit assumptions	Workplace, mentoring can foster transformation	Four kinds of Relationships: Utilitarian, Love, Memory, Imaginative emerged. Love relationships had the most transformations	9 white middle class well educated women
2002	Kilgore, D. Bloom, L. R. *"When I'm Down, It takes me a While": Rethinking Transformational Education Through Narratives of Women in Crisis*	Qualitative 2 Ethnographic Studies with multiple in-depth interviews	Adult Education Experience presents a different way of life	Dialogue is the condition of learning, recognizing the unconscious of the student and the teacher	Current context of ABE—instrumental learning—to women in crisis obstructs transformation	Women in crisis are in a constant state of fragmentation. TL Theory does not take this into account	20 women in penitentiary; 3 cohorts of women in crisis attending welfare-to-work ABE classes

YEAR	AUTHOR and TITLE	DESIGN	DISORIENTING DILEMMA	CRITICAL REFLECTION	CONTEXT	AFFECT	DIVERSITY
2002	King, K. *Educational Technology professional development as transformative learning opportunities*	Mixed Method, Predominantly Phenomenological Survey and Interviews, journal entries, reflective essays	Learning how to use educational technology can be a catalyst for change for faculty	Professional development occurs through critical reflection	Transformative Learning helps to cultivate a community of reflective practice	No Discussion	Limited. 175 teachers and teachers-in-training; typically a white female in 30s with Bachelor's degree
2003	Ball, M.J. *ConsideringTrade Union Education as a Community of Practice*	Primarily Qualitative with two postal surveys and selective interviews and 3 life histories or narratives	No Discussion	No Discussion	Importance of learning in community, full participation can take place outside of formal courses	Legitimate Peripheral Participation	68 trade union members who were taking a course, 66 of them had ended their formal education at the minimum age
2003	Jarvis, C. *Desirable Reading: The Relationship between Women Students' Lives and Their Reading Practices*	Qualitative Unstructured Interviews	Reading can provide a disorienting dilemma	Discussed readings with female friends and male partners	Focus included power dynamics in male-female relationships	Study demonstrates the importance of relationships, power, and meaning making through relationships	36 women from diverse educational, family, and ethnic backgrounds

YEAR	AUTHOR and TITLE	DESIGN	DISORIENTING DILEMMA	CRITICAL REFLECTION	CONTEXT	AFFECT	DIVERSITY
2003	King, K.P. *Understanding Adult Learners Amidst Societal Crisis: Learning and Grief in Tandem*	Mixed Method, Learning Activities Survey, Focus groups, follow-up surveys	Framed around the events of September 11, 2001 People need time to process events	Explored the role and impact of reflective practice	Themes that emerged demonstrate importance of the context: loss of security, mortality, reallocation of priorities, international perspectives, etc.	In addition to receiving traditional grief counseling, adult learners could be guided in using a frame of perspective transformation	19 class members, convenience sample, Diverse cross section of continuing professional and higher educational learners, from several countries
2003	Kovan, J.T., Dirkx, J.M. *"Being Called Awake": The Role of Transformative Learning in the Lives of Environmental Activists*	Qualitative Structured and Semistructured Interviews Individual and Group Interviews	Dancing with an illusive, shadowy figure that can be sensed moving within but concrete features cannot be discerned	Shifts focus from critical reflection to emotional, spiritual, and transpersonal ways of knowing	Focus on Psychosocial context for shift in consciousness	Grounded in Depth-psychology and Jungian principles of individuation	6 Women and 3 men, all white, reflecting the lack of diversity in the field of environmentalism

YEAR	AUTHOR and TITLE	DESIGN	DISORIENTING DILEMMA	CRITICAL REFLECTION	CONTEXT	AFFECT	DIVERSITY
2004	Feinstein, B.C. *Learning and Transformation in the context of Hawaiian Traditional Ecological Knowledge*	Qualitative study of a Course Artifacts, observations, interviews, questionnaires, Weekly journal entries, final projects	Aspects of Identity reflection and cultural differences can serve as catalysts for paradigmatic shifts.	. A course that has the potential for transformation of its learners must incorporate a great deal of dialogue, exploration, and reflection	Students bridged western and indigenous thoughts	Students must feel safe and free enough to explore the deeper aspects of their lives.	12 students 5 males, 7 females 1 Japanese, 1 Swedish, 10 U.S. citizens, 4 part Native American or Hawaiian
2004	Lange, E.A. *Transformative and Restorative Learning: A Vital Dialectic for Sustainable Societies*	Qualitative, Action Research, Phenomenological, critical, hermeneutic analysis	Disillusionment and Fragmentation	Participants did not experience transformation of fundamental principles and values, but rather a restoration of their ethics to their rightful place in their lives	Learners need an ethical sanctuary to heighten their ethical consciousness	Stability is required to survive disorientation and this process is identified as, "restorative learning."	15 students: Diversity in age, income, educational background, type of work, ethnic background and sexual orientation

YEAR	AUTHOR and TITLE	DESIGN	DISORIENTING DILEMMA	CRITICAL REFLECTION	CONTEXT	AFFECT	DIVERSITY
2004	Whitelaw, C., Sears, M. Campbell, K. *Transformative Learning in a Faculty Professional Development Context*	Qualitative, Semi-structured interviews were used to create a descriptive, historical picture of the Partnership Program	Disjuncture or misalignment between expectation and experience of program	It was crucial for participants to reflect upon their expectations of instrumental learning in comparison with the experience they actually had	Need to situate collaborative instructional development projects within faculty members' interpretive community that includes their discipline and department	Collaboration and ongoing support is necessary	16 participants, 10 women, 6 men; most over age of 40; 8 associate professors, 4 professors, 2 assistant professors, 2 graduate assistants
2004	Tosey, P., Mathison, J., Michelli, D. *Mapping Transformative Learning: The Potential of Neuro-Linguistic Programming*	Qualitative Longitudinal Single Case Study 4 interviews over 9 months	"An inside splitting," Paradoxical thinking; Either-or thinking, which is frustrating	Caused a lessening of anxiety regarding self and an increasing focus on others	Space, time, and motion are important for the transformational journey	Symbolic, imaginative, and metaphoric descriptions of the journey are important	1 participant

YEAR	AUTHOR and TITLE	DESIGN	DISORIENTING DILEMMA	CRITICAL REFLECTION	CONTEXT	AFFECT	DIVERSITY
2005	Franz, N.K. *Transformative Learning in Intraorganization Partnerships*	Qualitative Grounded Theory Semistructured Interviews	Critical events and associated discomfort	Transforming partnerships include the practice of thinking critically about individual, work, or process assumptions	A fundamental difference in personality, work style, or worldview between partners promotes transformative learning	Partnerships can help in coping with and adapting to rapid environmental change	10 partnerships, diversity in personality, work style and worldview
2005	Goldie, J., Schwartz, L., Morrison, J. *Whose Information is it Anyway?: Informing a 12-year-old Patient of her Terminal Prognosis*	Mixed Method, Longitudinal Ethics in Health Care Survey Instrument; Examined quantitatively and qualitatively	Vignette given where medical students must make a difficult ethical decision	Medical school students need to critically reflect on their pre-existing perspectives relating to ethical decisions	Students enter medical school with pre-existing perspectives through which they will view their experiences	Students need small groups to work on transforming their thinking	162 medical students in first round 101 students from same cohort in second round, 67 students from cohort in last round

YEAR	AUTHOR and TITLE	DESIGN	DISORIENTING DILEMMA	CRITICAL REFLECTION	CONTEXT	AFFECT	DIVERSITY
2005	Kreber, C. *Reflection on Teaching and the Scholarship of Teaching: Focus on Science Instructors*	Mixed Method Predominantly Qualitative; Approaches to Teaching Inventory, semistructured interviews	No Discussion	Participants claimed to have reflected, but few could provide objective indicators of their reflection	Full-time faculty from the natural or life sciences, focusing on a group of disciplines with a similar paradigmatic structure	Not Discussed	36 faculty from natural and biological sciences, Follow-up study is underway for humanities and social sciences faculty
2005	Narushima, M. *'Payback time': community volunteering Among Older Adults as a Transformative Mechanism*	Qualitative Case Study done in two phases Semistructured interviews, Life story interviews	"Inner conflict"	Inner conflict led to critical reflection	Community volunteering was frustrating	Working collaboratively was often stressful	12 coordinators of volunteers, then 15 volunteers, 6 men and 9 women from diverse occupations

Chapman (2007)

How a theory is studied tells a lot about the theory. Positivist theories are tested using a hypothetical-deductive method. Constructivist theories are examined to provide deeper understanding of a phenomenon. Analyzing the type of studies done on transformative learning theory provides insight into the inherent nature of that theory. Taylor noted in 1997 that there was a need for research designs beyond the phenomenological approach, but this analysis points to continued use of predominantly phenomenological methods. None were solely positivistic and quantitative. Of the 38 studies reviewed for this dissertation, eight of them were generically qualitative, that is the researchers did not assign a particular name for the method they used. Nine used a mixed method, five were qualitative and longitudinal, three were case studies, three used grounded theory, two were ethnographies, three were phenomenological case studies, three were heuristic narratives, and two were action research studies. Each group will be discussed below.

Mixed Methods.

Nine studies used a mixed method (M. J. Ball, 2003; Cragg, C.E., et. al., Goldie, Schwartz, & Morrison, 2005; King, 2000; King, 2002; King, 2003; Kreber, 2005; Mohammed, S. N. & Thombre, A., 2005; Whitelaw, Sears, & Campbell, 2004). Some of the studies used the quantitative aspect of data gathering to screen for participants to interview more deeply regarding a phenomenological experience (M. J. Ball, 2003; King, 2000; King, 2002; King, 2003). Ball's study used a postal survey, sent out to trade union members three times over a period of two years. From these data, the method "unfolded" for the researcher to construct three life histories, nine months after the surveys had been completed. The weakness of the data gathering might be the amount of time it took to gather the data and the fact that the survey does not seem to have been piloted first.

The work done by Cragg et. al., comes closest to a purely quantitative study of perspective transformation of all the research done to date. Two instruments were used—one for demographics and one to measure attitude changes. The Professional Values Scale was used because it included a number of attitudes that were identified as differentiating baccalaureate-prepared from diploma-prepared nurses. Three sets of students were studied, all moving from RN to BSN, but differentiated by how they took their courses: onsite, a mixture of onsite and distance learning, and distance learning. The results showed that baccalaureate education is a key factor for perspective transformation regardless of delivery method. One weakness of this study, noted by the researchers, is that the professional values instrument proved to be problematic. Another weakness was that the distance learning was all through video teleconference. A follow-up study would warrant researching the impact of the use of computers for distance learning.

King had created a Learning Activities Survey for her dissertation and subsequently adapted the tool for different audiences: English as a Second Language (ESL) students, faculty learning how to use technology, and adults in societal crisis (soon after the events of September 11, 2001). While the tool was initially piloted, and subsequently for each of the new audiences as well, the major weakness of each of these studies is that the survey depends upon the participant to determine whether he or she had a transformative learning experience. It seems to me that participants might want to construe responses so as to be among those who were transformed. Moreover, King found an unusually large percentage of participants who said they had experienced transformation: 66.8% in the ESL study, 89.1% in the faculty and technology study, and 18 out of 19 participants in the study of participants in societal crisis. King notes the use of the qualitative aspect of her study was for researchers to examine the learners' perspective transformation experiences for unifying themes, "rather than imposing preconceived ideas on the

data" (King, 2000). However, that the survey used in the quantitative aspect of the study may have "imposed" an expectation of the participant to have had a transformative learning experience, whether that experience was the dramatic structural shift of perspective Mezirow speaks of or not. King then did extensive follow-up interviews to capture the in-depth qualitative aspects of the retrospective transformative experience.

Mohammed and Thombre (2005) looked at 164 stories on the World Wide Web of people with HIV/AIDS. They asked three questions: What are the primary themes of HIV/AIDS survivor stories on the World Wide Web? To what extent is transformation perspective reflected in HIV/AIDS survivor stories on the World Wide Web? And How does evidence of transformation perspective vary with the age, gender, and stage of disease? Two researchers searched the web independently and found 164 stories. They were read and coded for transformation perspective phase markers and transformation perspective outlook markers. A statistical analysis was conducted on the frequency of phase markers and outlook markers. The markers for the phases of transformation and the markers for individuals' outlook changes were strongly correlated. Younger persons were more likely to report a transformation perspective, but there seemed to be no difference between male and female storytellers in exhibiting a transformative perspective in their web stories.

Whitelaw, Sears, and Campbell used a five-point scale survey to evaluate the Academic Technologies for Learning Unit at the university where the study was conducted. However, these data seem to evaluate that program more than any aspect of transformative learning (Whitelaw et al., 2004). Kreber used Prosser and Trigwell's Approaches of Teaching Inventory (ATI), an instrument with, "16 items that distinguishes between two main scales: an approach to teaching that is student-focused and is intended to change students' conceptions, and an approach to

teaching that is teacher focused and is intended to transmit information" (Kreber, 2005, p. 332). The purpose of using this instrument was to identify and compare two groups of instructors— teacher-focused and student-focused. Because I had never heard of the ATI instrument, I searched to find out information about it and discovered a paper given at a conference of the European Association for Research on Learning and Instruction which describes a factor analysis of the tool and concluded that the teaching model represented by the ATI has been "artificially constrained to reflect two extreme dimensions of variation in teaching (Meyer & Eley, 2003). Therefore, there is at least one study that deems the instrument suspect. However, for the purposes of Kreber's study, the tool may have served to identify those instructors who would be most likely to focus on transformative learning for their students.

Of all the studies that used a mixed method, the one done in a medical education setting seems most compelling (Goldie et al., 2005). The purpose of this study was to see if students' ethical decision making processes changed over time to become more consistent with professional consensus. A vignette was used, describing a 12-year-old girl who has leukemia, for whom nothing more can be done. Students are told that the parents of the little girl do not want her to know that she will soon die. Then they are asked what they would do, tell the girl or abide by the parents' decision, and then to justify their response. The students were asked this question coming into the curriculum, at the end of the first year, at the end of the third year, and finally, at the end of the fifth year of the curriculum. The justifications were judged according to a hierarchical scale. The students' responses were compared at the four time points to determine if their ideas before starting the curriculum were consistent with the consensus judgment of informed professionals and if they changed as they studied in the program. The reliability of the process was estimated by using the kappa coefficient, which compares the level of agreement

between two raters with that which would have been expected by chance alone. The findings were startling because by the end of the curriculum, only 23% of the students chose the consensus answer, pointing to the fact that the curriculum had had a minimal effect on the students' pre-existing attitudes towards the autonomy of the 12-year-old girl. Therefore, the large class lectures were not having the type of transformative impact desired. Recommendations to improve this situation included an intentional use of ways to foster transformative learning, such as smaller classes as safe environments for discussion, challenge, and feedback. The research design had construct validity because it analyzed the actual responses of the participants to determine if they had experienced a transformation, rather than asking them to decide for themselves whether they had transformed (as several studies do—see all of King's studies)

Longitudinal case studies.

Five other studies, besides the Goldie case study described above, were longitudinal. This is a good response to Taylor's call for longitudinal studies (E. W. Taylor, 1997). One such design was a single case study about one person over a period of about nine months (Tosey, Mathison, & Michelli, 2005). The researchers note that the purpose of their study was not generalization, but particularization, and there was no attempt to claim the findings could be extrapolated beyond this case. The strength of the case seems to be in the fact that it is not retrospective, as are most studies on transformative learning. This, too, is in response to Taylor's call for studies other than those looking at the experience in retrospect (E. W. Taylor, 1998, p. 22; Tosey et al., 2005, p. 142). This case yields a rich description of the experience of change as a space-time continuum (Tosey et al., 2005p. 156).

Another longitudinal study looked at 20 (volunteers out of a class of 40 students) mature-aged Aboriginal men and women with family and other responsibilities over a period of four

years as they undertook tertiary study (Grant & Trimingham Jack, 1996). Semi-structured interviews and written responses to motivations were collected, however, no discussion is given as to how the data were analyzed. Some of the pertinent findings, though, include noting that critical awareness needs to be unlocked in order for perspective transformation to occur. It is concluded that Mezirow's framework for understanding the process of and necessity for perspective transformation helps participants to construct a new self-image, self-as-student.

The next three studies to be discussed each contribute to the knowledge of the theory, but also comprise one longitudinal study. In 1995, three researchers at the University of Georgia studied how HIV-positive adults make sense of their lives (Courtenay, Merriam, & Reeves, 1998). A nonrandom, purposeful sample of 18 HIV-positive adults was selected from four community-based organizations. Diversity was sought among the group. Semi-structured interviews that were about 90 minutes each provided data on coping, psychosocial development, and meaning-making. Data were analyzed inductively using a constant comparative method, in which the analysis takes place simultaneously while being collected. Five phases of the meaning-making process emerged that reflected the interpretations of all the researchers together.

Two years later, 14 of the original 18 participants were interviewed again (Courtenay, Merriam, Reeves, & Baumgartner, 2000). One major purpose of the study was to determine how participants' perspectives had changed over time, and particularly whether their perspective transformation was permanent. The stability of perspective transformation had not been studied up till that time (Courtenay et al., 2000, p. 104). Prior to gathering new data, each transcript from the previous study was read, studied, and discussed by two members of the research team to acquaint the researchers with particular stories and to read back some of the phrases or statements to the participants as memory prompts. Once again, data were gathered through semi-

structured interviews. Data from all 14 participants showed that the perspective transformation had been maintained, validating what was speculated, that perspective transformation is permanent. The second finding was that meaning schemes (rather than meaning perspectives) did change, relating to the adoption of a future-oriented perspective on life, greater attention to issues pertaining to care of the self, and integration of one's HIV-positive status into self-definition (Courtenay et al., 2000, p. 107).

Eleven of the participants from the 1995 and 1998 studies were interviewed a third time in 1999 (Baumgartner, 2002). Data was collected through semi-structured interviews that were one and a half to three hours long, field notes, and follow-up phone conversations. The researchers who participated in the previous studies also examined this study. The researcher clearly and explicitly positions herself through her psychological orientation and her predisposition toward viewing the participants positively because of previous positive contact. A psychological, biographical, and linguistic approach to narrative analysis was used for the data. The researcher used Alexander's nine indicators of salience to identify psychological themes, including primacy and frequency, and also Denzin's biographical approach to data analysis focused on the interaction between the individual and society to discern the learning pattern (Baumgartner, 2002, p. 49). Findings include the continued stability of the perspective transformation, the integral role of social interaction and the importance of relationships to the transformation process, and the validation that meaning schemes continue to change.

Case study.

One study sought to describe the learning experiences of four students in two online graduate-level library media courses and to explore the theory of perspective transformation as a possible explanation for the changes that occur in those perspectives (Benson, Guy, & Tallman,

2001). The unit of analysis was the individual student who had completed both the courses. They also had less than two years of Internet experience prior to taking the courses. A variety of data collection methods were used: written statements of their expectations on the first night of class, focus group interviews, and semi-structured interviews with individuals after the two courses were completed. A two-phase process to data analysis was used: a with-in case analysis of each individual and a cross case analysis of all four participants. This study was of particular interest given the current trend in higher education to offer more and more online opportunities. Findings showed that only one of the four students experienced a perspective transformation. Indications include the observation that student perspectives on what learning should be influence the experience they have. Using transformative learning theory to intentionally challenge what learning is and can be for students could greatly enhance the learning experience of the students.

Another case study was done on a cohort within a cohort, one team of seven students, representing various leadership positions (Scribner & Donaldson, 2001). The researchers explored learning in the team via observations, one focus group interview, and document analysis, implemented sequentially to increase sensitivity to the phenomena of interest and the potential for collecting pertinent data throughout the process. Thirty-five hours of video recording of structured team activities were collected, along with 25 hours of audio recordings (conducted and monitored by a graduate assistant). The focus group interview was semi-structured and open-ended, and it lasted two and a half hours. Interviews were semi-structured and lasted between 45 and 90 minutes. Student artifacts were also collected. Strategies of open and axial coding were used to analyze the data (Strauss & Corbin, 1998). Member checking was also used, asking each participant to read and comment on the accuracy of the data. The most interesting finding of the study was that group work can actually mitigate against deep learning

because groups can take on a single-mindedness toward task orientation. In Mezirow's terms, students would be so focused on the instrumental goals that they would be hindered from engaging in communicative learning. Further findings indicate that power dynamics can hamper communication. The major weakness of the study is that the research itself may have contributed to the group's difficulty in communicating.

The final case study was done to explore what structural supports might encourage the expansion of volunteering among older adults in non-profit organizations (Narushima, 2005). Data collected included a demographic and administrative overview of senior volunteers in Toronto's non-profit organizations and older people's personal stories of community volunteering. A face-to-face, semi-structured interview of about 60 to 90 minutes was conducted with each of the 12 coordinators of the non-profit organizations. In the second phase of the study, 15 volunteers, ranging in age from 55 to 93, were interviewed face-to-face for their life stories. The volunteer interviews were tape-recorded, transcribed, and returned to the participants for validation. One finding that emerged was how working collaboratively with people who share differing values and beliefs can be both stressful and transformative, mirroring the process of perspective transformation described by Mezirow (Narushima, 2005, p. 578).

Grounded theory.

Mezirow's seminal research was a collection of case studies conducted using grounded theory (1978). The research plan called for a comparative analysis of women's college re-entry programs across the nation that would use participant observation, informal and structured interviews, and documentation review. A diversified sample of 12 programs was selected: five in the New York/ New Jersey area, five in California, and two in the state of Washington. Over a hundred sets of field notes were collected, including interviews with students and staff. Field

notes were contributed by 12 investigators. A collateral interview study was conducted of 20 women who had recently participated in a consciousness raising group. Also, an analysis on the re-entry program Soundings, at the University of Washington, was conducted. The diversity of re-entry programs proved to be too great to infer common patterns. With intensive field data already collected, a comprehensive interview schedule was developed to investigate organizational, administrative, and curricular aspects of women's re-entry programs. Twenty-four additional programs were identified through a telephone survey and case histories were developed on 23 community colleges. Finally, interviews were conducted with over 50 alumnae of re-entry programs to look at the development of participants after their re-entry experience. The Center used six analysts and two consultants to analyze the data and to identify common patterns. It was from this study that Mezirow inductively developed his 10 phases of perspective transformation.

Another study aimed at building theory was one on life mission and adult learning (Kroth & Boverie, 2000). The researchers had found little or no current theory on the relationship of mission to adult learning. Therefore, their study required theory building rather than verification; hence they employed grounded theory. "Using this methodology, theory evolves during the study as the researcher alternatively uses inductive knowledge derived from data gathered and then subsequently deductively tests it within the study itself" (Kroth & Boverie, 2000, p. 138). Five participants were chosen and were each interviewed three times, approximately two hours each time, over a three-month period. Participants were also asked to keep a journal related to their mission. Interviews were transcribed, read, coded, analyzed, and shared with interviewees for added changes if desired. The major finding of this study is that, "until a disorienting dilemma presents itself, mission continues to direct learning and learning continues to reinforce mission,

limiting both purpose and scope of learning" (Kroth & Boverie, 2000, p. 145). The theoretical

contribution generated from this study is that transformation theory might be broadened to

include life mission, focusing more on the affective, somatic, intuitive, and spiritual dimensions.

The third study that identified grounded theory as its approach to inquiry looked at how

successful partnerships transform individuals (Franz, 2005). The sample included ten successful

staff partnerships made up of one campus researcher and one county educator. All partners

participated in semistructured interviews, which were transcribed and coded. Additional data

included document reviews, observations of partners at work, and feedback from partners and

peers. The researchers used Eisenhardt's comparative case study method, analyzing emerging

patterns and themes within each case and then across each case to build theory (Franz, 2005, p.

259). The main contribution to theory from this study was that when there is a fundamental

difference in personality, work style, or worldview between partners, transformative learning is

promoted, and therefore, those studying transformative learning should include partnerships as a

learning context.

Ethnography.

Two studies were conducted with an ethnographic approach. The purpose of one study

was to assess a computer mediated graduate course on inclusive community building and to

explore how students talked about sensitive cultural topics, and how the online nature of the

course influence reflection (Ziegahn, 2001). The study focused on 13 students participating in an

asynchronous course. Email transcripts of discussions and assignments posted by the students

throughout the course were analyzed with a software package, Ethnograph, to "look for

perspectives related to personal history with intercultural contact, cultural identity, and attempts

to 'make meaning' of culture through examination of theory (Ziegahn, 2001, p. 146). There were

two major findings: asynchronous discussions allowed students time and mental space to read other student responses and think about how they would respond, and the written nature of the discussion online made thinking and feeling transparent. The ability to reflect on the premises of their beliefs can lead students to transformative experiences, but the most important finding is that online educators need to be present during the entire learning voyage to nurture and pose questions that will stimulate students to ask questions about their own cultural differences.

The second ethnographic study is actually a comparison of two institutional ethnographies of women in crisis—one of a women's penitentiary in Texas with women participating in educational programs, and the other was of a welfare-to-work educational program in Iowa (Kilgore & Bloom, 2002). In-depth interviews or group discussions with 20 women in the penitentiary and multiple in-depth interviews with students who persisted and graduated (out of three cohorts) from the nine-week welfare-to-work program provided the data.

The researchers found that for women in crisis, master scripts of transformation were usually suppressed and scripts of powerlessness were common. Two main conclusions were drawn. First, Adult Basic Education (ABE) classes for women in crisis are actually an obstruction to transformation, focusing on absolute knowledge or mastery as its organizing structure. Second, transformation theory fails to recognize the nonunitary self and the voices of women in crisis in adult basic education classes. In other words, since women in crisis are in a constant state of fragmentation, they cannot be subjects of a transformational pedagogy that assumes a unitary self.

Phenomenology.

As stated before, most of the studies done on transformative learning are concerned with phenomenological issues. "Phenomenological research is the study of

essences…Phenomenological research is a search for what it means to be human" (Van Manen, 1990, pp. 10, 12). While all the research reviewed in this study are somewhat phenomenological, this section will describe the studies found in this search that explicitly use the word phenomenological to describe the design used.

Taylor sought to delineate the learning process of intercultural competency and to explore the theory of perspective transformation as a possible explanation for the learning participants experience (1994). Using a purposeful sample of 12 culturally competent adults (as determined by criteria from the literature) data were collected through 60-90 minute long conversational style interviews. The analysis involved a three step phenomenological approach. The first step was epoché, developing clarity regarding preconceived ideas, being aware of biases and minimizing personal involvement with the data. Secondly, phenomenological reduction was used, where data were bracketed, being removed from their pure form, being dissected, and having essential elements identified. The third step involved the development of a structural synthesis, looking at the effects of the intercultural learning experience in an in-depth way, identifying deeper meanings for the individual (1994, p. 160). From these data a five-phase model for learning to become interculturally competent emerged. Taylor came to two general conclusions. First, even thought the sample was diverse, there was a similar pattern to learning to become interculturally competent. Second, transformative learning partly explains this process. Taylor found that the process is more recursive than Mezirow's more linear 10 stages or phases of transformative learning. Readiness for change was also a factor identified in Taylor's study, not fully addressed in Mezirow's model. Another major finding is that, "a perspective transformation is not contingent upon critical reflection and that a nonreflective orientation can also lead to a change in meaning perspective" (1994, p. 171).

Another phenomenological study looked at how one adult learner made sense out of her higher education experience (Eddy, 2001). The purpose of this case study was to search for the student's descriptions of the underlying meaning of these experiences. The researcher had known the participant for 17 years prior to the study and that background provided a context for the two formal interviews in which the student described her learning experiences and selected one particularly memorable experience. The main finding of this study, related to transformative learning theory, is that the participant was transformed more from an accumulation of experience in higher education than from any single event or particular experience (Eddy, 2001, p. 18).

The third study in this category is actually a hermeneutic phenomenological study. Van Manen describes what a hermeneutic phenomenology is in this way:

"There is a difference between comprehending the project of phenomenology intellectually and understanding it 'from the inside'…a real understanding of phenomenology can only be accomplished by 'actively doing it.'" (Van Manen, 1990, p. 8)

This study sought to understand how participants in a parent education program experienced the program (First & Way, 1995). Data collection included personal histories and collecting stories of human experience from eight mothers who volunteered to participate after attending a parent education program that met two hours per week for eight weeks. Seven of the eight talked about a major change in their lives, describing it as a turn around point or a 180 degree turn. Findings show that parent education classes need to go beyond the training workshops of the past and provide more meaningful learning experiences as suggested by Mezirow's transformative learning theory. In fact, the authors say that perspective transformation should be explicitly planned for in the curriculum.

Heuristic Narratives.

Three studies used heuristic narratives. Like phenomenology, heuristic inquiry is interested in exploring the inner meaning of a human experience. However, it is different from phenomenology in that it always begins with the researcher's personal perspective first, and then relates it to others. Hence, the researcher becomes part of the study.

One study looked at the importance of talk to midcareer women's development (Carter, 2002). Data collection came from tape-recorded telephone conversations, journal entries, and in-depth interviews, and an informal conversational approach was used. The data were analyzed, looking for themes and categories, and four types of developmental relationships emerged: utilitarian, love, memory, and imaginative. Then narrative portraits were written for each of the nine participants, who read and verified the analyses. Though findings speak only to white, middle-class women, they challenge managers to revisit traditional career development initiatives that are instrumental, task oriented, and goal driven. Furthermore, unlike Mezirow's recommendation for learners to engage in rational dialogue to justify and test beliefs, these women grew and developed through relational communication that was often very personal and self-disclosing.

The second heuristic study was also about women—in this case, 12 women in adult and higher education who traveled overseas for work for an extended period of time (Lyon, 2001). It was a heuristic study because the researcher's own experiences were included. Data were collected through preliminary questionnaires, interviews, follow-up interviews, and an examination of personal documents. Narrative portraits were developed. Transformative learning theory was the lens through which these data were viewed because it provided a way of understanding how adults make meaning of their experiences. However, the findings depart from

Mezirow's theory in that trigger events (or what Mezirow would call disorienting dilemmas) and supporting relationships changed according to the chronological stages of the experience. There is no finality to transformation and relationships were key to the changes the participants experienced.

The third heuristic study sought to better understand the process of learning and self-renewal in the lives of committed and experienced environmentalists (Kovan & Dirkx, 2003). While Mezirow's work relies heavily on cognitive, rational processes that lead to a structural shift in consciousness, this study focuses on a psychosocial understanding of that shift, recognizing that consciousness is made up of sociological and cultural dimensions as well. This work is grounded in the depth psychology and in the work of Carl Jung, suggesting that transformative learning reflects what Jung called, "individuation" or the profound lifelong struggle to be who he or she is called to be (Kovan & Dirkx, 2003, p. 102). Nine participants engaged in two semi-structured interviews individually and in groups, data were analyzed for themes, and feedback was sought from the participants as the analysis took place. The major finding was that transformative learning can be a struggle for consciousness in a largely unconscious world.

"Their ongoing dialogue between conscious and unconscious aspects of the self is embedded in the everydayness of their work, as if they are dancing with an illusive, shadowy figure that they can feel move with them but cannot discern its concrete features." (Kovan & Dirkx, 2003, p. 107)

Hence, according to this study, one can experience a transformation without being fully conscious of the change in perspective.

Generic Qualitative Studies

Eight articles reviewed are qualitative studies without a clearly defined form. The first study evaluated the higher education process of counseling students moving toward becoming professional counselors (Bennetts, 2003). Six female participants were interviewed individually and each interview, lasting between one and one and half hours, was audio taped. A focus group was conducted after the interviews were analyzed. Being in a counseling course, students had more opportunities for reflection and group interaction throughout their experience, which contributed significantly to their ability to transform into professionals.

The second study sought to answer this question, "How do middle-aged widows construct meaning from the experience of loss?" (Danforth & Glass, 2001, p. 515). Narrative interviews, guided by a process of critical reflection, were used to gather data from six women. This technique allows participants to engage in a therapeutic process that gives the griever permission to talk, yielding new information that may add meaning to the discovery process. Additional questions and follow-up interviews were used. Data were analyzed through a continuous process of looking for patterns and making linkages among various parts of the data. The findings resemble Mezirow's phases of perspective transformation.

Six significant themes emerged from the data: (a) emotional dissonance with the reality of being widowed; (b) assumptions about self, relationships, and life which no longer fit current reality; (c) reflections on current life experiences; (d) sense of acceptance of reality and recognition of self as survivor; (e) changes in sense of self and ways of knowing; and (f) meaning-making experience through change in perspective. (Danforth & Glass, 2001, p. 519)

Another qualitative study examines the use of transformative learning theory to evaluate a family-empowerment project focusing on life skills (Christopher, Dunnagan, Duncan, & Paul,

2001). Even though this study is a qualitative study with the use of open-ended questions for interviewing, the interviewers were trained in interviewing methods, including maintaining neutrality and being impartial. It seems that the researchers has somewhat of a positivist influence in their approach, design, and analysis of the data. For instance, even though a convenience sample of 34 participants was used, interviewers were instructed to select every other client who had participated in the education program for 3 months. While they were using a qualitative approach, there was an attempt to use some sort of randomization and for interviewers to be unbiased. A graduate student trained in "qualitative research techniques" conducted interviews that lasted from about 15 to 30 minutes (Christopher et al., 2001, p. 136). A software program called NUD*IST (Nonnumerical, Unstructured, Data-Indexing, Searching Theorizing) was used to analyze the data. Data were analyzed across the case to look for themes and patterns; open and axial coding were used. Results showed that participants did experience transformation, and in particular, a strong sense of empowerment. Limitations of the study include the fact that participants may not have wanted to criticize the program, it is not certain that the educational program alone is responsible to the change in perspective, and it may be hard to believe that such transformation could take place in such a short period of three months.

The fourth research project sought to analyze the pedagogical implications of the close relationship between reading and identity (Jarvis, 2003). The context of the research was a one-year Access course, designed to assist underprepared students (in this case, women with child care needs) to be able to handle the difficulties of higher education. The researcher was also the lead teacher of the classes. Semi-structured interviews were conducted with 36 women of diverse backgrounds. Data were coded to generate categories. The researcher does a good job of positioning, unlike the case noted above, by saying that the stories of the participants were retold

through the filter of her own interpretation, and she did not claim to be presenting their unmediated voices (p. 263). The study was conducted in two parts: considering the interrelationship between reading and the participants' relationships with their male partners, and focusing on the interrelationship between reading and the participants' relationships with women friends and families. Findings show that the women liked to deal with issues in context and in narrative, and books are part of their world and how they make sense of the world. Their identities are constructed in part through reading processes, and their identities as readers are constructed in part by their family and social situations (p. 274). The study confirms the notion that reading can produce disorienting dilemmas for learners. As students read, they may face challenges to their self-identity, beliefs, values, and assumptions, requiring them to wrestle with the different perspectives and sometimes change because of them.

The fifth qualitative study took place in a Finish hospital, exploring the use of self-reflection to improve communication between nurses and patients in health counseling (Marita, Leena, & Tarja, 1999). Nineteen nurses were videotaped and interviewed with an questionnaire. Nurses had received a lecture on Mezirow's levels of reflectivity (Mezirow, 1981) prior to being videotaped. The nurses self-evaluated their interaction with patients, and the process was repeated six months later with different patients. The data consisted of transcribed audiotaped interviews and written evaluations, which were analyzed using Mezirow's model. Findings showed that self-reflective working could help nurses to understand the meanings of other persons' values, ideals, feelings, and moral decisions.

The purpose of the sixth qualitative study was to describe the process and essential nature of reflective learning (Boyd & Fales, 1983). The authors state that they did not initially intend to study perspective transformation as outlined by Mezirow, but the process of reflective learning

appears to be, if not *the* process of perspective transformation, at least a key element in such changes of perspective. Three separate samples were used to gather data: 21 graduate students and 12 practicing counselors, 69 adult educators, and the two authors. Data consisted of information from open-ended self-report responses to questionnaires, structured and nondirected interviews, and the experience and reflections of the authors. Findings included a five-step process to reflective learning that closely resembles Mezirow's 10 phases of perspective transformation.

1. Defining reflecting
2. Being more aware of own process
3. Controlling the process
4. Facilitating the process for others
5. utilizing the concept as a new perspective (Boyd & Fales, 1983, p. 103)

The authors offer two major conclusions. First, the mere naming of the process—bringing to consciousness what is done automatically—is a significant help for students to engage in reflective learning. Second, once students understand this process of reflective learning, they become more interested in controlling their own process. Adult educators should take advantage of both explaining the process and applying this new perspective as a way to empower their students for deeper learning.

> We suggest that reflective learning will become an extremely significant concept in the future of professional learning experience, personal growth, and for all the helping professions, both in professionals' own continuing learning and in facilitating the learning and growth of their clients. (Boyd & Fales, 1983, pp. 114-115)

The aim of the seventh case study under review here was to better understand the power of normative ideologies in transformative learning (McDonald, Cervero, & Courtenay, 1999). In the literature review of this article it is noted that Mezirow's theory does not adequately take into account the interdependence of power and context. Furthermore, Mezirow's theory is credited for focusing on the intrapersonal or psychological level, but not on the organizational level. The authors position themselves well by stating that one of them is a vegan (the subject of their study) and that the research is based on the assumption that to become a vegan, one would most likely have had a perspective transformation like Mezirow describes. Twelve ethical vegans were interviewed for 60-120 minutes. A holistic analysis of the data included open and axial coding and member checking. Results showed that transformational learning is more of a journey than a decision at one point in time, and the learning process is affected by normative and systematic structures of power. Context is of crucial importance to understanding experience. Hence, according to these researchers, Mezirow's theory does not adequately address the effects of power in transformational learning and to understand transformative learning it should be viewed from a more holistic perspective.

The last qualitative study in this category focuses on the transformative learning experiences of 14 "authentic, compassionate, optimistic, proactive" environmentalists (Ball, 1999, p. 254). After completing a screening questionnaire to determine the suitability of their involvement, participants were interviewed in a conversational context. These interviews were tape-recorded and transcribed, and the data were then analyzed for relationships among categories of responses. Results show that transformative learning is not like an acquired skill or a bit of knowledge limited to one dimension; instead it is a fundamental change that encompasses the whole person. In this study, the educator was rarely the key player in the

transformative experience for the students, although he or she may have identified or set up the experience.

Action research.

In the final category of research designs used to study transformative learning, one study used what it calls, "active research" and the other, "action research," and both were course designs and implementations. The purpose of the first study was to explore the possibility of transformation in the context of Hawaiian environmental education (Feinstein, 2004). It was conducted in conjunction with an undergraduate course, Traditional Ecological Knowledge (TEK), rooted in social constructivism and critical multiculturalism. The instructor of the course was also more of a coordinator and participant. Data were collected from artifacts (weekly journals, questionnaires, and final projects), participant observation, and interviews with the students and were analyzed while the class was ongoing. The instructor took field notes throughout the course. Trends began to emerge from the data and they were coded into three themes: explorations of Hawaiian cultural knowledge, student environmental knowledge, and student identity. Students claimed they had a shift in their perspectives of what all TEK encompassed. The course provided the environment and focus for transformational learning to take place.

The final study explored the potential of critical transformative learning for revitalizing citizen action, particularly toward a sustainable society (Lange, 2004). The author used what she called a double spiral-action research model in which the participants studied their working and living while the researcher studied the practice of critical transformative learning. The course began with description and problem posing, but quickly introduced participants to other ways of living and working were hope producing before moving to social and economic critique. Fifteen

middleclass students, mostly women, participated in the three-month course that met weekly for three hours. Participants were not considered objects of the study, but as mutual searchers involved in a discourse about ways of living and working that could be more life giving. Participants kept journals to capture the impact of activities and daily thoughts. Data analysis took place in three stages: phenomenological description, thematic analysis, and critical hermeneutic analysis, as well as participant checking. The major finding was that participants did not experience transformative learning as much as they did "restorative" learning. "They were able to return to their inner compass, which was submerged under the deluge of adult expectations, cultural scripts, and workplace practices…"(Lange, 2004, p. 130). This study enlarges and enriches the current understanding of transformative learning to include a dialectic of transformative and restorative learning.

Synthesis of Methodology

Taylor called for more longitudinal studies, and six have been done. Also, he noted that most studies up to 1997 were phenomenological. That still seems to be the case. Nine studies used a mixed method, but they were still predominantly phenomenological. It seems that the experience of transformative learning lends itself best to phenomenological inquiry because it is such an abstract, deeply felt human phenomenon. One challenge for future researchers is to think outside the phenomenological domain and critically assess whether other paradigms and methods would offer new ways of thinking about transformative learning. One possibility is to study frequency in different contexts. However, the study must not rely upon self-determination of perspective transformation, as some of the mixed methods did here. Participants might not be able to accurately identify if their perspectives have been transformed as Mezirow describes. It is

challenging to think of other ways of appropriately studying the theory, and perhaps others in the future will think of new ways.

All the studies were qualitative or predominantly qualitative. Nearly all used some sort of questionnaire, semi-structured questions, conversational interviews, or narrative questions. Some used the observation of participants and/or the analysis of artifacts. Nearly all of them used coding for the analysis of the data, some specified software programs to assist in that effort, others used open and axial coding. All looked for themes and/or categories and/or trends.

While more studies have been published, many of them also contributed to the issues Taylor indicated for focus: and in-depth understanding of the disorienting dilemma, critical reflection, context, affect, and diversity. A synthesis of the findings on these topics follows.

Disorienting dilemma

Some of the catalysts for disorienting dilemmas identified by the research are the following: cultural differences, intercultural miscommunication, cultural triggers, serious medical diagnosis, chronic illness, traumatic events such as September 11, 2001, identity reflection, external and internal triggers, and reading. Descriptions of the phenomenon include nagging doubt, dancing with an illusive shadowy figure, inner discomfort, discomfort associated with critical events, emotional dissonance, disequilibrium, cultural disequilibrium, disillusionment, frustration, a totally different experience, a different way of life, either/or thinking, paradoxical thinking, disjuncture or misalignment, tensions, fragmentation, inside splitting, and earth-shattering. One study showed transformative learning through a gradual cumulative change, without a disorienting dilemma.

Critical reflection

Contributions to our understanding of critical reflection are not as easily described as those for understanding disorienting dilemmas. Neither is there clear consensus on the role of critical reflection. Overall, many studies say critical reflection is essential for learners to be transformed, but some research found that transformative learning can take place without the rational aspect of critical reflection, emphasizing a more spiritual, emotional, and transpersonal ways of knowing and being (Ball, 1999; Kovan & Dirkx, 2003; Lyon, 2001).

Context

There were many different contexts in which the studies have been done, speaking to the universality of the experience. Those pertaining to educational contexts are the following: returning to college, university education for Aboriginal students, medical school curriculum, graduate and undergraduate courses, online courses (2), group learning within a class, faculty learning for development (2), and parent education class. Contexts that have to do with culture in particular were these: intensive intercultural experience (people from other cultures coming to the U.S.), bridging Western and indigenous thoughts, and travel to other cultures and back home. The workplace was also a context for studying transformation: workplace in general, mentoring in the workplace, nurse/patient communication, and community volunteering. Other contexts discussed in the literature were chronic illness, bereavement, women in crisis, life mission, age group (participants turning 30 or 40), the power dynamics between men and women, and learning from experience.

The research also gives us a better understanding of the nature of context in relation to perspective transformation. The following list is culled from the studies reviewed.

1. Emotional attachments form a part of the context.

2. Meaning and experience cannot be understood outside of context.

3. Transformative experiences were not in isolation from other life experiences.

4. Learners are not isolated from their prior experience and life context.

5. People draw from previous experience and larger social context to learn.

6. Classes that focus on instrumental learning (such as Adult Basic Education) can obstruct deep learning.

7. Transformative learning helps to cultivate a community of reflective practice.

8. Learners need an ethical sanctuary to heighten their ethical consciousness.

9. Space, time, and motion are important for the transformational journey.

Affect

Much of what we learn about affect and transformative learning overlaps with what we discovered about the context. However, to look at these learnings from the affective lens, important trends emerge. The findings will be grouped according to five categories: general findings, the negative stress people experience going through transformation, the positive effect of transformation, findings about the need for support for those experiencing transformation, and the importance of relationships

General findings.

1. Assumptions are attached to feelings.

2. Assumptions about life purpose are powerful.

3. Passion and intense emotion is central to transformation.

4. Transformative learning includes affective understanding of intuition, reliance on faith, or the development of trust.

5. Perspective transformation seems to be related to Jungian individuation.

6. Symbolic imagination and metaphoric descriptions of the journey are important.

Negative stress of the experience.

1. Decisions makers and leaders experienced stress in the workplace through the experience of transformation.

2. Students felt the strain of family responsibility while trying to go to school.

3. Collaborative work can be stressful, but can lead to transformation.

4. Women in crisis feel fragmented and need holistic approaches to transformative experiences.

Positive effects of transformation.

1. Participants became more loving parents.

2. Nurses could better understand the perspectives of their patients.

3. Transformative learning can be used in conjunction with grief counseling.

The need for support for people going through transformation.

1. The women's movement was a supportive environment for women returning to college.

2. Students need a safe place to discuss cross cultural issues.

3. Students must feel safe enough to explore the deeper aspects of their lives.

4. Collaboration and ongoing support are necessary.

5. Students need small groups to work on transforming their thinking.

6. A positive learning environment fostered transformative learning.

7. Stability is required to survive disorientation and to lead to restorative learning.

8. Legitimate peripheral participation creates an environment that fosters transformative learning.

Importance of relationships.

1. Relationships are important for transformation to occur.

2. Social interaction is central to transformation.

3. Love relationships seem to foster transformation more than utilitarian, memory, or imaginative relationships.

4. Partnerships can help in coping with and adapting to rapid environmental change.

5. Relationships, power, and making meaning through relationships is important for transformation.

Diversity

Diversity was demonstrated in several ways: ethnicity, gender, age, profession, and the country in which the study was done. My search was for articles in English, therefore, studies done in non-English speaking countries are not likely to appear in this synthesis. One exception is the research done in a Finish hospital. When ethnicity was specified, the largest number of participants overall were white or "Caucasian," a close second is African American participants, followed by only a few Hispanics and Asians, and one or two indigenous participants. One study focused on Aboriginal participants. Looking at the overall total of men and women mentioned as participants in the studies, women outnumber men by about two to one. Ages of participants (when provided in the study) range from early 20s to the 80s. Professions of participants include educators, teachers-in-training, trade union members, nurses, students, and a "wide range of professions." Participants were also HIV/AIDs patients, women in a penitentiary, welfare recipients in an educational program, widows, and New York residents who lived through the terrorist attack of September 11, 2001. Countries in which these studies were conducted were Australia, Canada, England, Finland, Scotland, and the United States.

Summary

In conclusion, it seems that Taylor's 1997 call for more studies to be submitted to major journals, for designs to include more longitudinal studies, and for researchers to look more closely at the nature of the disorienting dilemma, critical reflection, context, affect, and diversity has been heeded. This chapter listed all the studies published in refereed journals since Mezirow's seminal work appeared in 1978. The increase in studies done after Taylor's review of the literature in 1997 can be readily seen. The types of designs have been analyzed and summarized, as have the treatment of each of the areas Taylor emphasized. The only area that does not seem to have changed is the over abundance of phenomenological research done on the theory. It seems that the nature of the phenomenon calls for such methodology, and simply does not warrant a quantitative, experimental approach.

More than several researchers, especially those who were educators, called for purposely planning for transformative learning in courses and other types of learning experiences. Two courses were designed with transformation in mind. What seems to be lacking is a coherent plan or theoretical model to use to intentionally and deliberately design curricula for communicative learning that could and should lead to transformations, without neglecting instrumental learning.

Summary of Transformative Learning Theory

The first part of chapter 2 defined and described Mezirow's transformative learning theory. How he developed the theory was explored, looking at the major events and contributors that influenced the theory. A discussion of what critics have said regarding the theory was provided, as was Mezirow's responses to his critics. Thirty-eight empirical studies conducted on the theory were analyzed and synthesized. It is safe to say that transformative learning theory is now the most empirically researched theory unique to adult learning.

Deliberative Curriculum Theory

This section will introduce curriculum theory by discussing the different ways the term curriculum has been defined, described, and discussed in the field. It will also provide a brief historical sketch of curriculum theory in general in order to provide a context to situate deliberative curriculum theory. This section will conclude with an explanation of Schwab's deliberative curriculum theory: how it was developed, how it has been interpreted and implemented, how it relates to program planning for adult education, and why it is an appropriate framework to integrate with transformative learning theory to improve professional education.

Definition of Curriculum

The term curriculum is difficult to define because it could mean anything quite simple, from intended educational objectives or a list of courses students must take, to much more complex definitions, such as the subject matter, experiences, goals, outcomes, and processes for learning. By 1987, there were more than 130 definitions of *curriculum* in the educational literature (Portelli, p. 357). The word conjures up all sorts of notions from the vision of an educated adult to the socio-political agendas of those in power over those who are not in power, to the direct instruction to be "covered" by a particular teacher in a particular classroom on a given day.

The actual word *curriculum* is of Latin origin and comes to the English language through the Old French verb, *currere*, meaning "to run" (Ellis, 2004, p. 3). In the Middle Ages the English term took on the idea of a "course of study," with a beginning and an end—as a running course would have. It could be viewed as a running path to take students toward a particular conception of the good life (Henderson & Hawthorne, 2000, p. 3). Running a path is a metaphor that brings with it ideas of starting and stopping. Reid says that a curriculum must have

sequence, completion, and certification (Reid, 2006, p. 35). Without sequence, completion, and certification, there can be learning, teaching, and education, but not curriculum.

Posner describes seven common concepts of curriculum. They are the scope and sequence with a matrix of themes and levels; syllabus as a plan for an entire course with rationale, resources, and evaluation; content outline or a list of topics in outline form; standards, or a list of knowledge and skills required for completion; textbooks; course of study, or a series of courses a student must take; and planned experiences (Posner, 2004, p. 12).

Curriculum can be defined as a means to an end or as the end itself. As the *end*, curriculum would mean the subject matter and objectives for which the educational institution holds students accountable. As the means to the end, curriculum is the set of instructional strategies instructors plan to use (Posner, 2004, p. 5). One can study curriculum as prescription or curriculum as experience (Ellis, 2004, pp. 4-5). Reid talks about curriculum as practice (the concrete ways one might be involved in the practice of curriculum) and curriculum as institution (the public character it portrays) (Reid, 2006).

In describing the immense complexity of the notion of curriculum, Beyer and Apple (1988, p. 5) list eight general issues that must be dealt with when considering curricula. They are: epistemological (what should count as knowledge?), political (who shall control the selection and distribution of knowledge), economic (how is the control of knowledge linked to the existing and unequal distribution of power, goods, and services in society?), ideological (what knowledge is of most worth?), technical (how shall curricular knowledge be made accessible to students?), aesthetic (how do we act "artfully" as designers?), ethical (how shall we treat others responsibly and justly in education?), and historical (what traditions in the field already exist to help us answer these questions?).

Furthermore, curriculum is not an isolated phenomenon to define and study. Posner says that there five concurrent curricula (Posner, 2004, pp. 12-13). First, the *official* curriculum is the written, documented curriculum, designed to give faculty a basis for planning. Second, the *operational* curriculum is what is actually taught by the teacher and how its importance is communicated to the student. Third, the *hidden* curriculum refers to the norms and values embodied by the school or institution, which include issues related to gender, class, race, authority, and school knowledge. Fourth, the *null* curriculum is the subject matter *not* taught. Consideration of the null curriculum would include why certain subjects are not included. Finally, the *extra* curriculum includes all those activities and experiences outside the subjects.

To talk about curriculum requires one to try to come to grips with the complexity of its meaning. For the purposes of this study, curriculum will take a broader rather than more narrow definition of the term, i.e., curriculum will be viewed as a multi-dimensional, complex phenomenon with many components, stakeholders, and issues rather than a simple course of study or the subject matter to be learned.

Brief History of Curriculum Theory

The purpose of this sketch of the history of curriculum theory is to provide a context in which to situate Schwab's deliberative curriculum theory (Schwab, 1978). It will focus on some of the key figures, events, and publications that helped to shape the field of curriculum studies in the United States from 1828 to the present. An exhaustive study of all the major contributions to the field is outside the scope of this dissertation, therefore, those people, ideas, events, and publications that seem most important for understanding the context of Schwab's deliberative curriculum theory will be described. It is not meant to be an exhaustive account of the history of the field, but rather, a broad context to better understand Schwab's significant contribution.

Probably the earliest attempt to conceptualize a curriculum was in 1828 with the *Yale Report on the Defense of the Classics* (Pinar, Reynolds, Slattery, & Taubman, 1995, p. 74). Known as faculty psychology, or a focus on the two main faculties of the mind, this was a strong defense for traditional education and humanistic values in the face of the rise of the natural sciences and practical subjects (Kliebard, 1995, p. 5). The report articulated two major purposes of education—to build up the mind or expand the power of the mind, and as furniture, or school subjects to store in the mind. Today these two distinctions might be considered teaching students *thinking skills* and particular *knowledge and skills*. This report was born out of the mental discipline movement that viewed the mind as a muscle.

For decades, the mind-as-a-muscle paradigm pervaded the schools, which came to be known for drab and dreary rote learning, but by the last decade of the century, the view of this type of education began to slowly change. Several factors contributed to its demise. First, it was not empirically verified through studies done by William James in 1890 and Edward Thorndike in 1901. Second, there were logical problems; for instance, if the mind were a muscle that could be strengthened by exercise, why could not students exercise it on a wide variety of different subjects, or why could not one's mind be developed by studying nonsense syllables? Finally, though, perhaps the most important reason for the falling away of the mental disciplinarian view was a changing social order that brought with it a different idea of what knowledge is most worthy of learning. The decade of the 1890s was one of great societal change economically and technologically, and more and more students began to attend secondary schools in search of better lives and jobs (Kliebard, 1995, p. 7). In many ways, the last decade of that century, with the 1893 economic panic, news of crime and corruption in developing cities, and the emergence

of a depersonalized urban society, it was not surprising that a new role for curriculum began to develop (Kliebard, 1988, p. 23).

In 1902 Dewey published *The Child and the Curriculum* (2001), which began to shift the focus away from a subject-matter approach to a student-centered approach. He maintained that the dualism between the child and the curriculum did not exist and that the child's experience must form the basis of the curriculum, and thereby synthesize, in Hegelian fashion, the two (Pinar et al., 1995, p. 105). He wrote,

> Abandon the notion of subject-matter as something fixed and ready-made in itself, outside the child's experience; cease thinking of the child's experience as also something hard and fast; see it as something fluent embryonic, vital; two limits which define a single process…It is continuous reconstruction, moving from the child's present experience out into that represented by the organized bodies of truth that we call studies. (Dewey, 2001, p. 109)

Besides experience (1938), Dewey also emphasized reflection (1910, p. 13), the growth and development of students (1916, pp. 41-53), community (1916, pp. 4-5), and democracy (1916, pp. 86-89). These were the hallmarks of the progressive education movement, one that has come to be associated with Dewey more than with any other philosopher, and its tenets went directly opposed to the traditional conception of what curriculum is or should be.

While progressivism was slowly developing in educational circles in the early decades of the twentieth century, other important psychological and philosophical trends were gaining influence. One was Thorndike's stimulus-response behavioral psychology, published in his major opus, *Educational Psychology* in 1913 (Pinar et al., 1995, p. 91). For Thorndike, a measurable response equaled learning. Furthermore, in the same way that measurement assists

engineers (by using the foot, pound, calorie, etc.), so education could become a form of human engineering that would help students achieve fundamental ideal human aspirations. Thorndike, recruited to work at Columbia's Teachers College, began to discredit the mental disciplinarian concept of transfer. Essentially, his work cast doubt on the existence of such mental operations as memory, perception, reasoning, and observation. For him, they were fictions that should be cast aside along with other conceptual baggage left around from faculty psychologists. Thorndike saw the mind as a machine that has millions of individual connections, each bearing a message having little in common with the next. Therefore, it did not have a large capacity for memory and reasoning waiting to be developed. Instead, it had multitudinous separate individual functions, something like a switchboard with countless wires and connecting points (Kliebard, 1995, p. 92).

In the same way that Thorndike provided a psychological rationale to move away from faculty psychology's influence on curriculum, Frederick Winslow Taylor (1856-1915) provided a methodological approach to accomplish change in the curriculum through his notion of scientific management. During the rise of industrialism and massive social change in the U.S., when social institutions such as family and church were believed to be in decline, it was the idea of social efficiency applied to schools that emerged as an urgent mission (Kliebard, 1995, p. 77). Whereas in the past, educators viewed their responsibility as either to develop mental discipline, or to organize curriculum around the needs and abilities of the children, now the mission was to help curriculum developers to design education that would prepare students specifically for the role they would play as adults in the new social order. To go beyond what someone would need to perform a particular role would be a waste.

Specifically, Taylor was focused on economic practice and the division of labor. Moving away from the craft guilds with apprentices, large factories were springing up where labor had to be specialized and routinized. This called for a "scientific management" of the labor, to supervise and control mass production, effectiveness, and efficiency. Managers were asked to analyze specific tasks into their smallest, constituent parts to assure their most efficient execution. This process became known as "task analysis," and in his seminal work, *Principles of Scientific Management*, published in 1911, Taylor said that the most important single aspect of modern scientific management was the task idea (Pinar et al., 1995, p. 95). Applying Taylor's notion of atomizing work responsibilities and analyzing tasks to reduce waste gave rise to the social efficiency movement of curriculum development. Curriculum "became the assembly line by which economically and socially useful citizens would be produced" (Pinar et al., 1995, p. 95).

It was John Franklin Bobbitt who applied Taylor's ideas of social efficiency to education. Bobbitt has become associated with developing a particular specialization within the education field—the field of curriculum study. Bobbitt became a member of the faculty at the University of Chicago in 1909. In 1912 he wrote an article in which he lauded a school system in Gary, Indiana that had been practically created by the U.S. Steel Corporation. In this article, Bobbitt spoke of education as if it were a business or industry. He used words such as "plant" to describe the buildings and "educational engineer" to refer the superintendent. He was very impressed with the social efficiency he saw there and felt that waste was to be avoided in the educational enterprise; therefore people should not be taught what they would never use. In order to reduce waste, educators would have to develop a scientific way of determining a student's future role in life. That prediction would then become the basis for directing certain students into certain subjects, and avoiding the inefficient approach of training all students in the same way (Kliebard,

1995, p.85). In 1918, Bobbitt wrote, *The Curriculum*, now considered the first major work on curriculum theory in the U.S. and his definition of curriculum was distinct.

> The curriculum may, in his view, be defined in two ways: 1) it is the entire range of experiences, both directed and undirected, concerned in the unfolding of the abilities of the individual or 2) it is the series of consciously directed training experiences that the schools use for completing and perfecting unfoldment. (Pinar et al., 1995, p. 98)

Perhaps the most important aspect of Bobbitt's contribution, however, was his application of task analysis and his emphasis upon vocational training that led to scientifically determined objectives to measure what students need to know and be able to do in their world as it is. In 1924, Bobbitt wrote a companion book, *How to Build a Curriculum*, which operationalized the theory he had developed in his earlier work.

With the stock market crash in 1929, the social efficiency movement in curriculum design suffered a setback as the progressives started to have greater influence. Dewey insisted that subject matter be reorganized based upon the study of the student. In 1930, the Progressive Education Association recruited Ralph W. Tyler to oversee the evaluation component of a significant study comparing traditional schools with progressive schools. The study came to be known as the Eight-Year Study and it provided impetus for at least two major curricular developments. First, it fused the social efficiency concern of preparing students directly for the duties of life with the needs and interests of the learner as the basis of the curriculum. Second, and perhaps more importantly, it infused behaviorism into the curriculum (Kliebard, 1995, pp. 187-188). As a proponent of the scientific study of education, Tyler was insistent on finding objective ways of measuring learning, and hence the behavioral objectives were born. He insisted in stating objectives in terms of behaviors as a first step in creating curricula, which

influenced the field of curriculum theory to this day. Benjamin Bloom, known for his taxonomy of educational objectives developed in 1956, was part of the team of evaluators of the Eight-Year Study. His experience with this project no doubt influenced him as he later systematized the behavioral dimension of learning and reinforced the belief that "objectives are fundamentally expressions of the behaviors that educators wanted—as opposed to the content teachers want to teach or the experiences educators want students to have"(Posner, 2004, p. 60).

Tyler's scientific approach notwithstanding, the Eight-Year Study was a resounding success for Dewey's ideas of progressive education. Essentially, after nearly 1,500 students who attended 30 progressive schools (each unique in its own way), were compared with an equal number of students who had attended traditional schools, the students from the progressive schools seemed to have fared better.

> Comparisons seemed to indicate that students from the experimental schools, which emphasized experiential education, did slightly better academically in college than did students from their traditional schools, but were decidedly better off in terms of their overall development in a whole host of things such as thinking, taking initiative for their own lives, and social adjustment. (Posner, 2004, p. 52)

At this same time, however, there was a movement brewing to revitalize the traditional, classical approach to education from the nineteenth century. It was led by Robert M. Hutchins, who became president of the University of Chicago in 1938. Hutchins recruited Tyler to come to the University as chair of the department of education and university examiner. In 1936 Hutchins had published *The Higher Learning in America*, his treatise on what he considered to be the classics of Western civilization and how they should be used to create a "great books" curriculum for higher education. Hutchins felt that a person could not be considered educated

without having read the great books from the Western world. During this time, Hutchins

garnered only a few followers, but his idea was revisited almost five decades later by Mortimer

Adler in 1982, and by Allan Bloom and E.D. Hirsch in 1987 (Pinar et al., 1995, p. 153).

The Great Books curriculum at the University of Chicago did not receive much support

from the faculty, but Tyler and Bloom began to do significant work there in the late 1930s, albeit

technical and scientific work (Pinar et al., 1995, p. 155). With the interruption of World War II,

progressivism suffered a loss of popularity, and a decade later Tyler published what arguably

became the most influential work on curriculum design of the twentieth century, *Basic Principles*

of Curriculum and Instruction (Tyler, 1949). Known as the Tyler Rationale, he asked four

questions for the curriculum designer to answer,

1. What educational purposes should the school seek to attain?

2. What educational experiences can be provided that are likely to attain these purposes?

3. How can these educational experiences be effectively organized?

4. How can we determine whether these purposes are being attained? (Tyler, 1949, p. 1)

The Tyler Rationale was based upon an epistemological assumption that the scientific way of

prescribing learning, i.e., a linear, cause/effect way, is unquestionable. It is assumed that the

planner is objective, and that he or she scientifically plans the means necessary to produce the

desired learning outcomes. This leads to the assumption that decisions on such issues as

instructional method and content are technical ones, and are value-free and appropriate for a

technical expert to make. However, this led to a "technicizing" of curriculum work, in which the

curriculum specialist uses only a "technicist" approach to making important curriculum

decisions. This logical conclusion would eventually lead to a very important difference between

Tyler and Joseph Schwab. "A technicist approach to a decision doesn't even recognize that the

decision has moral, political, cultural, social, and economic dimensions, much less address these dimensions" (Posner, 2004, p. 18). Schwab later focused on the negating of the moral act of curriculum design as he reflected upon Aristotle's distinction between two different kinds of virtues, intellectual and moral (Aristotle, 1992, p. 351). This would become Schwab's major point of departure from Tyler's Rationale, one that has been misunderstood and misinterpreted (Hlebowitsh, 2005; Westbury, 2005), perhaps because of Schwab's use of the words "theoretic" and "practical" for Aristotle's terms "intellectual" and "moral" respectively. Schwab's theory and the issue of how he used the term "practical" will be discussed more fully in the later in this chapter.

Contemporary Setting

Before discussing Schwab's curriculum theory in detail, it will be helpful to look at the contemporary field of curriculum theory, in which deliberative work is situated today. Reid, a scholar on curriculum studies, provides a helpful framework of four different perspectives on how to think about curriculum (Reid, 2006, pp. 12-18). The curriculurists who use the first perspective are what Reid calls systematizers. They see curriculum as a plan or blueprint for activities. Some names associated with this approach are Bobbitt, Tyler, Gagne, and Mager. The curriculum process is treated as an unproblematic, institutionalized activity. They are concerned about defining curriculum, setting boundaries between it and other interests, especially between curriculum and instruction. The metaphor used within this framework is one of engineering and systematic work (as distinguished from systems thinking). It suggests that the smooth running of the machine might be problematic, but the machine itself is fine. It also implies that the problematic parts of the curriculum require experts who understand these complex machines. From this point of view, it is useful to think about objectives and criteria of evaluation. However,

this becomes a weakness when educators work with narrow definitions of curriculum that hinder their view of other issues, such as power structures and how they affect the planning process.

The second perspective Reid provides for looking at curriculum frameworks is from the radicals, who see curriculum as cultural reproduction. In terms of attitude to institutions, radicals are at the opposite end of the spectrum from the systematizers. Some names of theorists who would be associated with this category are Pinar, Apple, and Beyer. For the radicals, curriculum maintains a hegemonic role in society and continues to be part of the apparatus that stabilizes the social order and oppresses the majority of the population. The strength of this position, whether its adherents believe that the practice of hegemony is intentional or not, is that they have pointed out gaps in the systematic approach, namely, questions about what the machine is *for*, and that the systematizers have focused only on how to make it work. The disadvantage of the radical position is the strong a priori theoretical stance it brings to the discussion and work. Reid states, "While a systematic perspective confines understanding of curriculum to technical experts, a radical perspective restricts it to those who support and understand a particular kind of doctrine" (Reid, 2006, p. 15).

The third perspective of curriculum work is from existentialists, who see curriculum as personal experience. They, like radicals, share hostility for curriculum as institution. Rather than trying to deal with the mechanisms through which institutions act oppressively, they would prefer to talk about what might be achieved now, in the context of existing structures. Being practical, they use whatever they can to deal with immediate desires and needs. Therefore, they would be inclined to write about aesthetics, psychoanalysis, spirituality, or anything that deals with the human condition and suggests ways to bring about improvement. Maxine Greene, a renowned professor of education and philosophy at Columbia University (emerita) would be an

example of an existential curricularist. For existentialists, curriculum might be benign or oppressive, but it is not just an institution. It is a cluster of activities that is experienced by different people in different ways. The idea of the expert must be done away with because everyone is his or her own expert. The problem of this perspective is that it limits the significance of the social reality of curriculum as institution, and therefore, the curriculum has no historical or cultural significance as a shared practice (Reid, 2006, p. 16).

The final perspective Reid provides is from what he calls deliberators, who see curriculum as a practical art. While this perspective may contain elements of the other three—curriculum as plan, cultural reproduction, or personal experience, for them, curriculum is the art of discovering curriculum problems, deliberating about them, and inventing resolutions for them. This approach is not driven by a big idea, such as the power influences in the process, hegemony, and oppression. Neither is it dominated by a technical plan, a means to ends linearity, or a prescribed way of building the curriculum. Instead, the deliberators are prepared to listen to what others have to say, which is a precondition to deliberation. In this sense, it does address issues of power in the group because deliberation cannot take place under conditions where those with influence know in advance what kind of decision it must provide, either because of institutional reasons or because of an espoused theory (Reid, 2006, p. 16-17).

Neither can deliberation take place if participants do not have a voice. Furthermore, multiple stakeholders must be present to be certain to hear all perspectives on the curriculum problems and needs—perspectives from teachers, students, administrators, and anyone who may be able to contribute to the conversation in a meaningful way. Deliberation does not solve the problem but resolves questions of right action, or what should we do? Groups may discuss questions of knowledge, understanding, and value, but this is not deliberating. "Deliberation is

group resolution, through discussion, of a deliberative question" (Dillon, 1994, p. 5). Curriculum

must be seen as a common endeavor (Reid, 1994, p. 25). Deliberation is about deciding on

judgments, choices, and actions together. The idea of deliberation came to the field of curriculum

design through Aristotle and Dewey, but it was articulated and developed more fully by Schwab

(Schwab, 1978 /1971a).

The Development of Schwab's Deliberative Curriculum Theory

This section will discuss some of the most important life experiences Schwab had that led

him to his deliberative point of view, the two major philosophical influences that informed his

theory, and studies done on the theory since his seminal work in the late 1960s and early 1970s.

Schwab was primarily an essayist whose writings are dense and difficult to understand. This

section will explain at least one reason why readers often misunderstand him or give up easily:

he draws from his life experiences and the writings of others to engage the reader into a

deliberative process itself, with a kind of back and forth discussion that encourages thought and

intends to lead to action.

Schwab's Personal Experiences

In the same way that Mezirow was profoundly influenced by personal experiences that

led to the development of his theory of transformative learning, Schwab also had rich and

significant experiences with influential people and opportunities. He began studies at the

University of Chicago at the age of 15 and graduated with his baccalaureate degree in 1930, and

earned his doctorate in genetics in 1939. During 1937, however, he spent a year at Teachers

College, Columbia University, where he studied psychometrics and assisted with curriculum

development. By 1938 he had already become an instructor at the University of Chicago, the

same school from which he would retire in 1974 as professor of education and professor of

natural sciences (the only known full professor of natural sciences who became a full professor of education) (Eisner, 1984). Thus, Schwab studied and worked at what has been arguably two of the most important universities for curriculum development in the U.S. (Pinar et al., 1995), and two of the same institutions for which Dewey worked. It was at Chicago that Bobbitt, Hutchins, Tyler, Bloom, worked, as well Richard McKeon, a brilliant philosopher and well-known epistemologist who had studied with Dewey. At Columbia was also Thorndike, and access to Mortimer Adler, who was a member of Columbia's Great Books faculty. Also at Columbia, but after Schwab's retirement, Mezirow would come as professor of adult education in 1975.

The early years of Schwab's career at the University of Chicago were marked by sweeping curriculum changes including the designing of a four-year liberal arts baccalaureate degree, figuring out where natural science fit into the liberal arts curriculum, debating the Great Books approach to education, watching the impact of behaviorism upon curriculum planning, and comparing student-centered progressivism to the traditional subject-matter approach to education. This was the hotbed of curriculum debate and young Schwab was participating at all ends of the spectrum.

Of particular influence was a project Schwab was invited to work on in relation to the newly developed four-year general education curriculum. McKeon asked him to work on developing a capstone course for this program, called Observation, Integration, and Interpretation (OII). He had been greatly influenced by Dewey at Columbia and now offered Schwab direct access to his thought. McKeon was concerned most fundamentally with epistemology, and particularly knowing how experienced thought about a problem could be understood. He felt the cardinal role of the intellectual historian was to understand what others have said by the careful analysis of the texts they have written, or in other words, McKeon was

profoundly concerned by this question—what is meant by the words that make up a text? Thus, McKeon brought to Schwab an appreciation for hermeneutics, and an understanding that reading a text also requires both the understanding of what the author is saying and meaning and an understanding of the interpretation the reader brings to that text. Schwab took this experience with hermeneutics into planning the OII course (and into his subsequent work with curriculum design) and he found a way to embrace many different perspectives in a deliberative fashion, i.e., he was able to reconcile in coherent terms his concerns as a biology teacher with his interest in the Great Books as resources for liberal education. Curricular tasks were seen by McKeon and others as focused around three key notions—the culture, the person and how that person interpreted the culture, and community, or persons seeking to resolve problems given by the culture (Westbury & Osborne, 2001, p. 75).

His experience in dealing with ideas on opposite ends of the spectrum—such as the need for a generally educated person on one hand, and the need for a skilled scientist on the other— led him to embrace curriculum work as challenging mental work of interpreting, reconciling, and judging. These experiences would become very important for him later. Indeed, it has been said that he never gave his readers answers, but rather invited them to engage in hard thinking (Westbury & Osborne, 2001, p. 78). This is one reason many readers have found Schwab's writings to be opaque. Westbury and Wilkof say, "his writing was seen as puzzling and enigmatic and more often than not was misunderstood" (Westbury & Wildof, 1978, p. 23). Schwab said he was very opposed to "global principles and comprehensive patterns, the search for stable sequences and invariant elements, the construction of taxonomies of supposedly fixed or recurrent kinds" (Schwab, 1978/1971a, p. 288). In this way, his ideas were diametrically opposed to Tyler's systematic, linear way of designing curriculum, and Bloom's fixed taxonomy

of educational objectives. However, with his use of the term "practical" many readers thought he was simply calling practitioners back from theoretical discussions and into the pragmatic practice of getting things done. Hlebowitsh maintains that Schwab was not that different from Tyler and simply wanted to help the curriculum field to "recognize itself along the lines of its practice and the practical skills needed to help improve school learning environments" (Hlebowitsh, 2005, p. 78). However, Westbury takes issue with this position and maintains that Schwab's ideas were a radical departure from Tyler and others who embraced a systematic, seemingly unproblematic way of planning curricula (Westbury, 2005). An in-depth discussion of how Schwab used the term "practical" will be discussed later in this section.

By 1950, after presenting an essay on testing for the Educational Testing Service, he demonstrates his view of the complexity of the work of education,

> One axis of doctrinaire adhesion consisted of a line of which one extreme consisted of persons who felt they deserved the name "no-nonsense" people. The no-nonsense people turn out to be simply people who have honed a problem down until it looks simple. Their "common-sense" view of reality looks good because it is an unexamined notion of what reality is…. What is required is conversation… (Westbury & Wildof, 1978, p. 31)

Schwab's writings reflect his experiences. He often describes in his writings how problems are to be encountered and resolved, but not what the solutions could or should be. In this sense, Schwab offers his readers a "*characterization* rather than a prescription of what teaching might be like, what a liberal education might be, how a curriculum might be developed" (Westbury & Osborne, 2001, p. 76). Tyler, Bloom, Mager and Gagne who drew heavily from behaviorists such as, Thorndike and B.F. Skinner (Pinar et al., 1995, p. 167), all provided prescriptions, albeit sometimes with caveats that they were not to be lockstep. Nonetheless, human nature tends to

look for quick prescriptive solutions to complex problems, and Schwab's complex, dense essays, designed to characterize curriculum problems and built upon a philosophical framework of Aristotle and Dewey often seem obtuse and unavailable for solving problems educators face, as seen in Hlebowitsh's position that Schwab was not really saying anything new.

Another important experience Schwab had came in 1960 when he wrote an essay that sought to work thorough the influence of cultural forms on the practice of scientific inquiry. "What Do Scientists Do? (Schwab, 1978/1960) has the same spirit of Thomas Kuhn's *The Structure of Scientific Revolutions*, and is similar to the hermeneutic sociology of Habermas (Westbury & Wildof, 1978, p. 28). By this time, he had been in the throes of curriculum debates for two decades, so it is not surprising that in this essay Schwab, in addition to addressing the role of interpretation and understanding, articulated the role of feelings within education. He states

> Training of the intellect must take place ("must" in the sense of "unavoidably") in a milieu of feelings and must express itself in actions, either symbolic or actual. We may employ the emotional and active factors existent in student and teacher as means for intensifying and facilitating the process of intellectual education—or ignore them and suffer at the least a loss of them as effective aids, and possibly an alienation which places them in active opposition to our purposes. (Schwab, 1978/ 1960)

Two other major experiences in the 1960s affected and influenced Schwab in profound ways. First, he began working with the Jewish Theological Seminary's Melton Research Center where he focused on a very different genre of education—confessional, informal, and communal. This led him to think in new ways about the psychology of growth and development and the place of tradition and community in developing character. This experience reawakened his

interests in liberal education, and more importantly, raised his consciousness regarding issues of

community, moral choice, and of deliberation and decision-making (Westbury & Wildof, 1978,

p. 30). This raised consciousness he experienced came at a tumultuous time for higher education

in the United States, which leads to the second profound influence in this decade for Schwab—

the student protest movement.

This upheaval brought Schwab to a new question. He wondered if the ends and means of

liberal education could be brought to bear on the student protest movement. He wrote *College*

Curriculum and Student Protest (1969), in which he examines the relationships between the

many different aspects of the curriculum and the education of a person of "prudent and

intelligent character" (Westbury & Wildof, 1978, p. 30). What he did with this problem is what

he always did with curriculum concerns—he analyzed the many aspects of the situation and

deliberated over what might be right courses of action. But, more importantly, his deliberation

led him to challenge education head on. This shift of interest led him to write a series of essays

on the "practical" and the "theoretic" ideas of curriculum building, which became his most

significant contributions to the curriculum field (Schwab, 1978). To best comprehend how

Schwab used the terms "practical" and "theoretic," an understanding of Aristotelian ethics is

required, which will be discussed in the next section of this chapter.

To summarize Schwab's experiences that led to his contributions of curriculum theory, it

could be said that he lived at a time and in a place of tremendous importance for the field. He

was profoundly influenced by key universities (particularly the University of Chicago) in

momentous times. He had access to great thinkers, who cared deeply about curriculum issues and

who included him in their discussions and debates. But he was a great thinker, himself, which led

him to never join one solitary intellectual camp, philosophical position, or ideology over others.

He embraced aspects of progressivism and traditionalism, of the Great Books curriculum and of scientific inquiry, of formal and informal curriculum needs, of general education and confessional learning, and of listening to protesting students vis a vis the curriculum. The fact that he never jumped onto one bandwagon or another, but rather embraced many ideas and endeavored to understand and interpret meaning from them, led him to become one of the most significant curriculurists of U.S. history, even if perhaps least understood.

Basic Premises of Schwab's Theory

The most salient point of Schwab's theory is that he moves curriculum workers radically away from the taken-for-granted traditional way of designing curriculum (derived from the Tyler Rationale) by shedding light on the fact that it had become unquestioned practice, and considered to be *the* theory of curriculum. It was static, fixed, and unchanging; and in his words, moribund. It moved into the realm of the "theoretic," according to Schwab, or what Aristotle would call the "intellectual," terms to be fully discussed in the next section. This was problematic for Schwab because he saw curriculum work not as something "theoretic," but as "practical" or "moral" in the Aristotelian sense. Practical or moral work depends on decisions, judgment, and action. For Aristotle, for one to develop the virtue of courage, for instance, one would need to practice actions of courage. Curriculum work, according to Schwab, is not merely theoretic or intellectual, but it is moral and practical, requiring actions based on judgments and decisions. But how should those judgments and decisions be made? Again, Schwab looked to Aristotle's use of deliberation for decisions. Deliberation is used for the means, not the ends. A doctor does not deliberate on whether to heal a patient (the ends), but rather how to heal the patient (the means). Curriculum workers must deliberate on how to bring about learning for particular learners in local, specific contexts, an idea that comes from Aristotle's use of "categories," also explained

below. The process of deliberation is modeled after Aristotle's practice of seeking for the mean between too much or too little. Schwab advocated a deliberative process for curriculum work that would hear out all the positions to be represented by what he called the commonplaces: the teacher, the student, the subject matter, and the milieu, and seek the mean, work toward a decision to be made and action to be taken. This is a very different way of thinking about curriculum work than the linear, traditional one that led to technical rationality and still dominates curriculum planning today. It was based solidly on Aristotelian ethics, and led not only to changes in curriculum work, but in classroom activities as well, as the faculty who engaged in deliberation for curriculum development took the process into their classrooms and created opportunities for students to engage in deliberation, as well.

Influence of Philosophers on Schwab

   Aristotle.

Schwab read Aristotle's works on biology while compiling an index of sources for Hutchins's Great Books of the Western World. He quotes from both Biology and Physics throughout his many essays (Schwab, 1978), but it is from Aristotle's Organon (Aristotle, 1941), Nicomachean Ethics, and Physics (Aristotle, 1992) that he derives his framework for curriculum building. There are at least four important Aristotelian ideas that Schwab weaves together to create the structure of his theory. The first is Aristotle's differentiation between two types of virtues—intellectual and moral (Aristotle, 1992; Schwab, 1978/1971a), which Schwab used to distinguish between the *theoretic* and *practical* aspects of curricular work (Aristotle, 1992, p. 351). The second Aristotelian idea Schwab uses extensively is that moral virtue is a relative mean between extremes of excess and deficiency that requires choice, action, and deliberation (Aristotle, 1992, p. 354), which Schwab applies to curricular deliberation. The third major idea

Schwab used from Aristotle is the idea of categories of knowledge and his four causes (Aristotle, 1941, pp. 7-37), which contributed to his formulation of commonplaces and the functions of the quasi-practical and eclectic arts. How Schwab used the notion of categories will be discussed more fully later in this chapter. And finally, Aristotle's notion of learning by doing, or experience, is evident throughout Schwab's writings. Each of these four ideas will be discussed below.

Schwab began these essays by issuing what has become his famous indictment on the curriculum discipline with this statement, "The field of curriculum theory is moribund"(Schwab, 1978/1971a, p. 287). He continued by saying that the field had reached this "unhappy state by inveterate, unexamined, and mistaken reliance on *theory*." Theory is problematic for Schwab because for him, it presents only a partial view of educational reality (Harris, 1991, p. 288; Schwab, 1978/1971a, p. 296). Instead of relying too much on theory, the solution is not to simply swing the pendulum over to practice. Indeed, it is a mistake to think of Schwab's term *practical* as practice (Davis, 2006, p. xi). Schwab's use of the word "practical" instead of "practice" is instructive and comes from his interpretation of Aristotle, who used the terms "intellectual" and "moral" instead of "theoretic" and "practical" (Null, 2006, p. xvi).

In Nicomachean Ethics, Book II, Aristotle said,

> Virtue, then, being of two kinds, intellectual and moral, intellectual virtue in the main owes both its birth and its growth to teaching (for which reason it requires experience and time), while moral virtue comes about as a result of habit, whence also its name *ethike* is one that is formed by a slight variation of the word *ethos* (habit). (Aristotle, 1992, p. 351)

Schwab used the words *theoretic* and *practical* for intellectual and moral, respectively. By the word "intellectual," by using the two terms, Aristotle did not intend for the distinction to lead to fragmentation, but rather to unity and wholeness (Null, 2006, p. xvi). These are two types of virtues, and both should be cultivated. However, the way in which they are cultivated differs greatly. For intellectual or theoretic virtue, according to Aristotle, one would learn from teachers (which Schwab expands to include gathering and interpreting data (Schwab, 1978/1971a, p. 289). To cultivate moral or practical virtue, one would make choices, practice, and develop habits. Schwab elaborates,

> The end or outcome of the theoretic is knowledge, general or universal statements which are supposed to be true, warranted, confidence-inspiring. Their truth, warrant, or trustworthiness is held, moreover, to be durable and extensive. That is, theoretic statements are supposed to hold good for long periods of time and to apply unequivocally to each member of a large class of occurrences or recurrences. The end or outcome of the practical, on the other hand, is a *decision*, a selection and guide to possible action… A decision, moreover, has no great durability or extensive application. It applies unequivocally only to the case for which it was sought. (Schwab, 1978/1971a, p. 288)

Furthermore, the problems of the theoretic have to do with states of mind, but problems of the practical deal with states of affairs. Problems that arise from states of mind relate to what one is conscious of not knowing, such as why something predicted by theory fails to occur. The scientific method works here. Data can be gathered, observed, and analyzed according to scientific principles (Reid, 2006, p. 69). Coming up with an answer or solution to the problem is in the intellectual or theoretic realm.

However, problems that arise from states of affairs are human or social conditions, which, it is believed, can be improved. The route to their solutions, though, is not simply through intellectual pursuit. Rather, it lies in the knowledge particular to the situation for which the solution is sought, such as knowledge of persons, places, actions, and the consequences of their actions. However, there is no knowledge to point toward a solution. Therefore, in order for knowledge to lead to a solution, deliberation must take place. Arguments must be made by individuals or groups, to which a judgment is applied (Reid, 2006, p. 70). Knowledge is not gained to improve the state of mind; instead, a decision is made to improve the state of affairs. Therefore, the work of solving practical problems, or coming to decisions about what to do in a given situation is achieved through deliberation.

It is apparent then, that deliberation is not for the intellectual or theoretic issues. Those problems are solved by learning, by gathering data, observing, and analyzing. Aristotle says deliberation is not for everything. For example, he says,

> And in the case of exact and self-contained sciences there is no deliberation, e.g. about the letters of the alphabet (for we have no doubt how they should be written); but the things that are brought about by our own efforts, but not always in the same way, are the things about which we deliberate, e.g. questions about medical treatment or of money-making. (Aristotle, 1992, p. 377)

Another important point about deliberation is that, according to Aristotle, it is for the means, not for the ends. A doctor does not deliberate on whether to heal a sick person (the ends), but rather on how to treat the patient (the means). Therefore, while the induction method (for the theoretic) can be used to solve intellectual or theoretic problems, deliberation must be used to solve moral or practical problems. The method of the practical "is not at all a linear affair

proceeding step-by-step, but rather a complex, fluid, transactional discipline aimed at identification of the desirable and at either attainment of the desired or at alteration of desires" (Schwab, 1978/1971a, p. 291). The fact that Schwab made a strong case for the complexity of the practical, and stated that it is not a linear, step-by-step procedure demonstrates his point of departure with Tyler's Rationale, which even if Tyler tried to soften its formulaic approach, many people took to be a simple, unproblematic step-by-step approach to curriculum problems. In essence, Schwab was saying that the problem with the curriculum field was not that curriculurists were focusing too much on theory or too little on practice, but rather, they were unquestioningly adopting theoretical principles and uncritically applying them to diverse educational settings. Instead, the means should be deliberated upon—the methods of how to design curriculum should be deliberated upon themselves. Then, even the ends may change as the means deliberated upon (Schwab, 1978/1971a, p. 318).

Aristotle's use of the avoiding excess or deficiency and seeking the mean is instructive for how Schwab saw deliberation working. It is rumored that Schwab would often say to his students, "Do not ask yourselves what Aristotle is saying. Ask what is he *doing*?" The way Aristotle seeks the mean of two extremes throughout his treatise on ethics serves as a model for curriculum designers to hear about different ways one can design curriculum, about many of the issues, from multiple stakeholders, and not just accept certain theories uncritically, or one big idea, but to deliberate about what means would be best for the particular end for a particular curriculum in a particular school. Deliberation is the work of the practical, seeking to change the state of affairs. The difference between the two types of virtues is illustrated in Figure 2.

Figure 2 Aristotle's Two Types of Virtues

Two Kinds of Virtues

Intellectual	Moral
↓	↓
Theoretic	Practical
↓	↓
State of Mind (Knowledge to Produce Explanations)	State of Affairs (Knowledge to Take Action)
No Need for Deliberation	Needs Deliberation, Use to Seek Means
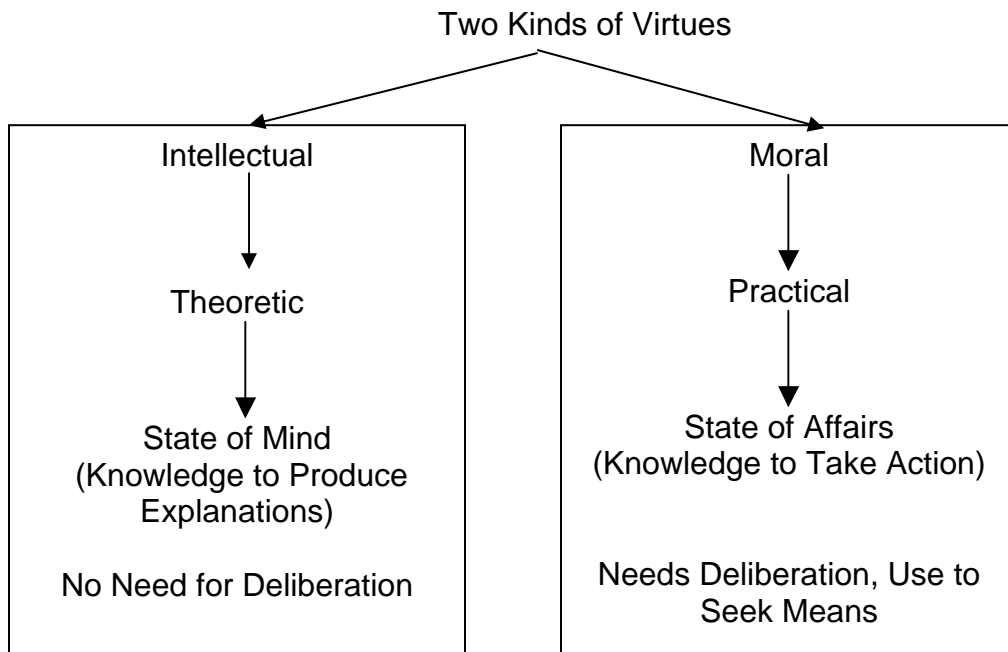
(Chapman, 2007)

Besides Aristotelian influence on the practical and on deliberation, Schwab also used Aristotle's "categories" (Aristotle, 1941) to elaborate on the process of the quasi-practical and the eclectic, which along with the practical make up his three important modes of operation for curriculum design (Schwab, 1978 (1971)a, p. 288; Westbury & Wildof, 1978, p. 28). Schwab was not interested in the ten particular categories Aristotle named; instead, he was fascinated by the notion of looking for different, unique particularities within a situation. In other words, grasping the notion of Aristotelian categories allowed Schwab to look for "categories" or particulars of each curriculum design process. Each situation is different and called forth its own categories or particulars. Understanding the diversity of aspects that can be considered when designing curriculum helped Schwab to conceptualize the reality of the deliberation process, i.e.,

that it is not easy and clear-cut; there are many points of consideration. This is in opposition to Bobbitt's directions for how to build a curriculum and Tyler's Rationale.

The practical, described above, pertains to deliberation over states of affairs. The quasi-practical method takes the practical method a step further because of the complexity and uncertainty of working with heterogeneous groups in the process. There are two considerations. First, in making decisions, there is no point at which it is clear that the course of deliberation has been completed and has been completed well. Also, quasi-practical decisions are not to be mistaken as directives, either by those who make them or by those who translate them into actions (Schwab, 1978/1971a, p. 292). Second, the organic connection among the diverse organs of the school, the school community, and the educational establishment require an emphasis on the "*cherishing of diversity* and the *honoring of delegated powers*"(p. 294).

The eclectic is the third mode of operation for curriculum design, and it takes into consideration two particular weaknesses of theory. First, theories are incomplete in terms of subject matter, and second, each participant has a partial view of the already incomplete theory (p. 296). However, the eclectic mode allows for a comparison that

> generates a set of factors to be called "commonplaces" or "topica" (the names pilfered from Aristotle and Bacon). These commonplaces represent, in effect, the *whole* subject matter of the whole plurality of enquiries of which each member-theory reveals only one façade at best, and usually only one façade seen in one aspect. (Schwab, 1978/1971b)

Therefore, Aristotle's teachings on the *categories* of things informed Schwab's understanding of process and goals to help him develop the notions of commonplaces and deliberation for curricular planning (Schwab, 1978/1960, p. 201; Westbury & Wildof, 1978, p. 28).

The final contribution of Aristotle to be discussed in this section is his idea of learning by doing. In Nicomachean Ethics, Aristotle states,

> For the things we have to learn before we can do them, we learn by doing them, e.g. men become builders by building and lyre-players by playing the lyre; so too we become just by doing just acts, temperate by doing temperate acts, brave by doing brave acts.
>
> (Aristotle, 1992, p. 352)

This maxim formed the basis for much of Schwab's thought, including his treatise on how to teach science (Schwab, 1962). He elaborated on this theme even more fully, especially as it relates to the ideas of Dewey, in an essay he wrote in 1959 entitled, "The 'Impossible' Role of the Teacher in Progressive Education (Schwab, 1978/1959, p. 182). In fact, Schwab was greatly influenced by Dewey's philosophy of progressivism, his theories of thinking, problem solving, inquiry, and the scientific method (Harris, 1991, p. 291).

John Dewey.

Perhaps the greatest influence Dewey had on Schwab was how he used the term *theory*, which goes directly to the heart of the theoretic/practical dichotomy. Dewey differentiates between the theoretical and the practical from his early works. He called the theoretical things intellectual or abstract and the practical things mentally concrete (Dewey, 1910, pp. 136-137). For Dewey, a theory was not a received set of meanings. "Its aim was not to explain and provide settled "understanding" but to persuade its readers to embark upon a practice" (Schwab, 1978/1959, p. 169). In the words of Dewey, "There is no inherent opposition between theory and practice; the former enlarges, releases and gives significance to the latter; while practice supplies theory with its materials and with the test and check which keep it sincere and vital" (1959, p.

135). This distinction is profound for how Schwab viewed his work in theory development, as well as curriculum design.

Dewey did not set out to prove theories to be true. Instead, he moved students to reconstruct and test by practice. He said, "To prove a thing means primarily to try, to test it" (Dewey, 1910, p. 27). However, Schwab pointed out that Dewey cannot *prove* this point of view is true (he could only test it) (Schwab, 1978/1959, p. 171) and thereby, Schwab sheds light upon a sort of epistemological conundrum: Dewey's theory about theories cannot be proven because his theory says that theories cannot be proven, only tried and tested. This intellectual predicament impacts Schwab's view of learning theories and theories from psychology. Basically, this fact drives him away from espousing any theory as the right way or the proven way to do curriculum work. Instead, the theories must be tried and tested in the real world of practice and judgment.

Dewey's emphasis on reflection goes to the heart of Schwab's foundation for the possibility of deliberation to take place. One cannot deliberate without reflecting. Schwab quotes Dewey,

> "It is the business of an intelligent theory to ascertain the causes for the conflicts that exist and then, instead of taking one side or the other, to indicate a plan of operations proceeding from a level *deeper and more inclusive* (italics Schwab's) than is represented by the practices and ideas of the contending parties." (Dewey, 1938; Schwab, 1978 (1959), p. 180)

Dewey sought to bring together society and separate persons. He did not seek conformity, but rather question and inquiry for the learning process. Schwab sought the same for curriculum work because deliberation requires the consideration of the widest possible variety of alternatives

if it is to be most effective. He said, "Each alternative must be viewed in the widest variety of lights. Ramifying consequences must be traced to all parts of the curriculum" (Schwab, 1978/1971a, p. 319).

Once free and full deliberation takes place, it must lead to a judgment. Deliberation leads to action and commitment. It does not lead to the right alternative because there is no such thing, only the best one (Schwab, 1978/1971a, p. 319). Dewey's influence is noted here.

> The judgment when formed is a *decision*; it closes (or concludes) the question at issue. This determination not only settles that particular case, but it helps fix a rule of method for deciding similar matters in the future; as the sentence of the judge on the bench both terminates that dispute and also forms a precedent for future decisions. (1910, p. 109)

Schwab does not take decisions to the point of precedents as readily as Dewey. Instead, he insists upon the concreteness of each situation. His often-quoted description of the result of a typical deliberation is as follows.

> The subject matter of the practical, on the other hand is always something taken as concrete and particular and treated as indefinitely susceptible to circumstance, and therefore, highly liable to unexpected change: this student, in that school, on the South Side of Columbus, with Principal Jones during the present mayoralty of Ed Tweed in view of the probability of his reelection. (Schwab, 1978/1971a, p. 289)

In summary, Dewey's influence was fundamental to Schwab's thinking process as he developed his framework for curriculum work (Westbury & Wildof, 1978, p. 38). Dewey called people away from "proven theories" to the practice of trying and testing ideas. He engaged them in inquiry, not to embrace ready-made solutions. He welcomed many ideas rather than the so-

called right ideas, and he encouraged the use of reflection to lead people to more inclusive points of view. Finally, he understood that deliberation leads to decision-making. Schwab used all these ideas to formulate his framework for deliberative curriculum inquiry.

Over Three decades ago, Schwab enjoined a paradigm shift on the field of curriculum with his now legendary pronouncement that the field was moribund (Harris, 1991, p. 286). This section of the chapter will describe what his framework is, illuminated by studies done on the process.

Research on Schwab's Theory

In his "practical" papers Schwab asked what kinds of problems are curriculum problems? He argued that curriculum problems are not intellectual or theoretical, but rather moral or practical. They are practical in the sense that they are about choice and action in specific situations about concrete issues. Therefore, they require deliberation, and the associated "arts" of deliberation, or certain ways to deliberate. He called these ways of deliberating the "practical, quasi-practical, and eclectic" (Schwab, 1978/1971a), discussed above.

Within the eclectic arts, the challenge is to see the many particularities of our practical situation and to "problematize" the setting with as many categories as possible. For instance, Schwab uses the story of a student in a class, whom he calls Tilda, paraphrased here. To view her from the category of student allows us to see her with a theory of learning, or of development, but we would be blind to other particulars about her. The practical arts would allow for her to be seen through a succession of lenses, which have nothing to do with the fact that she is a student. She is a sibling, a firstborn, the occupant of a third floor apartment, a person who is somewhat overweight with a southern accent, and so on. This is the art of perception, to see the particulars. To group these details in different ways in order to perceive and shape different formulations of

"the" problem posed by the situation is the art of problemation. Therefore, there are arts for perceiving and problematizing, but also for generating possible resolutions, tracing possible alternatives, and for weighing and choosing among them (Schwab, 1978/171b, pp. 325- 326). These arts are enhanced in curriculum deliberation when multiple stakeholders are involved. In fact, Schwab calls for representation for four commonplaces: the teacher, the student, the subject matter, and the milieu, and the curriculum-making (Schwab, 1978/1973, pp. 366-368).

Few empirical studies have been conducted on the deliberative process. Walker (1971) conducted an empirical analysis of deliberations of three university-based subject-matter-oriented curriculum design projects. He sought to explain the process groups go through to formulate curriculum plans and hoped to establish principles and methods for effective deliberation. He used Gauthier's (1963) guidelines for deliberation to analyze deliberative "moves." After tape recording and transcribing deliberation sessions for three different projects, the texts were analyzed. The findings showed that the curriculum project staffs actively engaged deliberative moves, such as stating problems, proposing resolutions, offering arguments, and providing instances for examples (Walker, 1971, pp. 132-133).

Orpwood (1985) conducted a participant-observer case study that reported on the how a curriculum committee deliberated over a new science program for Canadian elementary and secondary schools. Atkins (1986) also reported on the deliberations of a curriculum design committee at the Community College of Philadelphia, in which they were able to construct an interdisciplinary program for predominantly poor minority students. Hegarty (1971) demonstrated how the nominal group technique, a structured group process technique which came from the management sciences, can help participants to identify problems and solution phases in deliberation.

In 1986, Harris wrote that there were few published reports on practical activity related to deliberative curriculum work and that the descriptions did not always exemplify the principles they sought to illustrate (1986). Bonser and Grundy sought to rectify that with a report on a curriculum redesign effort in Australia when individual schools were asked to become the focus for administration and delivery of education (1985). Curriculum theorists and practitioners worked together to find ways of making the deliberative process more meaningful and more effective in the practice of curriculum planning. Like Hegerty, they also used a Nominal Group Technique (NGT) and led participants through three inter-related sessions of reflective deliberation. It was learned that through critical reflection, backtracking, and reviewing, the problematic nature of ideas clarification and decision-making processes might be more clearly addressed (Bonser & Grundy, 1985, p. 44).

Frey (1989) conducted an empirical study using three different curriculum models to work on the same goal of redesigning the mathematics curriculum for a school of engineering in Zug, Switzerland. This study appears to be the close to a true experiment. It is the hypothesis that the process of curriculum development affects outcomes. A set of criteria was established to delimit an acceptable context. The deliberative approach to designing curriculum was one of the three curriculum planning methods used in this experiment. The finding was that the process of curriculum development does affect outcomes, hence process is important.

After a search of major indexes and curriculum journals, I found no other empirical studies published on Schwab's notion of deliberative curriculum theory. However, one curriculum project committee report published in 2001 provides some useful information. The committee worked at Miami University (Ohio) and focused on the deliberation, process, and curriculum changes that resulted from the committee's deliberative work (Poetter, Everington, &

Jetty, 2001). The group focused on reforming a course of study in higher education to include the subject matter of special education and inclusion for new school leaders. The committee was made up of a diverse group of nine people, representing the commonplaces Schwab describes. It was noted that the group needed to be a respectful, trusting set of colleagues for true deliberation to occur. Engaging in the practical did not result in focusing on the technical. Instead, theoretical ideas were included with the specific issues at hand, to generate multiple alternatives, and to make decisions about solutions. They met every week throughout the school year, did readings for their own professional development and discussed them together, and in so doing, they revealed their own personal assumptions about the purposes of the project, the nature of school leadership, and the function of the university in preparing leaders. They used four data sources to inform their work:

> (1) a document analysis review of the content of the content of current coursework embedded in course syllabi, (2) telephone interviews with recent School Leadership Program graduates who are practicing administrators, (3) questionnaires given to student cohort groups in the current program, and (4) interviews with the program's faculty.
> (Poetter et al., 2001, p. 172)

This particular project led to three observations regarding the decisions they made. First, they were made in the context of theoretical and practical alternatives, with perspectives from all the commonplaces being honored. Second, the decisions were about concrete, immediate curricular significance that required a prompt response. Third, a learning community was created throughout the process, with a spirit of collaboration, cooperation, and collegiality that drove the work away from competition, authority, and domination (Poetter et al., 2001, p. 180).

In summary, little empirical research has been conducted on deliberative curriculum theory. Much of the literature is philosophical or theoretical. After Schwab's seminal work in the 1970s, a flurry of research projects took place in the subsequent decade, reported above. Since that time, few studies have been done. There are several possible reasons for this. One is that Schwab's writings are dense, philosophical, and difficult to read. This is an uncontested perspective noted by others (Westbury & Wildof, 1978, p. 23). Schwab, himself, even admits that his own deliberative style of writing may "annoy the reader" (Schwab, 1996/1983, p. 89). This means fewer people find his ideas accessible to try and test. A second possible reason for the dearth of research on Schwab's theory is that it requires very hard work. To approach curriculum design from a systematic approach is probably the easiest, with specific steps to follow, but, as Eisner says

> Joseph Schwab has not made life easier for those in the curriculum field. For an easier life we would need a straightforward, rigorously tested, and systematic approach to curriculum planning, an approach that would provide the conceptual security that eludes us and that would reassure those who have doubts about our sanity that we are clear thinking, straight shooting educationists…He teaches that curriculum is, unlike some other areas of inquiry, uneasy, uncertain, and perhaps most painful of all (in academic circles, at least), practical. (Eisner, 1984, p. 201)

A third possible reason for the limited studies done on Schwab's theory is that it poses a sort of methodological conundrum. To do a study implies a certain type of systematic approach, but deliberative curriculum planning is very asystematic. Further, the process is so amorphous that it becomes difficult to think about how one would look at it. Curriculurists need help to think of ways to conduct deliberative processes, how to explain the process to participants, and how to

evaluate the experience. A heuristic, using both transformative learning theory and deliberative curriculum theory can help faculty to design curricula for graduate professional students.

The Relationship Between Schwab's Work and Program Planning

Program planning is the term many educators use for designing curricula for adult and continuing education. Besides delving into the how-to of designing curricula, this approach includes administrative planning, such as how to articulate its rationale (Grotelueschen, 1980, p.86), focus on costs, enrollments, marketing, etc. (Cafferella, 2002; Sork, 1991). Planning a program is much more involved than designing a curriculum. It could be said that designing a curriculum is one aspect of the multifaceted work of program planning. Grotelueschen explains,

> In defining the term *program* it is useful as a starting point to note that a program differs somewhat from the traditional notion of curriculum, though certainly it is also related to it…the notion of an adult education program primarily connotes short-term learning experiences that are responsive to learner needs and are implemented outside of the traditional educational delivery system. Additionally, these definitions emphasize the characteristics of flexibility, variability, and all-inclusiveness of programs. (Grotelueschen, 1980, p. 82)

One of the first influential books for program planning was Cyril Houle's book *The Design of Education*, published in 1972 with a second edition in 1996. Houle was a professor of education at the University of Chicago during the same time as Schwab. Curiously, their work seems to exist in silos—neither quotes from the other and subsequent authors do not seem to quote from both, only one or the other. Perhaps this is because while Schwab focused on curriculum in general, and on K-12, undergraduate liberal arts, and science in particular, Houle targeted adult and continuing education and program planning, which was broader and more

flexible than formal higher education, as noted in Grotelueschen's comment above. Another example of program planning is Cafferella's book, *Planning Programs for Adult Learners: A Practical Guide for Educators, Trainers, and Staff Developers* (2002). Cafferella's use of the term "practical" is not in the same sense as Schwab's use of the word, but rather more simply how to put program planning into practice.

Houle aligns himself squarely with Tyler's rationale. Of his own book, he says, "…many of the of the program-planning models devised by theoreticians of adult education have flowed directly or indirectly from his rationale. Certainly that fact is true of the framework suggested in this book" (Houle, 1996, p. 16). Schwab's work is considered radical shift away from the Tyler Rationale (Eisner, 1984; Reid, 1999; Westbury, 2005).

There are distinct differences between Schwab's theory and Houle's. Houle does not use the word *curriculum*, but rather *program,* which he uses synonymously with *design* (Houle, 1996, pp. 254-262). He uses *categories* to distinguish between different types of educational situations or opportunities, such as independent study, tutorial teaching, learning group, teacher-directed group instruction, etc. (Houle, 1996, pp. 125-171). This is a very different use of the word category from Schwab's use, which for him means the various particularities one can bring to bear upon the concrete learning situation to understand it better and to use those perspectives to inform curricular decisions (Schwab, 1978/1971b, p. 325). Finally, the major difference between Houle and Schwab is that besides quoting Aristotle once in regard to the notion that some subjects can only be learned in adulthood (Houle, 1996, p. 209), Houle is not Aristotelian in his framework as Schwab is. Aristotelian philosophy led Schwab to focus delineating between the theoretic (intellectual) and the practical (moral) aspects of a situation and consequently on deliberation. Houle relies upon a linear means-to-achieve-ends philosophical framework instead,

albeit embracing collaboration and cooperation among the participants of the program planning activity.

One point of commonality between Houle and Schwab is the notion of what the former calls factors and roles, and the latter calls commonplaces. Houle says that objectives for a course should be defined by the simultaneous interaction of six factors: the milieu, the nature of the learners, the aspirations, the motives, the content, and the framework itself (Houle, 1996, p. 252). By milieu, he means the full social and physical context. Aspiration, for Houle, is the desired perfection or excellence based on an ideal, and a motive is an inciting cause that helps to determine an individual's choice of an objective and behavior to seek it (pp. 181-182). The three roles involved in planning an educational activity are the educator, the learner, and an independent analyst (p. 48). This is somewhat similar to Schwab's five *commonplaces*, which were delineated in his later essay—the teacher, the student, the milieu, the subject matter, and the curriculum making (Schwab, 1978/1973).

Cervero and Wilson and associates focused on adult education in general and ask questions relating to power and equity (Cervero, Wilson, & Associates, 2001). Their work takes as a starting point two questions—who benefits and who *should* benefit (p. 3)? They called adult educators to struggle with the ever-present reality of power structures that influence the politics and practice of adult education. Their stance is that if adult educators bring greater visibility to the political and ethical choices, contradictions, and consequences of adult education, they will be able to create educational programs, practices, and policies that give people more control over their social, cultural, economic, and political lives (p. 15).

In this vein, Tisdell (2001) believes that higher education not only has the responsibility to fulfill the traditional role of creating and disseminating knowledge, but that it should also

contribute to creating a more equitable and just society (p. 149). She points out further that higher education has served as a gatekeeper and guardian for what counts as official knowledge (p. 155). To teach for social change generally means trying to alter the power relations of the dominant culture by calling attention to the politics of positionality, which for higher education, means looking at curriculum analysis and pedagogy. She calls for a greater inclusion of people from outside the dominant culture, to have representatives of people of color and other marginalized groups, and to conduct classes in a way that accounts for a diversity of ways people construct knowledge (p. 156). Schwab's emphasis on seeing the many particularities of our practical situation and to "problematize" the setting with as many categories as possible seems to be a practical way to begin to answer Tisdell's call. In essence, Wilson and Cervero and associates bring to light issues that become some of the categories and particularities Schwab did not mention in his day, but would certainly embrace in the deliberative process (Schwab, 1969, p.197-208). What this work contributes to deliberative curriculum theory is the awareness of power structures that exist within the deliberative process itself, including the determining of what knowledge counts, and a process to negotiate power and interests. Put simply, while Schwab insisted on the equal weight of all four commonplaces—the teacher, the student, the milieus, and the subject matter—he did not explicitly reckon with the notion of power. Cervero and Wilson resist scientifically validated technical expertise, as Schwab does, but they also point out that curricularists are not neutral players in the development of curriculum. Schwab does account for the need for a multiplicity of opinions and ideas in the deliberative process, but Wilson and Cervero and associates enhance Schwab's ideas by focusing on the notion of power.

Because of what they call the "end of innocence," or the ideas that curriculum workers are neutral, Cervero and Wilson suggest that adult educators become knowledge-power *brokers*

(Cervero et al., 2001, p. 276). In their earlier works, Cervero and Wilson used the term *negotiating interests* to highlight what they felt was at stake in adult education and to confront the naïve notion that adult educators are neutral facilitators, but in this more recent work they moved to the term "brokering" because it adds to the "politicalness" of the negotiating image (Cervero et al., 2001, p. 278). These ideas seem to indicate that the first step for curriculum negotiation or brokering is to face the classic innocent image of the traditional and accepted way of doing curriculum work. Herein lies one reason for the necessity of using Mezirow's transformative learning theory (Mezirow, 2000) in conjunction with deliberative curriculum theory, i.e., the curriculum workers most likely assume that the traditional, systematic approach of creating curricula, based on the Tyler Rationale, is the only way to design curriculum. They may be wedded to notions of making long lists of behavioral objectives, of being systematic and linear in planning. Being confronted with Schwab's notion of deliberating with the four commonplaces, and letting go of the comfort and ease of using the Tyler Rationale will be a disorienting dilemma for some. In this sense, Cervero and Wilson and associates provide support for the work of integrating the theories of Schwab and Mezirow.

In another sense, however, focusing primarily on power structures could become a dominant idea that would drive the agenda for curriculum work in itself. Reid would warn that radical approaches to curriculum work actually cut off deliberation because it already has a determined agenda, whatever that big idea is. In this way, it is similar to a purely behaviorist perspective of curriculum design, with one dominant force driving it.

A disadvantage of the strong *a priori* theoretical position is that there are a great many things that fall outside its field of vision, and a great many possibilities it fails to discuss. This problem does not only affect the radical perspective. Skinnerian

psychology, for example, affords an equally deficient view of the curriculum. (Reid, 2006, p. 15)

Radical perspectives of curriculum work, whether from the left or the right, operate from great ideas, whether hegemony, reproduction, and alienation, or order, tradition, and social cohesion (Reid, 2006, p. 37). For Reid, having this perspective is much like being a hedgehog as seen through Isaiah Berlin's metaphor of the hedgehog and the fox (p. 34). The fox is a cunning animal that knows many things. The hedgehog knows one big thing. To have the radical view of curriculum work is to be like the hedgehog, with one, big, dominant idea, such as hegemony, relating everything to a central vision. To be able to deliberate in curriculum work makes one more like a fox, capable of being self-aware of one's positioning, but also not dominated by one big idea.

Therefore, Cervero and Wilson significantly contribute to Schwab's theory of deliberative curriculum work by making educators aware of power structures that exist and which must be confronted. They suggest the act of deliberation could be a difficult time of confronting one's hidden assumptions, whether about values and the dominant culture, or how one should go about doing curriculum work. They raise the need for consciousness raising in deliberation sessions. However, their ideas are from a dominant point of view—one of confronting power structures and of working toward social justice. Deliberative curriculum work would treat this as one big idea, albeit one that must be heard at the deliberation table, but one of many diverse ideas among the commonplaces.

Sork (2000), another scholar in program planning for adult education, seems to ameliorate the "big idea" problem by creating a framework that is generic in the sense that it does not assume that there is a particular value set or ideological system driving planning,

although, as he says, there always is (p. 179). Sork uses a convergence of critiques—feminisms, postmodernisms, and critical theory to build a rationale for his framework for planning theory. Feminisms, though varied in their different forms, have criticized the exclusion of women from planning processes, and the absence of gender as an important consideration. Postmodernism challenges the notion that planning is a process that has scientifically determined means that are instrumental in achieving ends that are unproblematic. Discussing postmodernism in this way sounds very much like Schwab who was concerned about treating both the means and the ends in the deliberation process (Schwab, 1978/1971a, p. 318). When Sork's description of a postmodern approach to planning is compared to Schwab's words on deliberation an uncanny similarity can be observed:

> A postmodern approach to planning would be much more sensitive to the particularities
>
> of context, would treat ends and means as mutually determined... (Sork, 2000, p. 175)
>
> Deliberation is complex and arduous. It treats both ends and means and must treat them
>
> as mutually determining one another. (Schwab, 1978/1971a, p. 318)

Therefore, in some ways, Schwab was postmodern in his thinking.

Another critique Sork used to build a rationale for a different framework for planning is critical theory. He points primarily to the work done by Cervero and Wilson, discussed above. The central focus of critical theory, as it relates to adult education is to help educators understand the role they play in this endeavor, i.e., "in maintaining the hegemony of privileged individuals and groups, existing class structures, access to limited resources, and control of productive capacity" (Sork, 2000, p. 176). Some scholars in adult education feel that its mission should be for social change, i.e., for emancipation and empowerment. Sork believes that this is the focus of

adult education, but that very little program planning literature deals effectively with this issue. (p. 176).

Built upon the rationale of the convergence of these three critiques, Sork proposed a new framework for program planning. In an oval shape, he attempts to steer away from a linear feel to the process. Arranged around the oval with formative evaluation in the center, the basic elements to program planning are the following:

Analyze Context and Learner Community

Justify and Focus Planning

Clarify Intentions

Prepare Instructional Plan

Prepare Administrative Plan

Develop Summative Evaluation Plan (Sork, 2000, p. 180)

He also adds three dimensions to planning. First is the technical domain, the "how-to" of planning, on the surface of this framework, and it seeks to answer questions such as "How should I define the learner community and what do I need to know about it?" Often, a preoccupation with this level of planning overemphasizes the skill of planning, and neglects its artistry. Second is the sociopolitical domain, concerned with questions about the human dynamics of planning including the interests involved, power relationships, and what they mean for planning. The deepest domain, according to Sork is the ethical domain. These questions are framed using the language of ethics and morality, such as, "Can I construct a convincing moral justification for doing it this way?" or "Is this action consistent with social justice?" (Sork, 2000, p. 186)

There are quite a few similarities between the work of Sork and Schwab. They both include multiple stakeholders, although Schwab insists that they all be involved from the very beginning and Sork seems to leave that open for decision by the planning group. They both point out the presence of power structures in the process, even if Schwab's mention of it is weak (Schwab, 1996/1983, p. 104; Sork, 2000), although Sork makes it part of his rationale for his framework as well as a concern for the activity, and Schwab seems to only make it a concern for the process. Both eschewed the Tyler Rationale and the linearity of means-to-ends objective-based thinking. Neither created a theory or a model; Sork proposed a multi-faceted, three-dimensional framework, and Schwab advanced three modes of operation (practical, quasi-practical, and eclectic). While Sork speaks of negotiation in the planning process, Schwab makes deliberation the chief activity. Sork speaks of the artistry of the planning process, Schwab elaborates on the arts of the practical and the eclectic. Schwab says that the "problems of education arise from exceeding complex actions, reactions, and transactions of men [sic]" (Schwab, 1978/1971b, p. 329) requiring more than skills and formulations. Both turn away from the technical rational, instrumental approach toward a communicative, question-based, deliberative approach.

Sork's framework enhances Schwab's deliberative process by being explicit in the need to raise awareness of power structures and interests in the planning process. He also provides a non-linear image for conceptualizing the artistry of the planning process. Furthermore, his framework and his writings are easier to understand than Schwab's work. Finally, Sork's work is contemporary and in touch with important issues of social justice.

However, Sork's work is different from Schwab's in important ways. First of all, Sork created a framework for program planning, not curriculum work. Therefore, he has included

administrative issues, which Schwab does not do. While the administration of various kinds of formal and informal adult education programs is important, it was less of a concern to Schwab, who focused on curriculum work rather than program planning. Perhaps Schwab was fixed within a higher education structural paradigm, and did not feel the need to break out of it. Usually, faculty want to deliberate on curriculum, but not on administrative issues. However, with the advent of technology and alternative formats for learning in higher education, perhaps it should be looked at. Schwab, was, though, very focused on *particularities*, however, and to the extent that those particularities would involve administrative issues, they were fair game for deliberation.

A second difference between Sork and Schwab is that while the former speaks of key stakeholders, he does not seem to name who they may be. Schwab is adamant, however, about including four commonplaces—teachers, students, the subject matter, and the milieu, all with equal status. For Sork, the milieu is the planning environment. Schwab includes the deliberation environment plus the classroom in which the students will learn, the institution in which the class is situated, the homes from which they come, etc.

The most important difference between Sork and Schwab, however, is that Sork's rationale is based upon an *ideological* approach, bringing feminisms, postmodernisms, and critical theory to bear upon the systematic Tylerian approach, whereas Schwab's modes of the practical, quasi-practical, and eclectic are based squarely upon a *philosophical* foundation, primarily upon Aristotle's differentiation between the intellectual and moral virtues, categories to inform the important use of particularities in curriculum discussion, and of course, deliberation. In essence, they begin from different places, but take similar journeys. Sork begins with a big idea, and hence is like Reid's hedgehog approach to curriculum building. Schwab, more like

Reid's fox, begins with the philosophical mandate to deliberate on problems that require decisions. These are very different starting points, which is significant for this study since it focuses on graduate professional education.

No doubt, a dominant power structure exists in graduate professional studies, and there is a need to confront hegemony. Furthermore, critical theory has greatly informed Mezirow, whose transformative learning theory is necessary for transforming graduate professional education and will be used with deliberative curriculum theory to create a new approach to curriculum design for graduate professional education. However, since many educators working to help students to become professionals, are focused on theory and practice, they may not be ready to start talking about the issues of feminisms, postmodernisms, or critical theory. They need a reason to engage in deliberation, since it is such hard work, but the convergence of critiques that Sork uses to build his rationale probably would not provide that rationale that they need. The pendulum swings back and forth in graduate professional education between theory and practice. That is where their focus is. It will be more apropos to engage them in curriculum work around the notions of the theoretic and the practical, the intellectual and the moral, and to help them see how Schwab's use of Aristotelian logic can help them deal with the theory/practice dilemma. The answer is that Schwab's approach provides a continual, dynamic deliberation over the particularities of the theory and of the practice that will provide a working response to the dilemma. Within this deliberation, however, the skilled deliberation specialist can artfully guide the participants to deal with issues of power structures, political interests, hegemony, and the like. In this way, the concerns that Sork starts out with are included in Schwab's deliberation process, but the actual curriculum work starts from a foundation of Aristotelian philosophy rather than ideology critique.

This section has defined, discussed, and elaborated on deliberative curriculum theory, how it was developed and what it means for designing curricula for professional education. The influence of Aristotle and Dewey on Schwab was profound and deep, providing a backbone for focusing on the moral or practical issues leading to decision-making on particular issues in specific situations through sometimes-arduous deliberation. Schwab's approach is decidedly more challenging than Tyler's approach, but the needs of professional education call for serious deliberation.

GRADUATE PROFESSIONAL EDUCATION

The third and final section of this chapter will provide a context for graduate professional education. The purpose of this study is to integrate transformative learning theory with deliberative curriculum theory in order to propose a heuristic that can contribute to the reform of graduate professional education. This section will first define the terms *profession* and *professional* and the goals of the professional. Next, it will describe the most important criticisms that have been leveled against of the field of professional education and the calls for change that have appeared in the literature. Finally, it will list the major reforms that have been suggested throughout the past three decades or more and make a case for the need to apply an integrated model of transformative and deliberative theories to reform the field.

Definitions of *Profession, Professional*

Originally, the term *profession* simply referred to a public declaration or vow. During medieval period the meaning of the term widened to take in any business or occupation that was publicly offered. However, by the sixteenth century, the term began to narrow to more specialized meanings, and to apply to groups who offered public service and who did so through a relationship between a principal and a client. This service required a more particularized form

of knowledge and skill with some theoretical foundation, which had be received through a rather long period of study in an institution of higher learning, and sometimes those institutions acted as qualifying authorities. Furthermore, those who achieved this status by virtue of their membership, knowledge, and skill, usually earned a large monetary reward (Charlton, 1973, p. 20).

In 1847, Joseph Henry Green addressed the College of Surgeons in England with a speech entitled, "Mental Dynamics or Groundwork for a Professional Education" in which he stated that,

> the medical practitioner, who aims at the performance of those duties, which his profession demands, will possess himself of the requisites for its practice, which no honest man would be without…It is evidently this, that each severally should be capable of applying all the resources of art, which the whole profession can supply. (1847, pp. 38-39)

Therefore, early on, we see the notion of "art" being associated with the knowledge and skill needed to be a professional as discussed in more contemporary literature (Schön, 1987; Shulman, 2004/1997). Teachers are often described as performing the art of their craft; doctors are told they do beautiful work. The word *art* seems to bridge theory and practice, knowledge and skill.

With the Flexner Report in 1910, ill-run medical schools in the U.S. and Canada either closed down or moved into research universities and established the practice of laying a foundation for scientific knowledge as preparation for experiential clinical learning as part of the curriculum. This model became the prototype of all professional education. Mayhew proclaimed that a profession consists of specialized knowledge obtained through intensive education, which allows the professional to provide esoteric services in a near-monopoly fashion to a public who

accepts the monopoly (1971, p. 1). Similarly, Curry and Wergin characterize professional groups as those that share specialized skills that required extensive academic and systematic training, restrict access with staunch entrance and exit requirements, and claim high social prestige because of their importance to society (1993, p. xiii).

Freidson contributes an economic point of view of what the professions are. By professionalism he refers to the institutional circumstances in which the members of occupations rather than consumers or managers control work. In the market, consumers control the work people do; in a bureaucracy, managers are in control.

> Professionalism may be said to exist when an organized occupation gains the power to determine who is qualified to perform a defined set of tasks, to prevent all others from performing that work, and to control the criteria by which to evaluate the performance…The organized occupation creates the circumstances under which its members are free of control by those who employ them. (2001, p. 12)

Interestingly, Sullivan refers to the briefcase as the symbol of a professional's autonomy and freedom (2005, p. 35).

Schein provides criteria to define a professional which focus on full time employment, a specialized body knowledge, decision-making on behalf of clients, a service orientation, autonomy of judgment, and a calling to the profession (1972, pp. 8-9). Others agree that professionals must have a specialist knowledge base, autonomy, and a commitment to service, each of which has been significantly affected by social and cultural changes throughout the 1980s and 1990s (Watts, 2000, p. 12).

Some consider that the ideal of professional practice is captured by the motto, *credat emptor* (let the buyer trust) rather than what typically rules the marketplace, *caveat emptor* (let

the buyer beware) (Goodlad, 1984, p. 7). Furthermore, the professionals must not practice beyond their competence, and they have an obligation to the community (Ozar, 1993, pp. 170-171).

One of the problems in defining the term *profession* is that it has often been equated with employment, occupation, or career. Indeed, as members of trades move into professions (nurses, dental hygienists, etc.) the line between what is a career and what is a profession blurs. Even within the professions, individuals may view their employment as an occupation, not as a calling. However, scholars agree that the original meaning of the term "profession" calls forth a broader connotation than mere occupation. The notion of "professing" (May, 2001; Shulman, 2004/1997; Sullivan, 2005) is related to a calling or vocation in the sense that one professes (beliefs, values, special knowledge, commitment, loyalty, trust etc.) to other people, to a community, to society. This professing is not done in isolation, but within and for a community of others. Even Freidson says that professionals claim the moral as well as the technical right to control the uses of their discipline, and so they must resist the kinds of political or economic restrictions that might arbitrarily hurt others (2001, p. 222).

May (2001) points out that the word *career* comes from the same root word as *car*. They both refer to movement, or to the way people take off and get moving. The career-oriented person invests in himself or herself, and pursues private goals, much the same way a car takes the driver to a particular destination; both the career and the car are a private means of transportation. One of the reasons the car is so loved is that individuals can get into it and drive through the city, but stay autonomous, wrapped up in a glass-enclosed sense of privacy as they race through public thoroughfares. Similarly, the careerist is focused on self, with a private destination, asking questions relating to self: What will *I* be? What moves shall *I* make to get

where *I* want to go? Whom shall *I* cultivate and whom shall *I* avoid? The careerist obeys the laws, much as the driver of a car obeys the traffic laws, but goes where he or she desires. The calling to be a professional is a very different journey.

Developing an authentic professional identity requires looking outside oneself and beyond one's own private goals. It is to answer a higher calling—one to others rather than to self. It is to value the greater good over one's own accomplishments. For instance, lawyers work for justice, doctors seek healing and health, clergy inspire faith and goodwill, engineers and architects assure safety, accountants promise honesty and accuracy, and teachers encourage learning—all of these for the public good. They "create goods that at some time are essential for everyone, and important for society as a whole. They are activities that sustain public values" (Sullivan, 2005, p. 39).

Because professionals have a calling to the public good, they are often called upon to make ethical (choosing between good and bad) and moral (choosing between right and wrong) decisions. Indeed, sometimes, professionals are asked to choose between right versus right and to make decisions in the midst of competing demands in ambiguous and uncertain situations (Badaracco, 1997). A profession is a vocation, or calling, that requires considerable individual discernment and capacity for initiative and judgment, involving oftentimes a lifetime of creative invention as well as labor (Sullivan, 2005, p. 15). To become a professional is to assume a civic identity and to embrace a covenant of good will with society at large, i.e. to accept a responsibility that goes beyond one's career.

One argument against the idea of the professional calling relates to the *business* professional. When asked the question, what is the public good it seeks (as justice for lawyers, health for doctors, education for teachers, etc.) it is often said quite bluntly, *money*, or profit for

shareholders, which seems possibly antithetical to public good. When wealthy chief executive officers of billion-dollar oil companies raise gas prices because they must raise profits for the shareholders, they face a public scathing. How is this behavior reconciled with the ideals of professionalism?

May offers three personal virtues that must be cultivated by business professionals: virtues of industry (without which goods would not be produced), honesty (otherwise stealing would be rampant) and integrity (truth-telling and promise-keeping without which one could not count on receiving value in contractual exchanges) for the system to work (2001, p. 131). Indeed, according to May, the business community wields greater power than any other group in our society—whether churches, synagogues, mosques, service organizations, or labor organizations. Therefore, business professionals are called upon to cultivate a spirit of public concern as they make decisions that create momentous public impact for good on workers, consumers, suppliers, satellite service industries, as well as on the air we breathe, the water we drink, etc. While engaged in private enterprise, they often serve as unofficial public officials (p. 133).

Therefore, while knowledge and skills, theory and practice, rigor and relevance describe one important type of learning in which students need to engage in order to become professionals, this type of learning does not necessarily address the need for professionals to be able to see their work as a vocation or calling, to develop a fiduciary relationship with society, or to cultivate the ability to think autonomously in the face of difficult decisions, competing demands and ambiguous situations to best serve the public good.

Shulman seems to sum up all the definitions and descriptions of a professional by providing the following list of attributes by which all professions are characterized:

- The obligations of *service* to others, as in a "calling";

- *Understanding* of a scholarly or theoretical kind;

- A domain of skilled performance or *practice*;

- The exercise of *judgment* under conditions of unavoidable uncertainty;

- The need for *learning from experience* as theory and practice interact; and

- A professional *community* to monitor quality and aggregate knowledge. (2004/1998, p. 530)

Professional Education and Calls for Reform

Thirty-five years ago, a prominent expert on professional education, and professor of education at Stanford University pronounced,

Not since 1910 when Abraham Flexner published his report on *Medical Education in the United States and Canada*, and thereby brought about drastic reform in the nation's medical schools, has there been as much need and as great opportunity for reform of professional education generally. (Mayhew, 1971, p. 1)

In a sense, the Flexner Report started a national discussion on the relationship between theory and practice for professional education that continued through the twentieth century. Johns Hopkins University demonstrated the need for both, carefully planned for in the curriculum. But how much theory and how much practice were needed? At first it seems that the movement into the universities in the early part of the century and the subsequent explosion of knowledge led to an over-emphasis on theory. In 1971 it was reported, "Currently there is evidence that a number of professional schools have moved too far in the direction of theory and some reform now represents attempts to moderate that swing" (p. 7). However, some professional schools had allowed the pendulum swing in the other direction as they emphasized practice, "resulting in a

'how-to-do-it' procedure that limits members in adapting to changed conditions" (Mayhew, 1971, p. 14; Mayhew & Ford, 1974, p. 5). Mayhew called these pendulum swings "weaknesses and malfunctions" of the education practices of both the traditional and emerging professions. He also attacked the notion of putting professional students through a series of required courses and thus presuming them to be able to have the qualities the profession requires (p.14). Schein pointed out that the explosion of new knowledge and technologies coupled with the pressure to solve society's problems had resulted in a strain on the professions that show up most clearly in the professional schools (Schein, 1972).

Sullivan notes that there was an insidious problem with the Flexner Report. While it served the educational community well in its day and established the need for a strong theoretical foundation in professional education, its overcorrection led to an assumption that theoretical knowledge could be formulated in general, context-free, and value-neutral terms and denied context, narrative, and the ethical implications of knowledge. It led to the ascendancy of analytic reason and diminished the value a crucial aspect of apprenticeship—the initiation into the wisdom of practice (Sullivan, pp. 197-204).

Not long after Mayhew's work was published, Curry and Wergin called for a complete change in the conception of the professions, including professional education,

> This is not a time for tinkering with adaptations. A continuation of what we have been doing in the professions—only pursued harder, longer, or with more publicity—will not satisfy the various stakeholders: the public, the funders, the members of the profession in practice and the students in training. (1993, p. 327)

At about the same time, Hoberman declared, "[E]ducation for the professions has not changed significantly for more than fifty years. …Criticism of professional education is neither new nor

novel. Content of the education and the preparation of students as practitioners have been and continue to be major issues" (Hoberman & Mailick, 1994, p. 13). Some argue that there has been an increasing distrust of professionals, and of professional autonomy, by society in general throughout the 1980s and 1990s (Watts, 2000, p. 13).

Most recently, Sullivan lamented the abuse of public trust by the many in the professions, stating that while professionals must be competent in the technical aspects of their jobs, they also must regard their public obligations to society (2005, p. 41). It is no wonder that in an era of Arthur Andersen's huge accounting debacles, such as Enron, WorldCom, Global Crossing, Qwest, and others, the public has lost trust not only in financial gurus, but in the professions altogether (p. 48). Lawyers have come to expect denigration for their profession, physicians are regularly challenged by alternative medicines or solutions found on the Internet, and teachers who receive "emergency" credentials to fill the classrooms call into question the value of teacher preparation programs (p. 43). Further, he states, "There has never been a time when the quality of professional education was more important, or more subject to question, than the present" (p. 27). Clearly, there is a need to contribute toward a reform for the art, practice, and value of educating professionals.

Professionals have had an obligation to the public good. Therefore, how they behave in their profession has greater consequences than an employee who works for himself or herself alone. This fact has led some professionals to retreat in the face of possible disastrous decisions. For instance, doctors live in the world of possible malpractice suits and some choose to leave certain specialties (such as obstetrics) because of this fact; lawyers must balance the need to best represent clients with the fact that they are officers of the court; teachers must deal with parental complaints on one hand and local and federal government pressures on the other. "Since

professionals perceive themselves as marginal and beleaguered, they tend to overlook their duties as public servants, duties which the community traditionally deemed to be substantial" (May, 2001, p. 6).

Sullivan agrees that the professions are moving away from their fiduciary role (2005, p. 3). They are retreating to a more individualized focus on life because of what Sullivan describes as Robert Reich's notion of a so-called new economy as one where the days of employees staying with one company for decades, buying homes, raising families, and retiring comfortably are over. The market is more volatile and one's future now depends more upon one's own success or failure in the workplace. There has been a recent renaissance of entrepreneurial work as professionals seek the protection of individualism and autonomy. Sullivan refers to the work of sociologist, Steven Brint, who believes that this change in society is causing a movement away from the conception of professionalism as "social trusteeship," and toward one in which the professional is simply the technical expert. Sullivan calls this *technical professionalism* and he warns that this narrowing of professional claims toward the purely cognitive or technical in recent decades has contributed to a serious weakening of professionalism (2005, pp. 8-12).

The focus on technical professionalism in the universities has taken place because of the grip the positivist paradigm on curriculum and pedagogy (Sullivan, 2005, pp. 200-201). The historical tradition of positivist ways of thinking about knowledge, planning for learning, and measuring outcomes is still the dominant model in higher education. For Sullivan, this fact goes to the heart of the problem for professional education, and renewal will come only by coming to terms with this epistemological dilemma. This is a problem that Mezirow would call a disorienting dilemma for faculty who have lived and functioned within the positivist paradigm for many years (as students, themselves, as well as faculty). To ask them to begin to think

differently about knowledge, how people learn, and how we know they know what they know, is to ask them to examine their core values, beliefs, and assumptions about those very processes. This is a very different process than simply asking faculty to state objectives, sequencing activities, and stating how they would measure learning, which is the Tyler Rationale. They would need time and space for deliberation and discussion to get curriculum work done differently. Therefore, Sullivan has pointed out a problem which transformative learning theory and deliberative curriculum theory can help to resolve.

<div align="center">Suggestions for Reform</div>

Besides the Flexner Report, the literature reveals many suggestions to improve professional education. This discussion will be limited to the most important suggestions for reform offered in the past six decades.

As early as 1950 a report was published on how the Carnegie Institute of Technology reconstructed its professional education during the previous fourteen years (Doherty, 1950). Besides advocating for the education of values, and suggesting the need to help students to be able to make value judgments (p. 34), Doherty decried what he called, "subjectmatteristis" and said that the most pervasive and insidious educational fallacy lies in believing that students only need to learn the subject matter, "that the more ground covered in class—the more pages assigned in the book—the greater the education" (p. 5). He proposed three specific changes. First, he believed that professional education needed a new philosophy and new outlook that would embrace the human realm of studies as well as the technical. Second, students needed to develop a professional way of thought—one that embodies an analytical and creative power that is as effective in the human and social realm as that developed in the engineering realm. Finally, students needed to develop the ability to learn from experience so that in the future they would

be able to expand their fundamental knowledge, deepen their understanding, and become leaders (pp. 4-5).

Two decades later, the suggestions for reform did not sound much different. Mayhew also offered three suggestions. First, he recommended that professional schools provide a psychological structure for the curriculum rather than the logical structure of a string of common required courses. The U.S., according to Mayhew, had had a propensity for solving educational problems by simply creating new courses (Mayhew, 1971, p. 31). Instead, students should get a little taste of the practice early on, and they should have opportunities to choose a concentration and then courses to help students learn about that specialized area. With this plan, students would have more interest and insight into the profession. Second, he advocated for a switch from emphasizing the science or the theory to focusing on practice. He felt students needed to experience reality. He noted that at that time the most pervasive reform was the attempt to provide more clinical or field experience early in the students' education (p. 34). Third, Mayhew felt the curriculum needed to use problems in an eclectic and interdisciplinary way. He felt the true problems of the profession should be presented early on so that the student can take a multi-faceted approach to searching for the solution. He felt that they should grapple with problems through their program in an interdisciplinary way (pp. 16-17). To accomplish a more integrated approach to the curriculum, they should add humanities, social sciences, and more electives. Mayhew did focus on the ability of the students to solve problems, though, which reveals his bias that students should learn how to solve problems in the technical sense, i.e., he did not discuss the fact that problems are often too ambiguous, complex, and ill-defined to have technical solutions and that they may require what Heifetz calls adaptive approaches to deal with such challenges (Heifetz, 1994). Despite his perspective that professional education is basically

technical education, Mayhew's call for more experience with a more integrated curriculum however is one that others would also come to suggest, discussed later in this section.

Mayhew invoked the names of curriculurists Tyler and Bloom in suggesting ways to reform professional education, and said, "the process of Tyler's conception is a laborious one but almost seems the only possible approach if curriculum construction is to be a rational act" (Mayhew, 1971, p. 75). This statement was published in the same year that Schwab's first essays on deliberative curriculum theory were published. Perhaps, had he known of Schwab's ideas, he would have embraced them. He seems to anticipate Schwab's recommendations for curriculum reform in several ways. First he advocates for an ongoing curriculum committee to oversee the dynamic change of curricula with the recommendation that "curricular experimentation should be the rule" (1971, p 74). Furthermore, he maintains that curriculum reform will only take place when the faculty accepts the desirability of change and when there is strong and skilled administrative leadership, which harkens to Schwab's notion of including a variety of commonplaces (p. 76). He even sounds like Mezirow when he calls for faculty from different disciplines to come together and explore each other's presuppositions and learn the different languages of the varied disciplines (1971, p. 77). In this sense, Mayhew was a voice crying in the wilderness, pointing to deliberative and transformative theories that would soon develop, and that now can be integrated to ameliorate the curriculum situation.

Schein's greatest contribution to the reform debate was simply his plea for students to "learn how to learn" (1972, p. 55). He also presented a list of four major changes he felt were necessary to develop a new kind of professional education:

1. new kinds of learning modules built on better theories of how students learn

2. new kinds of faculty members who bring different skills, attitudes, and values to their job

3. new kinds of administrative structures and procedures that are more flexible and that adapt to the learning tasks to be met

4. Perpetual self-diagnosis and evaluation research. (p. 129)

In essence, Schein was saying that professional schools needed to do away with the standard, traditional "core courses," "applied courses," and "practicum," and move toward single learning modules using a learning theory that integrates basic sciences, applied sciences and professional skills. He felt that adjunct professors, practitioners in the field, should function as consultants on the design of the curriculum and that physically, the new school should be organized around a learning resource center with laboratories or applications-oriented subcenters all around, much like a teaching hospital.

Emphasizing learning in the professional schools was also the concern of professors at the Weatherhead School of Management at Case Western Reserve University (Boyatzis, Cowen, & Kolb, D.A. & Associates, 1995). They talk about shifting the focus from teaching to learning as they created a new management school. Strategies they used include focusing on learning outcomes, making faculty managers of learning, and emphasizing the most current adult learning theories. Their approach is germane to this study because they lean toward the kinds of design activities Schwab advocates—including the perspectives of all stakeholders in the design process—and the kinds of learning strategies Mezirow proposes—to learn a different way of thinking. For the latter, their description sounds very much like transformative learning theory,

Adult students…have well-developed values, opinions, and thought processes for dealing with issues at work or at home. To learn a different way of thinking, these students must

be given the opportunity to examine their current way of thinking; assess its value, costs, and benefits; explore the new way; and determine its relevance or potential to their lives or work. In professional education, the aim is to help them interpret their experiences and learn new and hopefully better ways to approach these situations in life and work. (Boyatzis, et al, 1995, p. 36)

In the concluding chapter of their book, they discuss what learning is by describing various adult learning theories. Besides suggesting that Mezirow's transformative learning theory is important for professional education (p. 232), they also use Habermas's three types of learning—instrumental, communicative, and emancipatory—to explain how complex, broad, and deep learning is (p. 231). The backbone of Mezirow's theory is Habermas's theory. Therefore, it is safe to say that Boyatzis, et al, recommend the use of Mezirow's transformative learning theory for professional education.

The question of how to help students to move from novice to expert has been the topic of several reformers of professional education. Original research was conducted as a phenomenological study that proposes that students move through five levels of skill development: novice, competence, proficiency, expertise, and mastery (Dreyfus & Dreyfus, 1980), which was later changed to novice, advanced beginner, competent, proficient, expert (Eraut, 1994, pp. 123-128). In this model, competence is the climax of rule-guided learning, and discovering how to get along in a stressful environment. However, proficiency marks the beginning of a very different approach to doing the job, i.e., situations are apprehended more deeply, the abnormal is perceived more quickly, and a more holistic approach is used for situational learning. Movement from proficient to expert takes place when decision-making and situational understanding becomes intuitive rather than analytic. The action of experts is based

on mature and practiced understanding. Their skill becomes part of who they are as professionals (Eraut, 1994, p. 126). Benner (2001, pp. 13-38) applied this framework to curricula for nursing students and found that proficient performers are best taught inductively and by the use of case studies since context-free rules only seem to frustrate them. Benner says that not all proficient nurses will become experts, but as expert nurses make explicit what they do, this articulation and documentation of their now tacit knowledge helps competent and proficient nurses to grow and develop in their expertise. Sullivan also embraces the Dreyfus model for professional education (2005, pp.246-250).

Another very significant suggestion for reform is Schön's idea of educating professionals to become reflective practitioners. This notion provided a new way of thinking about what knowledge counts and how professionals know what they know (epistemology). In fact, he called for a new epistemology for a new way of doing scholarship (2000/1995). This was a very important shift in thinking about graduate professional education and it relates to the epistemological history of professional schools. In the early part of the twentieth century, Veblen attempted to have professional schools removed from universities. In describing the university, he said, "Its aim is to equip the student for the work of inquiry, not to give him facility in that conduct of affairs that turns such knowledge to 'practical account'" (Veblen, 2005/1918, p. 13). Of professional schools, he said that their aims, methods, and achievements were foreign to higher learning (p. 19) and therefore, he advocated having them removed from universities all together and to have a two-tiered system higher learning and vocationalism, or lower schools. However, the professions did enter the universities in increasing numbers, and today, students must graduate from a college or university to enter into the professions. However, Schön points out that the professions paid a price for their entrance into "higher learning."

They had to accept the Positivist epistemology of practice which was now built into the very tissue of the universities. And they had to also accept the fundamental division of labor on which Veblen had placed so great an emphasis. It was to be the business of university-based scientists and scholars to create the fundamental theory which professionals and technicians would apply to practice. (Schön, 1983, p. 36)

Schön's work focused on changing the model of what he called "technical rationality" to "reflection-in-action." The former was based on the premise that professional activity consists in instrumental problem solving made rigorous by the use of scientific theory and technique (1983, p. 21). However, this view is insufficient and even insidiously counterproductive because it does not take into account or acknowledge the fact that most problems professionals face exist within what Schön calls "indeterminate zones of practice—uncertainty, uniqueness, and value conflict" (Schön, 1987, p. 6). This calls for a different kind of knowledge, an epistemology of practice, one that starts by asking what can be learned—not from rigorous scientific research—but from a careful examination of the artistry of practice, or the competence by which practitioners deal with the indeterminate zones of practice. Thus, even though artistry is inherently mysterious, it is rigorous on its own terms. Research-based technique and applied science are critically important, but definitely limited. Technical rationality does not get at the artistry of a professional who learns from the indeterminate zones of practice. In order to learn the artistry of a profession, students must engage in a continual reflection-in-action (Schön, 1987, p. 13), much the same way students of the fine arts reflect on their performance or their artwork and adjust. Schön argues that professional schools need to go deeper than discussing how much theory and how much practice, or adding courses or even integrating the standard curriculum with more humanities. He calls educators of professional schools to rethink both the epistemology of

practice and the pedagogical assumptions on which their curricula are based and to change their institutions to accommodate the reflective practicum as a key element of professional education (1987, p. 18).

Harris points out that critiques of Schön's work have focused on his strong emphasis on practice to the expense of specialized knowledge from the basic and applied sciences (Harris, 1993a, p. 34). She maintains that specialized bodies of knowledge, such as pertinent explanatory theories, doctrines or systems of values, applied theories and practice theories are not incompatible with reflective practice. This emphasis on the importance of the subject matter is similar to Schwab's inclusion of the same as one of his commonplaces, along with the teacher, the student, and the milieu. Perhaps the most important contribution to curriculum reform for professional education that Harris provides is that she connects it with Schwab's deliberative curriculum development process, pointing out that it "virtually echoes in its assumptions and recommendations what Schön and others have outlined about the nature of professional practice, except that it is applied to curriculum practice, the practice of designing and studying curricula" (p. 42).

Curry and Wergin (1993, pp. 317-322) expand on the notion of reflection by suggesting three fundamental ways in which professional education needs to change. One suggestion is for the adoption of a more reflective educational practice by building greater communication between the practice of the professions and the education and recruitment for that practice. This discourse would provide a better understanding of problems, constraints, and perceived opportunities within the professions, and for Schwab it would add a layer of particularity, or another category or lens through which to investigate what the curriculum could be. Another idea they propose is that professional educators should take a proactive stance with regard to public

accountability. Written almost a decade before the Arthur Andersen accounting disasters, they prophetically warned, "Society is now demanding some method of continuous assessment, both of the individual professional's ability to use professional knowledge in ways that clearly accomplish desirable ends and, more broadly, of the entire profession's impact as a group on society's well-being (Curry & Wergin, 1993, p. 318). Lastly, curriculum planners should integrate technical with practical knowledge in professional schools, and explore further what it means to develop professional competence, which is more than technical expertise. They suggest professional competence includes evidence of the fruits of liberal learning, such as "evidence of active thinking, employment of an intellectual and social context for that thought, the questioning of established values, and the skills to communicate the results of the thought process" (1993, pp. 19-20). The call for students to question their established values is part of transformative learning, which uses reflection to raise awareness of personal values, beliefs, and assumptions. When there is a cognitive dissonance or a disorienting dilemma, students are challenged to change their perspectives to become more inclusive, open, and autonomous in their thinking.

Another major contributor to the reform of professional education is Shulman, who offered at least two major, significant ideas. One idea is to learn and apply Schwab's ideas of the practical, deliberative curriculum planning, and deliberation in the classroom (2004/1991). According to Shulman, Schwab was committed to doubt as the source of wisdom, and was devoted to the "other view" as the key to the growth of understanding (p. 420). He eschewed lecturing because lectures always flirted with the danger of doctrine, of presenting knowledge as definitive, and he used the Socratic method skillfully, often asking students what the author was doing, rather than what the author was saying. There were two main elements of good teaching

for Schwab. First, the program must be well conceived, developed through a deliberative process with all the four commonplaces represented equally: the subject matter, the teacher, the learner, and the milieu. The curriculum must not be built upon one theory alone, since all theories are incomplete, and any theoretical position necessarily represents a narrowing of the field (Shulman, 2004/1991, p. 427). The second main element of good teaching for Schwab was that he believed that there needs to be carefully selected and designed materials along with appropriate forms of pedagogy to match the goals of the curriculum. He felt that curriculum materials needed to be sufficiently complex that multiple alternative interpretations could be offered and defended. Deep and full understanding could only be achieved through permitting alternative views to "flourish, compete, and interact (Shulman, 2004/1991, p. 426). Thus, Schwab advocated for deliberation, not only for the curriculum design process, but also for classroom experiences. Shulman says that Schwab's lifelong quest was to cure his students, "whatever their ages or stations in life, of the malady that some came to call the 'hardening of the categories'" (Shulman, 2004/1991, p. 430). This sentence sounds much like how Mezirow describes habits of expectation or meaning schemes, "Ashley Montague somewhere wrote of 'psychosclerosis' or 'hardening of the categories'" (Mezirow, 1991, p. 50). Therefore, it is evident that both Schwab and Mezirow were keenly interested in the preconceived notions, assumptions, beliefs, values, and other forms of tacit knowledge that students bring to the learning environment and that they felt the need for students to explore and examine those orientations. It could be said, too, since Schwab advocated for equal representation of the commonplaces, that he was also concerned about the presuppositions of faculty as well as the students.

The other significant idea Shulman contributed is what he calls an emergent new view of education in the professions, one that connects to each of the commonplaces of professional learning: moral vision, theoretical understanding, practical skills, the centrality of judgment, learning from experience, and the development of responsible professional communities (2004/1998, p. 543). This list of the commonplaces for professional learning gives specificity for Schwab's commonplace of the "subject matter." In other words, when making up a curriculum work team to design or redesign professional education programs, it is important to use Schwab's four commonplaces: the teacher, the student, the milieu, and the subject matter. However, what Shulman gives to us is the articulation of what the various components of the subject matter must be for professional education. The limitation of Shulman's emergent new view of professional education is that it does not account for the "hardening of the categories" of the teachers, especially of those teachers who are involved with the design process. In other words, while Shulman advocates for the use of deliberative curriculum planning, especially including all the elements of the subject matter commonplace he lists, he does not explicitly account for how faculty would deal with the change in process or design. Herein is the need to integrate transformative learning theory and deliberative curriculum theory to create a heuristic to assist curriculum workers who design professional education as well as the teachers who teach in the programs.

The final contribution to the reform of professional education to be explored in this study is from Sullivan (2005, pp. 208-209), who proposes three types of apprenticeships—intellectual or cognitive, the tacit body of skills shared by competent practitioners, and values and attitudes shared by the professional community. This framework is helpful because it explicitly adds the third dimension to the theory/practice debate. All three apprenticeships are necessary, "But it is

the third apprenticeship through which the student's professional self can be most broadly explored and developed" (p. 209). While the theory/practice pendulum has swung back and forth for decades, Sullivan essentially says that expecting the combination of theory and practice to automatically transform students into professionals is a fallacy. Sullivan is saying that the answer to reforming professional education is not in getting the theory/practice algorithm right, but rather dealing with the theory/practice tension regularly and adding on the dimension of values and attitudes. Thus, transformative learning theory could inform planners of professional education as they design opportunities to foster the transformation of students into professionals.

Sullivan's approach elevates the role of the faculty because now the faculty must do more than give intellectual information and help students develop skills, they must make visible their mostly invisible processes of thinking and demonstrate their habits of mind, their values, and their tacit assumptions. This idea articulates the role of the faculty in deliberative planning process, as well, so that the role of the commonplace of the teacher is more specific. Sullivan also says that the aim is to help students, "question their stereotypes and assumptions," (p. 216), which is a part of fostering transformation. Finally, Sullivan notes that university professors are members of the "key profession" because it is academics who prepare all other professionals (p. 201). Therefore, before the professions can be transformed to higher purposes than technical professionalism, to serving the public good, those who teach them must be transformed to understand the true calling of the professional and how to help students to actually become professional.

Helping students embrace a calling to serve the pubic good is a noble, but difficult challenge. However, some believe there is a national movement toward this goal (Kezar, Chambers, & Burkhardt, 2005). One of the obstacles to assisting students in this endeavor is the

careerist attitude that many students have (Kezar et al., 2005, pp. 34-35). Even though most agree that a quality education should prepare students for public life, not just a career, Kezar notes that the newest innovations of distance learning tend to emphasize information delivery over critical thinking (Kezar et al., 2005, p. 28). Her point is that reforming professional education to emphasize the public good does not require technological advances, new "delivery" formats, or other types of innovations. Instead, a public deliberation is necessary about how higher education can serve the public good by helping students to become professionals with the call to serve.

Summary

In sum, to become a professional means more than to acquire knowledge and skills. It is artistry, and it is vocation or a calling to service, to the public good, and to a professional community. Being professional means more than having a career or being competent. It means seeking to serve others rather than self and becoming proficient and expert rather than merely competent. Developing expertise requires wisdom and the ability to make sound judgments in the face of uncertainty and ambiguity. Having one's own assumptions, beliefs, and values examined is part of transforming into a professional who thinks autonomously, more openly and critically.

Being rooted in a positivist paradigm, graduate professional education has excelled in technical professionalism, or emphasizing technical rationality and instrumental knowledge. Even the Flexner Report, though it served to set a course of professional education within the university setting, contributed to the notion that professional education is primarily scientific foundation and clinical practice, without an explicit focus on the development of values, attitudes, and beliefs regarding the calling of the professional for the public good, in the service

of others. Distrust of professionals is rampant in our society, causing many students to opt for the careerist path. Economic trends have forced schools to create new "delivery" formats to make programs more convenient and to increase enrollments, even if the formats do not lend themselves to the development of the professional.

However, students must learn to "profess" their beliefs and values for their field. Lawyers profess justice, doctors health, teachers learning, clergy faith, architects beauty and safety, etc. This type of professing goes beyond knowledge and skills, theory and practice. It moves students from knowing and doing to being professional. Their ability to make sound judgments in the face of difficulty becomes part of their tacit knowledge, their theory-in-use, their habits of mind. They need to be transformed from student to professional.

Current curricula cannot accomplish this goal. A paradigm shift needs to take place where deliberation can happen with the four commonplaces of teacher, student, subject matter, and milieu. The traditional positivist way of approaching curriculum development needs to give way to less linear, more deliberative processes and for the learning experiences of the students. The calls for reform over the past six decades point to the need for Mezirow's transformative learning theory and Schwab's deliberative curriculum theory to assist in reforming professional education. Tables 2 and 3 summarize the most salient reform suggestions discussed in this section as they relate to the two abovementioned theories.

Table 2

Suggestions for Reform that Relate to Mezirow's Theory

Contributor	Mezirow's Transformative Learning Theory
Doherty 1950	Need to emphasize values and value judgment.
Schein 1972	Need to use better, new, and current learning theories; Need faculty with new values for their job.
Boyatzis, et al 1995	Use Habermas's distinction between communicative and instrumental learning; Use Mezirow's theory; Help students interpret their experiences.
Benner 2001	Teachers should make their tacit knowledge explicit to help students move from competent to proficient.
Schön 1983, 1987, 1995	Move away from technical rationality towards becoming reflective practitioners, examine epistemological assumptions, strive for artistry of practice, and explore value conflicts.
Curry & Wergin 1993	Students should be encouraged to question established values.
Shulman 2004/1991	Faculty should fight against the "hardening of the categories," or preconceived notions and presuppositions.
Sullivan 2005	Faculty must help students question their stereotypes and assumptions. The faculty are key because they prepare students for all the professions, therefore they must be transformed if the professions will be transformed.
Kezar 2005	Students must transform to serve the public good, not to simply have careers.

Table 3

Suggestions for Reform that Relate to Schwab's Theory

Contributor	Schwab's Deliberative Curriculum Theory
Mayhew 1971	There should be an ongoing curriculum committee who seek to use problems in an eclectic and interdisciplinary way.
Schein 1972	The curriculum design process needs a new administrative structure, and it should be more flexible. Programs need a perpetual self-dianosis.
Boyatzis, et al. 1995	Perspectives of all stakeholders must be included in the design process.
Harris 1993	Use Schwab's ideas of deliberative curriculum design for professional education.
Curry & Wergin 1993	Add communication with the professions to the curriculum design process. This gives more substance to the subject matter commonplace.
Shulman 2004/1991 2004/ 1998	Use Schwab's ideas of the practical, deliberative curriculum planning, and deliberation in the classroom. Resources for curricula need to be rich and complex, and this can only come about through arduous deliberation. Use these commonplaces for professional education: moral vision, theoretical understanding, practical skills, the centrality of judgment, learning from experience, and the development of responsible professional communities. This enriches the commonplace of the subject matter.
May, 2001 Sullivan, 2005 Kezar, et al. 2005	Deliberations must include the calling to the public good.

The need to use transformative learning theory and deliberative curriculum theory for professional education is clear. Faculty need to be confronted with the need to include all the commonplaces, and they need to learn how to deliberate effectively. The literature demonstrates the need for faculty to be transformed to engage in deliberation to design the new kind of curricula needed for professionals to rise to their calling. The need is apparent, and the two theories, which can help resolve the professional education problem, are well established now after 30 years of research. What remains to be done is to find a way to help educators integrate and implement these theories in a meaningful and useful way. Both theories of Mezirow and Schwab have proven to be somewhat complex and difficult to understand, especially for educators who prefer linear, quick and easy solutions. What educators need is a heuristic that will help them to integrate and implement the two theories in order to transform graduate professional education.

CODA

During the past century professional education has become fully accepted within the university structure, but it at the same time, it has been gripped by the traditional positivist way of doing education, focusing on technical rationality. While the past several decades have produced cries for reform, few have taken hold in a significant, paradigmatic way. Technical rationality is married to Tyler's rationale; therefore, to design curriculum differently requires a new philosophical approach altogether. This study proposes no easy solution; in fact, I acknowledge that the work that needs to be done to create graduate education that will help students transform into true professionals is tough, uncomfortable, and quite disorienting for all involved.

Transformative learning theory provides an understanding and a framework to help wrestle with the disorienting dilemma that many faculty, administrators, and even students will have when engaging in deliberative processes to design curricula. In essence, the deliberators—the faculty, students, representatives from the subject matter and the milieu—become learners. They must first deal with their own assumptions, beliefs, and values as they relate to curriculum design and learning. As they transform, and as they begin to deliberate in the hard process of decision-making for curriculum designs, a new paradigm can emerge for graduate professional education.

As the centennial anniversary of the Flexner Report approaches, it is time to offer a new process for creating professional education that leads students to accept the call to service for the public good. One antidote to careerism and technical professionalism lies in transforming the assumptions, beliefs, and values of those who create professional education, and giving them a flexible, fluid, dynamic process to intentionally plan for the transformation of their students. According to Reid (2006) "the practice of deliberation is at the heart of re-instilling concern for the public interest." In order to accomplish this, transformative learning theory and deliberative curriculum theory must be integrated and formed into a heuristic that will help create this paradigm shift. The next chapter will describe the methodology of theory integration that will be used to merge these two theories. Once the heuristic is created and begins to be used, it should lead to a transformation of the faculty, the students, and the field.

Chapter 3: Methodology—Developing a Theory of Integration

For this dissertation, I built a new theory, integrating the theories of Mezirow and Schwab. In order to be able to do that I needed to understand the nature of theory—what it is, why it is important, how theories have been developed throughout history, how to integrate two theories into one new theory, and how to assess a theory. Therefore, this chapter answers the abovementioned questions in depth, and analyzes how theories have come into existence over the years. As a result of this study on theory building, a process of how to build a theory emerged. This 10-phase framework for theory building that I developed was used for chapter four when I created the new theory. Furthermore, in the future, others could use this framework to create theories of integration.

People have and operate within the framework of theoretical presuppositions all the time. It is only when they uncover the surface of their activities and reflect upon what their beliefs, values, and assumptions are regarding their practice that they can create significant meaning for what they do, enhance the work they have embraced, and continue to change and expand their theoretical understandings, keeping up with and making advances in their fields.

To be sure, there are different theories about theories, diverse definitions for the notion of a theory, and a variety of approaches to theory building. This chapter discusses the importance of theories, briefly reviews the historical and philosophical roots of theory building and in so doing, explores different definitions for a variety of terms within the realm of theory building, and describes a new invention that emerged from this study—my 10-phase plan for how to build a new theory of integration. Finally, I propose criteria for assessing the new theory. The 10-phase plan to build a new theory of integration can be used by others in the future for theory building.

The Importance of Theories

Why theory? As humans we need theories to give us something we do not have, whether it is a solution to a problem, a remedy for something lacking (Habermas, 1984, p. 45), illumination of something not clear to us, a framework for understanding, or lens to see the world in a different way. Mithaug relates John Dewey's account of the, "Lost Traveler" as an illustration of this need (Mithaug, 2000, p. 1). The traveler came to a fork in the road with no sign to indicate which road would take him to his destination. He could trust his fate to luck and simply pick one, hoping his fifty-fifty chance of choosing the correct path would turn out in his favor, or he could try to find clues to inform his decision. Mithaug points out that he could search his memory to see if he remembers anything about this place, he could climb a tree to see where the paths may lead, or he could start down one path for a short while to get a feel for it, come back and try the same with the other. All of these activities would be contributions to his building of a theory for which road to take. For Mithaug, then, theories help us solve problems. The traveler had to go to a destination, but did not know which road to take. The theory could inform his choice to solve this problem for him.

Not only do theories help people to solve problems, they also help them to create the capacity to invent explanations (Stinchcombe, 1968, p. 3). They are, "vehicles for explanation, prediction, or control," (Argyris & Schön, 1974, p. 5). Those explanations usually take people from the concrete to the abstract, stepping from what we see and observe to being able to interpret and understand; "it is an attempt to explain a phenomenon or phenomena in abstract terms and general principles," (Ellis, 2004, p. xiii). Theories make the rough places smooth and the messy settings neat (Shulman, 1997, p. 16). Sometimes those messy settings are upsetting. Kaplan says that theories help us to make sense of a disturbing situation and allow people to bring to bear their repertoire of habits, or more importantly to change our habits to better and

new ones as the situation dictates (Kaplan, 1998, p. 295). We could say then that theories

function to provoke us to think (Pinar, Reynolds, Slattery, & Taubman, 1995, p. 8).

Besides helping us to explain, predict, solve problems, and think, theories can give us

insight. David Bohm points out that the word "theory" derives from the same root word as does

the word "theatre," meaning "to view" or "to make a spectacle," (Barbour, 1974p. 4). Scientists

at the beginning of the modern era began to *see* things differently, such as when Newton *saw* that

as the apple falls, so does the moon, and so do all objects. Therefore, Newton was led to the

theory of universal gravitation, which constituted a new way of *looking* at the heavens. This

Newtonian form of insight worked very well for several centuries until new forms of insight

were developed through the theory of relativity and quantum theory (Barbour, 1974, p. 5). Kuhn

noted how "normal science," or development by accumulation, actually hinders paradigmatic

shifts in the way people think and theorize (Kuhn, 1986). Kaplan points out that Cartesian

dualism, while aiding medical students in gaining access to cadavers, slowed progress in

psychosomatic medicine and even demonized modern psychiatry for years (Kaplan, 1998, p. 21).

In this way, theories can sometimes function as blinders rather than aides to vision (Olds, 1992,

p. 19).

Despite the limitation of "normal science," theories help people to understand the world

(Barbour, 1974, p. 30). Habermas distinguishes between theories for natural sciences and

cultural sciences in this way, "Nature we explain; psychic life we understand" (Habermas, 1971,

p. 145). He elaborates on this notion by saying that explanation requires the application of

theoretical propositions to facts that have been observed systematically, but understanding is an

act in which experience and theoretical apprehension are fused (Habermas, 1971, p. 144). This

act of seeking to understand phenomena requires creative imagination (Barbour, 1974, p. 30;

Kaplan, 1998, p. 308). Theorists could sometimes be considered architects and synthesizers of the process of inquiry. However, this creative activity does not mitigate against rigor. "Theory is as rigorous an intellectual exercise as experimentation and involves a disciplined type of critical thinking," (Olds, 1992, p. 19).

Finally, theory is important for the advancement of knowledge and academic fields. Bentz and Shapiro note, "…without theory, any given practice is lost to history without becoming a part of the cumulative wisdom embodied in theory" (Bentz & Shapiro, 1998, p. 140). Theoretical inquiry attempts to generate new knowledge and to advance the field in which it operates.

Why theory? People concern themselves with theory to help them live in this world of perplexing questions, confusing problems, muddled understandings, and disturbing situations. They are interested in theory when they see something is lacking and we need to remedy it, when we are curious about a phenomenon, when we find ourselves "looking through a glass, darkly" (1 Cor. 13:12 King James Version), when we want to advance the field in which we work. We theorize to know and to understand and to change the way we see the world and ourselves.

Historical and Philosophical Roots of Theoretical Paradigms

The historical and philosophical roots of theory building are long and complex. However, it is useful to have a concise context for how theories have been developed in the past before deciding how to create a theoretical model now. Therefore, the brief sketch here is not meant to be exhaustive or complete, but rather more of a broad sweep of the most important points in time and contributions to the field of theoretical inquiry.

The history of theorizing has roots in two major questions: ontological—what is the essence of reality? and epistemological—how do we know what we know? For the ancient

Greeks, reality was an objective entity. It was known primarily through theology (by faith) or philosophy (by reason or logic). Hence, theology and philosophy governed the process of inquiry about the world up to the modern era.

With Francis Bacon's development of the "scientific method" in 1620, a new way of knowing about the world was introduced. The activity of observation and inductive reasoning usurped theology and metaphysics as the primary way of understanding the world. By 1641, Cartesian dualism, or mind versus body, continued the movement of classic science toward focusing inquiry on what could be measured by the senses. This relegated the study of the "mind" to something not quite scientific. Only what could be observed was counted as pure science. In 1739, David Hume continued the march of scientism by maintaining that human nature must be studied through observation rather than through pure philosophy. He did not do away with logic, but instead believed that propositions should be viewed as existing within one of two categories: formal propositions, such as logic or pure mathematics which were tautological (vacuous statements such as, "Either it will rain tomorrow or it will not rain tomorrow."), and factual propositions, which had to be empirically verifiable. However, Kant argued against what he viewed as Hume's radical empiricism by the 1780s, and emphasized free will, meaning that logic could be used by the individual to make choices about objective truth. Kant also argued that for a new foundation of philosophy to be achieved, it would be by reason's critical self-examination, or reason's critical reflection upon itself. In essence, Kant was saying that science must deal with the question of whether human reasoning can achieve the knowledge relevant to reality without having to depend on the use of experiences. He called it knowledge gained from pure reason. This was a transcendental issue, one that concerned not the objects of knowledge, but rather, the conditions that make knowledge possible in the first place. Objects

can be comprehended in relation to a subject; subject and object are only meaningful if thought of in relation to each other. Pure reason, then, transcends empirical-object-oriented understanding (Kleiner, 2005, p. 317).

Fifty years after Kant's time, Auguste Comte abandoned Kant's notion of pure reason, followed Bacon's work, and developed a system of knowledge through the empirical sciences, relegating philosophy to the same realm as theology. Comte was concerned with brute facts and the relationship between them, and the essences of metaphysics were declared unreal. His focus was on what could be known through empiricism and the scientific method, particularly as it could be applied to a study of society. Comte is considered the father of sociology and the idea of applying methodologies of the natural sciences to study social phenomena. He called this idea *positivism*, which Habermas says ended the theory of knowledge and birthed the philosophy of science (Habermas, 1971, p.67). The ontological question—what is the essence of reality—was answered with the response of, only what we can know through our senses; all else is not relevant for study. This answer, of course, had profound impact on the epistemological question—how do we know what we know—since metaphysical, philosophical, and theological knowledge was considered inconsequential to positive scientific knowledge. Only empirical research was deemed relevant. The positivist strategy was to avoid epistemological questions (Habermas, 1971, p. 84). This direction of theoretical study greatly influenced social inquiry for subsequent decades. Hence we could say that with the genesis of positivism, and the notion that only empirical knowledge counted, the empirical way of knowing subsumed epistemology.

Positivism

What exactly is positivism? It is the doctrine that maintains that the study of the human or social world should be organized by the same principles as the study of the physical or natural

world; the social sciences should be modeled after the natural sciences (Lemich, 2005, p. 571). Auguste Comte believed he had established a law of three stages through which knowledge in all disciplines progress. The first stage was theological, in which people appeal to divine authority for knowledge. The second stage was metaphysical, in which knowledge was acquired through understanding terms of abstract forces and powers. The third and final stage was the *positive* stage, or the scientific stage, in which understanding comes from knowledge of invariable natural laws that relate observable phenomena and events. Newton's law of motion was a case in point: as the apple falls, so does everything because of the universal law of gravitation.

Habermas states that Comte's philosophy of science can be reduced to methodological rules, all of which are ostensibly covered by the term, *positive*. The *positive* spirit is linked to procedures that guarantee scientific objectivity. Comte uses "positive" to refer to the actual in contrast to the merely imaginary, what can claim certainty in contrast to the undecided, the exact in contrast to the indefinite, the useful in contrast to the vain, and what claims relative validity in contrast to the absolute (Habermas, 1971, p. 74). Theology and metaphysics was speculative; scientific methodology applied to social inquiry was thought to provide positive knowledge— both in terms of certainty and progress, but not in terms of perfection. Furthermore, positivism rejected "negative" thinking that is thinking that either invokes principles that have not been verified experimentally, or that applies to the current social order principles, norms, standards, or values that go beyond it or that are more than generalizations of behavior or statements of subjective preference. According to the positivists, we must be limited to the facts; everything else is speculation or emotion. Social critique and "negative" or "critical thinking" are seen as expressions of confused thinking, resentment, ideology, or totalitarian hopes and visions (Bentz & Shapiro, 1998, p. 184).

There were three core themes of positivism. First, historical progress is built upon scientific advancement. Second, all "sound" or "positive" knowledge is based ultimately upon observations as opposed to divine authority or human reason. Third, all the sciences natural and social, can be integrated into a system of natural laws (Lemich, 2005, p. 572).

By 1870, Herbert Spencer had applied Darwin's theory of natural evolution to social theory, forming part of the social Darwinist movement that extended ideas the field of biology to the discipline of sociology. Spencer did not agree with Comte on every point, but he was committed to the cardinal point of positivism—the unification of the natural and social sciences, and in his case, through the theory of natural evolution. However, Comte's position looked forward to a continual progress through the increase of positive knowledge—in direct opposition to Spencer's individualistic approach that allowed for the competitive evolutionary process.

Emile Durkheim contributed to the solidification of positivism in the 1890s by creating the idea of a *social facts*, which can be described as concepts or expectations that do not come from individual responses and preferences, but from the social community which socializes each of its members**.** Durkheim exemplified the application of positivistic methods in studying the social fact of suicide. Perhaps one of Durkheim's greatest contributions to social research methodology was his introduction of statistical analysis to social phenomena, using the collection and analysis of quantitative descriptions of social facts to conduct social inquiry. This activity was embraced wholeheartedly during the first half of the twentieth century when newly established academic departments of sociology in the U.S. sought to project themselves as equals among the other sciences. They encouraged the dispassionate and rigorous application of statistical methods to accurately measure social facts. It was believed by many that the use of

numerical data was objective, and therefore statistically analyzing data was thought to be a value free activity (Halfpenny, 2005, p. 572; Lemich, 2005, p. 900).

Positivists are both dualists and objectivists, i.e., the researcher and that which is being researched are independent entities and the investigator is capable of studying the object without influencing it or being influenced by it. It is thought that biases are kept from influencing outcomes, as long as rigorous methods and prescribed procedures are carefully followed. Once findings are replicated, they are considered, in fact, "true" (Denzin & Lincoln, 1998, p. 204).

Logical Positivism

By the 1920s, positivism changed when a group of philosophers, scientists, and mathematicians focused on two of the three central themes of positivism mentioned above, empiricism and the unification of the sciences, but did not embrace the third tenet, that historical progress would be built upon scientific advancement. These academicians came to be known as the Vienna Circle and they called their work "logical positivism." Their outlook recalled Hume's position of using logic for clarifying the form of science, but not its substance. The theory of logical positivism "explores the consequences of a sound and respectable point of logic which was already made by Hume; that normative statements are not derivable from descriptive statements, or, as Hume puts it, that 'ought' does not follow from 'is' (Ayer, 1959, p. 22).

Therefore, logic could be incorporated into science for logical positivists because, although logical truths are a priori—or known to be true without appeal to experience—they are analytic. Since laws are an essential component to scientific explanation, the logical positivists devoted much effort toward expounding the nature of laws. In their approach, an explanation consists of a statement describing an event (the explandum) that is explained by deducing it from a set of other statements (the explanans), including a covering law and a set of initial conditions.

This process of explanation was called the *deductive-nomological* form of explication. Durkheim's study on suicide rates offers an example of this approach, which has become a formal model for explanations in all disciplines. The high rate of suicide in a particular place is explained by deducing it from the initial condition that the place is experiencing rapid economic development together with cover laws (1) that sudden economic success is accompanied by high levels of anomie (Durkheim's term for when norms no longer apply to guide behavior) and (2) that anomie encourages suicide (Halfpenny, 2005, p. 573).

The logical positivists faced two important problems with their use of laws, though. One problem was that in order to be sure that the explanandum is really deducible from the explanans, the law included in the latter had to be an unrestricted universal statement—All A's, without exception, are also B's. The second problem the logical positivists had with the use of laws was that in order to distinguish universal laws from the accidental generalizations, the former must have a relationship between the antecedent and the consequent that is stronger than mere covariation. These problems are troubling because no matter how many A's one observes to be B's, there is no guarantee that all A's are B's. Also, if a connection is considered beyond covariation, and is proposed as characteristic of laws, but not generalizations, it is mostly something that is considered beyond immediate observation, which would violate empiricism. An example of this problem is when the law is said to show causal connections. In 1959, Karl Popper, who was not considered a logical positivist, but who communicated with those of the Vienna Circle, found a unique solution to these problems by simply avoiding them. He turned them upside down and said that universal laws have a provisional character, being accepted as true only until proved false. Laws, therefore, are corroborated by our experience, but never verified. Instead, science would progress by the elimination of falsified conjectures. If a

proposition cannot be falsified, then it should not be considered science (Halfpenny, 2005, p. 573; Lemich, 2005, p.902).

The result of logical positivism has been a broad acceptance of the notion of requiring social theorists to use *hypothetical-deductive* methods to corroborate general laws and to state their explanations in the *deductive nomological* form. Quantitative inquiries, using statistical analyses, are still used to show the strength of relationships between variables. However, Habermas states that with

> the origins of the modern empirical sciences, the classical metaphysical concepts of substance have been replaced by concepts of relation, and theories that were intended to replicate being as a whole have been supplanted by theories that causally explain empirical regularities. But the positivist interpretation of this is itself still immersed in metaphysics. (Habermas, 1971, p. 79)

What Habermas is saying is that even though the positivists claimed to be value-free and objective, the very fact that they held onto a positivist position was the value they had chosen, and this value was chosen subjectively. Furthermore, positivism can be hegemonic since it often perpetuates the power of the positivists. Herein are the greatest weaknesses of positivism and logical positivism, which leads to a discussion of postpositivism.

Postpositivism

Opposition to positivism and logical positivism focused on the assumption that the scientific method is objective and not value-laden. Positivists believed that the contents of observation are free from conceptual contamination. Kaplan quoted Nietzsche as calling this notion, "the dogma of immaculate perception," (Kaplan, 1998, p. 131). In fact, there can be no perception free from influence. Observation is part of the cognitive process and Kaplan noted

that the eye with which we see is really the mind's eye, that we sort of put a second metaphorical eye behind the real one so that we can make meaning out of what we see with the physical eye (Kaplan, 1998, p. 132).

Postpositivism is a reaction against the notion that the hypothetical-deductive method can be used with an eye free from personal influence to study sociological phenomena. In other words, according to postpositivism, the scientific method used in the natural sciences cannot be easily superimposed upon the social sciences. In essence, positivism ended the epistemological argument (how can we know what we know) by saying that ways of knowing outside the scientific method are irrelevant and that only through a hypothetical-deductive method can validity be achieved. Postpositivism recaptures other ways of knowing outside the scientific method and changes the paradigm by saying that validity is not the goal, but rather understanding is the goal. The ontological position of postpositivism could be named critical realism. Reality is assumed to exist, but it is imperfectly apprehendable.

However, Bentz and Shapiro (1998) warn against accepting an idea of a postpositivist theory of knowledge that has superseded positivism.

> That idea implies that there was a time when everyone was a positivist but now, through either increased wisdom or a paradigm shift, everyone sees the light and recognizes the limitations and defects of positivism. This would imply that the positivist age has given way to a "postpositivist" age. In fact, positivism was always just one stream of thought and has been criticized since its beginnings. (p. 30)

Notwithstanding, there has been a steady stream of criticism of positivism because of the fact that it, "explicitly or implicitly, is at the core of the modern worldview of scientific,

technological, bureaucratic, commercial civilization" (Bentz & Shapiro, p. 30). No doubt, its pervasiveness led to a strong current of objections, still prevalent today.

Critical Theory

Perhaps the most significant opposition to positivism came first from the "Frankfurt School", a group of German theorists who developed powerful analyses of the Western world and its capitalist societies. (Kellner, 2005, p. 290). In the 1950s, they launched a sustained attack upon positivism, using a Hegelian-Marxist critique, arguing that both physical and social scientific knowledge, as all products of human activity, are not value-free and, in fact, they serve sectional interests. For them, in the case of positivism, the interest was in technical control, which can be as discriminatory as class oppression, and which could be overcome only by a radical transformation of society to overcome inequalities. In order to effect transformation, people must critique their beliefs, or become critical of their hegemonic assumptions. This theory came to be known as critical theory.

The ontological stance of critical theory is one of historical realism—virtual reality shaped by social, political, cultural, economic, ethnic, and gender values; reified over time (Denzin & Lincoln, 1998, p. 203). The epistemological perspective of critical theorists is transactional in that the investigator and the investigated object are assumed to be interactively linked, with the values of the investigator influencing the study. Therefore, findings are value-mediated. While positivism does away with epistemology and ushers in a philosophy of science, critical theory merges ontology with epistemology because what can be known is inextricably intertwined with the interaction between a particular researcher and a particular object or group (Denzin & Lincoln, 1998, p. 213).

Arguably, one of the most well known representatives of critical theory is Jürgen Habermas, who developed a theory of modernity with a twofold concept of society combining action and system theory. Specifically, he developed the notion of the *lifeworld*, which is made up of the structural components of culture, society, and personality and the corresponding reproduction processes of cultural reproduction, social integration, and socialization. This concept of lifeworld includes shared common understandings, such as values, that develop through personal contacts over time in different social groups, from families to communities. Habermas's theoretical model depends upon different aspects of communicative action, such as understanding, coordination, and sociation, which are rooted in the structural components of speech acts. Habermas argues that communicative action can lead to a learning process in which an internal restructuring of the "prejudgmental power" of the lifeworld over the communicative practice of everyday life progressively diminishes. (McCarthy, 1984, p. xxv). This theory is especially significant from a theory-building perspective because it is not built upon a hypothetical-deductive model, but rather upon a reconstructive model. Mezirow, a leading theorist in adult learning, says,

> Habermas argues that to understand scientific theories formulated by the Tradition, we must differentiate empirical-analytical theories from reconstructive theories, like those of Chomsky, Piaget, and Kohlberg. Reconstructive theories seek to explain universal conditions and rules implicit in linguistic competence, cognitive and moral development and the nature of human communication. (J. Mezirow, 1996, p. 166)

To revisit the ontological question upon which theories are built, what is the essence of reality, we see that positivists would say that the essence of reality is that it is objective and knowable or apprehendable. Outside the positivist paradigm, theorists would say that reality is

subjective and interpretive. Epistemological approaches flow out of the ontological beliefs. Since reality is objective, and knowable or apprehendable, those researchers who are influenced by a positivist paradigm will use hypothetical-deductive methods to discover knowledge in an accumulative fashion. Researchers outside the positivist paradigm, who believe that reality is subjective and interpretive, may use constructivist methods to seek to understand perceptions of reality.

Constructionism and Constructivism

The final inquiry paradigms to be discussed in this chapter also grew out of opposition to positivism. Constructionist critique developed out of the history of science and sociology of knowledge, with contributions from critical theory, feminism, literary theory, rhetoric, and other disciplines. "For constructionists, all claims to 'the real' are traced to the processes of relationship, and there is no extra-cultural means of ultimately privileging one construction of reality over another" (Gergen, 2001, p. 8). This paradigm offers a potential reflection, reconsideration, reconstruction, and even emancipatory experiences because creative reconstruction is a continuous possibility. A constructionist resists terms such as "real," "true," "rational," and "objective" and instead embraces the notion of local truths for particular communities (Gergen, 2001, 12). The weakness of this position is that it sometimes becomes personally difficult to live in a world without objectivity. For instance, if a physician tells a person that she has cancer, as a constructionist, she could open a new domain or dialogue on health and disease.

> For the constructionist, 'health' and 'illness' are terms that acquire their meaning within
> particular traditions of relationship. We may agree that 'something is going on,' in what
> we call my body, but such agreement places no necessary demands on the configuration

of phonemes we use in description or explanation, or how or whether we treat it. (Gergen,

p. 11)

Constructionism is not to be confused with cognitive constructivism. Influenced by Jean

Piaget's theory, cognitive constructivists agree with constructionists that knowledge is not

something built up within the mind through astute observation or that knowledge is an accurate

reflection of the world. Empiricists did, indeed, at least at the beginning of the twentieth century,

view knowledge outside the learner coming inside the learner as impressions made upon the

mind, and called this these impressions sensations. This identified knowledge with the reception

and association of sensory impressions, much in the tradition of John Locke's "tabula rasa," or

the notion of a child being born with a blank slate for the mind (Dewey, 1916, p. 268). Cognitive

constructivism is not based on this assumption, but rather purports that learners construct

knowledge through cognitive processes. According to Gergen, constructivism is still largely

ontologically dualistic, subscribing to a mind/world dichotomy, which depends largely upon

cognitive processes. Radical cognitive constructivism is instrumental in that it seeks to help

learners assimilate and accommodate knowledge to serve the subject's organization and

experience of the world (Gergen, 2001, p. 122).

Social constructivism is closer to constructionism. Growing out of theories developed by

Lev Vygotsky, Jerome Bruner, and others, both cognitive processes and the social milieu are

critical for learning. Human knowledge or rationality is a byproduct of the processes that take

place within the social experience. For both constructionism and social constructivism, the

relationship precedes the individual. For Gergen, the two paradigms diverge over the dualist

epistemology once again. He maintains, "epistemological riddles remain about how external and

internal reality are connected" (Gergen, 2001, p. 123). It would not be uncommon for a social

constructivist to make mental processes a focus of inquiry. On the other hand, constructionists would be more likely to focus on discourse, dialogue, coordination, conjoint meaning making, discursive positioning, etc. (Gergen, 2001, p. 124).

Ontologically, constructivists are relativists. Realities can be apprehended through multiple, intangible mental constructions, which are local and specific in nature, and which are experiential and social. A constructivist would not say that constructions are more or less "true" in any absolute sense, but rather that they are more or less informed or sophisticated. Epistemologically, constructivists are subjective and transactional. "Findings" are actually created as the research proceeds because the investigator and the object being studied are assumed to be interactively linked (Denzin & Lincoln, 1998, p. 213).

Summary of Theoretical Paradigms

The goals of positivism are usually to prove that something is "true" either through processes of verification, whether through replication, or falsification. In the natural sciences, for instance, researchers seek to discover the truth or something objective in the "real" world. These theoreticians seek to *explain* phenomena. However, the goals of critical theory and constructivism are usually to gain a deeper, clearer understanding of some aspect of the interpreted experience and milieu of the researchers and the object of investigation. These theoreticians seek to *understand* phenomena.

Positivism and logical positivism are similar, as are the different types of constructivism and constructionism. Denzin and Lincoln summarize the four main paradigms in this way.

Ontology

1. Positivism's position is naïve realism, assuming an objective external reality upon which inquiry can converge.

2. Postpositivism's position is critical realism, which still assumes an objective reality, but grants that it can be apprehended only imperfectly and probabilistically.

3. Critical theory's position is historical realism, which assumes an apprehendable reality consisting of historically situated structures that are, in the absence of insight, as limiting and confining as if they were real.

4. Constructivism's position is relativism, which assumes multiple, apprehendable, and sometimes conflicting social realties that are the products of human intellects, but that may change as their constructors become more informed and sophisticated.

Epistemology

1. Positivism's stance is dualist, objectivist, with the assumption that enables the investigator to determine "how things really are" and "how many things really work."

2. Postpositivism's stance is as a modified dualist, objectivist with the assumption that it is possible to approximate (but never fully know) reality.

3. Critical theory's stance is transactional and subjectivist, with the assumption that knowledge is value-mediated and hence value dependent.

4. Constructivism's stance is somewhat similar, but with a broader transactional/subjectivist assumption that sees knowledge as created in interaction between the investigator and respondents (Denzin & Lincoln, 1998, p. 208).

The way in which one goes about building a theory depends upon which of the four above-mentioned paradigms of inquiry is chosen by the theoretician. For instance, if a cancer researcher wants to discover cures for the disease, he or she will use a hypothetical-deductive, positivistic approach to build theories that can be tested for validity through replication or falsification. If a non-positivist social scientist wants to understand the relationship between poverty and student

success rates in urban school settings, he or she could use critical theory or a constructivistic approach to seek to create better understandings. Instead of the hypothetical-deductive methods, these researchers would use inductive methods, whether through phenomenology, hermeneutics, ethnography, case studies, and/or grounded theory. Specific ways of formulating theories will be discussed in the following section.

Theory Building

Theory Building

Through Empiricism, Logical Reasoning, Problem Solving, and Creative Imagination

In 1968, Arthur Stinchcombe published his seminal work on *Constructing Social Theories* (Stinchcombe, 1968). Bentz and Shapiro, advocates of what they call, "mindful inquiry" for social research, recommend this source because, according to them, it focuses on the logical structure of theories, and has as its goal that the student become an active theorist in his or her own right (Bentz & Shapiro, 1998, p. 143). The Stinchcombe book does provide a thorough explanation of how to develop theories from a predominantly positivistic or logical positivistic perspective, requiring observation of data, controlling of experiments, and using a variety of tests for theories that will provide verification or falsification. For instance, regarding theories that "prove" causation, he says, "In general, for any causal theory, then, one must derive empirical statements which specify observations which will establish covariation, causal direction and nonspuriousness" (Stinchcombe, 1968, p. 37). It seems that by the terms Stinchcombe chooses, he is a realist with an objective, dualist view of reality, using observation of data to show causation or covariation and falsification, all of which are chiefly notions of positivism or logical positivism. This statement is not to negate the power of positivist study, only to locate the theorist's paradigmatic assumptions.

Another quotation will demonstrate Stinchcombe's ontological and epistemological stance. "Our aim will be, as with all conceptual work, to locate with our concepts those phenomena which cause variations in people's behavior or which describe phenomena with a unique set of causes" (Stinchcombe, 1968, p. 149). Notice the emphasis on observing behavior to objectify causation. Thus, this theoretician sets out to explain how to deduce theories through hypothetical-deductive testing: the observation of data, laws of logic, and adequate forms of theory testing, e.g. statistical inference and crucial experiments. As an example, he describes Durkheim's study of suicide, discussed earlier in this chapter (Stinchcombe, 1968).

Much like the Stinchcombe book, and also from a positivist paradigm, Mithaug proposed a four-step strategy to learn how to theorize (Mithaug, 2000). He actually developed his approach from three domains of inquiry: the scientific method; practical reasoning; and a self-paced, problem solving learning method. He maintains that his method will help students to construct empirical theories to explain a circumstance, moral theories to judge the significance of that condition, and policy theories to prescribe actions to alter or maintain it (Mithaug, 2000, p. x). This is an instrumentalist view of theory building, i.e., one that aims to solve problems, change behavior, or understand how things work. This is in contrast with a critical theorist's or constructivist's concerns of seeking to *understand*. Habermas's distinction between explaining and understanding has been delineated earlier in this chapter, that explanation requires the application of theoretical propositions to facts that have been observed systematically, but understanding is an act in which experience and theoretical apprehension are fused (Habermas, 1971, p. 144).

Mithaug uses a three-part framework to solve an empirical, moral, and policy problem, which he calls recursive theorizing (see Figure 3). The steps are the same for each of the three domains.

Figure 3. *Mithaug's model for recursive theorizing*

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                        ┌──────────────────────────────┐
                        │         MORAL                │
                        │       THEORIZING             │
                        │                              │
                        │  How Should We Judge         │
                        │  How Things Work?            │
                        │                              │
                        │  Step 1: Define the          │
                        │          Discrepancy         │
                        │  Step 2: Identify the Reasons │
                        │  Step 3: Evaluate the Theory  │
                        │          Credibility         │
                        │             Coherence        │
                        │             Validity         │
                        │             Verifiability    │
                        │          Worth               │
                        │            Significance      │
                        │            Scope             │
                        │            Utility           │
                        │  Step 4: Adjust the Policy    │
                        │          Theory              │
                        └──────────────────────────────┘
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MORAL
THEORIZING

How Should We *Judge*
How Things *Work*?

Step 1: Define the
        Discrepancy
Step 2: Identify the Reasons
Step 3: Evaluate the Theory
        Credibility
           Coherence
           Validity
           Verifiability
        Worth
          Significance
          Scope
          Utility
Step 4: Adjust the Policy
        Theory

EMPIRICAL
THEORIZING

How Things *Work*?

Step 1: Define the
        Discrepancy
Step 2: Identify the Reasons
Step 3: Evaluate the Theory
        Credibility
           Coherence
           Validity
           Verifiability
        Worth
          Significance
          Scope
          Utility
Step 4: Adjust the Policy
        Theory

POLICY
THEORIZING

How Should We *Act* on
Judgments about How things
Work?

Step 1: Define the
        Discrepancy
Step 2: Identify the Reasons
Step 3: Evaluate the Theory
        Credibility
           Coherence
           Validity
           Verifiability
        Worth
          Significance
          Scope
          Utility
Step 4: Adjust the Policy Theory

Note. From *Learning to theorize: A four-step strategy* (p. xiii), by D. E. Mithaug, 2000, Thousand Oaks, CA: Sage Publications. Copyright 2000 by Sage. Reprinted with permission.

Mithaug uses something he calls, "constructive theorizing," but it is not to be confused with constructivism. He says that constructive theorizing is, "a type of practical reasoning that moves thinkers from a condition of not knowing to a condition of knowing" (Mithaug, 2000, p. 7), implying that one can "know" with some certainty the solution to problems. He compares constructive theorizing to scientific problem solving and general problem solving, showing how the four basic steps are related as described in Table 4.

Table 4 Mithaug's Problem Solving and Constructive Theorizing

Comparing Scientific Problem Solving and General Problem Solving With Constructive Theorizing		
1. Identify a problem as an inconsistency between facts of a circumstance and existing theory	1. Define the problem	1. Define the discrepancy problem of not knowing, and collect relevant data describing the difference between knowing and not knowing something.
2. Collect relevant data on the problem.	2. Find a method to solve it.	2. Find reasons and construct a theory to explain it.
3. Formulate a hypothesis to explain the problem.	3. Implement the method.	3. Evaluate the credibility and worth of the theory.
4. Test the hypothesis.	4. Evaluate the solution.	4. Adjust beliefs inconsistent with the theory by repeating Steps 1 through 3.

Note. From *Learning to theorize: A four-step strategy* (p. 7), by D. E. Mithaug, 2000, Thousand Oaks, CA: Sage Publications. Copyright 2000 by Sage. Reprinted with permission.

While Stinchcombe and Mithaug both recommend the development of theories from an ontological position of realism and an epistemological stance of empirical knowing with logical reasoning, Kaplan maintains that realism puts too much emphasis on the brute empirical determinants of theory. He states, "if a theory is essentially a picture of the reality, then to arrive at a sound theory we must concentrate on discovering how things are, rather than on inventing ways in which we can usefully conceptualize them" (Kaplan, 1998, p. 308). Even though it is often said that many scientists are greatly influenced by Baconian induction, Kaplan explains that this is rather unjust since Bacon, himself, spoke of a scientist as being not completely speculative like a spider, spinning a web from his own substance, nor wholly empirical like an ant, piling up data, but like the bee, feeding on nectar and digesting it, and turning it into pure honey. Nevertheless, most theorists in the behavioral sciences have leaned toward working like the ant, collecting data in a heap (Kaplan, 1998, p. 308).

Kaplan moved away from the pure realist, positivist stance and proposed something quite different for theory building—the exercise of creative imagination. He said that scientists *discover* laws, but that theories must be *invented* or *constructed*. For Kaplan, theories do not just reveal hidden aspects of reality, but rather, they provide new ways of thinking about those facts, of organizing and presenting them (Kaplan, 1998, p. 309). This sounds very much like Thomas Kuhn's position that the only type of phenomena that lead scientists to new theories are those that are recognized anomalies, whose characteristic feature is their stubborn refusal to be assimilated to existing paradigms (Kuhn, 1986, p.97). Kuhn, therefore, took the point of creative imagination a step further and says that without the change of the beliefs and assumptions of the scientists, it is difficult for new theories to arise (Kuhn, 1986, p. 98).

Theory Building Through Practice

In the same way that Kuhn speaks of a paradigm shift for new theories to emerge, Argyris and Schön developed the idea of double loop learning to inform theories of action. A theory of action contains both the theories people espouse and the actual theories they are using, or what Argyris and Schön call their *theories-in-use*. Sometimes the espoused theory is different from the theory-in-use, and the person may not be aware of the incompatibility. Theories-in-use all include assumptions about the self, others, the situation, and connections among the action, consequence, and situation (Argyris & Schön, 1974, p. 7). Within the context of theories-in-use, people engage in what Argyris and Schön call *single-loop learning.* An example of this type of activity is when one learns new techniques for suppressing conflict. *Double-loop learning* takes place when one learns to be concerned with the surfacing and resolution of conflict rather than with its suppression. "In single-loop learning, we learn to maintain the field of constancy by learning to design actions that satisfy existing governing variables. In double-loop learning, we learn to change the field of constancy itself"(Argyris & Schön, 1974, p. 19).

Building a theory-in-use requires one to learn about managing variables and changing variables. These theories help us to create as well as describe the behavioral worlds to which they apply. "Hence, theory-construction and reality-construction go together. The constancy of theories-in-use is as valuable as the constancy of the behavioral worlds created by those theories" (Argyris & Schön, 1974, p. 30). From this statement, it becomes clear that Argyris and Schön advocate a social constructivist approach to theory building, one that requires the inquirer to explore tacit understandings and change governing variables. Furthermore, for Argyris and Schön, theory building requires learning and the awareness of how to learn in the way that would permit double-loop learning. This is akin to Kuhn's discussion of "normal science" and the kind

of science that allows for paradigm shifts. "Normal science" would be like single-loop learning, and paradigm shifts occur within double-loop learning. The transition from "normal science" is not a cumulative process or one achieved by the articulation or extension of the old paradigm. "Rather it is a reconstruction of the field from new fundamentals, a reconstruction that changes some of the field's most elementary theoretical generalizations as well as many of its paradigm methods and applications" (Kuhn, 1986, p. 85).

There is a danger of getting stuck within single-loop learning or "normal science." Especially once practitioners get into the field and find success with single-loop learning, they are likely to continue to function in this mode. Scientists become comfortable with their "normal" way of accumulating knowledge and resist change. Argyris and Schön advise that practitioners must become more reflective under real time conditions to that ad hoc theories of action can be created and tested. In order to be able to do this, they offer several suggestions. First, students must relate preprogrammed, applied theories to concrete situations of practice and look for gaps, translation, and internalization. Second, in the same way that a researcher from the natural sciences observes data, so must the student reflect upon experience—the organization, institution, system, or culture with the goal of description and diagnosis. Third, students should try out new theories in practice, i.e., design an intervention to test a new theory and carry it out noting and interpreting its outcome. Fourth, students should be aware of personal causality, or the extent to which their participation affects the process. They should understand their role and the values and viewpoints they bring to the experience (Argyris & Schön, 1974, pp. 189-191).

Using these steps, students can learn how to build theories from practice. Peter Jarvis also advocates developing theory from practice. In fact, there are four distinct formulations that he uses for the term theory:

- Personal theory of practice (theory as knowledge)—practical knowledge, including both process and content

- Theory of practice (theory as information)—a combination of both integrated knowledge of the process and content knowledge of the process and content knowledge; both become integrated into personal theory when they have been tried and found to work in practice

- Theory about practice (metatheory as information)—based in the academic disciplines and making few claims of practicality

- Theory of and about practice (knowledge learned but not tried out in practice)— learned cognitively from both forms of information. (Jarvis, 1999, p. 145)

Jarvis makes a distinction between knowledge and information. Knowledge is learned by individuals; information, is contained in reports and might be learned and become knowledge. He says that knowledge is subjective, but that information is not. One person's knowledge becomes another's information. The theory taught in professional schools and universities, then, is only information for learners until they have had the opportunity to test it out so that it can become practical knowledge (Jarvis, 1999pp. 147-148). Jarvis explains that the relationship between theory and practice is more complex than the traditional view of theory informing practice. Instead, there is more of a discursive approach to developing theory as indicated in Figure 4.

Figure 4. Jarvis's Model for Theory, Practice, and Research
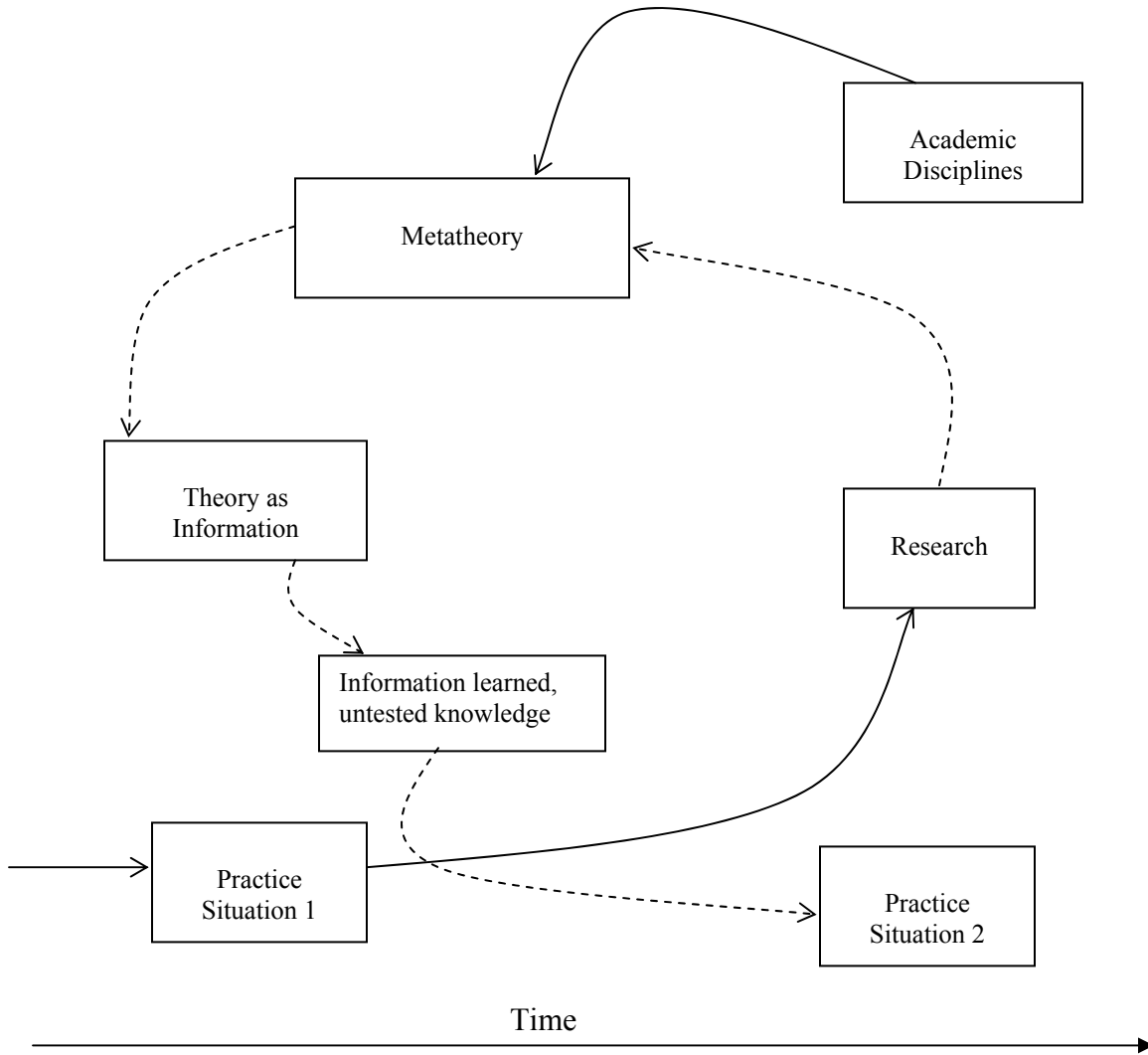
Note. From *The practitioner-researcher: Developing theory from practice* (p. 153), by P. Jarvis, 1999, San Francisco: Jossey-Bass. Copyright 1999 by Wiley. Reprinted by permission.

Jarvis said that within the empirical paradigm, theory determines practice. For instance, teachers are expected to fit their practice within a stated theory. However, he maintains that research is no longer a function of the elite, by the elite, and for the elite, but that it has been democratized. For Jarvis, academic scholarship has moved from being an authoritarian source of

informing how the world is to having a more hermeneutic nature, "interpreting the developments of practice, highlighting some of the potential pitfalls, and giving advice to the practitioners, the policymakers, and occasionally the politicians" (Jarvis, 1999, pp. 166-167). Theory building through practice brings together the two worlds of objective reality and subjective experience into the theory creation exercise.

Theory Building Through Generative Theory and Systems Theory

Linda Olds adopted more of a constructionist view of theory building than any of the above-mentioned theorists. She challenged the possibility of objective knowledge, uninfluenced by assumptions and interpretation. For her, no scientific fact exists apart from a value decision or a choice about what would be studied. She saw passion as a positive and irrevocable part of inquiry, to be harnessed and used for discovery of the new. In fact, the very dualism and subject-object dichotomies of the contemporary philosophy of science can be challenged through the use of metaphors of systems theory. Olds appeals to Gergen's view of what he calls *generative theory* to provide rationale for this approach. Gergen attempted to find a replacement for "objectivity" as a criterion to evaluate the use of a theory, and suggested generativity—or the capacity for a theory to open up alternative metaphors, which can transform culture and society in keeping with chosen values (Olds, 1992, p. 15).

Gergen says that generative theory is designed to unseat conventional assumptions. This challenge is to reinvigorate the theories of the past, redefine or recontextualize their meanings so as not to be cast from the repository of potentials, and at the same time be sensitive to issues of how and whether a given form of language can be absorbed into ongoing relationships (Gergen, 2001, p. 165). He sees this activity being what he calls *dialogic* in that not only will academic discourse and practice percolate outwards, but the discourses and practices of organizations will

filter into the academy (Gergen, 2001, p. 165) In this regard, he echoes the call of Argyris, Schön, and Jarvis.

Olds maintains that systems theory is generative and can provide metaphors and models to advance understanding. Ludwig von Bertalanffy, an Austrian biologist, is considered the father of general systems theory. He emphasized the scientific exploration of wholes and wholeness in the field of biology as a model that could be transportable across fields with different levels of focus. Systems theory is a reaction against the limits of the analytic method and a reductionistic approach to inquiry (Olds, 1992, p. 75). As such, it is a holistic, heuristic style of investigation. A system is the whole in relation to its relevant environment; it is the Gestalt, in which the whole is greater than the sum of its parts. It includes the notion of synergy, or the phenomenon that the operation of a total system is not reducible to or predictable from the behavior of separate parts within the system (Olds, 1992, p. 76).

Bateson points out the limitation of systems theory as defined by von Bertalanffy. He says that in looking at a biological event we take into account the system of closed circuits, within which that biological event takes place. However, when we seek to explain the behavior of a person, this "system" will not have the same limits as the "self" is commonly understood (Bateson, 1972, p. 317). Specifically, the problem is fourfold:

1. The system is not a transcendent entity as the "self" is commonly supposed to be.
2. The ideas are immanent in a network of causal pathways along which transforms of difference are conducted. The "ideas of the system are in all cases at least binary in structure. They are not "impulses" but "information."

3. This network of pathways is not bounded with consciousness but extends to include the pathways of all unconscious mentation—autonomic and repressed, neural and hormonal.

4. The network is not bounded by the skin but includes all external pathways along with information can travel. (Bateson, 1972, p. 319)

The problem of the "self" notwithstanding, general systems theory provides a conceptual framework to better conceptualize, understand, and interpret subjects of inquiry. It is often arranged in hierarchies, i.e., systems within systems: electron within atom, within molecule, within compound and so on. "Thus atoms, organism, societies, are reconceptualized as one variety of natural system, and we can begin the process of comparing systems as systems to see what they have in common at this level" (Olds, 1992, p. 76). One way to compare systems is by using metaphors and models.

Theory Building Through Metaphors

The use of metaphors is fundamental to systems theory because it draws explicit analogies between levels of complexity in the phenomenal world (Olds, 1992, p.28.). "Metaphors are 'meaning transports' which extend our level of understanding by comparison, or some might argue by smuggling extra dimensions into our analysis. In either case, they enrich the field of potential comprehension" (Olds, 1992, p. 24). Kaplan notes that a theory does not merely tell us something different; it says something *differently*. Theory has a different role to play than merely providing information. Metaphors are of the poet's own making (Kaplan, 1998, p. 309), and as such, create opportunity for the creative imagination Kaplan calls for in theory building. Barbour says that metaphors can order our perceptions, helping us to use one kind of experience to be interpreted in terms of the characteristics of another. "In a metaphor, a novel configuration has

been produced by the juxtaposition of two frames of reference (Barbour, 1974, p. 13). Meaning comes forth from the intersection of the two perspectives. The observer must maintain awareness of both points of view at once, often creating a novelty with surprise and illumination. The power of a metaphor lies in the holding of the tension between the two perspectives, the similarities and differences between two compared objects or events, the two poles of the metaphor (Olds, 1992, p. 24).

Another benefit of metaphors is the emotional overtones. They provoke feelings and attitudes and influence perception and interpretation. An example of the symbolic impact of metaphors is how imagery is used within religious circles to convey understanding about the transcendent. The symbolism of light is used as a symbol of knowledge—illuminate, clarify, illustrate, throw light on, etc. Light symbolism is found frequently in Platonism and Gnosticism, in Buddhist enlightenment, in deities such as Mazda in Iran, Agni in Vedic India, in the Biblical assertion that God is light, including the Hebrew's picture of Jehovah's bright shining glory, or the Apostle Paul's mention of unapproachable light (Barbour, 1974, p. 15). All of these images can call forth deep-seated emotion, and can move beyond the purely cognitive level to touch others in the affective domain.

Metaphors have limitations, though. Some metaphors are well-grounded and illuminating, while others are forced or contrived. Furthermore, perhaps the most important limitation of metaphors is the tendency for people to take them literally. It is likely for us to think, "That's what it is" instead of "That's what it's like" (Kaplan, 1998, p. 309). Olds says metaphors are the map, not the territory. Also, when they are found to be very useful, they sometimes become difficult to surrender. This is precisely what happened in the "normal science" paradigm discussed by Kuhn. Scientists were so fixed in the metaphor of Newtonian view of a

mechanistic, billiard ball model of the universe with its linear chain of causation, that they could not easily see Einsteinian and quantum physics. When using metaphors, theorists might be tempted to over generalize or to give way to sloppy or loose thinking. "Metaphors are aids to thinking, not substitutes for thinking" (Olds, 1992, pp. 31-32).

Theory Building Through Models

Like metaphors, models are useful tools for theory building. The term "model" is sometimes used as a synonym for theory, especially when it is presented in postulational style. However, according to Kaplan, not all theories are in fact, models. An example here would be the theory of evolution versus a model which geneticists might construct to study mathematically the rate of diffusion in a hypothetical population of a characteristic with a specified survival rate. For Kaplan, using the word, "model" to mean "theory" comes from an epistemology of realism, where theories portray what is "real" (Kaplan, 1998, p. 265).

It could be said that models are the embodiment of a structural analogy (Kaplan, 1998, p. 266). Models are things to be imitated or ideals toward which one should aim. Barbour defines model as a symbolic representation of selected aspects of the behavior of a complex system for particular purposes, an imaginative tool for ordering experience, not necessarily a description of the world. He maintains that theoretical models are important because they have a continuing role in suggesting both modifications in existing theories and the discovery of new phenomena (Barbour, 1974, pp. 6-7).

Barbour delineates between four different types of models. First, experimental models are constructed and used in laboratory settings. These are replicas or scale models to show special relationships. Kaplan calls these physical models (Kaplan, 1998, p. 275). Secondly, there are logical models, which start from axioms and theorems of a formal deductive system.

Mathematicians use logical models to illustrate abstract systems and to offer possible interpretations of them, but they are ideas, not physical things. Third, Barbour says that the mathematical model lies between these two extremes because they are symbolic representations of quantitative variables in physical or social systems. An example of this type of model is an equation to show the relationship between supply and demand. The final kind of model Barbour identifies is theoretical models, which are imaginative mental constructs invented to account for observed phenomena. His definition of a theoretical model is, "an imagined mechanism or process, postulated by *analogy* with familiar mechanisms or processes and used to construct a *theory* to correlate a set of *observations*" (Barbour, 1974, p. 30).
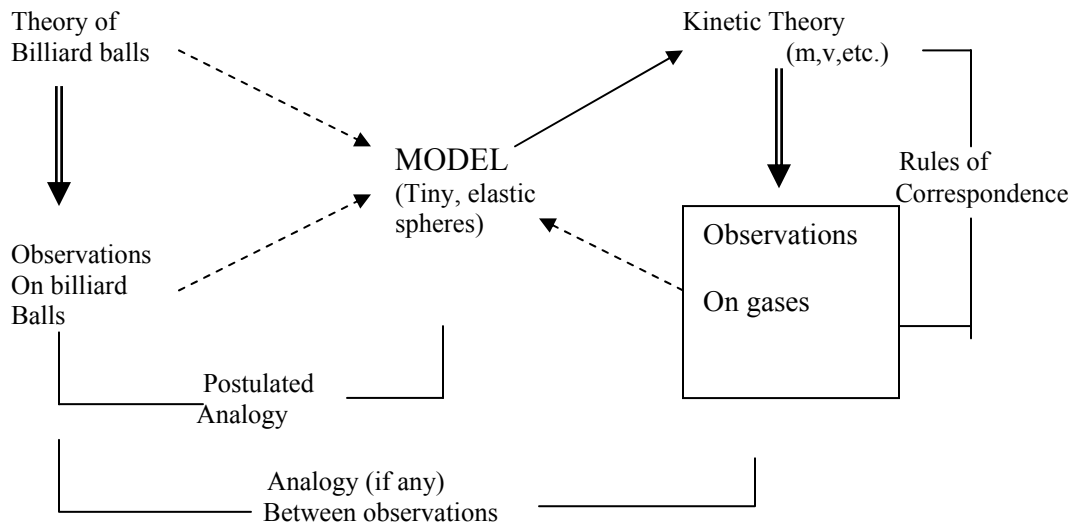
He explains,

> Such a model is usually an imagined mechanism or process, which is postulated by analogy with familiar mechanisms or processes. I will maintain that its chief use is to help one understand the world, not simply to make predictions. But I will also claim that it is not a literal picture of the world. Like a mathematical model, it is a symbolic representation of a physical system, but it differs in its intent to represent the underlying structure of the world. It is used to develop a theory which in some sense explains the phenomena. And its origination seems to require a special kind of creative imagination. (Barbour, 1974, p. 30)

For Barbour, models can lead to theories; a theoretical model is used to generate a theory to explain the behavior of an observable system. There is a relationship between terms in the model and terms used to describe observed behaviors. The correlations that link the theory with the observation are called *rules of correspondence* (Barbour, 1974pp. 30-31). The example he uses to explain the relationship of models to theories is the *billiard ball* model of a gas. When a box is full of a gas, such as air, one could imagine that the gas is composed of tiny elastic spheres

bouncing around. If one were to believe that those tiny spheres behave in the same way as colliding billiard balls, one could construct a theory (the Kinetic Theory of Gases). The theory involves using equations with mass (*m*), velocity (*v*), and pressure (P). In this case, the model leads to a theory, and the theory explains patterns in the observations. Barbour provides this schematic to demonstrate this relationship (see Figure 5).

Figure 5. Barbour's Example of the Relationship Between a Theory and a Model

Theory of
Billiard balls

Kinetic Theory
(m,v,etc.)

MODEL
(Tiny, elastic
spheres)

Rules of
Correspondence

Observations
On billiard
Balls

Observations

On gases

Postulated
Analogy

Analogy (if any)
Between observations

Note. From *Myths, models and paradigms: a comparative study in science and religion* (p. 31), by I. G. Barbour, 1974, New York: Harper & Row. Copyright 1974 by I. G. Barbour. Reprinted with permission

The double arrows stand for the deduction of experimental laws from the theory with the rules of correspondence. Barbour makes the lines going into the model dashed because, he says, their origins rely upon creative imagination, not purely logical inference. Models can suggest rules of correspondence between certain theoretical terms and observational variables.

Suggesting rules of correspondence is an important function, one that can actually lead to the extension of theories, or to the modification of the theory itself. The revised model, in Barbour's case, with elastic spheres with attractive forces, as opposed to the billiard ball model, leads one to different conclusions about the behavior of particles within a gas. Hence, the

purpose of a model could be to lead the investigator to new understandings of the essence of phenomena or how phenomena behave.

Another benefit of using a model such as the one above is to provide an intelligible unit, or a way for the observer to view the model as a whole; "it gives in vivid form a summary of complex relationships. It is said to offer 'epistemological immediacy' or 'direct presentation of meaning'" (Barbour, 1974, p. 33). For this reason, models are often used pedagogically. Visual imagery is important in model making because visualization often predominates over verbal or mathematical thinking (Barbour, 1974, p. 34), and images are expressions of the creative imagination of which both Kaplan and Barbour speak.

According to Kaplan, there are different styles and functions of models for the behavioral sciences. He differentiates between literary, academic, eristic, postulational, and formal styles of models. The literary style, such as case studies or a particular set of events, a plot unfolds. Anthropological writings in the early 20th century are examples (Kaplan, 1998, p. 259).

The academic style model is more abstract and general. It has its own vocabulary, often with special meanings for ordinary words. The materials dealt with are usually ideational rather than observational material and treatment tends to be highly theoretical. Examples are historical systematizers such as Toynbee or Veblen or like classical economics.

The eristic style of a model focuses on deductive relationships, logical derivations, and proofs. Experimental and statistical data are important. Pavlov's work is an example of this style. The symbolic style focuses on mathematics, not on what statistics demonstrate, but on the power of mathematical ideas. Mathematical economics serves as an example of this style (Kaplan, 1998, p. 260).

The postulational style model is similar to the symbolic style, but the focus is on the validity of truth. The emphasis is found to be on the system as a whole, bound together by the connections of logical derivation. A set of propositions serves as postulates, or "axioms." An example of its use is welfare economics (Kaplan, 1998, p. 261).

The formal style model is basically the same as the postulational style, but key terms are not given a interpretation, and there is no reference to a specific empirical content. Euclid's geometry is an example (Kaplan, 1998, pp. 261-262).

There are also different kinds of models. Physical models are probably the oldest type. As an analogue, the model obeys the same laws as the original, but is different in scale or in some other way. Physical models are very suitable for pedagogical purposes. Semantic models are symbolic analogies with clearly specified structures, allowing for the application of statistics or other mathematical tools. Formal models are models of form, such as the scientific method, and are in themselves, free from sets of variables.

Interpretive models stress the correspondence between theoretical and experimental notions. Kaplan states that is greatest merit is that it "allows us to use what we know of one subject-matter to arrive at hypotheses concerning another subject-matter structurally similar to the first….Interpretive models are thus peculiarly suited to interdisciplinary approaches…" (Kaplan, 1998, p. 275). The goal of the interpretive model is to bring together two apparently distinct areas together in a way that will be more meaningful.

In sum, models are types of images that enable the investigator to formulate understandings about analogous relationships between observed phenomena and theories. There are different kinds and styles of models, and models have different functions. However, the unifying principle

of model making is that creative imagination is used to draw correlations and to make

connections between ideas and reality, whether reality is viewed as objective or subjective.

Building Theory Through Analyzing and Critiquing Other Theories and Empirical Research

Another important function in developing a theory or a model is to analyze and critique

other theories and to compare them to empirical research. Bentz and Shapiro say, "Theoretical

inquiry attempts to generate new knowledge through the analysis, critique, extension, and

integration of existing theories and empirical research" (Bentz & Shapiro, 1998, p. 141). An

example of this activity is Jack Mezirow's work in developing Transformative Learning Theory.

Mezirow drew heavily from learning theories of Gould, Dewey, Piaget, Friere, Cell, Bruner, and

others, as well as from the theory of communicative action from Habermas. He synthesized these

theories and found analogous points of correlation to the empirical study he did using grounded

theory. From his analysis, he was able to integrate key ideas and develop a synergistic theory to

help educators understand how adults experience transformation through critical reflection of the

premises of their beliefs, assumptions, and values, through wrestling with the disorienting

dilemmas that come from that type of critical reflection, and through positive conditions of

discourse to engage in dialogic exchange. Mezirow was effective in integrating a variety of

theories into a coherent theoretical model for transformative learning. Hence, his is an academic,

interpretive model.

Another example of one who integrated theories into a new theory is Jürgen Habermas. He

uses theories from Marx, Pierce, Dilthey, Weber, Durkheim, Freud, Nietzsche, and others

(Habermas, 1971; Habermas, 1984; Habermas, 1987).

Pinar says there is no such thing as an original thought, that all ideas come from other ideas

(Pinar et al., 1995). These ideas may spur one to think differently. Kuhn would argue that from

time to time paradigms do shift dramatically because of someone thinking very differently from "normal" ways of thinking. Usually those scientists who think so differently are young or new to the field (Kuhn, 1986, p. 90). Kuhn sees advancement of a field coming from a radical shift in thinking about a situation. The transition to a new paradigm does not take place through a cumulative process, one achieved by an articulation or extension of an old paradigm. Instead, it is a reconstruction of the field from new fundamentals, "a reconstruction that changes some of the field's most elementary theoretical generalizations as well as ma of its paradigm methods and applications (Kuhn, 1986, p. 85). Therefore, while theory builders go to other theories to integrate ideas, they may discard some beliefs and dramatically change the way the field approaches its work.

Summary of Theory Building

Why theory? Theory is always present, but sometimes professionals or practitioners are unaware of their theories-in-use. To understand one's theoretical underpinnings enables one to challenge existing beliefs, assumptions, and values and to consider how those presuppositions influence one's actions. It is the first step to building a new theory.

The next step is to understand that theories can be built through the use of empiricism, logical reasoning, and problem solving. Experimentation, philosophical argumentation, and instrumental problem solving can all contribute to the creation of a theory.

In addition to experimentation and logical reasoning, experience and practice inform theory building. This can be personal, recursive, and ongoing, but it is a very important component to theory building.

Furthermore, generative theory can be used to unseat conventional assumptions, to reinvigorate theories of the past, and to redefine or recontextualize their meanings. Also,

metaphors and models help to formulate and articulate theories. Most all theories come from other theories in one way or another—either in reaction against or in attempt to integrate key ideas of disparate theories to seek a synergistic integration and deeper understanding.

Framework for Theory Integration

In order to develop a theory, I used the following framework that I created as a result of this study, delineated in Table 5. The framework is a synthesis of the literature on how to build a theory, arranged in a general sequential list of phases. However, this framework describes a recursive activity, not an instrumental checklist or cookbook type of recipe for theory building. In the same way that transformative learning theory and deliberative curriculum theory focus on the back and forth of engaged discourse and deliberation, this process will allow for fluidity and flexibility. It will be deliberative, generative, and constructivistic. In the following table, I will be the "theory-builder." Finally, others should be able to use this same framework to build theories.

Table 5 Method for Integrating Two Theories

Framework for Theory Integration
1. Establish the theory-builder's ontological and epistemological beliefs and values (Habermas, 1971; Kaplan, 1998; Mezirow, 1996).
2. Choose a theoretical paradigm for inquiry, based upon ontological and epistemological beliefs of the inquirer (Habermas, 1971; Mezirow, 1996; Olds, 1992).
3. Identify the gap, lack, problem, need, question of interest, or other type of phenomenon for inquiry.
4. Choose the kind, style, and function of a model to be used (Barbour, 1974; Kaplan, 1998)
5. Research theories that may deepen understanding of the phenomenon in question (Bentz & Shapiro, 1998)
6. Use "generative" efforts to reinvigorate theories of the past, redefine or recontextualize their meanings to be used in new ways (Gergen, 2001).
7. Reflect upon published empirical research on the theories being studied and integrated (Bentz & Shapiro, 1998).
8. Reflect upon the theory-builder's own experience and practice that informs the theories being integrated (Argyris & Schön, 1974; Jarvis, 1999).
9. Use "creative imagination" to develop an image—a model, metaphor, or some other image to demonstrate the synergy, integration and new, hopefully deeper understanding of a situation or phenomenon (Barbour, 1974; Kaplan, 1998; Kuhn, 1986; Olds, 1992).

> 10. Assess the theoretical integration and/or model with a variety of criteria
>
> (Barbour, 1974, p. 116).

(Chapman, 2006)

Application of Framework to this Study

The purpose of this chapter is to establish the method I used to integrate the theories of Mezirow and Schwab to improve graduate professional education. This section elaborates on how I applied the 10-phase framework listed in Table 4. Chapter 4 explicates each phase more thoroughly, but how the new theory of integration took place can be exemplified by the following discussion of each of the ten phases.

1. Establish ontological and epistemological beliefs

It is my position that all theorists have pre-established beliefs about reality and knowledge, and that those beliefs determine how they will proceed in creating or integrating theories. They may not be aware of their ontological and epistemological beliefs, however, and therefore, it is important that before theorists begin the work of theory building, they stop, reflect upon this issue and determine, identify, and establish just what they believe about reality and knowledge, since it will determine the type of inquiry they will undertake and the kind of results they will receive. The following figure illustrates the relationship of ontology and epistemology with the process of inquiry.

Figure 6 The Relationship of Ontology and Epistemology with Inquiry

Results of Inquiry

Methods of Inquiry

Epistemological Views—

How can we know reality?
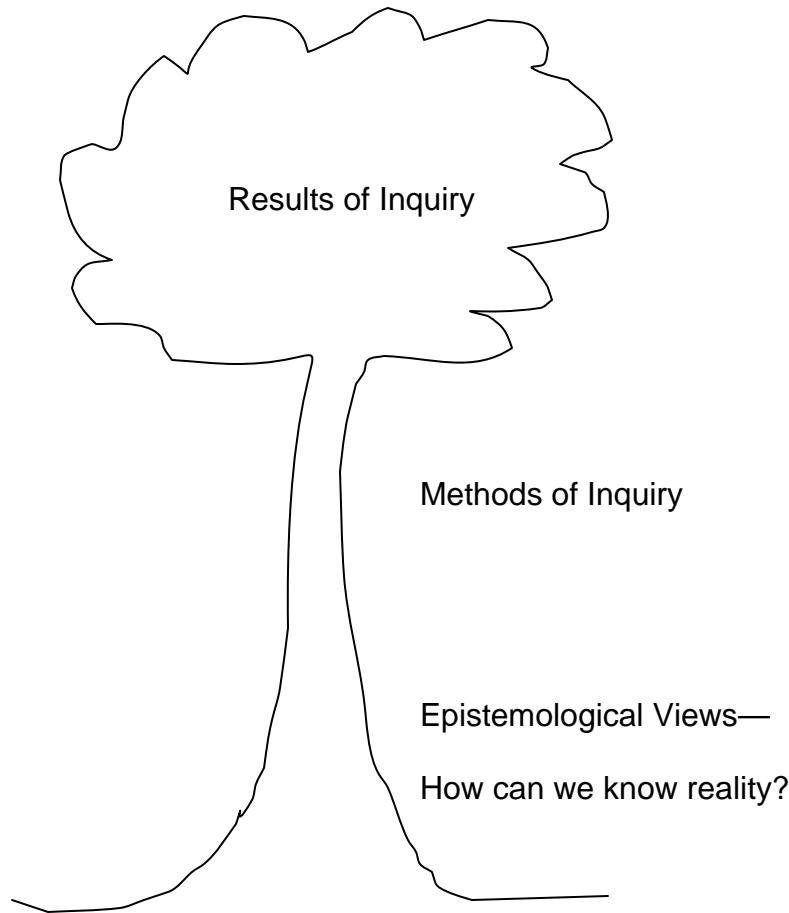
Ontological Beliefs and Assumptions—What is the nature of reality?

(Chapman, 2007)

Theorists who believe reality is objective and knowable will have a different approach to

creating a theory, and will have a different type of result from theorists who believe reality is

subjective and somewhat apprehendable. Just as the roots of an apple tree produce apples in the

treetops and the roots of an orange tree produce oranges in the treetops, so the results of

positivist and constructivist theory building are as different as apples and oranges. The

description of theoretical paradigms given by Denzin and Lincoln (1998) provided earlier in this

chapter is a helpful guide to think about the different ways (the apples and oranges) a theorist

might go about creating a theory. Adapted and summarized more succinctly in Table 6, the

theory builder could choose from these belief systems. As indicated by Denzin and Lincoln,

however, there can be some overlap between Critical Theory and constructivism.

Table 6 Summary of Theoretical Paradigms

Paradigm	Ontology	Epistemology
Positivism	Naïve Realism—There is an objective, external reality upon which inquiry can converge	Objectivist—Investigator determines how things really are
Postpositivism	Critical Realism—There is an objective reality, but it can only be apprehended imperfectly and probablistically	Modified Dualist—There is an external reality, but it is not possible to fully know it.
Critical Theory	Historical Realism—Reality consists of historically situated structures that are limiting and confining	Transactional/Subjectivist—Knowledge is value mediated and value dependent
Constructivism	Relativism—There are multiple, apprehendable, and sometimes conflicting realities that are the products of human intellects, but that may change as their constructors become more informed	Transactional/Subjectivist—Knowledge is created in interaction between the investigator and respondents

Adapted from Denzin, N. K., & Lincoln, Y. S. (1998). *The landscape of qualitative research.* (p. 208). Thousand Oaks, CA: Sage.

To establish my ontological and epistemological stance, I ask myself, what do I believe about reality and how it can be known? Before I create a theory of integration, I need to know the answer to those questions—they form the roots of the tree of inquiry. Therefore, I will explicate my own epistemological position in phase one. In order to build a theory I have to first reveal how my own belief structure will frame it. I am a constructivist, and as such, I believe that there are multiple, apprehendable, and sometimes conflicting social realities that are the products of human intellects, but which may change as their constructors become more informed and sophisticated. Therefore, my epistemological stance follows that knowledge is transactional and subjective, created in interaction between the investigator and respondents. Not only is this my belief system, but also, both Mezirow and Schwab seem to be constructivist in their approach. Certainly, Mezirow was also influenced by Critical Theory, and the notion of confronting historically situated structures is important to his theory, but I also see an important strand of constructivism in Mezirow's thinking in that the ideal conditions for discourse provide an opportunity for interaction between learners who engage in dialogic exchange in order to construct new understandings. Schwab's inclusion of the four commonplaces on an equal footing, and his Aristotelian emphasis on seeking to find the mean between opposing viewpoints is another example of constructing new understandings, sometimes in Hegelian fashion. Therefore, using a constructivist position, I am true to my own ontological and epistemological beliefs, but also, I am in keeping with the two theories I seek to integrate.

2. *Choose a theoretical paradigm for inquiry*

The ontological and epistemological perspectives of the theory builder are the roots of the theory tree. How the actual tree will look is analogous to the theoretical paradigm used. Hence, the roots determine how the tree will look, but they are not the trunk or branches and leaves.

Different theoretical paradigms are as different from each other as different types of trees In the same way that the roots of an evergreen tree produce a very different looking tree from a maple, constructivist roots create a very different theoretical paradigm than positivist roots.

What will this theory look like? Will there be apples or oranges in the treetop? A positivist would state a theory in terms of a theorem or hypothesis to be proved, and so such a theory might be stated in a paragraph, with suggested ways to empirically test the hypothesis. Postpositivists would rely upon logic models to demonstrate probability. Illustrations with arrows showing cause might be used, or mathematical algorithms that demonstrate probability could be used. Critical theory would address processes to uncover historically situated contexts. Metaphors, such as Freire's "banking education" help illustrate hegemonic practices. Constructivists focus on interaction with others and context to create meaning. Using metaphors to demonstrate systems of thought between people and context help illustrate the theory. Heifetz's (1994) notion of a "holding environment" is an example of such a metaphor for a systems approach.

It is my belief that one of the reasons the theories of Mezirow and Schwab are often considered difficult to understand is that they lack a metaphor for people to grasp onto, such as Freire's banking picture of teachers making deposits into their students' heads, or Heifetz's picture of a comfortable holding environment for people who are facing uncertainty and difficulty, giving them time to sort it out. Therefore, I decided to use the metaphor of a caucus for the kind of deliberations in which a curriculum committee needs to engage.

Also, in the same vein in which Schwab says that theories are incomplete and Mezirow says that his is a theory in progress, this theory of integration is not complete, all inclusive, final, and conclusive. Instead, it is in the form of a heuristic, allowing for recursiveness, fluidity, and flexibility. Inherent within constructivism is the belief that reality is not totally objective waiting

to be discovered, but it is socially created through interaction between investigator and respondents. Therefore, the metaphoric heuristic is a tool to improve our understanding of the phenomenon of using the two theories to transform graduate professional education, rather than a foolproof tool or instrument to apply to the process.

3. *Identify the gap, lack, problem, need, question of interest, or other type of phenomenon for inquiry*

Largely the work of chapters one and two, here I succinctly summarized the need for this new metaphor and heuristic. The critical period of professional education is not obvious to many people because the field is stuck within a paradigm of technical professionalism, leading to careerism rather than to professionalism for the public good. That is, we are doing business as usual, such as Kuhn's "normal science," while the society is slowly beginning to feel the effects of a loss of trust between the professionals who serve the public good and the people who need their services (May, 2001). Especially since society has betrayed many professionals, such as through malpractice suits for doctors or public derision for lawyers (May), some students simply want their credentials so that they can lead a life of relative comfort and ease. Society at large will suffer the loss of professionals who profess the virtues of their fields (such as health, justice, safety, learning) if careerism is not addressed and confronted at the curricular level. Another problem is the fact that in many of the professions, the special knowledge one must have to be a professional in that field has exploded to almost impossible amounts to learn, especially in medicine, according to surgeon and curriculum director of Johns Hopkins School of Medicine, Peter Green (personal conversation, June 29, 2006). Traditional, systematic ways of designing curricula have focused on theory and practice in some form or another, changing the amount of each, the sequence, or the integration of them. In my personal experience of working in graduate

professional education for the past six years, many faculty are asking for help to find better ways to design curricula that will help develop graduates who accept the call of being a true professional. The literature reveals few curriculum plans that have purposely and intentionally focused on deliberating on the curriculum to decide how to handle this knowledge explosion, the pendulum swing between theory and practice, and planning for transformation of both faculty and ultimately students, but this is exactly what is needed to lead both faculty to transform their beliefs and understandings about professional education and students about their call to the professions.

In essence, the current theoretical perspective on learning and curriculum design has stifled reform in graduate professional education. There is a need for a new approach altogether, one that targets key areas of concern, namely, shifting from careerism to professionalism, appropriately dealing with knowledge explosion, and the need for deliberative processes to achieve those ends.

4. *Choose the style, kind, and function of a model to be used*

This section demonstrates how a significantly different perspective can provide a more useful model for practice. The style of model I created comes from Kaplan's classification (1998) system. Also discussed earlier in this chapter, the eristic, postulational, and formal styles of models do not seem appropriate for this study since they are based more on logic experimentation. However, Kaplan's academic style of a model is perfect for the integration of theories. He says it is more abstract and general, and has its own vocabulary, often with its own definitions for certain terms. It is ideational and observational.

As noted above in this chapter, Kaplan also delineates between different kinds of models—physical, semantic, formal, and interpretive. Barbour talks about logical, mathematical, or

theoretical models. The kind of model I created is interpretive and theoretical. It is interpretive because Kaplan says the goal of the interpretive model is to bring together two apparently distinct areas together in a way that will be more meaningful. Therefore, my interpretive model moves educational practice forward. My goal was to bring together a particular learning theory and a particular curriculum theory into one model. It is theoretical because, as Barbour points out, it is more abstract and it deals with ideational rather than observational material. Therefore, this new model of theory integration is academic, interpretive, and theoretic.

This model functions as a metaphor, which can have both visual and verbal components, and which encourage new ways to conceptualize data (Olds, 1992, p. 39). Furthermore, the use of metaphors yields affective understanding as well as cognitive understanding, which is important for dealing with theories that go to the heart of one's assumptions, beliefs, and values. Mezirow speaks of the disorienting dilemma, and Schwab talks about how the deliberative process can frustrate people; therefore, with disorientation and frustration, the affective aspects of the experience should be addressed. The metaphor of a caucus can help to do this.

5. Research the theories that may deepen understanding of the phenomenon in question

The topic of chapter two, the two theories have been analyzed by how they developed—their epistemological evolution and the empirical research done on them. This section of chapter four investigates connections between these theories that already exist. For instance, how are the experiences Mezirow and Schwab had that contributed to their theories similar or different? They were both teachers of adults and involved in curriculum design. How might this inform the integration of the theories? Where do these experiences connect and inform the theories? Secondly, how are the voices that influenced them similar or different? For instance, Mezirow uses the ideas of Habermas extensively, and Habermas was greatly influenced by hermeneutics

(interpretation). Schwab was also affected by hermeneutics, both through his experience at the University of Chicago and in his work with the Jewish Theological Seminary. I investigated the importance of hermeneutics to these theories and how it impacts their integration. Another interesting connection between Mezirow and Schwab is how much Dewey influenced both of them. I will looked closely at exactly what the main Deweyan influences were and how they inform the integration of the theories.

How much Schwab and Mezirow relied upon discourse and deliberation is another important aspect to consider when integrating these two theories. Dialogic exchange seems integral to both theories. Allowing for the back and forth of deliberation while trying on new perspectives is a powerful dynamic in which to design curriculum.

In essence, this section analyzes the similarities of the two theories and demonstrates how bringing them together creates a synergy that is stronger and more powerful than the two theories alone. It articulates direct correlations to graduate professional education. For example, deliberations and dialogic exchange seem apropos for leadership development (Heifetz, 1994).

6. *Use "generative" efforts to reinvigorate the theories of the past, redefine, or recontextualize their meanings to be used in new ways*

Gergen (1994), a professor of psychology at Swarthmore College, proposed the term "generative theory" to refer to "theoretical views that are lodged against or contradict the commonly accepted assumptions of the culture and open new vistas of intelligibility." He pointed out in 1978 that much theory of the time lacked the capacity to challenge prevailing assumptions regarding the nature of social life primarily because of the commitment of the field to traditional positivist assumptions (1993/1978).

The attempt to build theory inductively from "what is known," the demand for verification of theoretical ideas, the disregard for the temporally situated character of social events, and the avoidance of valuational entanglements all prove detrimental to the kind of catalytic theorizing that throws into question the commonly shared assumptions of culture and points to fresh alternatives for action. (p. 87)

In a more recent text (2001), Gergen points out that organizational science has already produced a vast range of theory, and that these various different perspectives are not a deficit, but rather they each represent a discourse potentiality available for many purposes in a variety of contexts (pp. 164-165). What is needed is to apply what he calls "generative efforts" to reinvigorate the theories of the past, redefine or recontextualize the meanings so as to not cast them from the repository of potentials (p. 165).

For my study, generative efforts include creating a heuristic to challenge the commonly held assumptions of the graduate professional education culture regarding what curriculum is, breaking away from the theory-practice debate to the real issue of what the goals of professional education should be (professionalism versus careerism), and dealing with the knowledge explosion issue through deliberation for prioritization. Furthermore, generative efforts also included reinvigorating the two theories I am integrating, to redefine and recontextualize their meanings. This is particularly important in relation to Schwab's theory since he does not adequately address the issue of power differentials in the deliberation process. It is my belief that if he were alive today, he would be more than willing to address this very important dynamic inherent in the process. I pick up where he left off and add to his deliberative theory an understanding of how power can influence and control the process. I look at what Sork, Cervero,

and Wilson have contributed to the field of program planning to reinvigorate and recontextualize Schwab's theory.

7. *Reflect upon published empirical research on the theories being studied and integrated*

Chapter two of this dissertation demonstrated how empirical research informs the theory builder. Particularly, Mezirow's large, national study using grounded theory contributed significantly to his understanding of the phenomenon of perspective transformation and led to his inductively-derived 10 phases of transformative learning. Subsequent research methodologies on the theory reveal the nature and character of the theory—that it is not easily studied in a positivist paradigm, that quantitative studies and even mixed method studies are difficult to do on this theory, and that phenomenological studies seem to be the best suited for understanding the theory. This informs me, as one who will seek to integrate this theory with another theory, as I think about how it might be studied and investigated in the future. A fuller explanation of the criteria I used to evaluate the new theory will be described under phase ten below.

In like manner, I analyzed the methodologies used to study deliberative curriculum theory, and proposed ways to reinvigorate interest and research in the integrated theory moving forward, since it has not been seriously studied for the past decade or so. It is my belief that the dense writing of Schwab and the lack of metaphor or image to help readers understand his salient points contributed to the lack of research of the model. Also, though, I believe that many curriculum groups are functioning in a business-as-usual mode, unaware of the critical problem of professional education. The problem is an insidious one, difficult to understand and even more perplexing to think about studying. Creating a heuristic to do so ameliorates the research situation. In essence, I provide researchers and curriculum workers with scaffolding—the Curriculum Caucus Guide—to do the job of studying the process.

8. Reflect upon the theory-builder's own experience and practice that informs the theories being integrated

In the same way that Mezirow reflected upon his own experience and Schwab was certainly influenced by his experiences, I chose four vignettes to describe and analyze my own experiences in designing graduate professional education in different schools to allow my practice to inform my theory. I have chosen four because they each demonstrate a different aspect of the experience and because there are two experiences that were in which transformation and deliberation did not take place, and two in which it did. The four vignettes together provide substantial enlightenment on the actual experience of curriculum inquiry.

As an example of how the four vignettes work, I provide a preview here, using a fifth story, but a very short one. I was invited to do consulting for a graduate school of education as they planned a new certificate program for teachers in urban schools. The new teachers had come from all over the United States to work in a particular city, but many of them lasted only until October before quitting because they were unprepared for the urban setting. I was invited to meet with a group of public school principals from the city, and the director of the program, who was new to higher education, having been a principal for many years, herself. The goal of the meeting was to design a new graduate certificate program to help these students to be successful in their urban classrooms.

I began by using a method of backward design and I asked them to focus on deep understandings they wanted their students to have before getting to specific skills and knowledge the teachers needed to have. The principals were animated and excited. They felt validated that someone wanted to hear what they thought. About eight of them around the room deliberated nicely on how to craft the overall program outcomes they sought for these struggling students. I

facilitated the discussion, writing all their ideas on large pieces of white paper with marker. The room was alive with hope, energy, and excitement…until the program director interrupted the discussion to hand out a list of courses students should take. The room became silent as the principles read the list with descriptions. The program chair said that she did a search and found a couple programs like this and here is what they do. All the good ideas created by the principals came to a complete halt, and the linear, traditional way of designing curriculum kicked back in. It was a fait accompli.

To analyze this true story, I would first look at the players. The program director had a particular paradigm in mind regarding curriculum design. She was new to higher education, so she invited me to come in as a consultant. But, when I began to use a very different paradigm, she became uncomfortable and afraid of not getting the job done. She felt the need to wrest the process back into her control and move it along in the direction she had in mind.

The principals were excellent deliberators, but they only spoke from the subject matter perspective, the milieu of the city schools, and perhaps somewhat from the teacher's perspective since some of them had been approached about teaching in the new program. Missing was the student's perspective, except for what the principals relayed, and an understanding of the milieu the students would experience in the program. I tried to lead deliberations, and was successful up to a point, until the program director abruptly took over. I felt like someone turned off a switch; all the energy and enthusiasm was gone in an instant.

The biggest thing missing in this experience was an understanding of how this would be a different paradigm of curriculum inquiry. Even though I understood that, as the consultant and facilitator, I was not able to move the participants along in the direction they needed to go to accomplish a new and meaningful design. The program director needed to confront the new

paradigm, and when the disorienting dilemma became apparent to her, she retreated and did not deal with it. Also, she used the power of her position to stop the process. The power differential is significant, and one I am coming to understand to be very important to analyze in all the scenarios I will provide in chapter four. In conclusion, I needed a way to use transformative learning theory to help these participants, and particularly the leader, understand how different this process would be.

In my experience in higher education, I have often been on governance committees that provided oversight for the creation of new academic programs. It is not unusual to see individual academic chairpersons come forward with proposals that indicate lists of courses for students to take, and sometimes a list of core knowledge and skills they need to be successful. The proposers are operating on the assumption that a list of courses focusing on knowledge and skills will produce graduates who are professionals. This is contrary to both Mezirow's theory (Mezirow, 1997) and Schwab's theory (1978/1971a). An integration of these two theories will provide a richer context for understanding the experience of curriculum work. It will take faculty deeper into how students can experience transformation and how they can intentionally plan for it.

9. *Use creative imagination to develop an image—a model, metaphor, or some other image to demonstrate the synergy, integration and new, deeper understanding of the phenomenon*

Kaplan (1998) suggests that creative imagination must play an important role in theory building—in the process of theory formation, the context of discovery, and also in the product (p. 308). Olds (1992) points out the relationship between image and emotion, and suggests that in order to reach not only cognitive levels, but also emotional levels of awareness, images are useful (p. 43). Barbour (1974) states that the positivist position was criticized for leaving out creative imagination in the formation of theories. Theories are mental constructs, human

inventions, and as such, require creative imagination (p.94). As I worked through the phases of this framework, particularly phases five, six, and seven, the image of a curriculum caucus emerged.

10. *Assess the theoretical integration and/or model with a variety of criteria*

I assessed the theory in three ways. I asked the following questions: (1) how well was the theory constructed? (2) What is the quality of the theory? (3) how well does it work? The final assessment, how well does it work, will have to be tested over time, and will not be conclusive for this dissertation. It will provide direction for further research. I used the following criteria, listed in Table 7.

Table 7 Criteria to Assess the New Theory

Criteria for Assessing the New Theory	

How well was the theory constructed?
 	
(Based upon the study of how Mezirow and Schwab created their theories, discussed in chapter 2, and how theories have been developed through history, discussed in chapter 3)
	What was the knowledge input?
	From
	    what other theories?
	    experience of others?
	    my own experience?
	    empirical research?
	    the critique of experts?

What is the quality of the theory? (Argyris & Schön, 1974; Barbour, 1974; Olds, 1992; Bentz & Shapiro, 1998; Kaplan, 1998)	**Is it** **Coherent**—How well do its various parts fit together? **Parsimonious**—Does it use simplicity and the fewest assumptions necessary? **Comprehensive**—Does it seek to address most of the aspects of the targeted phenomenon? **Relevant**—Is it appropriate for the type of phenomenon it seeks to describe or explain? **Pragmatic**—Is it user-friendly?
How well does the theory work?	**What evidence demonstrates culture change** **Discourse**—Does the language about deliberation, transformation, and professionalism become commonplace in graduate professional education settings and the literature.

	Artifacts—What documents demonstrate change in assumptions, beliefs, and values regarding learning, curriculum, and professionalism? For example, how are syllabi or marketing materials different?
	Replication—How often do others seek to use the new theory to transform their graduate professional education?
	Student Development—How well do students profess their values and work for the public good? For example, what work do alumni engage in for the public good?
	Program Evaluation—How do students evaluate the learning experiences and the faculty in their professional education experience?

(Chapman, 2007)

Positioning

As part of number eight above, "Reflect upon the theory-builder's own experience that informs the theories being integrated," it is necessary for me to disclose my own biases and presuppositions that have come from life experience. I started in the education field in 1977 by co-founding a competency-based elementary school based on individualized learning in the British West Indies, which was juxtaposed with the British, subject matter based curriculum. After graduating from seminary, where I experienced a very humanistic curriculum, strong in hermeneutics, I earned a masters degree in Instructional Systems Design (ISD) with a concentration on teaching English to speakers of other languages. This was a behaviorist, linear,

systematic approach, straight from Gagne and based upon Tyler's rationale. The expectation of using a mechanistic approach to help non-native speakers with language acquisition created a disorienting dilemma for me. After teaching adults in a mental health facility, and underprepared students in a community college, I became the coordinator of academic support for students in a very large community college. The numbers of underprivileged students who needed help to succeed in basic courses overwhelmed me. It seemed that the best solution was to get into the classes and help the teachers with their understanding of teaching and learning. After eight years, I went to Johns Hopkins University and became the director of the Center for Teaching and Learning in the School of Professional Studies to provide faculty development. After six years, it has become evident that faculty need help with curriculum design most of all. It seems too difficult to engage faculty in conversations about epistemology, and too insignificant to talk about the latest technology or techniques, but involving them in curriculum deliberations has become the bridge to deeper and more meaningful conversations about learning theory and developing programs that are transformative. Leading several different faculty groups in deliberations over curriculum design has given me experience that will contribute to developing this new heuristic.

Chapter 4: Integrating the Theories of Mezirow and Schwab

In this chapter I used the framework for theory integration I developed as a result of this study to integrate Mezirow's transformative learning theory with Schwab's deliberative curriculum theory. The Framework, presented in chapter 3, is made up of ten phases, the first five of which are accomplished within the first three chapters of this dissertation. A recapitulation if those ten phases is presented here first. Second, I describe how the first five phases have been developed, and finally, I complete the integration of the theories by working through the subsequent five phases in this chapter.

The Ten Phase Framework for Integrating the Theories of Mezirow and Schwab

Framework for Theory Integration

1. Establish the theory-builder's ontological and epistemological beliefs and values (Habermas, 1971; Kaplan, 1998; Mezirow, 1996).

2. Choose a theoretical paradigm for inquiry, based upon ontological and epistemological beliefs of the inquirer (Habermas, 1971; Mezirow, 1996; Olds, 1992).

3. Identify the gap, lack, problem, need, question of interest, or other type of phenomenon for inquiry.

4. Choose the kind, style, and function of a model to be used (Barbour, 1974; Kaplan, 1998)

5. Research theories that may deepen understanding of the phenomenon in question (Bentz & Shapiro, 1998)

6. Use "generative" efforts to reinvigorate theories of the past, redefine or recontextualize their meanings to be used in new ways (Gergen, 2001).

7. Reflect upon the published empirical research on the theories being studied and integrated (Bentz & Shapiro, 1998).

8. Reflect upon the theory-builder's own experience and practice that informs the theories being integrated (Argyris & Schön, 1974; Jarvis, 1999).

9. Use "creative imagination" to develop an image—a model, metaphor, or some other image to demonstrate the synergy, integration and new, hopefully deeper understanding of a situation or phenomenon (Barbour, 1974; Kaplan, 1998; Kuhn, 1986; Olds, 1992).

10. Assess the theoretical integration and/or model with a variety of criteria (Barbour, 1974, p. 116).

Phase 1—Establish the theory-builder's ontological and epistemological beliefs and values (Habermas, 1971; Kaplan, 1998; Mezirow, 1996)

In order to create a theory about how something in the world is and how it works, I must first identify what I believe about how I can know the world and how it works. What do I believe about reality and how it can be known? I believe that reality is objective, but that it can only be known subjectively. Knowledge, therefore, is created in the interaction between the investigator and the respondents. Therefore, understanding reality is a constant back and forth pursuit of constructing understanding between what is and how we experience it. Reality is perceived differently for every human being who brings his or her own lens or perspective to the experience. Therefore, experienced reality is a continually changing composite of multiple perceptions of what is real by diverse people in various settings.
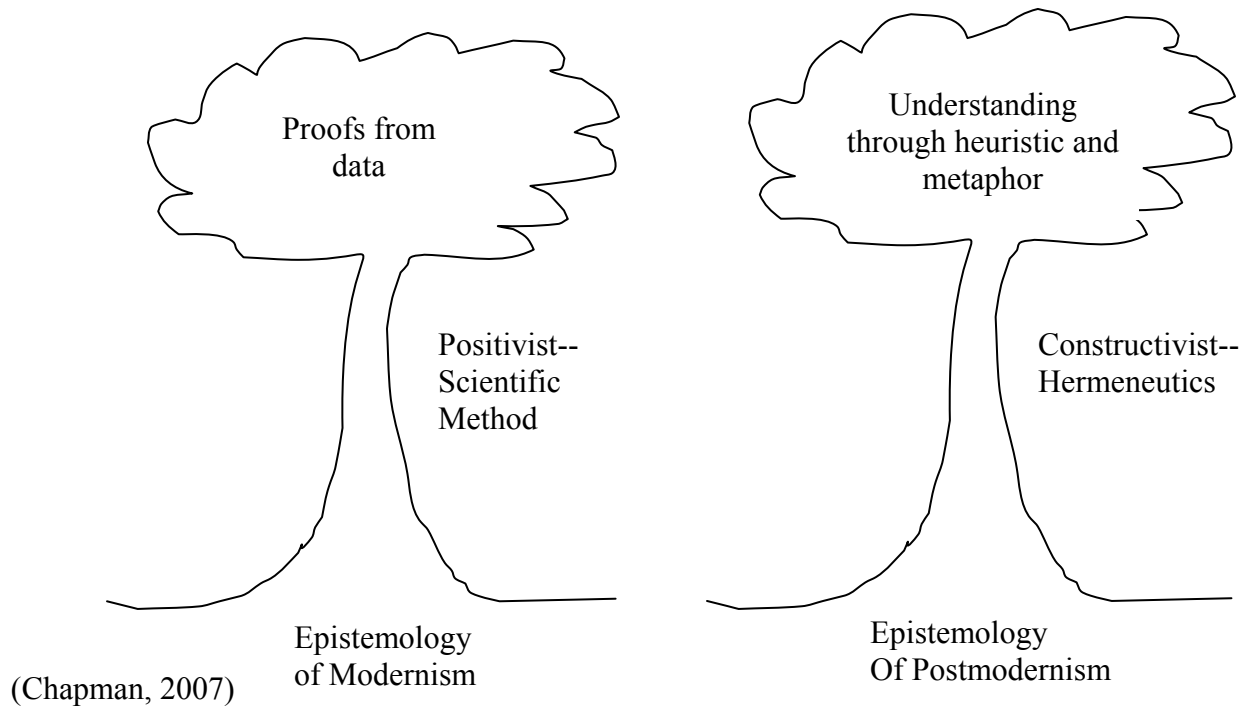
Being a constructivist is especially important as it relates to the goals and aims of education. A positivist would view reality as fixed and knowable. Such would probably be a behaviorist, believing that knowledge, reality, or truth exists outside oneself as a separate entity, requiring a certain *delivery* format for the *content* to go from the outside of the learner to the inside of the learner. Delivering lectures is one way to accomplish this goal efficiently for large numbers of students. In this paradigm, teachers are thought to *give* knowledge to students or to post *content* in online environment. In my opinion this activity diminishes the role of the faculty, who need to have opportunity to share, their passions, new ideas, and their critiques with students. Faculty need to model critical thinking, i.e., critically reflecting upon their ideas, the processes of learning, and the premises of their assumptions, beliefs, and values. In essence, faculty need to share their view of the world and help students to construct new and deep understandings of their worldviews. Therefore, I believe my ontological and epistemological

beliefs and values are congruent with transformative learning theory (requiring students to critically reflect upon their taken-for-granted assumptions, beliefs, and values) and deliberative curriculum theory (seeking to know every possible point of view as it relates to the pursuit of curriculum and the resolutions of curriculum problems).

Phase 2—Choose a theoretical paradigm for inquiry, based upon ontological and

epistemological beliefs and of the inquirer (Habermas, 1971; Mezirow, 1996; Olds, 1992)

Intricately connected to phase 1, I choose a constructivist paradigm for inquiry. As such, I am not conducting an experiment to *prove* that something is true or false, using the scientific method from an epistemological stance of moderrnism. Instead, I am creating an integrated theory to help educators *understand* how to do curriculum work in thoughtful ways to discover curriculum problems related to graduate professional education and to deliberate toward resolutions for those problems. As such, I will use the constructivist method of hermeneutics to interpret meaning from the two theories and to integrate them into a new theory. The constructivist approach is from a more postmodern epistemology, and it leads to a very different type of tree than the tree with roots of modernism. In the latter, the tree would likely be experimental, to discover what is *true* or *real.* In the former, and in my case, the investigator searches for understanding of phenomena through interpretation, or hermeneutics. Figure 7 demonstrates the difference between these two paradigms. I am using hermeneutics to interpret the two theories to better understand the phenomena they represent and to bring them together to improve graduate professional education.

Figure 7 Contrast of Theoretical Paradigms for Inquiry

Proofs from
data

Understanding
through heuristic and
metaphor

Positivist--
Scientific
Method

Constructivist--
Hermeneutics

Epistemology
of Modernism

Epistemology
Of Postmodernism

(Chapman, 2007)

The constructivist paradigm for inquiry can include the creation of a metaphor to enhance

understanding. In the same way that Freire used the metaphor of "banking education" and

Heifetz used a metaphor of a "holding environment," I am creating a metaphor to help educators

to understand how to integrate and implement the theories of Mezirow and Schwab.

Furthermore, the new theory will not be in the form of a foolproof list of steps to follow

to transform graduate professional education. Both Mezirow and Schwab eschewed the notion

that a theory could be a fixed, unproblematic solution to a problem. Instead, the new theory is in

the form of a heuristic, or a guide to make decisions. Transformative learning requires the critical

reflection upon one's assumptions, beliefs, and values in order to adjust or change one's mental

models or personal paradigms. This activity, in turn, depends upon an opportunity to build

discourse around different perspectives. Deliberative curriculum work leads to action and

decisions based on arriving at the mean of opposing views. Therefore, both the discourse and discussion required by transformative learning and the deliberation required by deliberative curriculum work need a guide for action, especially to integrate these two activities. Hence, a heuristic to integrate these theories is the appropriate paradigm for the new theory.

Phase 3—Identify the gap, lack, problem, need, question of interest, or other type of phenomenon for inquiry

A review of the literature provided in chapter 2 demonstrates that graduate professional education is in need of transformation from a focus on careerism to a renewed focus on authentic professionalism. As noted in Table 2 in chapter 2, over the past five decades, more than a dozen authors and experts have called for reforms that relate to transformative learning theory. Specifically, they have urged faculty to use new theories to help students to examine their values and presuppositions, to move away from technical rationality toward becoming reflective practitioners, to question their stereotypes, and to transform to serve the public good. Furthermore, over the same period of time, other experts have called for reforms that point to deliberative curriculum work: *committees* should work on curriculum, seeking to use problems in an eclectic way; programs need to be in perpetual self-diagnosis with a flexible structure for discussion; perspectives of all stakeholders must be included in the design process; Schwab's use of Aristotelian processes for deliberation should be employed; communication with the professions should be included; Schwab's use of the practical, deliberative curriculum work should be used; and deliberations must include a calling to serve the public good.

In essence, the change must be made from the bottom up, i.e., the very assumptions, beliefs, and values educators hold about graduate professional education need to be critically reflected upon before significant transformation can take place. It is not enough to change the

theory/practice continuum of the curriculum, or to add new kinds of strategies for learning such as problem based learning (PBL) or extensive case studies. For true transformation to occur, the very aims of graduate professional education need to be re-examined. Educators need to become learners themselves and critically reflect upon the assumptions, beliefs, and values they have about what professional education is all about.

However, the literature reveals few curriculum plans that have purposely and intentionally focused on deliberating over the curriculum to decide how to uncover the deep curriculum problems and how to work toward resolutions of those problems toward deep transformation. In fact, the current dominant theoretical perspective of technical rationality and careerism has stifled true reform in graduate professional education with its fixation on developing technical expertise for individuals, rather than cultivating a calling to serve the public good for professionals. Providing educators with a guide to work toward changing the situation will ameliorate the situation. That guide will be a heuristic developed from integrating the theories of Mezirow and Schwab.

Phase 4—Choose the style, kind, and function of a model to be used (Barbour, 1974; Kaplan, 1998)

Since I am not conducting an experiment, it would not be appropriate for me to attempt to create an eristic, postulational, or formal style model, according to Kaplan's classification system (1998). Instead, Kaplan's "academic" style of a model is appropriate for creating a heuristic. It is more abstract and general, has its own vocabulary, often with its own definitions for certain terms (such as for the word "practical"), and is ideational rather than observational.

Kaplan delineates between different kinds of models, as well. For him, there are physical, semantic, formal, and interpretive models. Barbour specifies logical, mathematical, and

theoretical models. The kind of model I will create will be interpretive and theoretical. It will be interpretive because Kaplan says the goal of the interpretive model is to bring together two apparently distinct areas together in a way that will be more meaningful. The interpretive model will serve to enhance the meaning of graduate professional education by helping educators plan for transformation of their students to becoming authentic professionals. It will be theoretical because it is more abstract and it deals with ideational rather than observational material. Therefore, the new model of theory integration will be academic, interpretive, and theoretic.

This model will use a metaphor to help convey meaning. According to Olds (1992, p. 39), the metaphor can have both visual and verbal components, which encourage new ways to conceptualize data. Metaphors also target the affective domain as well as the cognitive domain. Since transformative learning involves the emotional realm in that it focuses on a disorienting dilemma, and deliberative curriculum work seeks to discover curriculum problems to work toward resolutions, emotions become a very real part of the process. Educators will likely become frustrated, annoyed, disturbed, or even angry at times. A metaphor could serve to reach the affective domain and help deepen understanding of the theory for those involved in this hard, but necessary work.

5. Research the theories that may deepen understanding of the phenomenon in question (Bentz & Shapiro, 1998).

This section of the integration will analyze the connections between the theories of Mezirow and Schwab. It seeks to answer such questions as the following. How were the experiences they had similar or different, and how do those experiences inform the creation of the heuristic? In what way did hermeneutics influence them? How are their philosophical points of view connected and how do they come together in a confluence that leads to a synergy that can be

helpful for educators planning graduate professional education? How does Mezirow's "ideal conditions for discourse" compare with Schwab's notion of deliberative processes? How do all these connections relate to graduate professional education, for instance, how does it relate to adaptive leadership?

Comparison of Experiences of Mezirow and Schwab

Both Mezirow and Schwab were teachers and developers of curriculum. Mezirow was focused on fostering democratic social action through adult literacy programs and community development in the United States and in many developing countries, and he had created an image of himself as being a social action educator. However, when he confronted the writings of Freire and realized he had a lack of awareness of the deep-rooted power in the community development process, he had his own disorienting dilemma (Mezirow, 1991b, xvi-xvii).

Likewise, Schwab seems to have had several disorienting dilemmas related to his role as a teacher and as a curriculum worker. After spending a year with Thorndike where he focused on psychometrics at Columbia, he returned to the University of Chicago to work on the development of a liberal arts curriculum, for which he was tasked with trying to figure out how science fits into such a curriculum. Furthermore, he engaged in debate over the Great Books curriculum, watched the impact of behaviorism upon curriculum work through the implementation of the Tyler Rationale, witnessed the student protest movement of the 1960s, and participated in designing curricula for confessional learning at the Jewish Theological Seminary where he focused on the tradition of place and community in developing character. He lived at a time and in a place of tremendous importance for the field, where he heard many voices with diverse ideas and passions. He had access to great thinkers who cared deeply about curriculum issues, and who included him in discussions. However, he was a great thinker himself, and he

never joined one intellectual camp or philosophical position or ideology over another. The important aspect of Schwab's experience is that he embraced many diverse ideas and endeavored to understand them and interpret meaning from them. This experience led him to promote this very same process of listening to diverse ideas and engaging in discussion as a way to develop curricula.

The implication here is that Mezirow and Schwab both reflected upon their experiences to inform their theory and their practice. Both had to examine what they assumed, believed, and valued about learning and curriculum work. Furthermore, they both focused on hermeneutical processes, whether to shift the focus on learning from instrumental to communicative, based upon interpretation, as Mezirow did, or through striving to understand the perspectives of multiple and diverse commonplaces, as Schwab did. The new heuristic I develop must include a component that will help faculty to critically reflect upon the assumptions, beliefs, and values they have about learning and curriculum, and it must help faculty develop a hermeneutical stance toward texts and points of view expressed by others in the process of curriculum work. So, it must begin with self-awareness and self-reflection and move to an awareness of others and the points of views of others, critically reflecting upon these perspectives as the process moves forward.

Major Philosophical Ideas of the Theories

Tables 8 and 9 demonstrate the major philosophical points of view of each theory, how those ideas connect to the other theory, and how a synergy emerges to create a new heuristic.

Table 8 Comparison of Major Philosophical ideas of Mezirow with Schwab

I. Major Philosophical Points of View of Mezirow	Implication for Transformative Learning Theory (Mezirow)	Connection to Deliberative Curriculum Theory (Schwab)	Synergy for Curriculum Work
The role of the educator is to help students move toward a fuller and more dependable understanding of the meaning of the learning experience.	The acts of open communication and interpretation are critically important for making meaning. This is a hermeneutical approach to knowing.	The role of the deliberation specialist is to help the curriculum workers to move toward a fuller and more dependable understanding of the meaning of curriculum work. Open communication and mutual understanding among curriculum workers is key to accomplishing the work. This is a hermeneutical conception of curriculum—moving away from curriculum design to curriculum understanding.	Curriculum work should begin with engaging activities that lead curriculum workers to a fuller and more dependable understanding of the meaning of curriculum work. Open, meaningful communication about the work must be cultivated. Interpretation of the meanings of others must be clarified. This is a hermeneutical approach to curriculum work.

I. Major Philosophical Points of View of Mezirow	Implication for Transformative Learning Theory (Mezirow)	Connection to Deliberative Curriculum Theory (Schwab)	Synergy for Curriculum Work
Learning involves more than cognitive-instrumental rationality. It should include communicative competence, leading to the critical reflection of the premises for assumptions, beliefs, and values.	There are two main kinds of learning—instrumental and communicative. Transformation occurs through communicative learning, but educators often neglect it.	There are two ways of looking at curriculum work—technical (or Mezirow would say instrumental) and deliberative (or Mezirow would say communicative).	In the same way that students need to embrace communicative ways of learning, educators need to embrace deliberative ways of planning curriculum. Educators need to experience transformation to understand this different way of doing curriculum work.
Discourse should be pursued with certain ideals in mind, though they will never be achieved fully.	Discourse is a specialized use of dialogue devoted to searching for a common understanding and assessment of the justification of an interpretation or belief.	The method of creating curriculum should not be inductive or deductive; but instead, it should be deliberative, requiring consideration of the widest possible variety of alternatives and ramifications.	Curriculum work that targets transformation must use dialogue to search for understandings of the widest possible variety of alternatives of perspectives for accomplishing the work.

Table 9 Comparison of Major Philosophical ideas of Schwab with Mezirow

II. Major Philosophical Points of View of Schwab	Implication for Deliberative Curriculum Theory	Connection to Transformative Learning Theory	Confluence for Curriculum Work
There are two types of virtues—intellectual (or theoretic) which deal with states of mind and moral (or practical) which deal with states of affairs.	Curriculum work has been embraced as theoretic (states of mind), but should be viewed as practical (states of affairs), discovering problems and deliberating over resolutions.	Viewing curriculum as practical in the Aristotelian sense can be a disorienting dilemma for educators who are used to viewing it as theoretic.	Educators must experience transformation in their view of curriculum work in order to engage in it as a deliberative process of communicating perspectives to make choices and to take action.
Moral virtue is the relative mean between extremes of excess and deficiency that requires choice, action, and deliberation.	This is the way deliberation works—hearing the various perspectives and working together to find the mean between the opposing views. It is important for both creating curriculum and conducting learning sessions.	To fully participate in discourse, participants must have openness to alternative points of view, and the ability to weigh evidence and assess arguments.	Educators must have the opportunity to share their perspectives and to hear other perspectives in order to deliberate to find the mean. And, they should plan for their students to have this same experience.
Existence is made up of categories—or immediate perceptions, intuitions, or classifications (such as substance, quality, quantity, relation, place, time, position, state, action, and passion).	Curriculum work involves searching for unique particularities of local, individual settings, revealed by the stakeholders, or the commonplaces, namely, the teacher, the student, the subject matter, and the milieu.	These categories can function as perceptions and might lie beneath the surface of awareness as hidden assumptions, which can become unveiled when confronted by a disorienting dilemma.	Educators need to be aware of the various aspects of the curriculum work by listening to the voices of all the stakeholders, and by helping representatives of the commonplaces to critically examine their tacit assumptions.

II. Major Philosophical Points of View of Schwab	Implication for Deliberative Curriculum Theory	Connection to Transformative Learning Theory	Confluence for Curriculum Work
We learn by "doing."	We learn how to create curriculum by *doing* it together. We must constantly learn what the new problems are so we can deliberate to discover resolutions. It is a continual, recursive process.	Transformation comes through a process of *doing* critical reflection, trying on new perspectives, planning a course of action, and reintegrating the new perspective into one's life.	Curriculum work should be viewed as a continual, recursive process, in which curriculum workers critically reflect upon their perspectives and those of others, and become more inclusive and open to new aspects of it.
"Theory" is not a received set of meanings, but rather a persuasion of its readers to embark on a practice.	There is no one-way to develop curriculum. Theories must be tried and tested in the real world of practice and judgment.	Transformative learning theory is a "theory in progress."	A heuristic to help educators develop graduate professional education must be fluid and flexible.
Curriculum work involves the eclectic arts by which the distortions and limited perspectives of a theory are taken into practical account.	Theories should be selected and adapted to fit the particular case.	The process of transformation includes exploring options for new roles, relationships, and actions.	Curriculum work involves the deconstruction and analysis of curriculum problems and the selection of possible resolutions.

(Chapman, 2007)

Summary of the Synergy of Philosophical Ideas for Transformative Curriculum Work.

  Curriculum work should begin with engaging activities that lead curriculum workers to a fuller and more dependable understanding of the meaning of the activity. Open, meaningful communication about the work must be cultivated, and the interpretation of the meanings of others must be clarified. In essence, the curriculum workers must engage in a hermeneutical

approach to curriculum work. That is, in order to target transformation, it must use dialogue to search for understandings of the widest possible variety of alternatives of perspectives for accomplishing the work.

In the same way that students need to move beyond technical or instrumental ways of learning and embrace communicative ways of learning, educators need to move beyond the systematic, technical, way of doing curriculum work, which has become intellectual work rather than moral work. In order for a task to be moral, a decision must be made. Curriculum work must be viewed as moral because many decisions are made throughout the process, from what will be learned to who will participate, what experiences learners will have, and how the learning will be assessed. Therefore, the workers need to embrace deliberative ways of planning curriculum. This will most likely require educators to experience transformation to understand this different way of doing curriculum work.

Educators need a transformative learning experience so that they can engage in curriculum work as a deliberative process of communicating perspectives to make choices and to take action. Curriculum work involves the deconstruction and analysis of curriculum problems and the selection of possible resolutions. Educators must have the opportunity to share their perspectives and to hear other perspectives in order to deliberate to find the mean between the opposite ends of the spectrum on any given topic. They should also plan for their students to have this same experience for learning. Educators need to be aware of the various aspects of the curriculum work by listening to the voices of all the stakeholders, and by helping representatives of the commonplaces to critically examine their tacit assumptions.

Curriculum work should be viewed as a continual, recursive process, in which curriculum workers critically reflect upon their perspectives and those of others, and become more inclusive

and open to new aspects of it. A heuristic to help educators develop graduate professional education must be fluid and flexible.

Comparison of Mezirow's Discourse with Schwab's Deliberation

The chief purpose of discourse is to discover and share meaning. Mezirow (2000) advances seven conditions for ideal discourse to take place. He admits this is the ideal and not the real, but participants must strive to have the following in order for discourse to have its full realization:

1. More accurate and complete information

2. Freedom from coercion and distorting self-deception

3. Openness to alternative points of view: empathy and concern about how others think and feel

4. The ability to weigh evidence and assess arguments objectively[1]

5. Greater awareness of the context of ideas and, more critically, reflectiveness of assumptions, including their own

6. An equal opportunity to participate in the various roles of discourse

7. Willingness to seek understanding and agreement and to accept a resulting best judgment as a test of validity until new perspectives, evidence, or arguments are encountered and validated through discourse as yielding a better judgment. (pp. 13-14).

Mezirow likens this process of discourse to the graduate seminar (2000, p. 15)—where ideas can be discussed and debated. In such an environment, there is no coercion from the outside;

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[1] Mezirow's notion of objectivity and Schwab's discussion on biases will be examined more closely in the sixth phase of the framework for theory integration, where the older theories are reinvigorated by newer theories.

everyone has an equal opportunity[2] to contribute; participants are informed on the topic to be discussed; and there are norms of courtesy, active listening, studying issues in advance, and taking turns to talk.

The process of discourse is important for students who embark on a transformative journey, often stimulated by experiencing a disorienting dilemma, or when an idea or experience does not fit their mental model or personal paradigm made up of assumptions, beliefs, and values. Mezirow says they often follow some variation of the following phases of meaning becoming more clarified (2000, p.22).

1. A disorienting dilemma

2. Self-examination with feelings of fear, anger, guilt, or shame

3. A critical assessment of assumptions

4. Recognition that one's discontent and the process of transformation are shared

5. Exploration of options for new roles, relationships, and actions

6. Planning a course of action

7. Acquisition of knowledge and skills for implementing one's plans

8. Provisional trying of new roles

9. Building of competence and self-confidence in new roles and relationships

10. A reintegration into one's life on the basis of conditions dictated by one's new perspective.

The ideal conditions of discourse help people to move through this process of transformation.

In essence, Mezirow says that for individuals to experience transformative learning, they must first engage in a process of deliberation within their own heads. They critically examine

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[2] Mezirow's notion of "equal opportunity" will also be examined more closely in the sixth phase of the framework for theory integration, where the older theories are reinvigorated by newer theories.

and assess their assumptions, explore new roles, relationships, and actions, and plan a course of action. This is very much like Schwab's deliberation, which leads to making a decision for action, only in Mezirow's case it is the individual who must deliberate with the self. This is in alignment with a Jungian approach to transformative learning as espoused by Boyd and Meyers (1988). This notion of deliberating with the self also points to the fact that Mezirow's theory must embrace the notion of the fragmented self rather than the unitary self, otherwise, such deliberation could not take place.

Discourse, then, helps to facilitate transformation of the individual. This is necessary when people are confronted with disorienting dilemmas. Their "horizon of expectations" need to change (Popper, 1963), their frame (context) must change as much as the picture must change (Bateson, 1972), and they need to move away from the "normal" (Kuhn, 1986) ways of thinking about things and doing things. The process of transforming involves a decentration (Bruner, 1971)—that is, analyzing perspectives more and more removed from one's local perspective— and reflection-in-action in order to move from single loop learning (simple action-consequence processes to problem solving) to double loop learning (changing underlying values and assumptions to look at problems differently) (Argyris, 1991).

How does this discourse process function in a way so as to facilitate transformation? Mezirow picks up on Goleman's idea that the "lacunas" or blind spots people have must be identified for them by someone who functions like an investigative reporter, a whistle-blower, grand juries, therapists, etc. (1991, p. 51). According to Mezirow, the cardinal role of the educator of adult students is to serve this function—to help them recognize their lacunas, misperceptions, false assumptions, and ideas that are close-minded, not open to new perspectives. It is to help learners see that they have been stuck doing "normal" science when

they could be involved in a necessary revolution. This role sounds similar to the role of the deliberation leader Schwab describes below.

For Schwab, deliberation is an art. He advocates for a "chairman [sic]" to lead the process and to move the group to effectiveness. First, this chairman, which will be called a *deliberation leader* in this dissertation, needs to strive to reduce or remove barriers to collaboration among members of the group, "barriers arising from biases, stereotypical responses toward one another, and omissions in the earlier education of members of the group" (Schwab, 1996/1983, p.103). He says that students (one of the commonplaces) may not see themselves as genuine members of the group because schools have habitually treated students as "patients, not as agents, undergoers rather than actors" (p. 103). In essence, he is saying that students may feel that they do not have the same power or authority as others in the group because of their position, and the deliberation leader needs to publicly acknowledge the worth of the students' perspectives early on and thereby begin to model respect for their ideas for other members of the work group to embrace.

In the same vein, Schwab says that some members of the curriculum work group, particularly subject matter experts, may have an air of "snobbery toward nonspecialists" (p. 104), requiring the specialists to engage in frequent and tactful attention to their own views and biases. In essence, Schwab is saying that the subject matter experts need to engage in the type of critical reflection that Mezirow calls for—examining the premises for how one knows something, or epistemic cognition (2000, p. 5). This type of reflection has to do with the limits of knowledge, the certainty of knowledge, and the criteria for knowing. Transformative learning pertains to epistemic cognition. For the subject matter experts to move in the direction of seeing their role as equal among the other group members, they will need to engage in this type of critical reflection.

As they engage in the deliberation process, they may ask themselves questions such as the following: How do I know what I know is true? What are limits of my ability to know this subject matter? What are the very criteria I assume to be necessary to know something? As these curriculum workers begin to reflect in this way, they should uncover assumptions, beliefs, and values that may have been lying beneath their consciousness, and which affect their opinions.

The deliberation leader must work toward overcoming the barriers of biases that inhibit collaboration through frequent and tactful direction of the subject matter experts to examine their own lay views. For tactfulness, this activity might even take place outside the group before sessions begin, and it should be used for all members of the group.

Besides working on the barriers of biases, the deliberation leader needs to "evoke and maintain an appropriately deliberative mode of discussion" (Schwab, 1996/1983, p.105). Schwab says this is particularly difficult because the near-universal inexperience most of us have with deliberation. He warns that discussion should not fall into simple debate, or point—counterpoint, or attack, defense, counter-attack. Instead, the deliberation specialist needs to attend to the appropriate emphases among the commonplaces and helps the group members to pool their ingenuities, insights, and perceptions in the interest of discovering the most promising possibilities for trial, rather than forming sides. "We have, then, discovery and formulation of curriculum problems, construction of alternative solutions[3], deliberation on and deliberative modification of these alternatives. There remains the task of instituting and testing the changes decided on" (p. 109).

In order for the deliberation leader to be able to carry out this role, Schwab proposes a certain type of preparation (Schwab, 1996/1983). First, as a small group leader, the deliberation

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[3] Schwab's use of the term "solution" will be discussed more fully in the sixth phase of theory integration where the older theories are reinvigorated with newer theories.

specialist needs to be skillful in using two particular skills of rhetoric—elicitation and persuasion. The rhetoric of elicitation refers to being able to respectfully draw out a diversity of ideas from all those representing the commonplaces. In the same way that transformative learning theory advocates the understanding of different points of view, the rhetoric of persuasion relates to helping members of the group to reflect upon their own presuppositions as well as the reasons for those of the others in the group. In essence, the deliberation leader does not persuade participants toward the "what" of the curriculum work, but rather toward the "how" of the work. Dillon (1994) points out how much attention needs to be given to how participants view deliberation. He says that we are generally intolerant of ambiguity and uncertainty and we are impatient with problematic situations, and we tend to have an impetuous insistence on solutions. Since the work is harder than the traditional, linear way of creating curriculum, the curriculum workers will experience a disorienting dilemma, in Mezirow's terms. The curriculum workers will need support, much like Heifetz's holding environment to work through the disorienting dilemma to a transformed perspective on what curriculum work is. Furthermore, the deliberation leader needs to be able to persuade the curriculum workers early and frequently of the worth of the process. This can be done by regarding the progress of the work, as Heifetz suggests. Each small step forward in a positive, productive direction toward deliberation and transformation should be acknowledged as progress with positive feedback for the participants.

The second part of preparation for the deliberation leader relates to the ability to use the arts of problemation and to coordinate the arts of the eclectic. The arts of problemation refer to how we turn a problematic situation into a situation of problems. For instance, one problematic situation is that many graduate professional education curricula focus too much on careerism and not enough on professionalism. To problematize this matter is to formulate specific problems out

of this situation toward which the curriculum workers can move toward resolutions. Often, the curriculum work process possesses ill-structured problems or adaptive challenges that cannot be solved by technical solutions. The participants in the group need to figure out just what the problems are, how to articulate the complexity of them, and how to frame them in ways that make sense. This is what Schwab called problemation, and it is an art that the deliberation leader needs to be able to use. For example, the deliberation leader might say that one problem is that the curriculum workers do not fully understand what the call to be a professional means compared to careerism. This is a problem of understanding, meaning, or perception. For Mezirow, problem solving should not be limited to single-loop, action-consequence processes, but must include dealing with the problem of disorienting dilemmas—when something does not fit into our way of understanding. It is another way of describing the process of problemation.
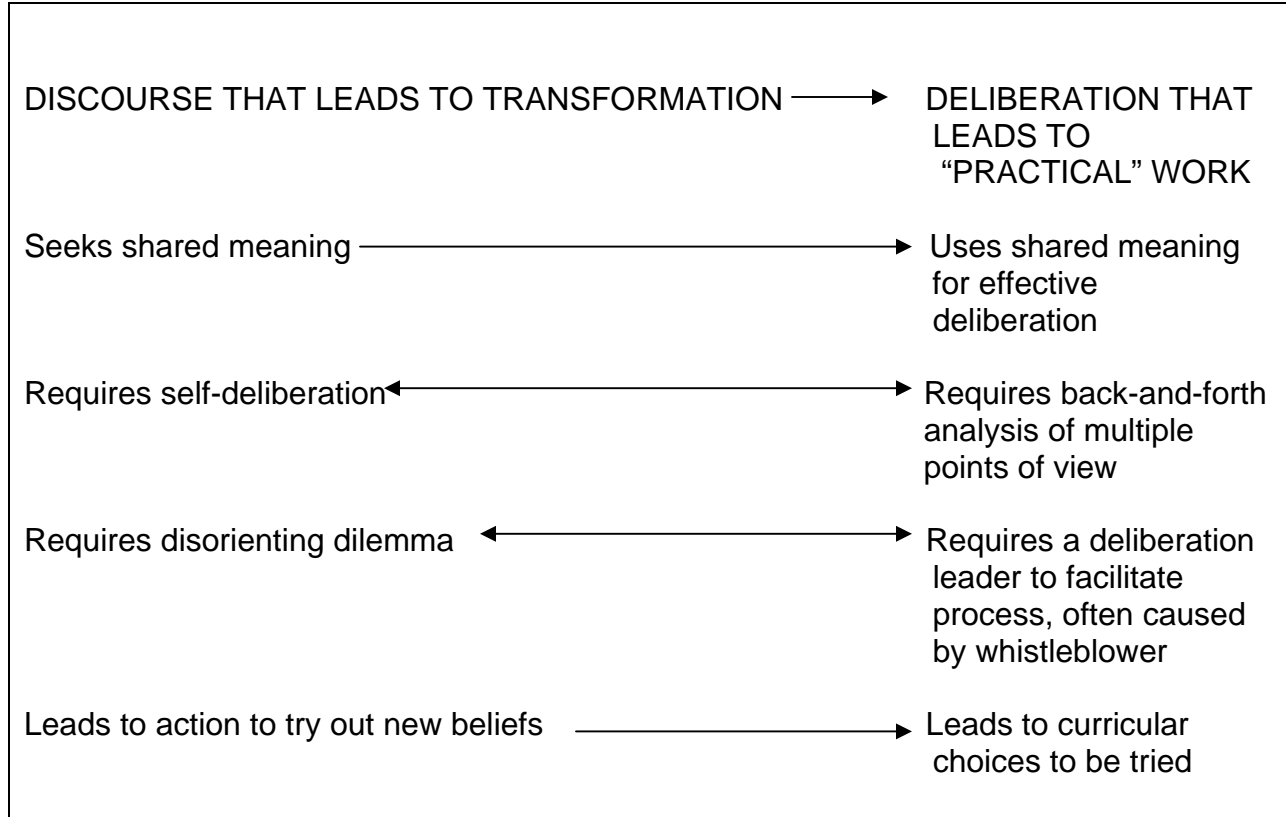
Besides being able to frame problems, the deliberation leader needs to be able to suggest possible ways the group can begin to move toward finding resolutions. In other words, the leader must use the arts of eclectic, which is to be able to use diverse bodies of theoretic knowledge in relation to a practical problem of curriculum. Using the arts of problemation means that curriculum situations are framed in descriptive ways to characterize possible next steps toward resolutions, and using the arts of the eclectic gives the curriculum leader direction for what those possible next steps might be. Hence, the arts of problemation and the arts of the eclectic go hand-in-hand and the curriculum leader must be adept at using them both in tandem.

To these two main steps of preparation for the deliberation leader, skills in rhetoric and in the arts of problemation and the eclectic, Schwab adds two other modes of preparation. First, the leaders need some background knowledge of the history of curriculum theory so that they can situate the work in which they are engaged. Second, a broad knowledge of the behavioral

sciences, such as psychology, sociology, and ethnography, as well as a general liberal education is desirable for the leader, especially to employ the arts of the eclectic. This seems to be akin to Mezirow's notion that before one can engage in transformative learning, formative learning must have taken place (Mezirow, 2000).

In sum, the ideas of discourse and deliberation are alike, but when taken together they form a synergy that provides a rich confluence for transformative curriculum work. The purpose of discourse is to create and share meaning. The purpose of deliberation is to discover all the possible sides to a situation and to choose actions. Discourse begins when the participant deliberates within the individual's own head, or within the self, to examine closely held assumptions, beliefs, and/or values. Deliberation takes place when participants hear all the possible perspectives of various stakeholders about a given situation and takes them into equal consideration, often seeking the mean of the opposing views to make informed decisions. Deliberation requires shared discourse, or shared meanings for ideas and terms being used in discussion. Discourse requires deliberation for the self, first, and then to hear the points of view of others. Sometimes, transformation requires a whistleblower who helps the learner to uncover hidden assumptions, beliefs, and/or values, leading to a disorienting dilemma. Other times, the disorienting dilemma arises out of experiences. In any case, the deliberation process requires someone like the whistleblower, one who will help participants to view multiple sides of a perspective.

Figure 8 The Confluence of Discourse and Deliberation for Transformative Curriculum Work

DISCOURSE THAT LEADS TO TRANSFORMATION ⟶ DELIBERATION THAT
LEADS TO
"PRACTICAL" WORK

Seeks shared meaning ⟶ Uses shared meaning
for effective
deliberation

Requires self-deliberation ⟵ Requires back-and-forth
analysis of multiple
points of view

Requires disorienting dilemma ⟵ Requires a deliberation
leader to facilitate
process, often caused
by whistleblower

Leads to action to try out new beliefs ⟶ Leads to curricular
choices to be tried

(Chapman, 2007)

How These Connections Relate to Graduate Professional Education

Uncertainty and Systems Thinking.

Schein told us in 1972 that reforming graduate professional education would not be a simple or automatic process (p. 52). Curry and Wergin called for a complete change in the conception of graduate professional education (1993), that tinkering with adaptations would not be enough. Indeed, moving toward a transformative-deliberative curriculum process is a movement toward chaos and uncertainty. As odd as it might seem, moving toward what may seem like chaos is an appropriate way to lead, as noted by current leadership theorists, particularly Wheatly and Vaill, whose ideas are discussed below.

Wheatly (1999) calls leaders to embrace uncertainty and to discover a new kind of order in a chaotic world. According to her, the twentieth century brought about the end of the hegemony of Newtonian thinking with the introduction of the "weird" world of quantum mechanics. Rather than reductionism, separationism, and individualism as promoted through Newtonian thinking, the quantum world challenges many of our basic assumptions, including our understanding of relationships, connectedness, prediction, and control. Rather than billiard ball-like action and reaction, the quantum world is better described as a *dance* of energy, more like a great thought rather than a great machine. Professionals need to embrace this new way of seeing their profession and the work they are called to do.

To live in a quantum world, to weave here and there with ease and grace, we need to change what we do. We need fewer descriptions of tasks and instead learn how to facilitate *process.* We need to become savvy about how to foster relationships, how to nurture growth and development. All of us need to become better at listening, conversing, respecting one another's uniqueness, because these are essential for strong relationships. The era of the

rugged individual has been replaced by the era of the team player. (Wheatly, p. 39)

Much like Wheatly's comparison of the weird world of quantum mechanics to the world in which leaders are called to lead, Vaill (1996) describes the professional's world as permanent white water that requires less of an applied science and more of special kind of consciousness and skill to navigate. For Vaill, the issue here is not so much learning how to do certain things as a professional, but how to cultivate continual learning as a way of being in the midst of permanent white water. Learning as a way of being is important because of the characteristics of permanent white water, which he describes:

1. Permanent white water conditions are full of surprises.

2. Complex systems tend to produce novel problems.

3. Permanent white water conditions feature events that are "messy" and ill-structured.

4. White water events are often extremely costly.

5. Permanent white water conditions raise the problem of recurrence. (pp. 10-13)

Therefore, permanent white water causes professionals to experience surprising, novel, messy, costly, recurring, and unpreventable events and feelings of lack of direction, absence of coherence, and loss of meaning (p. 16). To face this experience, Vaill admonishes leaders to embrace systems thinking—learning about oneself in the interaction with the surrounding world. He says that we do not so much learn *about* a system as we learn in, through, and of a system (p. 110).

According to Senge (1990) "systems thinking," or a discipline for seeing wholes, is important in order for organizations to learn and grow. He says that the essence of systems thinking lies in a shift of mind to seeing interrelationships rather than linear cause-effect chains, and seeing processes of change rather than snapshots (p.73). Furthermore, Senge maintains that

"organizations learn only through individuals who learn. Individual learning does not guarantee organizational learning. But without it no organizational learning occurs" (p.139). Faculty engaged in doing curriculum work will need to shift their paradigm of a systematic, linear, cause and effect approach to designing curriculum and embrace a systems approach that focuses on the process. The only way a group of faculty can grow in this type of learning is for individual faculty to experience transformative learning, changing their very paradigms of what curriculum work is.

The notions of quantum mechanics and permanent white water help to describe the kind of work in which professionals need to engage today. As such, it is imperative that the curriculum they experience in graduate professional education prepare them as much as possible for a turbulent profession. The first step to accomplish this type of learning experience is for faculty and other curriculum workers to engage in the messy work of transformative, deliberative curriculum work—work that is dynamic, fluid, and at times chaotic. This will help them to experience a process much like processes they will want to use in their classrooms, and it will lead them in the direction of working through the messiness of curriculum work toward workable, fluid resolutions. This process will also help them to not reify curriculum, but to see it as a something to continually pursue (Reid, 2006). It is not a one-time creation, but rather a continual journey where situations are regularly revisited.

Generative Dialog and Flow.

Isaacs (1999) proposes that managers, educators, and others need to learn how to use dialogue as the "art of thinking together" in order to be effective. He describes distinct steps or phases of dialogue. First is *conversation,* the roots of which mean *turn together* (con verser). People take turns talking. However, while listening, people sift through what they are listening to

and decide what they like or dislike. This is the beginning phase of deliberation. To deliberate, according to Isaacs, is to *weigh out*. People weigh out what they like and what they do not like, and either suspend what they think or defend their assumptions as correct. Typically, people are not particularly aware of whether they are suspending or defending, but in order to reach what he calls generative dialogue, where people can invent unprecedented possibilities and new insights, or a *collective flow*, people need to let go of their positions and views (pp. 40-41). Thus, Isaacs sounds very much like both Mezirow—encouraging people to listen and to let go of their positions and views, and Schwab—promoting deliberation to lead to generative dialogue, or new insights and unprecedented possibilities. This is a good description for the kind of process needed for productive curriculum work.

Isaacs's mention of getting into a "collective flow" sounds much like Csikszentmihalyi's work on the same concept (1990). Csikszentmihalyi describes how negative events create negative feedback that produces disorder in the mind (p. 202), which calls for transformational coping so that people can develop positive strategies and make the self stronger and more complex. People who know how to transform negative stress into a positive flow are constantly processing information from their surroundings. They are aware of alternative possibilities and they feel a part of the surrounding world (p. 205). Csikszentmihalyi's "disorder in the mind," is much like Mezirow's disorienting dilemma; being aware of alternative possibilities resembles part of Mezirow's phases of transformation and Schwab's arts of the eclectic.

Professional Learning.

Schein (1972) pointed out over three decades ago that professional education must emphasize "learning how to learn" (p. 55). Schön's work (1987) helped educators understand how reflection is a critical aspect to learning for professionals. Particularly, as he described

education for architects, he elaborates on a course of action that is much like Mezirow's process

for epistemic reflection and Schwab's deliberative process. Mezirow would say students need to

reflect upon their assumptions, beliefs, and values, especially as they relate to their

epistemological presuppositions. Schön refers to a situation in which students feel stuck in their

learning—a learning bind is created. This position of being stuck or bound can be created when

the epistemological presuppositions meet with dissonance in the classroom or some other

learning environment. For example, when people discover that their espoused-theory is not the

same as their theory-in-use, they feel this bind and dissonance. Reflection-in-action, according to

Schön, is essential to unbinding a learning bind. He elaborates on elements of reciprocal

reflection-in-action between student and teacher:

- Focus attention on the present interaction as an object of reflection in its own right.

- Getting in touch with and describing one's own largely tacit knowing-in-action.

- Reflection on the other's understandings of the substantive material that the instructor

  wants to convey and the student wants to learn.

- Testing what one has understood of the other's knowing-in-action and framing the

  interaction; testing what the other has made of one's own attempts at communication.

- Reflection on the interpersonal theories-in-use brought to the communicative process.

  (pp.138-139)

Unbinding a learning bind is much like what Bridges (2003) calls moving through three

phases of transition in the business and management world:

1. Letting go of the old ways and the old identity people had. This first phase of

   transition is an ending, and the time when you need to help people to deal with their

   losses.

2. Going through an in-between time when the old is gone but the new isn't fully operational. We call this time the "neutral zone": it's when the critical psychological realignments and repatternings take place.

3. Coming out of the transition and making a new beginning. This is when people develop the new identity, experience the new energy, and discover the new sense of purpose that make the change begin to work. (pp. 4-5)

Bridges maintains that in the first stage of letting go, people will experience signs of grieving much like what Kübler Ross discovered in studying death and dying (Bridges, pp. 28-30). First, they are in denial. This is the feeling that some people have when they can not believe that their previously-held position should be questioned. Their emotions can move then to anger, bargaining, anxiety, sadness, disorientation, and depression before they enter what Bridges has termed the second phase, or the neutral zone. This is much like Mezirow's idea of confronting a disorienting dilemma. The neutral zone is that place in Mezirow's theory where people can come together in dialogic exchange and try on new perspectives, identities, and roles. Bridges uses the term "reorientation" for the neutral zone (p. 43). Using both the lens of Mezirow and the lens of Bridges, one could say that the person is moving away from disorientation into a place of reorientation.

The third phase and final stage is what Bridges calls the new beginning. People need four things to navigate this phase: a purpose, a picture, a plan, and a part to play. The purpose must come from within, without being cliché. If it is a group of people, they must derive the purpose from its will, abilities, resources, and character. Bridges states that the purpose "must arise from the way in which these inherent qualities interact with the situation in which the organization finds itself" (p. 63). This sounds remarkably like Schwab's idea of using both categories and

commonplaces for curriculum work because the curriculum planners must take into consideration all the "categories" or inherent qualities of the situation and hear various perspectives as it moves in deliberation toward discovering its purpose (and sometimes the means and ends change in the process, according to Schwab).

People also need a picture to help them navigate the new beginning. Mezirow's idea of a graduate seminar provides a picture of a place where discourse can take place and people feel safe to try on new ideas that lead to transformation. Schwab's picture of examining the ends of a spectrum to deliberate toward the mean helps people to understand the process of deliberation. Curriculum workers and educators need a picture or image of some sort to help them to engage in the deliberative and transformative process and to embrace it fully.

Bridges says the third thing people need to navigate their new beginning is a plan. It provides action steps, or what they will do that will be different from before. Mezirow says that transformation leads to action, and Schwab insists that curriculum work is about making choices and taking action. While Schwab eschews a reified systematic approach, such as promoted by the Tyler Rationale, he promotes a process that leads to decisions that are made locally and uniquely for a given situation. This is much like the plan Bridges talks about.

Finally, Bridges states that people need a part to play for this new beginning. They need to see where they fit into the bigger picture. This gives them a sense of buy-in, worth, and importance. From Mezirow's perspective, they begin to try on new roles and to realize that their perspectives are becoming more open, permeable, and inclusive. Schwab's commonplaces are an example of making sure multiple parties have a part to play in the process.

Besides Schön's reflection-in-action and Bridges's three stages of transition, Heifetz's notion of adaptive leadership for professional learning is an important connection to Mezirow

and to Schwab. Chapman and Randall found a synergistic relationship between the theories of

Heifetz and Mezirow, indicated in Table 10.

Table 10

FOSTERING ADAPTIVE LEADING AND TRANSFORMATIVE LEARNING		
RESPONSIBILITY	HEIFETZ ON LEADING	MEZIROW ON LEARNING
1. Go Deep	Go beyond technical solutions to help people identify the adaptive challenges.	Go beyond instrumental learning to help learners cultivate communicative competence
2. Be Patient with Distress	Regulate distress. Provide comfort by keeping people within an energizing discomfort zone, pacing their work and sequencing issues.	Be empathetic when learners experience a disorienting dilemma. Model critical reflection of presuppositions and premises.
3. Attend to Needs	Create a holding environment for disequilibrium. Gauge the ripeness of strategic issues.	Create a protected learning environment with conditions of social democracy. Block out power relationships.
4. Monitor the Process	Give the work to the people and move back and forth from the balcony to observe. The people must do the work because it is they whose beliefs, values, and behaviors must change.	Use strategies to aid individual reflection and to build a community of discourse. Keep pace with their thinking processes. The learners must do the work of premise reflection because it is only as they reflect that they will be able to transform.
5. Regard Progress	Give voice to ideas that may seem unworkable or disorienting. Let all be heard.	Build confidence in learners' new roles. Protect their rights to choose different perspectives.

Note: A Comparison of Theories: Fostering Adaptive Leading from Chapman, S. A., & Randall, L. M. (forthcoming). Adaptive leadership and transformative learning: A case study of leading by part-time faculty. In J. F. Wergin (Ed.), *Leadership in place* (). Bolton, MA: Anker.

While Mezirow focuses on learning in the individual, Heifetz looks at a group of people, but both stress the importance of helping people to go deep in their critical analysis, to be patient with the distress they experience, to attend to their needs by creating a holding environment, to monitor the process, and to regard progress. These ideas put together create a synergy that looks much like the fluid, recursive process of deliberation, as demonstrated in Figure 9 below. Mezirow helps clarify how individuals transform; Heifetz demonstrates how groups move from being technical problem solvers to being able to embrace uncertainty and complexity and move toward discovering adaptive solutions to them. This is much like Schwab's deliberative approach of hearing multiple perspectives and negotiating to find the mean between the spectrum of ideas, discovering the curriculum problems of the situation, and helping people to move toward resolutions. Heifetz assumes there is a facilitator—one he calls the *leader*. Schwab called the facilitator a *chairman*, a term that will be updated in the generative phase of this theory integration process. Nonetheless, there is one who leads the people, one who moves back and forth between the dance floor and the balcony (Heifetz) and who facilitates the deliberation between multiple voices.

Figure 9 Synergy of the Theories of Heifetz and Mezirow
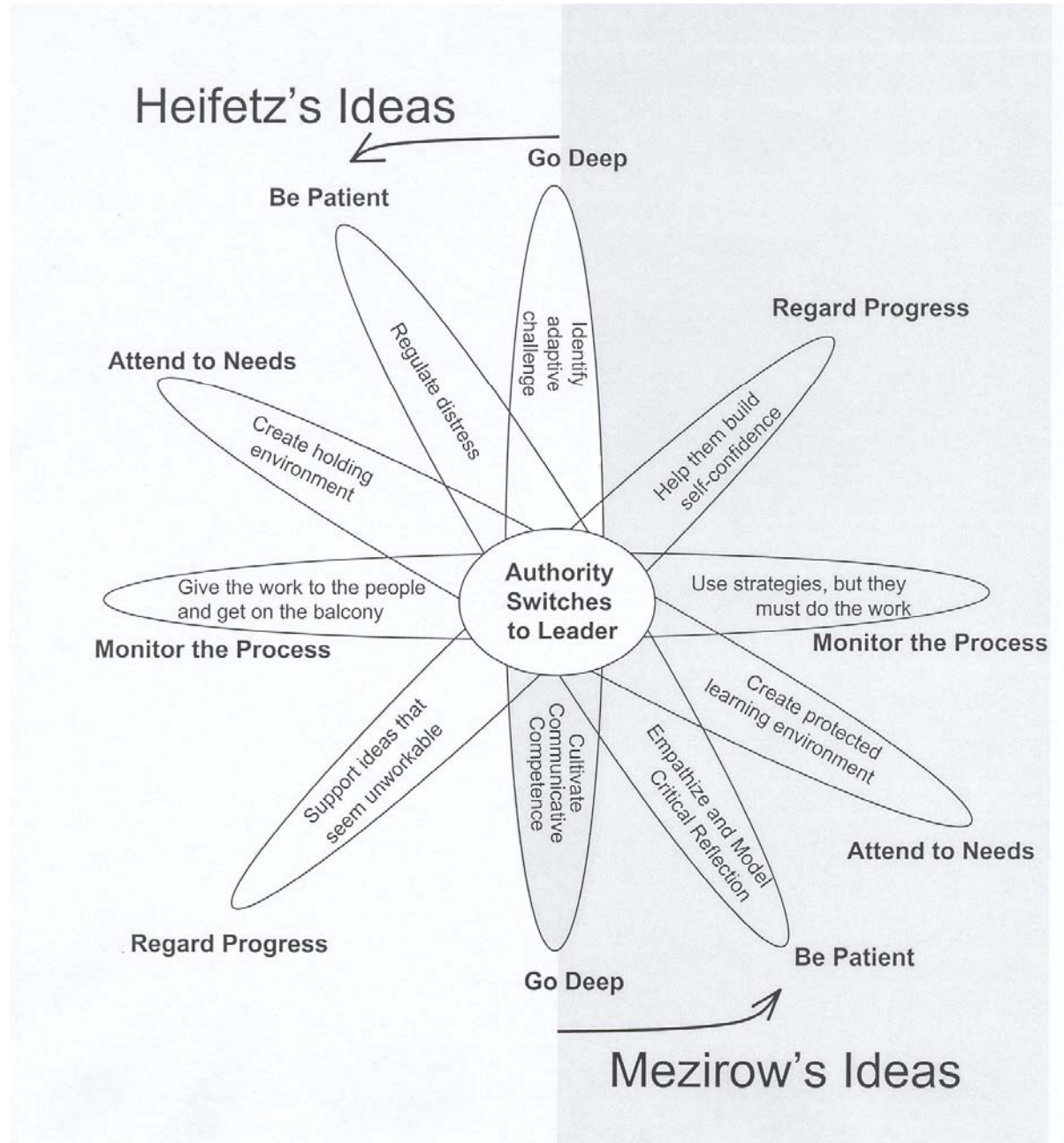
Note: Fostering Adaptive Leading and Transformative Learning: A Synergistic Relationship from Chapman, S. A., & Randall, L. M. (forthcoming). Adaptive leadership and transformative learning: A case study of leading by part-time faculty. In J. F. Wergin (Ed.), *Leadership in place* (). Bolton, MA: Anker.

Others also call for transformative learning and new ways to think about curriculum for professional education. Meuser and Lapp (2004) are very specific about the need to use Mezirow's transformative learning theory for students in MBA programs. They say that if transformative learning through critical reflection does not occur in the classroom, untested assumptions are then carried into the workplace. For instance, if students expect professors to give them answers, they will likely carry that assumption into the workplace and expect their supervisors to do the same. They call for an explicit, overt plan to use Mezirow's theory in designing curricula to help students to become the professional business people they need to be.

A recent publication of the New England Journal of Medicine calls for a transformation of medical education curriculum, especially to inculcate the values of the profession (Cooke, Irby, Sullivan, & Ludmerer, 2006). The authors describe the current situation, a hundred years after the Flexner Report, in this way.

> Ossified curricular structures, a persistent focus on the factual minutiae of today's knowledge base, distracted and overcommitted teaching faculty, archaic assessment practices, and regulatory constraints abound. These challenges threaten the integrated acquisition of technical knowledge and contextual understanding, the appropriately supervised mastery of practical skills, and the internalization of essential values that together make for an informed, curious, compassionate, proficient, and moral physician. (p.1343)

This state of affairs calls for Schwab's type of deliberation, emphasizing the art of problemation, turning a problematic situation into a situation with problems for which people can work together to begin to develop resolutions. However, Cooke, et al., point out that medical schools and the institutions that sponsor residency programs need to develop the will to implement

changes for an appropriate curriculum for the 21st century. Developing such a willingness to engage in change goes to the heart of the values of the educators and developers of curriculum for professional education. There is a need to use transformative learning theory to help educators explore and critically reflect upon their values and to engage in discourse about how to lead students to become true professionals.

Summary of Connection to Graduate Professional Education.

In sum, the integrated theories of Mezirow and Schwab connect to graduate professional education in several ways. First, professionals need to know how to embrace uncertainty and complexity, such as the weirdness of quantum mechanics and the turbulence and permanence of white water. The theories of Mezirow and Schwab focus on breaking out of the taken-for-granted assumptions and "theoretic" states of mind to embrace new and complicated ways of being in the world. Second, in order to move forward in the world of uncertainty and complexity, Isaacs says people need to learn to suspend their own assumptions and judgments and join in deliberation to move toward what he calls generative dialogue, where people can invent unprecedented possibilities and new insights, or a *collective flow*. This is similar to Csikszentmihalyi's *positive flow* which professionals need to transform negative stress and disorders of the mind into a stronger and more complex self.

The third important way in which the theories of Mezirow and Schwab connect to graduate professional education is through the learning endeavor. Schein says that professionals must learn how to learn. Mezirow maintains that transformative learning is the cardinal goal of adult learning, or in other words, the most important way adults must learn. Bridges says that organizations must learn by helping them to let go of old ways, by nurturing them through the neutral zone, and by helping them to make new beginnings. Senge points out that organizations

will not learn unless individuals learn. Mezirow helps organizational leaders to understand how to help individuals to let go and make new beginnings by leading them through a transformative process.

Likewise, Mezirow's theory informs Heifetz's adaptive leadership theory, showing how individuals can transform from technical problem solvers to being more open and inclusive, capable of embracing adaptive challenges. The process that Heifetz encourages is one that focuses on helping students to learn how to differentiate between technical problems and adaptive challenges. This is the very shift that takes place when developers of professional education move away from technical, systematic, linear ways of planning instruction to Schwab's recursive, deliberative, exploratory ways of discovering local, unique curriculum problems—which are really adaptive challenges, not instrumental or technical problems—and work together to discover resolutions for them. The recent calls for transformation in business and medical education curriculum such as exemplified by Meuser and Lapp as well as Cooke, et al., further substantiate the need to provide educators with a heuristic to integrate the theories of Mezirow and Schwab to make this change happen.

6. Use "generative" efforts to reinvigorate the theories of the past, redefine, or recontextualize their meanings to be used in new ways.

This phase of theory integration employs generative theory to bring the older theories up-to-date. Gergen pointed out in 1978 that much theory of the time lacked the capacity to challenge prevailing assumptions regarding the nature of social life primarily because of the commitment of the field to traditional positivist assumptions (1993/1978). In a more recent text (2001), Gergen points out that organizational science has already produced a vast range of theory, and that these various different perspectives are not a deficit, but rather they each represent a

discourse potentiality available for many purposes in a variety of contexts (pp. 164-165). What is needed is to apply what he calls "generative efforts" to reinvigorate the theories of the past, redefine or recontextualize the meanings so as to not cast them from the repository of potentials (p. 165).

Reconceptualist Curriculum Inquiry.

Harris updates deliberative curriculum theory by advocating its use along with reconceptualist curriculum theory, which focuses "on the relationship between curricula and their economic, political, social, and cultural contexts and on the experiential, personal, and hidden meanings associated with curricula" (1993b, p. 484). Using research methods such as ethnography, students' experiences can be studied in a variety of milieus, such as the socialization of medical students attending rounds, or how medical students manage their emotions as they come into intimate body contact with patients. Thus, the curriculum extends beyond the traditional classroom (although the classroom is a milieu that should be studied) and into the laboratory, small group settings, and internships. It is here that the professional attitudes of students can be developed through experiences with role models. The hidden curricula, or the relationships between curricula and the economic, political, and cultural forces in society, become more transparent, enhancing the understanding of the curriculum process.

Language of Modernism.

Schwab began his work on deliberative curriculum work in earnest in 1969 with the first of his essays on the practical. Mezirow conducted his seminal research in 1975. In essence, three decades have passed since these theorists started their work. While neither sought to provide a theory as a reified object to be applied into practice unproblematically, they had hidden assumptions of their own about society and culture that stand out as outdated for today. It could

be said that in some ways they were both modernists, holding on to notions of objectivity, the ability to set aside biases, and believing in the possibility of equal opportunity for people to participate in discourse. A more current postmodern stance would reject notions of objectivity, unbiased opinions, and equal opportunities and acknowledge directly that there is no such thing as objectivity, that people always have biases, and that opportunities are never equal.

It is appropriate to hunt out the hidden assumptions of Mezirow and Schwab because that is exactly what they require their learners and curriculum workers to do. To update the theories of Mezirow and Schwab, Table 11 will provide a quotation of a particular part of their theory and then propose a revision of the language to reflect a stance that is leaning more toward a postmodern position.

Table 11

"Reinvigorating" the Theories of Mezirow and Schwab	
Their Words	Updated Adaptation
To more freely participate in discourse, participants must have the "ability to weigh evidence and assess arguments objectively" (Mezirow, 2000, p. 13)	To more freely participate in discourse, participants must be self aware, able to identify their own biases, and they must suspend judgment of others' ideas while attempting to genuinely understand their perspectives.
To more freely participate in discourse, participants must have an "equal opportunity to participate in the various roles of discourse" (Mezirow, 2000, p. 13).	To more freely participate in discourse, participants must understand that most human relationships are asymmetrical and most communities include the immature and marginalized. Processes of discourse should include ways of "drawing out the voices and minds of marginalized peoples, enabling them to participate in reflective discourse communities and become more fully integrated into the social, economic, and political life of the whole society" (Belenky & Stanton, 2000, p. 74).
The *chairman* is responsible for removing "barriers arising from biases, stereotypical responses toward one another, and omissions in the earlier education of members of the group" (Schwab, 1996/1983, p.103).	The curriculum leader should be sensitive to the fact that barriers will exist in the room, coming from biases and stereotypical responses toward others. A lack of education may also contribute to limited perspectives, but all should be treated with respect and led toward openness with one another.
"With the curricular problems defensibly formulated, solutions must be devised or discovered." (Schwab, 1996/1983, p. 109)	After using the art of problemation—taking a problematic situation and turning it into a situation of problems to be worked on, alternatives for resolutions will be discovered. Resolution is a better word

	than solution because it is not so definite. It is more postmodern than modern.

(Chapman, 2006)

Changing some of the language of modernism to reflect a more postmodern approach to transformative learning and deliberative curriculum theory is a small, but important step toward updating the theories. It is instructive, however, to reflect upon the ways in which both theories *did* anticipate postmodernism. Schwab, for example, eschewed any type of prescriptive, linear, unproblematic approach to designing curriculum.

> The method of the practical (called "deliberation" in the loose way we call theoretic methods 'induction') is, then, not at all a linear affair proceeding step-by-step, but rather a complex, fluid, transactional discipline aimed at identification of the desirable and at either attainment of the desired or at alteration of desires." (Schwab, 1978/1970, p. 291)

Indeed, one of the criticisms Schwab has received has been how complex this process seems to be when compared to the systematic approach. Schwab wanted to characterize a process—a messy one at that—rather than prescribe a systematic approach to designing curriculum. This is more postmodern than modern in character. In fact, Cevero and Wilson (2001) update Schwab's work by pointing out that deliberations can usually be characterized as negotiating interests, or even brokering knowledge and power (p. 278). They prefer the term *brokering* over *negotiating* because of the political nature of curriculum work. This is discussed more fully in the next section on power and the learning and curriculum process.

Mezirow also sounds postmodern in some aspects of his works. He says that adult educators are never neutral (2000, p. 30). Furthermore, he describes the transformation process in terms that sound distinctly postmodern:

> Autonomy here does not represent a fixed goal to be achieved or an arbitrary

norm but movement in the process of transformative learning toward greater

understanding of the assumptions supporting one's concepts, beliefs, and feelings and

those of others. Emancipation in this context is no search for certainty and control

through totalizing explanations and the elimination of difference. Nevertheless, concepts

such as autonomy, emancipation, rationality, education, and democracy are all contested

meanings that require continuing critical reflection on their assumptions and practices,

and validation through continuing discourse. (2000, p. 29)

Therefore, while both Schwab and Mezirow used postmodern ideas to frame their theories, they

also had assumptions, beliefs, and values that stemmed from modernism, exemplified by Table

11 above. Changing some of the language they used helps to reinvigorate their theories to make

them even more suitable for today.

Power and the Learning and Curriculum Process.

Mezirow speaks of self empowerment, that the goal of adult learning should be

"acquiring greater control of one's life as a liberated learner" (2000, p. 27). However, he

acknowledges that this process is always limited by social, historical, and cultural conditions. He

maintains, though, that transformative learning "involves liberating ourselves from reified forms

of thought that are no longer dependable" (p. 27). However, Mezirow seems a bit naïve in

believing that educators can create protected learning environments in which the conditions of

social democracy necessary for transformative learning are fostered. He states that "this involves

blocking out power relationships engendered in the structure of communication, including those

traditionally existing between teachers and learners" (p.31). While this sounds like a noble goal,

Brookfield (2000b) takes issue with this stance.

Although it is important to privilege learners' voices and to create multiple foci of

attention in the classroom, it is disingenuous to pretend that as educators we are the same as students. Better to acknowledge publicly our position of power, to engage learners in deconstructing that power, and to attempt to model a critical analysis of our own source of authority in front of them. This involves us in becoming alert to, and publicly admitting, oppressive dimensions to our practice that learners, colleagues, and literature have helped us to see. So critical reflection on power in the adult classroom sometimes leads to a fundamental reordering of how power is named and understood. Learners become transformative agents of their own education, cocreators of knowledge and curricula. (p. 137)

While the goal is democratic conditions for discourse and learning, Mezirow's ideas must be updated to embrace the stance that we cannot ever provide a full and free democratic condition and that it is better for educators to name the power in the room, and work toward helping students to deconstruct that power that is always already there. To reinvigorate Mezirow's theory in this way would mean to add this intentional action to the phases of transformation, which could be placed after his third phase, "a critical assessment of assumptions." Therefore, the new fourth phase in the reinvigorated theory would be, "An acknowledgement that power is always already present in the learning context and that it always influences our perceptions about ourselves and our surroundings."

In the same way that Mezirow's ideas can be updated regarding the issue of power, Beyer and Apple (1998) state that Schwab may see the curriculum process as more rational than it really can or should be. However, while Schwab does not acknowledge that "facts" are constructed by the educational and ideological agendas of the people who ask the questions and generate such data, his theory is important because he emphasizes being open to as much, often

contradictory, information as possible and weighing this in regard to *both* ends and means (p 9). Posner points out, however, that Schwab's work is still different from a critical perspective, as demonstrated by Freire's work. Freire emphasized an emancipatory curriculum through developing critical consciousness. He recommended a series of steps to help students achieve this critical consciousness. First, educators need to help people to develop generative themes that represent their view of reality. Second, a group of people (professional educators as well as local volunteers) dialogue cooperatively to identify themes to be used for the curriculum. Next, the materials are used in what he called "culture circles" as the focus of discussions. Ultimately, this leads to what Freire named *praxis*, or action based on critical reflection.

The important shift in power here is away from the authority of experts, to a more shared power between teacher and student as co-investigators. Schwab is criticized for using "experts" to speak for the commonplace of the student, not the students themselves. This was because he was focused primarily on children, however. In higher education, and certainly for graduate professional education, students themselves are part of the commonplaces Schwab uses for the deliberative process.

Nonetheless, the critical perspective raises our consciousness regarding the assumptions underlying our curriculum work. The representatives of the commonplaces must be aware of the assumptions they hold and the implications of their use. To raise their consciousness, a series of critical questions (or a subset or adaptation of them), such as provided by Beyer and Apple could be used at the start of the curriculum work, and used as a touchstone throughout the process.

1. Epistemological. What should count as knowledge? As knowing? Should we take a behavioral position and one that divides knowledge and knowing into cognitive, affective, and psycho-motor areas, or do we need a less reductive and more integrated

picture of knowledge and the mind, one that stresses knowledge as process?

2. Political. Who shall control the selection and distribution of knowledge? Through what institutions?

3. Economic. How is the control of knowledge linked to the existing and unequal distribution of power, goods, and services in society?

4. Ideological. What knowledge is of most worth? Whose knowledge is it?

5. Technical. How shall curricular knowledge be made accessible to students?

6. Aesthetic. How do we link the curriculum knowledge to the biography and personal meanings of the student? How do we act "artfully" as curriculum designers and teachers in doing this?

7. Ethical. How shall we treat others responsibly and justly in education? What ideas of moral conduct and community serve as the underpinnings of the ways students and teachers are treated?

8. Historical. What traditions in the field already exist to help us answer these questions? What other resources do we need to go further? (pp. 5-6)

Curriculum work is always political in nature. Cevero and Wilson (2001) maintain that the goal of redistributing power through adult education has been a constant theme in the literature of the field (p. 9). They offer three premises regarding power and adult education:

(1) there is a reciprocal relationship between power and adult education, (2) adult education is a site of struggle for knowledge and power, and (3) all adult educators practice with a social vision." (p. 10)

Because curriculum work is always political, and since power differentials continually exist, a form of negotiation or brokering must be used in the deliberation process, and the deliberation

leader must be always growing in awareness of the power and politics in the process."

Tisdell (1998) claims that one of the roles of higher education is to contribute to creating a more equitable and just society. Often universities offer classes such as ethnic studies or women's studies, but such classes are often viewed as places to resist the dominant culture. In spite of trying to challenge power relations in these classes, they sometimes perpetuate the very power relations they seek to confront. Instead, Tisdell provides a very useful list of things adult educators should pay attention to in trying to teach for social change.

- Integrate affective and experiential knowledge with theoretical concepts.

- Pay attention to the politics and positionality inherent in knowledge production and among participants in the class.

- Acknowledge the power disparity between teachers and students

- If possible, team teach with someone who is positioned differently relative to the dominant culture.

- Require students to be in teaching roles.

- Consider how curricular choices implicitly or explicitly contribute to challenging structured power relations.

- Be conscious of the ways in which unconscious behavior contributes to challenging or reproducing unequal power relations.

- Build a community based on openness, affect, and intellectual rigor to create a democratic classroom. (pp. 161-162)

Tisdell's list for educators is equally helpful for curriculum workers to keep in mind while engaging in the tough work of deliberation, particularly paying attention to politics and positionality in the process. This seems to be the most important aspect of working toward

creating a democratic curriculum process that leads toward modeling for and creating a democracy.

Newman (2006) addresses power explicitly and directly. He maintains that before a group of people can enter into negotiation, they need to think about the power of the different parties involved. He suggests a way to teach negation is by first asking a series of questions that focus on power. For instance, he asks participants to think on their own for a moment of someone that they have some kind of power over and how they demonstrate that power, and where their power comes from. After they have some time to think about this, he asks them to think of someone who has power over them and discuss this with a few people in the group. Through the large group debriefing he likes to draw out a number of definitions and ideas on applications and sources of power (p.119). This process would help people to focus on and talk about the notion of power. Newman says that analyzing power is a useful precursor to any engagement; it helps us to understand ourselves and the people with whom we are engaged, and it helps us to choose the kinds of action we will take (p. 127). To use this example, curriculum work would begin with a discussion, among other things, on power using Newman's example.

In sum, to reinvigorate the theories of Mezirow and Schwab, we must talk about power, politics, and positionality. Since all curriculum work is political in nature, the metaphor I choose to use to describe the necessary process to create a deliberative curriculum in a highly political environment is the *caucus*. The caucus is a meeting in which people with shared interests come together to make decisions for policies, plans, or appointees, to further their interests (Oxford English Dictionary, 2006). It carries with it the connotation of deliberation, and even brokering, and the process leads to decisions and actions, to serve the common good of the group. In order to be effective, participants must listen to each other and hear different perspectives by which to

judge their own. In the same way that the Black Caucus seeks to advance the cause of African American people, the National Women's Political Caucus promotes the participation of women in the political process, and the Women's Caucus for Art seeks to advance women's contribution to art, the curriculum caucus for graduate professional education will promote shared values about learning and curriculum building. Particularly, members of the curriculum caucus will work to advance the cause of graduate professional education where students become more inclusive and permeable in their habits of mind, move from a singular sense of careerism to a calling to participate in a fiduciary relationship with society, and profess their special knowledge for the public good, hence becoming true professionals.

The curriculum caucus will begin with an exploration of power, politics, and positionality and how these forces influence the process of the caucus work. However, the caucus will keep this discussion as a touchstone to come back to throughout the process of deliberation toward shared decisions and action planning. In essence, these themes will be "in the room" during each caucus session, requiring attention as needed.

The Pedagogy of Understanding.

Besides reinvigorating the theories of Mezirow and Schwab by updating the language to a more postmodern stance and focusing explicitly on power, politics, and positioning, it is instructive to discuss the research done in the 1990s regarding a focus on the notion of *understanding* (Wiske, 1998). Started in 1988, principal researchers Howard Gardner, David Perkins, and Vito Perrone initiated a study that lasted six years and focused its inquiry on understanding. This research emerged partly as a reaction to the narrow skills-oriented curriculum that dominated the K-12 schools in the last decade of the twentieth century, and also because of wide-spread evidence that students were not receiving an education of

power and consequence—one that allows them to be critical thinkers, problem posers, and problem solvers who are able to work through complexity, beyond the routine, and live productively in this rapidly changing world (in what is often referred to as the global economy). (Perrone, 1998, pp. 13-14)

The need to work through complexity in the midst of uncertainty and constant change requires students to go beyond knowledge, which according to Perkins (1998) is "information on tap," and skills, which are "routine performances on tap" (p. 39). Researchers in the Teaching for Understanding project have come to use the definition of "flexible performance capability" for the term understanding (p. 40). It is more like learning to play jazz, to hold a good conversation, or to rock climb than learning discrete information such as multiplication tables. Learning facts and skills can be a crucial backdrop for learning for understanding, but it is not the same as learning understanding. This kind of learning is in line with both transformative learning theory, which goes beyond instrumental learning (knowledge and skills) to uncovering tacit knowledge—assumptions, beliefs, and values that influence one's perspectives, and deliberative curriculum theory, which seeks to uncover the complexity of the curriculum process through hearing the varied perspectives of multiple stakeholders. Intentionally planning to teach for understanding can increase the likelihood that students may come to transformative learning experiences. How do teachers teach for the type of understanding Gardner, Perkins, and Perrone promote?

A pedagogy of understanding requires deliberation over four important questions.

1. What topics are worth understanding?

2. What about these topics needs to be understood?

3. How can we foster understanding?

4. How can we tell what students understand? (Wiske, p. 61)

However, answering these questions can prove to be challenging for some teachers because the most fundamental aspirations for their students are deeply rooted in assumptions and values that usually remain tacit. It can be personally revealing to have these assumptions uprooted and it is often very difficult for faculty to put into words ideas that may still be inchoate and private in part because they are so heartfelt (p.68).

The significance of the pedagogy of understanding or teaching for understanding is threefold. First, it will provide a flexible framework for curriculum workers to use to deliberate over these issues—how to take learning to the deeper level of understanding, or to communicative learning rather than only instrumental learning. Second, it will require curriculum workers to surface their tacit assumptions about understanding in general and about understanding certain aspects of the targeted learnings in particular. This could lead to disorienting dilemmas about which they will need to critically reflect and for which they will need a supportive environment. Third, it provides the link between transformative learning for the curriculum workers and teachers and the students. As faculty experience transformation they will have a model and a framework to plan for the same types of experiences for their students.

Wiggins and McTighe (2005) have developed a conceptual framework to promote the pedagogy of understanding which they call "Understanding by Design." This framework is fluid and flexible, not fixed or linear. It gives curriculum workers a touchstone to deliberations. In fact, the process is built upon deliberative processes. "We build upon Schwab's idea…to propose that every discussion of 'content' requires a consideration of the meaning and value of the content from different points of view if understanding is to occur and mere coverage is to be avoided" (p. 97). The framework is built around three stages, although it does not follow a step-

by-step process (p. 29). The stages are to (1) identify desired results, (2) determine acceptable evidence, (3) plan learning experiences (p. 18). Determining evidence before planning learning experiences is one of the hallmarks of the *Understanding by Design* framework.

Summary of Phase 6 –Using Generative Theory to Reinvigorate the Theories of Mezirow and Schwab.

The theories of Mezirow and Schwab must be updated in there three major ways. First, their language of modernism needs to advance to convey a more postmodern stance. Updating their language from a modern stance to a more postmodern stance is in keeping with other aspects of their theories that are more postmodern. For instance, Mezirow acknowledged that adult educators are never neutral and that autonomy, emancipation, and democracy are terms with contested meanings requiring critical reflection. Furthermore, Schwab maintained that deliberation is always complex, fluid, and nonlinear. Deconstructing their modernist language and changing it to convey a more postmodern stance will reinvigorate the theories.

The second way in which these theories need to be reinvigorated is through addressing the existence of power differentials. Neither transformative learning theory nor deliberative curriculum theory adequately, directly, or overtly address the issue of power differentials. By preparing the deliberation leader to better understand the issues of power, politics, and positionality, that leader will be able to first lead the group to address the power that is always already there in the process. Also, the leader will be able to use questions about power, such as suggested by Newman (2006), and/or specific strategies as suggested by Tisdell (2000) to help facilitate a process that is more open to understanding the issues of power, politics, and positionality in the curriculum work process. Encouraging the group to talk about these issues is an important precursor to effective deliberation.

Finally, the theories of Mezirow and Schwab need to be updated to take advantage of the work done on the pedagogy of understanding during the decade of the 1990s. Research on how people develop deep understandings, going beyond instrumental or technical knowledge and skills, enhances the communicative and deliberative aspects of the theories of Mezirow and Schwab respectively. The pedagogy of understanding provides a framework for discussion in the deliberation process, and it informs the curriculum workers on how students using the curriculum can work to construct complex and enduring understandings.

7. *Reflect upon the empirical research on the theories being studied and integrated*

This section of the framework on theory integration focuses on the actual research conducted on the two theories being integrated. Analyzing how the two theories have been studied informs the theory builder on how to study the two theories once they are integrated into a new heuristic.

Empirical research informs the theory builder. Mezirow's study using grounded theory as a method led him to inductively create his ten phases of perspective transformation. As noted in chapter two, most all of the research designs on transformative learning theory have been constructivist and qualitative, most likely indicating that the theory is not easily studied from a positivist paradigm. When people experience a transformation of perspective, it tends to be more of a deep phenomenon to explore than a quantifiable experience to verify. Therefore, the research methods are predominantly utilized to understand and explain this phenomenon, whether through phenomenology, ethnography, or case studies. Several studies (King, 2000, 2002, 2003) relied upon an instrument which required the participants to identify for themselves whether they had experienced a transformation. This methodology is weak because participants may not be able to identify their own perspective transformation, and they may have been influenced by how they thought they should respond to the instrument. Hence, observational techniques through interviews, open-ended questionnaires, and hermeneutical analyses of artifacts, such as journal entries or reflection papers would be the best way to gather information on this phenomenon as it is integrated with the deliberation experience.

Little empirical research has been done on deliberative curriculum theory. It is my position that the reason for this is that educators have a hard time understanding the process, the process is messy, and it is seemingly amorphous and difficult to envision, and therefore difficult

to analyze or study. My responsibility in creating a heuristic will be to bring just enough

structure to the process for people to try to engage in it and to study its consequences, without

resorting to making a highly structured, linear, systematic process to follow.

One very interesting discovery in reading the research on deliberative curriculum work,

however, is the fact that two studies employed the Nominal Group Technique (NGT) (Moore,

1994). The NGT approach is a structured group process technique which came from the

management sciences, and which helps curriculum workers to clarify their values regarding what

they believe their students should understand. While the NGT approach actually requires

participants to vote on priorities, I have used an adaptation of this process focusing on

deliberations toward consensus. Specifically, I used the *Understanding by Design* (Wiggins &

McTighe, 2005) framework to facilitate curriculum deliberations, much the same way that

Hegarty (1971) and Bonser and Grundy (1985) did to help participants to identify problems and

solution phases in curriculum deliberation. Rather than having participants vote on

understandings they see as most important, the focus is on clarifying and prioritizing

understandings together. Using the NGT approach along with the Understanding by Design

framework provides a flexible structure for the deliberative curriculum work, but it must be

adaptable to accommodate participants who may experience disorienting dilemmas in the

process. At that point, the NGT of prioritizing what is deemed most important becomes the

guidepost for deliberation. The heuristic I developed, called the curriculum caucus guide,

incorporates the NGT notion of prioritization of deep understandings, important knowledge and

skills, and worthwhile information. Dialoging about what the deep understandings are and

prioritizing targeted learnings for students integrates the pedagogy of understanding with the

deliberative process, and can lead to disorienting dilemmas as participants are confronted with disagreements. However, these deliberations can lead to transformation for participants.

In sum, the new heuristic of the integrated theories of Mezirow and Schwab will need to be studied. To do so, constructivist, qualitative research methodologies are probably best suitable to study the phenomenon of perspective transformation and the process of deliberation. The heuristic created as a result of this study should provide enough structure—a sort of scaffolding—to invite prospective researchers to study the effectiveness of the curriculum caucus.

8. Reflect on the theory-builder's own experience and practice that informs the theories being integrated

I have conducted many curriculum design and redesign processes over the past 14 years in a variety of different schools and universities. In these experiences I served in different capacities—as an instructor, as the coordinator of academic support, the director of a center for teaching and learning, as program director for various types of programs, and as an independent consultant. These experiences inform my creation of the curriculum caucus heuristic to transform graduate professional education. To document how my practice informs my theory-building, I will present four vignettes from my past experiences, two in which neither transformation nor deliberation took place and two in which it did. These narratives will be deconstructed to better understand the meaning of what happened in the various processes and how it informs curriculum workers going forward.

Vignette I. "Content to Action"

A Systematic Approach to Designing Business Curriculum.

Bob was an associate professor at a university several states away. He had published a chapter in book about how to design curriculum for a business program. Therefore, he was considered to be an expert, and he was invited to come to a school to head up the development of a new curriculum. I was asked to join the working group as part of the collaborative team. I was assured that Bob would be leading discussions and building consensus, that he would not come in with his own way of designing the curriculum and assume it would be the new design. It sounded like a promising endeavor and I went to the first meeting with high hopes for an engaging discussion with the group.

Five men and three women were present. Three of the men were associate professors, one was an assistant professor, and one was a part-time instructor who was an expert entrepreneur (a regionally well-known millionaire). One woman was an assistant professor; the other two of us were considered "staff." Bob was introduced by a leader in the school, who then left the room. Bob stood up and began to tell about the program he designed for his school. (Later, we discovered that the program he championed was now defunct for a variety of reasons, but he did not disclose this information upfront.)

Bob started the meeting with a description of the program he created at the other school. This description was detailed and long. I expected that we would discuss whether or not we should do something like this, but he did not make that an option. He moved forward as if this is why he was invited—it was going to be Bob's way or no way. After the meeting I went to the administrator who had invited him and asked if the plan was simply to adopt Bob's program or to engage in discussion to decide what would be best. The answer was the latter—that Bob understood how important it would be to collaborate together.

Not so. In the next meeting he stood up in front of the group at the podium, as if he were the teacher, operating the computer and using slides to describe his program in more detail. Then he asked for the group to suggest ideas for learning outcomes. It was then that I realized the disconnect. Bob thought that he would collaborate on the subject matter, but not on the format which he had designed and which was very different. So, in essence, he brought his program and process, but asked for input from the faculty on specific targeted learning outcomes.

The meeting continued with him listening to the group and making a long list of behavioral objectives. I raised my hand and asked who they wanted their graduates to *be*, not just what did they want them to be able to do. I suggested that we should talk about deep, enduring understandings and values we want the students to have as graduates, not just knowledge and skills. Bob politely announced that we would not be using the word, "understanding" because it could not be measured. He explained that all the objectives would be behavioral objectives. This was not something we discussed as a group. He talked often of having students engaged in action learning, and he seemed to equate action learning with constructivism, even though he was working from a behavioral perspective as evidenced by his refusal to use the word understanding.

In a subsequent meeting, I ventured to suggest again that it would be useful to talk about understanding and that we could create ways for students to demonstrate understanding. Again, he simply shut down the suggestion by saying we would not do that, and he moved on to talk about other things. A few minutes later, Tim, the wealthy entrepreneur who was participating in the group spoke up and said, "I think we should revisit what Shelley is saying about understanding." Immediately, Bob agreed with Tim and it was suddenly OK to use the word understanding in planning.

However, the meetings that followed were full of listing all the things these students needed to learn how to do. Bob kept saying that they would take the content and apply it—that this would be the ultimate demonstration of learning. He called it "content to action" and eventually listed 40 different things these students would be able to do.

I realized I did not have a voice. After one of the other male associate professors and the one female assistant professor stopped attending, I also stopped going to their ongoing meetings. Eventually, the program design was completed and promotional materials called it an excellent technical degree program. I thought the word technical was an apt description.

Later, I saw that he would be presenting on this program at a national conference and my name was still associated with it on a list of people who were on the original planning committee. I had to call him and ask him to please remove my name from the list.

Analysis of Vignette I. "Content to Action"

The story of Bob's "Content to Action" process of designing curriculum is fraught with problems. First, Bob had assumptions about what he was asked to do, but those assumptions about the process were not shared by all the members of the group, or by the leader who invited Bob to come. When I tried to engage him in discourse about the curriculum work process, I was dismissed as being wrong (objectives needed to be stated behaviorally, and we should not talk about understanding). Bob was using a technical, systematic, linear approach to build a behavioral program. He was applying technical solutions to adaptive challenges (Heifetz) and he was focusing almost entirely on instrumental learning for students, not considering communicative learning (Mezirow). I was trying to engage him in deliberations about building a transformative program. We could not enter into discourse because we were not communicating from the same paradigm. He held assumptions, beliefs, and values about how the process should

go, and I had very different assumptions, beliefs, and values regarding the process. We were at a stalemate.

It would have been helpful to begin with a discussion on the different approaches to building curriculum. Operating from the Tyler Rationale, he focused on instrumental learning and technical problem solving skills and conducted the curriculum session in a linear, top-down way, even standing at the front of the room as if he were the teacher. If we had discussed the different approaches to curriculum work first, we would have at least understood where each stood on the matter. As it was, we did not have shared assumptions, beliefs, or values, and therefore we had no shared discourse. Deliberation was not sought or even desired because curriculum making was viewed as "theoretic" rather than "practical" in the Aristotelian sense. For Bob to enter into deliberation, he would have had to first challenge his own assumptions, beliefs, and values regarding the curriculum work process. In short, Bob needed a transformative learning experience to help him to understand the deliberative curriculum process.

Of the commonplaces, teachers were well represented, and they had the biggest influence. The subject matter was somewhat represented by the full-time faculty and the part-time faculty member who was also an entrepreneur. However, the other three commonplaces—students, milieus, and curriculum making—were not well represented. If students had been represented we may have heard something different about what they need to learn. Had we considered the milieus that affected the process, we would have looked at the contexts in which the students live and work now, the professional work environment to which they aspire, graduate professional education in general, and the milieu of this particular school. Furthermore, we would have to take into consideration the competing demands of professionals to serve the public good, while also building their careers so they can care for their families.

Probably most obvious problem we had in this process was that he held power *over* the people in the room, especially over the women. He seemed to yield power to the very wealthy part-time faculty member. The process was not collaborative, despite the fact that he asked the group for suggestions on what the students needed to be able to do. We should have discussed power relationships in the room before we started the curriculum work. However, Bob was under the impression that he was brought in as the expert, so he had the power. The administrator who invited him should have had a meeting with the whole group, including Bob, to discuss the power relationships in the room. This would have helped us to get started with shared understandings of how the group was to function. Through the early discussions on power and curriculum work, I believe Bob would have confronted some of he preconceived assumptions about the process. This may have led him to a disorienting dilemma, causing him to reflect upon the validity of his assumptions and possibly leading him to transform his perspectives. If his perspective on curriculum work had transformed, deliberation could have proceeded.

Vignette II. "Welcome to Our School"

A Radical/Existential Approach to Designing Education Curriculum.

I was contacted by a school far away to come as a consultant to help them redesign their graduate program for teacher preparation. Since it was so far away they decided to send to me a lot of information ahead of time, such as minutes of past department meetings, program and course descriptions of the current program, marketing materials, enrollment numbers and projections, and brief faculty biographies. This way I could try to get to know the school as much as possible before arriving. I would have only two days to be on campus.

I also began communicating with Paula, the department chair, a few months before going. We corresponded by email and by phone. She was able to give me her perspective on the

condition of the program, such as the low faculty morale, increased number of courses, but decreased enrollment in those courses, and infighting among the faculty. She also sent to me copies of all the correspondence she sent in advance to them announcing our curriculum work days. I was told that the environment was very liberal, that several faculty were Marxists, others were strong advocates for feminism, queer theory, and/or critical theory. I did not expect to encounter a strong, systematic approach resembling the Tyler Rationale. Instead, I felt challenged to feel the pulse and understand if the milieu were more radical or more existential.

When I arrived, I found out I was to meet with only four people on the first day, which I did. I led them in a modified version of the nominal group technique and demonstrated how to use the *Understanding by Design* framework to deliberate over decisions that needed to be made. We also discussed how to do program evaluation. These faculty members, two women and two men, were open and interested in the process. I was taken to dinner by one of the faculty members and his family, during which time I heard more about the morale problem among the faculty. I was picked up the next morning for my all-day curriculum work session with the whole faculty.

I was taken aback when I arrived. Thirty-five faculty members filled the large room! I had no idea there would be so many! I found out that part-time faculty had been invited, too. I was trying to figure out what to do with such a large group of people when I heard Paula introduce me and say, "Welcome to our school."

I began by giving them an overview of the deliberation process using the *Understanding by Design* framework. This idea was well received the day before in working with the smaller group. However, when I was on the third slide of my presentation one of the faculty members, who was very passionate about his subject area, interrupted me and began to object saying

among other things, "How can you do this? I don't think this process can capture what I do in my classroom with my students." I responded, "I embrace everything you just said, and we need to hear what you feel is important for your students. Please view this presentation as a suggestion to start our conversation, not the plan I think you should implement." He seemed to appreciate that response and I went on.

While I was talking, in my head I decided to break them into six groups of five or six people each, and to give each group a curriculum situation to discuss to try to articulate a problem and to suggest possible resolutions. When we started to break up into groups, a female senior faculty member named Margaret from the back of the room started to speak out forcibly. "Who said we have to do this? Who decided we needed to redesign the curriculum? We did all this last year. Why do we need to do it again? I think this is a waste of time." The department chair stood up and addressed her questions. I am not sure now what she said, but it was not authoritarian. Rather, it was conciliatory and so the disgruntled faculty member was appeased at least for a while. I found out much later that this faculty member had published a book about curriculum.

I moved nimbly from group to group giving small bits of advice on how to deliberate together. Some of the groups were highly functional, engaging in meaningful dialogue and deliberation among themselves. Others were consumed with one issue and could only talk about that, such as the need for diversity in the curriculum. Others were chatting about unrelated things. One group, the one with the disgruntled faculty member became mired in negativity and did not produce any meaningful work. They sat and complained the whole time.

After lunch and more group work, where I moved from group to group, the large group reconvened for a report out session. This was the hardest part of the day for me. I listened to each

group report out what they felt the most important understandings should be for the students and how they would know the students had achieved their understandings. Instead of individuals deliberating among themselves, the groups were deliberating as groups back and forth. This process just emerged and seemed to work for the amount of time we had. From time to time we still heard negative comments from Margaret who was spreading her low morale throughout her group.

By the end of the day I was able to lead the large group in reflection on the activities and the processes they had engaged in. The department chair was satisfied with the written results. She felt it was a starting point for them to continue deliberations. One of the faculty members who had been sitting quietly in the unhappy group walked toward me slowly after we had dismissed. She shook my hand and said, "You are one hell of a facilitator."

Analysis of Vignette II. "Welcome to Our School"

Paula's trust in me was very helpful as I prepared to go to this school. She communicated with me openly and freely. She also communicated well with Margaret, the disgruntled faculty member. Despite her good communication skills, the most obvious problem with the second vignette was the fact that not everyone in the room saw the need for or the value of redesigning the curriculum. While multiple stakeholders were sought out to represent their opinions, the negative people became a detriment to the deliberative process. Furthermore, there were too many people involved for too short a period of time. At best, I was able to describe the deliberative process, get them started in small groups and visit them regularly to help them along, and then suggest ways to continue this process after I left.

Within the small groups I noticed several important developments. One group was consumed with a "big" idea—what they called diversity, but what seemed to touch on issues of

power. They were more like radical curriculum theorists than deliberative workers. They wanted to focus entirely on how to free the curriculum from hegemony and to make the program more inclusive and diverse.

The negative group was focused on themselves in the moment. They felt they were the experts and that they already knew what should be done, how it should be done, and in fact, they thought it was already done. These participants were more like existentialists. In essence, they became conscientious objectors of the process, based on principle. They chose not to participate. This was their prerogative, of course, and no one was forced to participate. Apparently, however, they had been required to attend the meeting. Deliberation can not be successful when people called to be the deliberators do not want to participate.

It was helpful to have part-time faculty present to provide another voice for the commonplace of the teacher. I believe the milieu commonplace was also rather well represented as faculty talked passionately about the environment they wanted to create for the students in their classrooms. What I did not hear was discussion about the milieus students would be coming from, or the milieus of the schools to which they would go to work. There was no apparent representation for students, and the commonplace of curriculum work was something I felt I was working on all day long. In sum, the commonplaces were not all present and certainly not equal.

In conclusion, the most important lesson from this experience was that people need to explore what makes the deliberative curriculum process worthwhile. This type of exploration can lead to a disorienting dilemma. For instance, for the faculty who felt this was a waste of time, to think they needed to engage in curriculum design after they had done so not very long ago (maybe a year or so before) seemed insulting and redundant. Their perspective was that it was done. In order for the process to move forward, they needed a perspective transformation. In

order to follow up with that process, the deliberation leader would have needed time to engage them in dialogic exchange regarding the nature of the curriculum now and what it could be, the processes they used before and the processes proposed to be used now, and the targeted outcomes of the curriculum now and what new proposed outcomes could be. This would have been an important first step. When people are in the group who do not want to be there, the process is hindered.

Another important lesson from this experience is that time is needed for the process. To meet with a group for one or two days means that the deliberative process is described, briefly demonstrated and modeled, and promoted, but not fully used to design or redesign curriculum. The group would need to continue to meet with a deliberation leader on a regular basis to work toward creating a new curriculum.

Vignette III. "Sheer BLIS"

A Transformative and Deliberative Approach to Creating a Leadership Program for Business Officers of Independent Schools.

Nancy, an attorney and prominent owner of a national business approached the school to create a graduate certificate for business leadership of independent schools (which we came to affectionately call BLIS." Independent schools could be any level or levels of P3 to high school, including boarding schools, which were not public or connected to a religious board. The targeted student population would be national, requiring a design that would account for the need for some type of distance learning. Offering a significant amount of money for start-up costs, and being a part-time instructor for the school anyway, Nancy also wanted to be part of the design process. I was asked to facilitate the process of creating the curriculum.

I contacted two members of a national association for business officers (one from Hawaii

and one from Colorado who were willing to come for meetings at their own expense), two local business officers of prominent independent schools in the area, and curriculum specialists (including one who was an expert in technology) to join us for the first meeting. We began by using the *Understanding by Design* framework to shape our deliberations. I quickly sensed tension in the room between the local business officers and the representatives from across the nation. I did my best to facilitate, drawing out the voices of some who were quiet. The local people seemed to feel more power in the process and the people who had traveled far seemed hesitant to speak up. Nancy did feel comfortable in speaking and did so effectively, articulating her dream for the program.

Several more meetings followed, but the local participants stopped coming. There seemed to be a difference in vision for the program. The hope for a national program prevailed and those who wanted it to be national continued to participate. Through the meetings, the subject matter, students, milieus, and curriculum making commonplaces were well represented. The members of the national association were very knowledgeable about what the business officers needed to understand in order to transform into authentic leaders for their schools. They also seemed to know the prospective students well—about what socio-economic bracket they would come from, what their workload is typically like, the stress and tension of their jobs, etc. My low residency, distributed learning experience at Antioch University informed the process I believed we could use for this program. The technology expert and curriculum designer (expert in writing) all helped us to come up with a format that would allow the business officers to continue working in their schools, but to pursue a graduate certificate from a prominent university.

After several deliberative meetings, we had developed a first draft of the curriculum. I

was invited by the national business officers association to take this draft to a focus group in New York City. Well known business officers of prominent schools from across the country would be there for a conference, and I was asked to meet with them for a couple hours in the morning to get their feedback on the draft. I was very pleased with the experience because not only were they delighted with the work that had been done so far, but they offered some significant feedback to improve the program and gave suggestions for marketing it. Meeting with this focus group was very productive and helpful.

One problem was emerging for me, however. The commonplace of the teacher was noticeably missing. The problem was that we did not have teachers who were knowledgeable of business operations of independent schools. We had excellent teachers for business operations in general, but not for independent schools. After discussing this further with the original deliberation group, we decided we would use our current university business faculty, but that we would create two positions called "mentors" for the faculty. These mentors would be experts from the field—business officers themselves—who could support the faculty and help them understand the field. The mentors would not work with students—only with the faculty.

After recruiting five part-time business faculty, we set up a two-day faculty retreat and invited the mentors to attend. This session focused on two potential points of disorientation for the faculty. First, how different the format would be and how they would be focused on evidenced-based learning through the completion of reflective learning products, not on the completion of traditional 10 or 15-week courses. The second possible disorientation was over the subject matter. To understand endowments, for instance, did not mean that they would understand endowments for independent schools or the other business functions of the schools. The mentors served the faculty well in helping them to understand the students and the worlds

they would be coming from. The mentors would continue to serve them even after the program began, and that gave the faculty a sense of connection to the field.

One faculty member was stuck in his perspective of being an instructor at a university. He was arrogant and unteachable. He did not even show up for the second day of the faculty retreat, but he expected to be paid the stipend we had offered for their attendance. I quickly relieved him of his obligation to the program. It took three more tries to find an instructor who could teach this particular subject matter and who would be willing to engage in the *Understanding by Design* format and who understood that we wanted these students to transform into leaders, not just be able to do the business functions more efficiently. Clearly, more work needed to be done with faculty to help them understand how different this program would be. Even at the residency, some faculty members talked about their "course."

I began to work with faculty individually to help them to develop their learning plans for each subject area of the program. In so doing, I was able to emphasize how we wanted students to understand what it would mean to become a leader in their school. It was in working with some of them one-on-one that we engaged in dialogic exchange about what their perspective was for the program and what the perspective of the curriculum work group was. I could see some of them transform and hear it in their voice—"OHHH, I see. There are no courses. You don't expect me to teach them everything in the residency. They have to learn on their own." Transformation had begun. The technology expert and curriculum designer helped to pull it all together into a learners' guide and an electronic learning community and we were ready to launch the first cohort, eighteen months after we had begun working on the project.

Seventeen students arrived from all over the nation. I walked into the room to greet them and said, "Welcome to BLIS!" One of the students, who had traveled a very long way to get

there responded spontaneously, "*Sheer* BLIS!" And we were off and running. I spent time with them to lead them in discussions about how different this program would be and how they would grow to be leaders, not just efficient business managers. Many students' perspectives on the program changed as the week-long residency progressed. It was a highly successful residency and all students loved the program.

The curriculum work continues, though. One of the faculty never did understand how different this audience would be and refused to work with the mentors. We relieved him of his responsibility with the program and rewrote the learning product in the midst of the program. Curriculum work is like Vaill's permanent white water; it is never done and it is fraught with problems. However, it can be very rewarding, and when it works well it can be almost like BLIS!

Analysis of Vignette III. "Sheer BLIS"

This experience taught me a lot about how to lead a transformative and deliberative approach to designing curriculum. The participants were willing to engage in deliberation because they needed a very different, new program—one that would target a national audience. They realized they could not create a traditional program. They sought me out to help them; therefore, I did not have to spend time convincing them that the process would be worthwhile. However, I learned that this step is first, i.e., educators need to see the process as worthwhile. If they do not value the process, they will not engage in it in productive ways (as seen in Vignette II).

Having most of the commonplaces represented in the room during deliberations was very instructive. Not having the faculty was an anomaly. Usually, the faculty are present in the curriculum work group, and it is difficult to hear the voices of the other commonplaces. In this case, however, we did not know who the faculty would be until we began the deliberations. Once

we decided on who they would be, we had a lot of work to do to explain the program and to help them understand how different it would be. It would have been helpful to have brought together the entire curriculum group again with the entire faculty, I believe. However, logistically, that was not possible since members of the original curriculum group had come from so far away.

Another interesting aspect to this story is how some of the faculty did transform after many long conversations with me. The dialogic exchange took place between us in pairs. We did this on the phone, in individual meetings in my office, and online. Even though we had a two-day retreat, I think it would have been more effective if we could have continued bringing the faculty together in a group for this discourse to build. Since they were part time faculty, this was nearly impossible. At least the one-on-one dialogues served as a holding environment for them to process a perspective transformation.

This experience was successful in many ways because deliberation took place from the very beginning and continues to this day. Also, faculty members, mentors, and students all experienced some level of perspective transformation as they began to see how different this program would be and that it would focus on leadership, not solely on discrete skills for efficiency.

Another important aspect of this experience was the inclusion of an expert in technology in the process. This could be considered part of the milieu in which students would be learning. She was able to hear the voices of all the commonplaces from the very beginning of the curriculum work to the day she introduced the tool to our students. She was able to develop a tool that would be best for everyone involved, and she continues to modify it to meet our needs.

In conclusion, the BLIS project was a positive experience where deliberation among the commonplaces was effective and continues to this day. Faculty and students transformed in their

perspectives of the program and they embraced a new paradigm to help develop students into professional leaders of their schools, not simply technical experts.

Vignette IV. "You Have to Speak French"

> *A Transformative and Deliberative Approach to Designing Curriculum for Business Leaders in the Life Sciences.*

Gary, an associate professor of economics, had worked with me before on another curriculum project. That redesign was more cosmetic than life-saving or life-giving. His students told him that they did not have confidence in their competence and they wanted to know for sure that they were in a program that would help them to develop into the professionals they needed to be. We assembled a group of people which included faculty who taught in the program, a curriculum designer, a technology expert, the program director, and me as the facilitator. One of the faculty in this group had also recently graduated from the program, so he was able to give the student perspective. The redesign went fast because the program was already built well, but it was not well articulated. By the time we finished our work on this curriculum, students had a clear idea of the deep, enduring understandings they would achieve and they knew they would have evidence of their learning through various learning products and projects. It would give them confidence in their competence. This was a very good experience for Gary.

Now, Gary wanted to create a new program—a very unique one to transform scientists in the life sciences field, such as biotechnology researchers, into professional business people who would be able to lead in this complex and fast-paced world of uncertainty and risk. In essence, scientists would need to become professional business leaders. He called me and we talked about the concept and about who should be on the committee. He took my suggestions along with his own ideas and we convened our first meeting. Included in the group were part-time faculty, one

of whom was also just finishing a masters degree and was about to apply to enter medical school, a hospital administrator, a biotechnology faculty member from another school in the same university, a business professional from a national research organization, a scientist turned business entrepreneur, a leadership consultant, the technology expert, and myself as the facilitator.

When we convened for our first meeting, Gary introduced all the players. Then he turned to me and said, "Shelley, what's next?" I was taken aback that this associate professor so trusted me as to hand over the reigns of the meeting to me. Actually, I was stunned. However, I quickly recovered and kicked into deliberation gear. I began to ask them questions about the overarching goals of the kind of masters degree program that they wanted to create. We were using the *Understanding by Design* framework. In fact, I had given each of them a copy of the book by Wiggins and McTighe.

Gary would often chime in and say things like, "Remember, think unique—think outside the box. We don't even have to have courses. In fact, I am thinking we should model this after the life cycle of a life science business—from molecule to market." At that suggestion, creativity came alive and they began to propose how teams of students would choose an idea to take to market and follow it through all the stages of getting funding from a venture capitalist to getting it patented to bringing a business to an end.

Soon, however, reality set in and we began to ask the hard questions of logistics. How could this possibly work? How would students earn credits? Would there be class sessions at all? If so, how often would they need to meet? With these questions, the financial tools faculty member, Jim, shifted into traditional mode. He wanted modules with quizzes and tests. With these comments, Gary spoke up, "Jim, we are thinking differently about curriculum. It's like

switching from English to French. You have to speak French." I knew what Gary was saying. He was trying to say to Jim that this curriculum design project would not be in the systematic, linear approach Jim was used to. It would seem to have a different focus, and we would have different terminology, such as "enduring understandings", "perspective transformation," and "developing scientists into professional business leaders." Furthermore, we began to integrate the three themes of communication, leadership, and ethics into the overall subject matter of the program. We were focusing on communicative learning that would challenge the assumptions, beliefs, and values of the students. In order to do this, we had to challenge Jim's assumptions, beliefs, and values about learning and curriculum work.

From then the phrase, "you have to speak in French" became sort of a signal to the group that they had climbed back inside the tradition box or that they were doing business as usual, but we needed to think differently and deliberatively. I led the group through several sessions of prioritizing the enduring understandings of the program and began to engage them in discussions about evidence of learning. Their French really became alive in this phase as they thought up all sorts of creative learning products or projects that would demonstrate student learning and transformation.

As it came closer to the launch date, we realized we needed a foundations section to the program for students coming in with very little business background. Gary suggested a subcommittee of the larger group work on that. We deliberated over how to integrate the curriculum, while using several part-time faculty. The hospital administrator suggested that in the same way we will have a cohort of students, we should use a cohort of faculty. This idea was widely received and the team of instructors who would be teaching the foundations section of the program became the subcommittee to develop the foundations curriculum. I was assigned to

work with them, and I included the technology expert. Jim spoke up and suggested that we put the subcommittee in a cage together and let them "go at it" until they come out with an integrated plan for the foundations part of the program. Clearly, he was speaking French.

We worked separately and Gary worked on getting the program approved by the university and on marketing it. The subcommittee was focused and very respectful of everyone's ideas. They truly listened to each perspective and deliberated with courtesy and collaboration. We came together several times after that to plan the orientation, to review the work of the foundations subcommittee, and to plan for the launch of the rest of the program where they would be working in teams throughout the program.

In three weeks, our first cohort of 15 students will begin this new and truly innovative program. The curriculum work committee had learned how to "speak French."

Analysis of Vignette IV. "You Have to Speak French."

It is unusual for an associate professor of economics to seek the help of an educator to create curriculum. In this case, Gary knew it would be to his advantage to engage in a deliberative process because he had worked with me before on a project that turned out to be a very productive experience. In that first experience, deliberation took place to help students change their perspective of their own competence as they graduate. The fact that deliberation was worthwhile was already established for Gary. In essence, his perspective on how to design curriculum had already been transformed. When he decided to create a new program, the first thing he did was to seek a deliberative process.

Trust between the program director and the deliberation leader is crucially important. The fact that Gary trusted me and was willing to give up control of the group allowed us to engage in open discourse with fewer hindrances from power issues. It would be good for deliberation

leaders to spend time with the program directors or department chairs and to build a strong working relationship before beginning to work with the group. In essence, I also did this with the department chair in Vignette II, when I worked with her at a distance by phone and email until I arrived at her school.

Gary's relationship with all the participants was one of camaraderie and collaboration. He was not afraid to ask them what they thought we should do, even though they were all part-time faculty or external experts. In essence, the room was a safe environment for people to try on new perspectives, as is the case with Mezirow's graduate seminar metaphor or Heifetz's holding environment. Gary and I both moved nimbly back and forth between the dance floor and the balcony, allowing for cognitive dissonance at times, such as when Jim first wanted to build modules with quizzes and tests for quantitative subjects. Gary came down from the balcony, jumped onto the dance floor and explained to Jim that he needed to "speak French." In fact, after that, every time participants relapsed into a traditional, systematic, linear way of doing curriculum work, Gary or I would say, "think French," which was a way of jumping onto the dance floor long enough to jumpstart them back into deliberation. The fact that Jim wanted to put the subcommittee "in a cage to go at it" until they came up with an integrated foundations program demonstrated his perspective on curriculum planning had transformed.

All the commonplaces were well represented. One of the members of the group had been a student in a similar program that was also supervised by Gary, so he had a sense of the student perspective. Also around the table were several subject matter experts—scientists who had businesses or business people who worked with scientists, and full time faculty from biotechnology from another school. The people involved included the ones who would be teaching, or leading the learning. The milieus were also well represented as these deliberators

explained what the climate is like in the biotechnology world today—fast paced, risky, but exciting and very rewarding. I provided perspective on the milieu of the learning environment— that they would not be in lecture halls, but that they would likely come expecting such since they probably experienced a lot of lectures in their scholastic history. Our technology expert led us in seeing what the electronic learning community milieu would be like, as well. Gary and I kept them on the deliberation track in understanding the curriculum making commonplace. In essence, I believe that of the four vignettes, this story best demonstrates the power of the presence of all the commonplaces on an equal footing, the effectiveness of deliberation, and the power of transformed perspectives.

Summary of What I Learned from Experience.

The issue of power determines how the process will unfold. In the first vignette, Bob had power *over* the people, and in the end, the curriculum design was really Bob's design with limited subject matter input from the people. In the last vignette, Gary exercised power *with* the people, and the design was much more a collaborative effort capitalizing on the synergy of people working together. In the second vignette, Margaret, who felt the curriculum had already been redesigned, resisted power *with* the group and exerted power *over* the process not to engage. In the BLIS narrative, Nancy was a very powerful person as a wealthy attorney and donor for the BLIS program, but she worked *with* the group to collaborate effectively, trusting me to lead the deliberation process. I was able to use power *with* the focus group and representatives from the field in group sessions, but I had to use power *over* some faculty who joined the group, but who later proved to not be a good fit for the program—I relieved them of their responsibilities. Power is always already present, and the process is more creative if power can be used with people rather than over people. However, sometimes power over people will

occur when people resist or when people need to be removed from the group.

Finding a way to harness power for creative and synergistic outcomes is important for curriculum work. Bob seemed to think that his status of "expert" would automatically cause us to trust him, and some of the group did. At least three of us left the group because the work seemed to be a fait accompli—Bob's design with the group's stamp of approval. Gary built trust with me as the curriculum deliberation leader. From there he also drew the faculty into a relationship of trust by asking them what they thought should be done and how, seeking out the voices of all the commonplaces and deliberating to find the mean. In the second vignette, Margaret did not trust me as the deliberation leader or the process. It seems that when people trust others in the process it is easier for them to give up power over others and engage in power with people. In the cases where this was evident in these vignettes—with Paula, Nancy, and Gary, they had each spent a considerable amount of time with me prior to the deliberations beginning that allowed us to form this mutual respect and trust.

Not only is time important for building trust before deliberations begin, but it must be given consideration for the entire process. In the vignettes in which deliberation and transformation definitely took place (III and IV), the deliberations lasted 18 and 12 months respectively. The trust that is built early on will give the process the stamina it needs to carry on through meeting over multiple times. In those cases, the participants were convinced that this process was worth their while.

People need time to think between sessions. In the last vignette, when Jim suggested that we put the subcommittee "into a cage to go at it" we understood that we would have a series of sessions where we would deliberate and that there would be time in between those sessions for us to think, to create new ideas, and to prepare documents (such as plans for an integrated

curriculum) for consideration. We would come together and then deliberate until we came to a decision. In the first vignette, Bob made the big decisions for the group and allowed the people to make small decisions about the subject matter. In essence, he stifled the synergy and creativity of the group in the interest of control and systematic linearity. It is sometimes uncomfortable to go into a curriculum work meeting without a specific plan, such as when Gary simply turned to me and said, "Shelley, what's next?" He knew I had a framework to use to allow deliberation to take place, and that was enough specificity for him, knowing we would cultivate the creativity of the group.

These experiences also demonstrated for me how the deliberation leader can facilitate the process with curriculum workers who have different approaches to doing the work. For instance, in the second vignette, where the large group of 35 faculty members were gathered together, one small subgroup was focused on what they called "diversity," but what seemed to be issues of hegemony and power in the curriculum. That is all they wanted to deliberate about. It was their "big idea," as Reid (2006) would say. However, I was able to let that group speak and contribute to the whole group deliberations on the curriculum. Therefore, they had a very important voice, but the process was not dominated by the mission of hunting out hegemony alone. Rather, it became one of the points of deliberation, not the process itself.

Likewise, when I introduced the *Understanding by Design* framework, I ran the risk of seeming linear and systematic. If I adhered to the systematic approach to designing curriculum, I would have simply directed them in working through that process step by step, without deliberation on anything except the actual subject matter learning goals and what types of evidence of learning students would create. Instead, I introduced the process, but did not allow it to dominate the conversation. Some faculty loved it; others did not like it at all. We ended up

jumping in and out of it as we moved along making decisions together. This was another example of a "big idea" that could have dominated the process, but instead, this time (as opposed to Bob's style), it contributed to the process.

9. *Use creative imagination to develop an image—a model, metaphor, or some other image to demonstrate the synergy, integration and new, hopefully deeper understanding of a situation or phenomenon*

The metaphor I have chosen to describe the integration of Mezirow's transformative learning theory and Schwab's deliberative curriculum theory is the *caucus*, defined by The Oxford English Dictionary (OED) in this way:

> A private meeting of the leaders or representatives of a political party, previous to an election or to a general meeting of the party, to select candidates for office, or to concert other measures for the furthering of party interests. (Retrieved October 9, 2006)
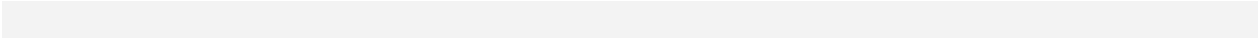
Its etymology is uncertain, but it may have come from an Algonquin word,

> *Caw-cawaassough* 'one who advises, urges, encourages', from a vb. meaning primarily 'to talk to', hence 'to give counsel, advise, encourage', and 'to urge, promote, incite to action.' (Retrieved October 9, 2006)

The word can mean simply a special interest group of people who unite to promote particular interests, or any group or meeting organized to further a special interest or cause. The Merriam Webster Online Dictionary defines caucus as a "group of people united to promote an agreed-upon cause" (Retrieved October 9, 2006).

The word caucus has political connotations. All curriculum work is political work; power is always present, whether exerted as power over people or power with people. While a curriculum caucus does not seek to nominate people for political office, it does nominate ideas

and plans (such as through the Nominal Group Technique) on which to deliberate. Caucuses seek to incite action and curriculum caucuses deliberate on actions to take for curriculum planning. The following Curriculum Caucus Guide is built upon the integration of Mezirow's theory of transformative learning with Schwab's theory of deliberative curriculum work. It will help planners of graduate professional education to target transformation among the curriculum workers and the students, and it will provide guidelines for deliberation.

The Curriculum Caucus Guide

For Graduate Professional Education

Guide for the Leader of the Curriculum Caucus

Why is there a need for a Curriculum Caucus?

How do people typically design or redesign curricula? Often, faculty will first try to build a program by listing courses students should take that would lead to a degree. They may decide to add a course here or eliminate a course there, but they will often use a piecemeal approach to assembling the list of required courses students must take in order to complete a program. Next, they may review the course descriptions and perhaps change them in one way or another. This is a linear approach based on the assumption that if the plan incorporates the right inputs, it will result in the desired outcomes.

Traditionally, curriculum in higher education has been developed systematically, usually by one faculty member who typically takes the plan to colleagues for review, and then on to governance bodies for approval. Within this systematic approach, curriculum is viewed as a blueprint or plan to be implemented, or translated into instruction.

While the systematic process has its strengths, such as requiring the statement of objectives and criteria of evaluation, it falls short in important ways. First, the systematic approach is a technical way of creating experiences for students who are diverse human beings in complex social settings who have varied needs, goals, and ways of being. An underlying assumption of this approach is that the plan will produce predictable outcomes, that there is a reliable cause/effect relationship between the plan and the outcome. However, the teaching and learning endeavor is more than an applied science; it is a complex social practice, requiring a deep exploration of the curricular problems at hand and deliberation toward resolutions for those problems. Second, the systematic approach often anatomizes the overall curriculum with lists of objectives without overarching understandings. It tends to focus on what students will be able to do rather than on whom the students will become. Third, the systematic approach seems detached from moral philosophy, based on the notion that curriculum work is an objective activity with few, if any, moral decisions to be made. Null, a curriculum theorist, maintains that the lack of moral philosophy is a problem for the systematic approach:

> ## Quotation to think About
>
> "All issues that we face as citizens in the early 21st century are ethical in nature. We face global warming, business scandals, human cloning, end of life questions, terrorism, nuclear proliferation, a rapidly globalizing economy, the depletion of energy sources, the decline of our inner cities, and may other challenges that cannot be met successfully

unless those who address them are guided by a coherent moral philosophy. The systematic perspective has little to say about moral philosophy, and this is a serious handicap for this tradition moving forward." (Null, 2006, p. xviii)

The deliberative approach, advanced by Schwab in the early 1970s, improves on the systematic approach in several ways. First, it includes key stakeholders and contexts for the consideration of a multiple curricular issues or problems and possible resolutions. Second, it builds upon the ideas of the group toward a coherent curriculum understanding and deliberation over big ideas and overarching outcomes, not mere lists of specific objectives. Finally, the underlying assumption of the deliberative approach is that since all curriculum work requires decisions to be made and actions to be taken, it is a moral endeavor, requiring deliberations over the widest points of view and negotiation toward resolutions for the best common good. A more complete description of the deliberative approach to curriculum planning can be found in this Guide under section A.1., "What is the deliberative approach?"

"[On the]…endless strings of objectives…such strings often, even usually, anatomize matters which may be of great importance into bits and pieces which, taken separately, are trivial or pointless." (Schwab, 1996/1983, p. 318).

What is a "Curriculum Caucus"?

A caucus is a group of people who come together to promote or advance a shared interest. The shared interest of this curriculum caucus is to create a meaningful curriculum to help students become authentic professionals—those who answer the call to serve the public good. All curriculum work is political; power is always present, whether exerted as power over people or power with people. While curriculum work is political work, the curriculum caucus does not seek to nominate people for political office. Instead, it nominates ideas and plans on which to deliberate. Caucuses seek to incite action and curriculum caucuses deliberate on actions to take for curriculum planning.

This Curriculum Caucus Guide is built upon the integration of Mezirow's theory of transformative learning with Schwab's theory of deliberative curriculum work. Transformative learning, defined by Mezirow, focuses on the transformation of taken-for-granted frames of reference (or personal paradigms) to make them more inclusive, open, and capable of change to guide action. Schwab defined curriculum work as a practical art of discovering curriculum problems, deliberating about them, and resolving them. Using a curriculum caucus will help planners of graduate professional education to target transformation for students to become true

professionals and also promote transformation among the curriculum planners as they reflect upon their assumptions, beliefs, and values as they relate to curriculum work.

Who should use this Curriculum Caucus Guide for Graduate Professional Education?

This Caucus Guide is designed for the caucus leader to help planners create graduate professional curricula, such as for students who want to become architects, accountants, dentists, engineers, lawyers, nurses, physicians, psychologists, teachers, or other kinds of professionals. A professional is one who not only possesses and uses special expert knowledge and skill, but who serves the public good, or "professes" a special expertise for the good of society. A trust exists between the professional and society, therefore students must not only develop into technical experts, but they must be able to answer the vocation or calling to serve the public good and to enter into a fiduciary relationship with society at large.

Quotations to Think About

"It is…[the] responsibility for public goods that sets off professionals from other knowledge workers. Although professionals are often engaged in generating or applying new ideas and advanced processes, and so are doing creative work, they are all directly pledged to an ethic of public service." (Sullivan, 2005, p. 4)

"…there has been a long term movement away from an earlier conception of professionalism as 'social trusteeship.' The drift is toward embracing a notion of the professional as a purveyor of expert services." (Sullivan, 2005, p. 9)

"This [deliberative] tradition…is the only philosophy that does justice to the common good." (Null, 2006, p. xxi)

The Curriculum Caucus Guide seeks to help educators plan learning experiences that will transform students into professionals who serve the public good.

How should this Curriculum Caucus Guide be used?

This guide is not meant to be a formulaic, linear, systematic approach to creating curricula. Instead, it is a resource guide and a tool kit to assist curriculum groups to work toward discovering curriculum problems and deliberating over resolutions for those problems. Curriculum planners can pick and choose sections that will be useful and the order in which to use them. This process can be recursive and fluid.

How is this Curriculum Caucus Guide Organized?

There are three major sections to the Curriculum Caucus Guide for leaders of the process. By working through these sections of the guide, caucus leaders will begin to understand the process, its value, and problems they will likely face. The guide models deliberation by posing questions for curriculum caucus participants to discuss, rather than listing steps for creating curriculum.

A. **Why is using a curriculum caucus worthwhile?**

1. What is the deliberative process?
2. Who should participate in the curriculum caucus?
3. What qualities, knowledge, and skills should the deliberation leader have?

B. **What do caucus participants need to know and be able to do?**

1. Deliberative curriculum work can include aspects of other curriculum approaches.
2. Learning is a complex, multi-faceted endeavor.
3. Students (and curriculum caucus workers) need time to experience transformation.
4. The *Understanding by Design* conceptual framework can be used to guide the deliberation process.

C. **What problems might the curriculum caucus leader encounter?**

1. Power differentials always affect caucus dynamics—power, politics, and positionality affect the deliberative process.
2. Curriculum planners may likely need a transformed view of these concepts: learning, curriculum, and professionalism.
3. Participants will not readily understand how much time and work the deliberative process takes.

A. Why is using a curriculum caucus worthwhile?

As the leader of the curriculum caucus, the most pressing question you will need to answer clearly and frequently is why this process is necessary or worthwhile. Traditionally, in higher education, educators have used a systematic rather than deliberative approach to design curriculum. Also, even though educators usually get feedback from department colleagues, the work that they do is virtually in isolation. The notion of creating curriculum as a group, and doing so through the hard work of deliberation will require explanation and persuasion. Suggestions to help build consensus for the process include the following ideas to consider.

Brainstorming Questions

The Abilene Paradox
The caucus leader may want to start the caucus discussions by showing a brief video clip of the Abilene Paradox, a short story that demonstrates how the power of group dynamics can propel people to go for a short term agreement rather than avoid a long term difficulty. Next, the caucus leader can ask the participants to discuss how they may have experienced the Abilene Paradox in terms of curriculum work. The systematic approach is what most people use and the deliberative approach may seem to go against the momentum of the school or university, but what would the payoffs be if they tried a different way of doing curriculum planning?

Ask the curriculum caucus guide participants to answer one or more of these questions aloud and write responses on a white board. (Suggestion—Have someone recording ideas by computer, or use flip chart paper to save responses.)
1. Why would it be worthwhile to work with a group of people who share an interest in this curriculum?
2. What do you hope to get out of working on this curriculum project? What would be valuable for you?
3. How do accountability issues relate to curriculum work? How will you consider accreditation requirements?

Some possible responses may include the following

a. It is helpful to hear what my colleagues from other disciplines think is important for our students to learn.
b. We need an outcomes-based curriculum for accreditation and this process will help us to decide on what overall program outcomes are appropriate.
c. We need to help our students see their learning accomplishments so that they have confidence of their competence, and this process will help us decide on how to do that.
d. As we engage in deliberation, we will model a learning strategy we can use in our classes.

Caveat—The caucus leader will need to remind the caucus participants of the values that they identified from time to time throughout the process.

Caucus Activity—Ask participants to answer these questions:
- Write in one sentence what you think your students want out of this curriculum.
- Write in one sentence what you hope your students will get out of this curriculum.
- How are these aims the same or different? How do you reconcile them, if they should be reconciled?

1. What is the Deliberative Approach?

The deliberative approach is different from the systematic approach in important ways. First, it views the work of curriculum building as one that examines the state of affairs of the learning environment and needs, or in other words, the process seeks to identify curriculum problems, which are often ill-structured and not easily named, and to discuss ways to go about resolving those problems. Second, the deliberative approach capitalizes upon the ideas of many stakeholders and perspectives related to the particular, local, unique situation at hand. Third, the process of deliberation is used to make moral decisions regarding the curriculum.

Quotation to Think About

"Hence, curriculum reflection must take place in a back-and-forth manner between ends and means. A linear movement from ends to means is absurd."
(Schwab, 1996/1983, p. 91)

Reid (Reid, 2006), a leading expert on deliberative curriculum theory since the 1970s, extended Schwab's work through the publication of books on case studies and essays on deliberative curriculum theory. Reid identifies two other approaches to doing curriculum work besides systematic and deliberative—radical, and existential. The following chart suggests the advantages and disadvantages of each approach.

Table 1 Four Approaches to Doing Curriculum Work
(Adapted from Reid, 2006)

Approach	Advantages	Disadvantages
Systematic—Curriculum as Plan, Blueprint , Machine Subscribes to cause-effect process as a priori, or a "great idea" Commitment to institutions	Seeks to organize for efficiency and effectiveness. If we get the parts right, the system will run efficiently.	Too unproblematic and naïve about real curriculum problems. Treats social practice as a technical system. Lacks a moral philosophy.
Radical—Curriculum as Cultural Reproduction Subscribes to the need to address power differentials as a priori, or a "great idea" No commitment to institutions	Seeks to raise consciousness regarding historic problems such as racism and segregation. Seeks to fight the forces of hegemony.	A strong a priori ideological position which fails to take into consideration broader perspectives of curriculum work. Focus is ideology rather than philosophy; ideology mitigates against deliberation.
Existential—Curriculum as Personal Experience No subscription to a priori knowledge No commitment to institutions	Focuses on the individual students and what can be accomplished now in the context of existing structures.	De-emphasizes the role of subject matter and the teacher. Diminishes the historical and cultural significance of shared practice.

Approach	Advantages	Disadvantages
Deliberative— Curriculum as Practical Art No Subscription to a priori knowledge Some commitment to institutions	Focuses on the art of discovering curriculum problems, deliberating about them, and devising resolutions for them. Helps to balance five stakeholders (student, teacher, subject matter, milieus, and curriculum making). Can include elements of the three other approaches.	Can be hard work. It is sometimes difficult for people to understand how to deliberate.

Optional Discussion Questions for the Curriculum Caucus

A. How have you created curricula in the past? Which of the four curriculum approaches did you use (see Table 1)? In what ways was your approach useful? In what ways could it be improved?

B. What assumptions do you have about how to create a curriculum? What do you believe to be the best way to go about designing curriculum? What do you think is important about curriculum work?

C. How can the deliberative approach incorporate the advantages of the other approaches? How do you think you will feel about using a deliberative approach to engage in curriculum work?

D. In curriculum work decisions must be made and actions must be taken. What moral decisions does this curriculum caucus need to make?

E. Curriculum workers identify and frame problems within the curriculum. What are some of the curriculum problems you have identified for this project?

F. To deliberate is to engage in meaningful conversation toward making a decision for action. The widest possible variety of alternatives must be considered. How should the caucus elicit the widest possible alternatives? How can dialogue and conversation be fostered? How do you feel about engaging in this type of dialogue?

2. Who Should Participate in the Curriculum Caucus?

Two stakeholders (teachers and students) and three contexts (subject matter, milieus and curriculum making) should be represented in the deliberative curriculum process. To elaborate on how these stakeholders and contexts come together, the metaphor of an orchestra can be used. The curriculum becomes the score, the teacher the conductor and the students the instrumentalists. In this example the subject matter becomes the type or genre of the score, while the milieus become the systems of the symphony hall, recording studio, practice room, prospective audience, etc. The curriculum making is the putting it all together—writing the score, rehearsing, deliberating on the sound, deciding on a starting point, the sequence, and the conclusion of the piece, its technical particulars and how it will serve the greatest artistic aims.

Teachers—Teachers are the intermediaries between the institutional endeavor to advance professionalism and the particular subject matter. They provide the scholarly voice of the subject matter. They have a unique source of knowledge on how the academic curriculum can be reconciled with the practical demands of the profession. They are actors in the moral process of realizing service for the public good through the application of skill and judgment, leading students from careerism to professionalism.

Students—Students help the caucus participants to understand perspectives they bring to the process. If the caucus is engaged in a redesign, it would be helpful to have graduates of the program to come back and discuss how the curriculum met their needs and what gaps exist. If it is a new program, prospective students may be able to provide valuable information on what they feel they need to succeed in their profession.

Subject Matter—Students need to learn expert knowledge and skills, but also how to use judgment, how to adapt, and how to serve the public good. The subject matter should be current, relevant to the culture of the targeted profession, adaptable to structuring, sequencing, and completion, and adaptable to transformative pedagogy. Representatives of the subject matter in a caucus might be professionals from the field and/or members of professional associations.

Milieus—Milieus are the systems at work all around the learning process—university culture, professional standards, accreditation requirements, classroom climate, technologies, work and life contexts of each student and teacher, etc. It is important members of the caucus to be able to bring these systems to bear upon the curriculum process. Other milieu representatives to be considered for the caucus might be faculty who have experience with accrediting processes, technology experts, or marketing professionals.

Curriculum-making—Curriculum-making is the system of the caucus itself. It becomes a system of systems as the leader engages all the representatives of the above-mentioned bodies of experience. As in the music-making of an orchestra, it never really ends. The caucus should continually meet to assess the curriculum, the process, and how it can be improved, in the same way that an orchestra continually rehearses, adapts, and broadens its repertoire. This suggests that the curriculum caucus is not an ad hoc body

task force, charged with creating a curriculum and then disbanding. Instead, it is a living system that reflects, adapts, improves, and expands continually.

Questions for the Caucus Leader to Discuss with the Program Director or Department Chair
After reading the descriptions and examples of the key stakeholders and contexts above, the caucus leader and program director should deliberate over these questions.

- Who will represent the teachers?
- Who will represent the students?
- Who will represent the subject matter?
- How will the various milieus of the institution, the profession, the students and teachers, etc. be represented?
- How will participants be encouraged to step outside the process and reflect on what is happening?

3. **What qualities, knowledge, and skills should the caucus leader have?**

The caucus leader needs to be self aware and aware of the systems at work in the caucus. The leader needs to be an exceptional reflective listener, and one who can elicit the perspectives of all the participants and engage everyone in purposeful deliberation. The caucus leader must understand that some participants may have their assumptions, beliefs, and values about learning and curriculum work challenged by the deliberative process. Also, the curriculum caucus leader must model the deliberative process for the classroom.

Specifically, the caucus leader needs to be able to do the following:

  a. Elicit the ideas of all the participants in the caucus.
  b. Continually persuade members of the value of deliberation.
  c. Help participants to formulate problems and deliberate toward resolutions.
  d. Practice the art of thinking eclectically—pulling from different ideas to pose possible resolutions for curriculum problems.
  e. Create a safe space, or what Heifetz (1994) calls a "holding environment" for deliberation, especially when participants experience disorienting dilemmas.
  f. What else?

B. What do caucus participants need to know and be able to do?

1. Deliberative curriculum work can include aspects of other approaches.

Deliberation does not mean that the caucus must not use any form of systematic approach to designing the structure, sequence, and completion of the curriculum. Nor does it mean that power differentials should be ignored, that hegemonic assumptions should be perpetuated, or that the individual needs in the particular context should be irrelevant. The caucus leader needs to use the art of being eclectic in leading curriculum discussions. The following curriculum map illustrates how the deliberative process can take from the other approaches to doing curriculum. The arrow pointing toward the oval indicates that the deliberative approach can, and usually does, take ideas from the other three approaches. It is the caucus leader who must balance those ideas and processes within the system of group deliberations.

Reid's Curriculum Map

Commitment to Institutions

● *systematic*

deliberative

Subscription to
Great Ideas
(*a priori* knowledge)

Rejection of
Great Ideas
(personal experience)

existentialist ●

● *radical*

Rejection of Institutions
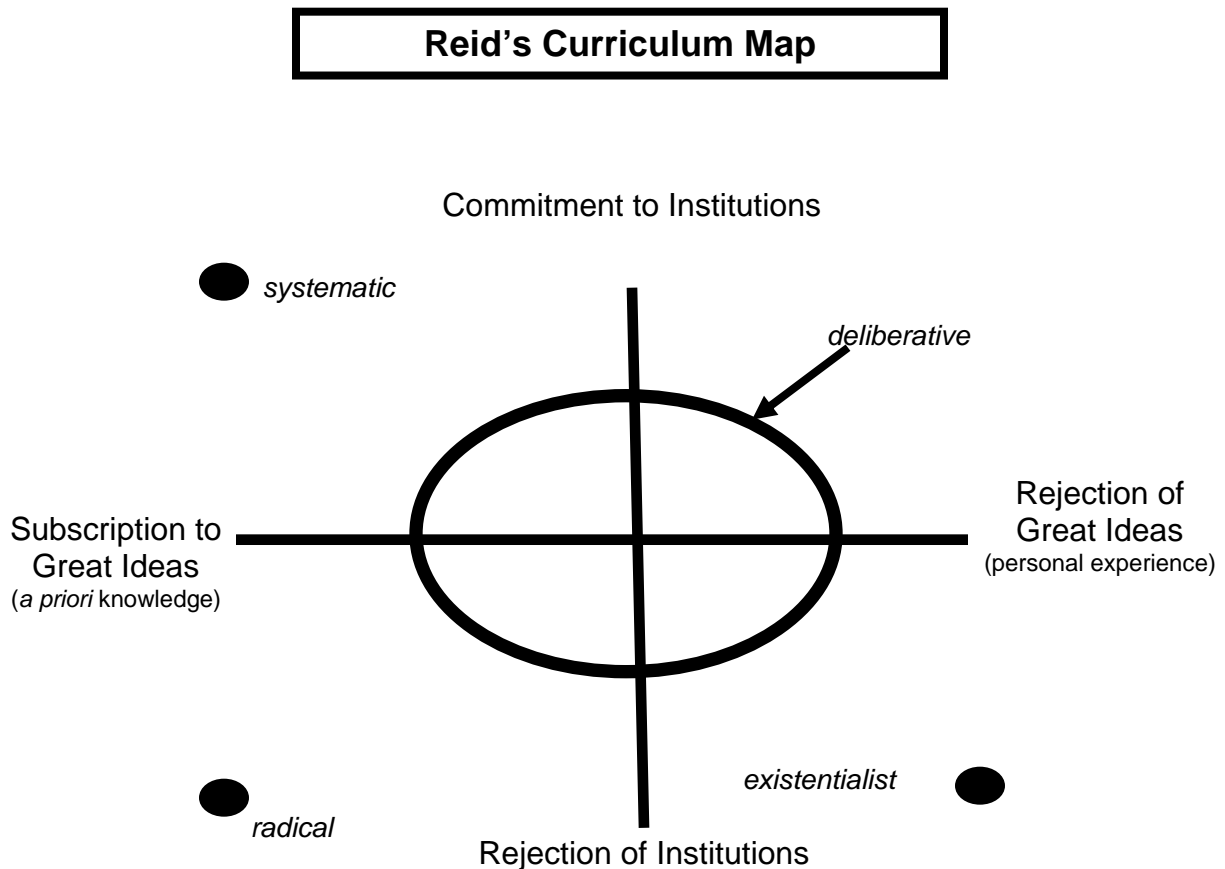
Note. From *Reid's Curriculum Map* (unpublished manuscript), by J. W. Null. (2006). used with permission.
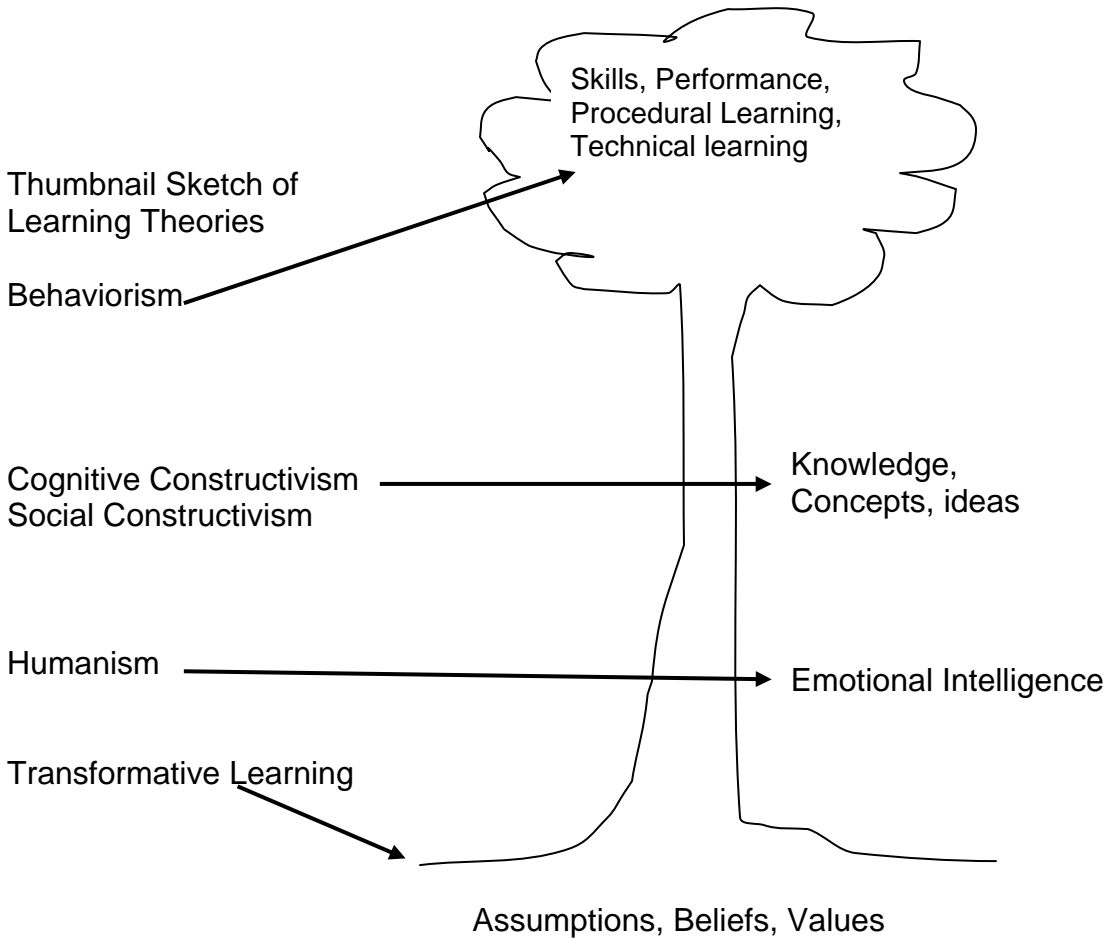
Optional Discussion Questions for the Curriculum Caucus

      a. Have you experienced curricula that have been developed with a radical or existential approach? If so, describe it.

      b. What aspects of systematic, radical, and/or existential approaches contribute to this curriculum caucus work? Why?

      c. What is the relationship between this curriculum and the economic, political, social, and cultural contexts in which it is situated?

      d. What hidden meanings of curricula exist in this context?

2. Learning is a complex, multi-faceted endeavor.

Often, in professional education, knowledge and skills are emphasized, but other aspects of affective and transformative learning are de-emphasized or even ignored. Goleman identified key competencies for individuals to have what he called "emotional intelligence," which are self awareness, social awareness and the ability to manage relationships (Goleman, Boyatzis, & McKee, 2002). In order for students to transform into authentic professionals, they must learn special knowledge and skills, but they must also go beyond that to becoming self aware, socially aware, and able to manage relationships, as well as capable of critically reflecting upon their assumptions, beliefs, and values to check the validity of those perspectives. In fact, students' perspectives are the lenses through which they experience all other kinds of learning; therefore attending to those perspectives is critically important. The tree diagram (Figure 1) illustrates the relationship between these different ways of learning.

Figure 1 Relationship between Different Ways of Learning

Skills, Performance,
Procedural Learning,
Technical learning

Thumbnail Sketch of
Learning Theories

Behaviorism

Cognitive Constructivism
Social Constructivism

Knowledge,
Concepts, ideas

Humanism

Emotional Intelligence

Transformative Learning

Assumptions, Beliefs, Values

(Chapman, 2006)

Optional Discussion Questions for the Curriculum Caucus

1. In what ways is emotional intelligence important for professionals in this particular field?

2. What assumptions, beliefs, and values do you want to explore with your students regarding becoming a professional?
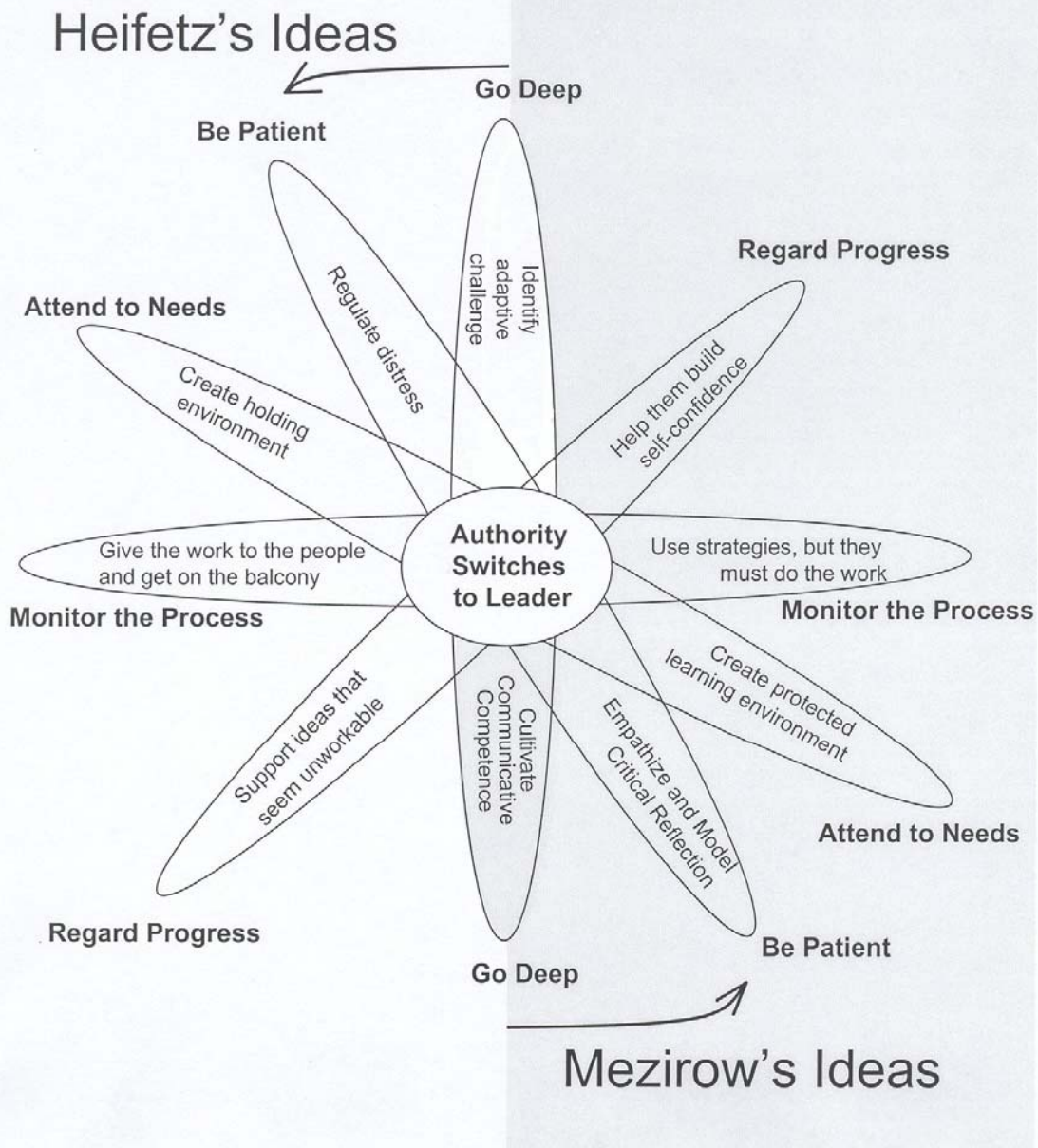
3. Students will usually need time for transformation.

As they transform their assumptions, beliefs, and values, they will become more autonomous and open to other points of view. In order for students to experience transformation of their personal perspectives and to become more inclusive and autonomous in their thinking, they will often experience a disorienting dilemma, or something that does not fit into their personal paradigm. Sometimes, the teacher needs to create a safe environment for students to engage in dialogue to discuss their perspectives with others, to try on new ideas and roles, and to change their perspective.

This will help the students to become better leaders—those who can face adaptive challenges (Heifetz) and ill-structured problems. Teachers need to be able to lead them through the transformation process (Mezirow). By looking at adaptive leadership and transformative learning together, the teacher can gain a deeper understanding of how to lead students through the transformation process. There are five main phases to this process, listed below and illustrated in Figure 2.

   a. **Go deep** – Help students critically reflect upon their personal perspectives and to identify adaptive challenges.
   b. **Be patient** – Empathize and model critical reflection, and regulate distress.
   c. **Attend to needs** – Create a protected learning environment or a holding environment.
   d. **Monitor the process** – Use strategies to help students do the work of deep learning; give the work of understanding adaptive challenges to the students and watch over the process carefully. Heifetz uses the metaphor of going to the balcony to watch the dance floor, but being ready to move back to the dance floor to keep people engaged.
   e. **Regard progress** – Help the students build self-confidence and support ideas that may seem unworkable at first.

Figure 2 The Synergy of Transformative Learning and Adaptive Leading

Heifetz's Ideas

Go Deep
Be Patient
Regard Progress
Attend to Needs
Regulate distress
Identify adaptive challenge
Create holding environment
Help them build self-confidence
Give the work to the people and get on the balcony
Authority Switches to Leader
Use strategies, but they must do the work
Monitor the Process
Monitor the Process
Support ideas that seem unworkable
Cultivate Communicative Competence
Create protected learning environment
Empathize and Model Critical Reflection
Attend to Needs
Regard Progress
Be Patient
Go Deep

Mezirow's Ideas

(Chapman & Randall, 2006)

1. How can you plan for students to experience transformative learning and learn how to become adaptive leaders?
2. What does it mean for you for the teacher to switch from authority to leader?

4. The *Understanding by Design* (Wiggins & McTighe, 1999) framework will help the caucus participants to deliberate over the deep meanings of the curriculum. Focusing on deep understanding is important because it prevents curriculum planners from seeing the curriculum in bits and pieces or as a list of behavioral objectives. Instead, the caucus participants deliberate over the overarching understandings of the curriculum first, emphasizing who the graduates should be as professionals, not merely what technical expertise they should have. Participants should be asked to work through the three stages, identified below in Figure 3. By starting with understandings instead of knowledge and skills, caucus participants are led to think deeply about the assumptions, beliefs, and values desired for professionals of the given field. This process of focusing on understandings helps curriculum planners to examine possible misconceptions students may have and how the curriculum may be able to promote transformation.

The caucus leader should facilitate the prioritization of deep understandings (desired results) by allowing the group to nominate their ideas and to deliberate over them and the articulation of the deep understandings.

Figure 3 Understanding by Design Framework
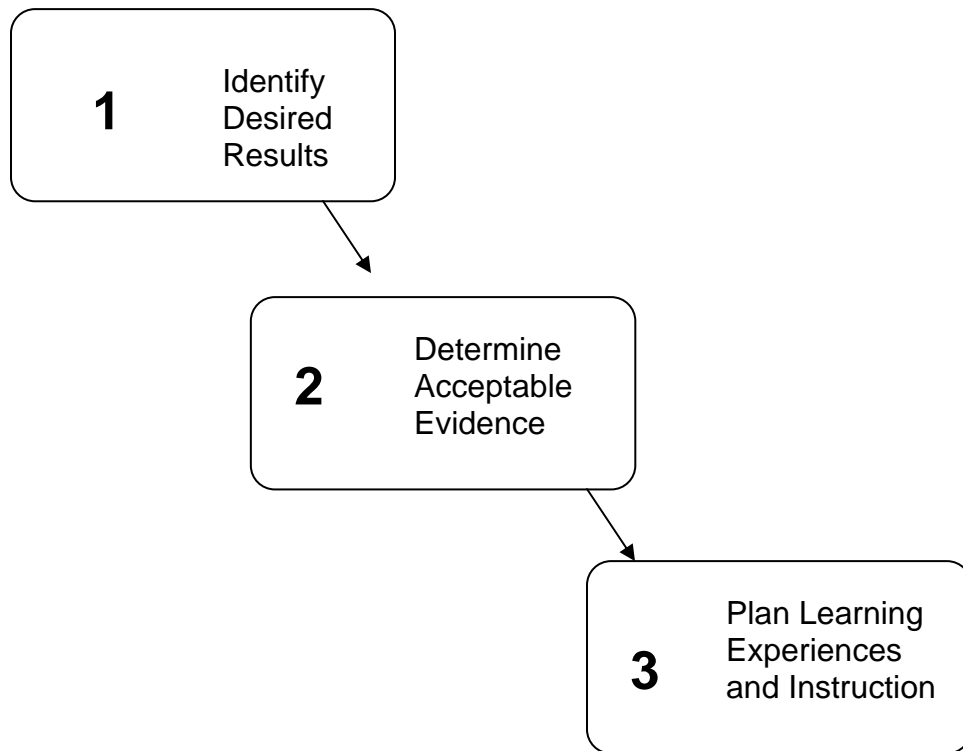
Note. From *Understanding by Design. (p.18),* by G. Wiggins and J. McTighe, Expanded 2nd ed. 2005. Reprinted with permission.

1. How should the deliberation process proceed so that everyone will have a voice in determining the desired results, acceptable evidence, and learning experiences?
2. How will the group work toward negotiation on differing points of view?

C. **What problems might the curriculum caucus leader encounter?**

1. Power differentials may deter the deliberation process.

   All curriculum work is political in nature because caucus participants represent different positions of power. It may be useful to explore the notions of power, politics, and positionality with the group before beginning the work of deliberation. The following exercise (Newman, 2006) may be useful.

   Reflect upon and discuss the following questions.

   a. Think about someone over whom you have some kind of power. How do you demonstrate that power and how do you feel about it?
   b. Think about someone who has power over you. How is it demonstrated and how do you feel about it?
   c. What are the sources of power and what political systems exist within this caucus?
   d. What is your position in this caucus? Are you the program director, a teacher, a student, a subject matter expert, or deliberation leader? How would you describe the power you have in the caucus?
   e. How do you convey trust in the participants and in the process?

4. Curriculum caucus participants may experience a disorienting dilemma regarding transformative learning and deliberative curriculum work as they begin to participate in the deliberative process.

   Also, they may choose not to change their perspective. This may result in their desire to approach the process from a traditional, linear, atomistic way. Participants who feel this way will express frustration over the process and will want to go back to doing curriculum work alone without deliberation.

   Furthermore, some participants may not know how to deliberate. The curriculum caucus leader may want to spend time at the beginning of the caucus work discussing a set of key ideas that drive the process. These key ideas would serve as flexible rules of engagement for the process to succeed. The caucus leader could elicit these key ideas from the group, and they need to come to consensus regarding the process. Some of these ideas may include the following:

   a. Appropriate interests are represented and all voices should be heard.
   b. All participants should have the opportunity to share their perspectives and to compare their ideas with others.
   c. Curriculum caucus workers must go into the process willing to suspend their allegiance to certain positions.
   d. Curriculum caucus workers should be prepared to take a position and argue from it, but also be willing to give it up.

5. Curriculum caucus participants may not understand how this process takes more time and may seem like more work than the traditional, systematic approach.

   Metaphors could be discussed to demonstrate the value of investing more time and effort, such as orchestral excellence.

Caucus Evaluation

1.   How different is the caucus process from the way you have planned curriculum in the past?

1   2   3   4   5
Not much different   Somewhat different   Vastly different

Please explain:

2.   How comfortable were you in deliberating with other caucus participants?

1   2   3   4   5
Mostly uncomfortable   Sometimes comfortable,   Mostly comfortable
                            sometimes not

Please explain:

3.   Please respond to the distribution of power in the caucus:

      a. Did you feel empowered to fully participate?

1   2   3   4   5

No, not at all   Somewhat   Yes, completely

Comment:

      b. Did others have voice and opportunity to fully participate?

1   2   3   4   5
No, not at all   Somewhat   Yes, completely

Comment:

4.   Overall, how effective is this approach to curriculum planning?

1   2   3   4   5
Not at all effective   Moderately effective   Very effective

What made the process *as effective as it was* for you?

What could have made it *more effective* for you?

5.   In your opinion, did the caucus deliberations produce anything that would *not* have been produced using another process? If so, what?

6.   (For the caucus leader): Please comment on the Caucus Guide. How might it be more useful?

References for Caucus Guide

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Phase 10: Assess the New Theory and Heuristic

In order to assess the new theory and heuristic, it will be compared to rubric designed in

chapter 3, Table 7, entitled, "Criteria to Assess the New Theory." Three major questions will be

answered here, (1) how well was the theory constructed, (2) what is the quality of the theory, and

(3) how well does the theory work?

Criteria for Assessing the New Theory	

1. How well was the theory constructed?
 	
(Based upon the study of how Mezirow and Schwab created their theories, discussed in chapter 2, and how theories have been developed through history, discussed in chapter 3)
	What was the knowledge input?
	From
	    what other theories?
	    experience of others?
	    my own experience?
	    empirical research?
	    the critique of experts?

2. What is the quality of the theory? (Argyris & Schön, 1974; Barbour, 1974; Olds, 1992; Bentz & Shapiro, 1998; Kaplan, 1998)	**Is it** **Coherent**—How well do its various parts fit together? **Parsimonious**—Does it use simplicity and the fewest assumptions necessary? **Comprehensive**—Does it seek to address most of the aspects of the targeted phenomenon? **Relevant**—Is it appropriate for the type of phenomenon it seeks to describe or explain? **Pragmatic**—Is it user-friendly?
3. How well does the theory work?	**What evidence demonstrates culture change**

	Discourse—Does the language about deliberation, transformation, and professionalism become commonplace in graduate professional education settings and the literature.
	Artifacts—What documents demonstrate change in assumptions, beliefs, and values regarding learning, curriculum, and professionalism? For example, how are syllabi or marketing materials different?
	Replication—How often do others seek to use the new theory to transform their graduate professional education?
	Student Development—How well do students profess their values and work for the public good? For example, what work do alumni engage in for the public good?
	Program Evaluation—How do students evaluate the learning experiences and the faculty in their professional education experience?

How well was the theory constructed?

What were the knowledge inputs? Besides integrating the major philosophical points of both transformative learning theory and deliberative curriculum theory, this study was further informed by important theories and experience related to professional education and professional work. Namely, Wheatly's use of chaos theory with leadership theory, Vaill's theory of learning as a way of being in permanent white water, Senge's systems thinking, Heifetz's adaptive leadership theory, Issaac's art of thinking together, Csikszentmihalyi's transformation of negative stress into positive

flow, Schein's "learning how to learn," Schön's reflection-in-action, Bridges's phases of transition, and Harris's reconceptualist curriculum theory have all contributed to this new transformative-deliberative theory of professional education.

My own personal experience informed the creation of the new theory in important ways. I was able to look at different approaches to doing curriculum work through my own personal lens and deconstruct those experiences to learn from them. The most salient contribution of my personal experience was a deeper understanding of the importance of power differentials in the deliberative process.

Empirical research supported the study by providing a strong foundation on which to build the new theory. A review of the research, however, demonstrates that much more study needs to be done, especially in terms of analyzing the deliberative process of curriculum work. The caucus guide will provide one tool that can be analyzed and evaluated as it relates to curriculum planning.

The critique of experts will take place in two stages. First, I took the caucus guide to three colleagues for review. This activity was like member checking since all of them have worked with me in deliberative curriculum planning in different settings. All three felt I needed to be more explicit up front in explaining why the deliberative approach is necessary, but they appreciated the quotations dispersed throughout. One, an associate professor of economics, was very specific about certain aspects of the guide. For instance, where I had "optional" activities, he thought they were too important to be optional. However, he was unfamiliar with some of the terms that I had taken for granted, such as Heifetz's "on the balcony" and "holding environment." This helped me to clarify language. Another colleague, an assistant professor of ethics, felt the emphasis on curriculum as a moral endeavor was pertinent and long-overdue, but had questions about exactly who would participate. She asked me to be more specific and to give examples for each of the

representatives. The third colleague teaches writing, and she was very helpful in clarifying

descriptions of the theories, suggestions for activities, and the overall layout of the guide for

coherence. It was she who suggested the terms "stakeholders and contexts" to replace the more

arcane term "commonplaces." The guide was greatly improved after receiving their feedback.

The second stage of the critique of experts will take place as others begin to use the caucus

guide and reflect upon its effectiveness. I hope the guide will generate qualitative studies on how

well it can be implemented, how well it leads curriculum planners to transformation, and how well

it helps planners to target transformation for students.

What is the Quality of the Theory?

Is it coherent? How well do its various parts fit together? The transformative-deliberative

curriculum theory is coherent, but not overly linear or systematic. The most important aspect of

coherence is this—the theory states that curriculum planners will likely need to experience a

transformation in how they view curriculum work before they can deliberate in ways that will lead

to student transformations. To expect curriculum planners to use solely a systematic approach to

designing curriculum that would target the transformation of students into genuine professionals

would be incoherent.

Is it parsimonious? Two very dense theories, often too difficult for the lay reader, have been

integrated in a way to produce a new theory that capitalizes on its synergy, not on every particular

aspect of both theories. For instance, the caucus guide does not address all the particularities of

transformative learning theory per se, such as differentiating between "frames of reference,"

"habits of mind," or "resulting points of view" (Mezirow, 2005). Neither does it refer to Schwab's

Aristotelian "theoretic" versus "practical", "commonplaces", or "categories" (Westbury &

Wilkof). A careful analysis of how the theories could be philosophically integrated resulted in the caucus guide.

Is it comprehensive? Does the transformative-deliberative theory of professional education seek to address most of the aspects of the targeted phenomenon? One of the strengths of this new theory is that it makes the individual theories—transformative learning and deliberative curriculum theories more comprehensive as they merge together. Educators have been limited in their ability to target transformation for students because they have not understood how to go about deliberating over the curriculum to plan it accordingly. With more people (commonplaces) participating in the endeavor, more synergy is achieved, which leads to more comprehensiveness.

Is it relevant? Is it appropriate for the type of phenomenon it seeks to describe or explain? Perhaps the most relevant aspect of this new theory is the fact that the caucus guide models the deliberative process it seeks to promote and hopefully, leads participants to transformation in order to become deliberators. It is timely in that the field of graduate professional studies is now in great need of the deliberative process to transform its programs to promote authentic professionals.

Is it pragmatic? Is it user friendly? Theoretical jargon was avoided in the caucus guide, and its layout was redesigned several times to make it user friendly. It is designed to meet caucus leaders where they are in their understanding of the process, and to lead them along to understand how to facilitate deliberations and transformations.

How well does the theory work?

It will take time to determine the effectiveness of the transformative-deliberative theory of professional education. Hopefully, the use of the heuristic will contribute toward a culture change—one in which the most important goal of graduate professional education becomes helping students transform into professionals who serve the public good. To identify culture

changes, one would look for a changing discourse. Will faculty begin talking about transformations as much as expertise? Will curricular activities focus on moral issues? Will curriculum work look more deliberative? Furthermore, will program evaluations analyze these new types of goals? Will educators come to expect deliberative processes as they embark on new curriculum designs? These questions can be investigated through qualitative research.

Chapter 5: Discussion and Implications of the Study

The final chapter of this dissertation provides a summary of how this project contributes to the field of graduate professional education in general. Specifically, it describes five major accomplishments of the project, a discussion of problems likely to be encountered in its implementation and suggestions to help with those problems, as well as an extrapolation of how the heuristic could be used in other educational domains.

A hundred years ago, the problem with professional education was that it lacked a sound scientific foundation and opportunities for clinical practice. Throughout the past three decades, discussions on graduate professional education have focused on how to improve the theory/practice continuum, whether through new formats or strategies, or by emphasizing one over the other. However, with the new century, new problems have emerged within the professional education arena. This dissertation has focused on two main problems in graduate professional education in the early 21st century—students are focusing too much on technical expertise and not enough on becoming transformed into authentic professionals who serve the public good, and in like manner, educators are using technical expertise to systematically plan for technical learning without intentionally planning for their students to transform into genuine professionals, or those who profess their expert knowledge for the public good. Both problems stem from deeply held values for the rational, cause/effect linear perspective, believing that on one hand, if students learn how to do what they need to be able to do in their profession (i.e., practice the theory or apply the knowledge), they will automatically become professionals, and on the other hand, if curriculum planners follow a technical and systematic approach to creating a blueprint or plan for the curriculum, students will automatically become professionals. This dissertation has demonstrated that both assumptions are flawed.

What must be done to ameliorate the over-dependence upon the traditional, systematic way of viewing professional learning and curriculum planning is to break outside this box of technical rationality altogether and introduce a new way of seeing professional learning and curriculum planning. This is the disorienting dilemma that precipitates the transformation of graduate professional education as a whole—the resolution to this problem is difficult to understand, appreciate, or implement because it flies in the face of technical rationality itself.

To be sure, it is important for professionals to learn expert knowledge and to become proficient in applying that knowledge. However, to focus solely on expert knowledge and skill (theory and practice) is to miss the most important aspect of graduate professional education— the fact that students are being educated to enter into a fiduciary relationship with society at large and to profess what they know and can do for the good of the whole, not merely for the benefit of their own careers. Educators of graduate professional education must plan for transformations to take place: that is, while students are learning expert knowledge and skills, they are also being confronted with the moral dilemmas that confront our society today and how to be genuine professionals in the face of those dilemmas. It is unlikely that the technical approach to learning and curriculum planning alone will lead students into a truly professional perspective. As Null states,

> All issues that we face as citizens in the early 21st century are ethical in nature. We face global warming, business scandals, human cloning, end of life questions, terrorism, nuclear proliferation, a rapidly globalizing economy, the depletion of energy sources, the decline of our inner cities, and many other challenges that cannot be met successfully unless those who address them are guided by a coherent moral philosophy.

The systematic perspective has little to say about moral philosophy, and this is a serious

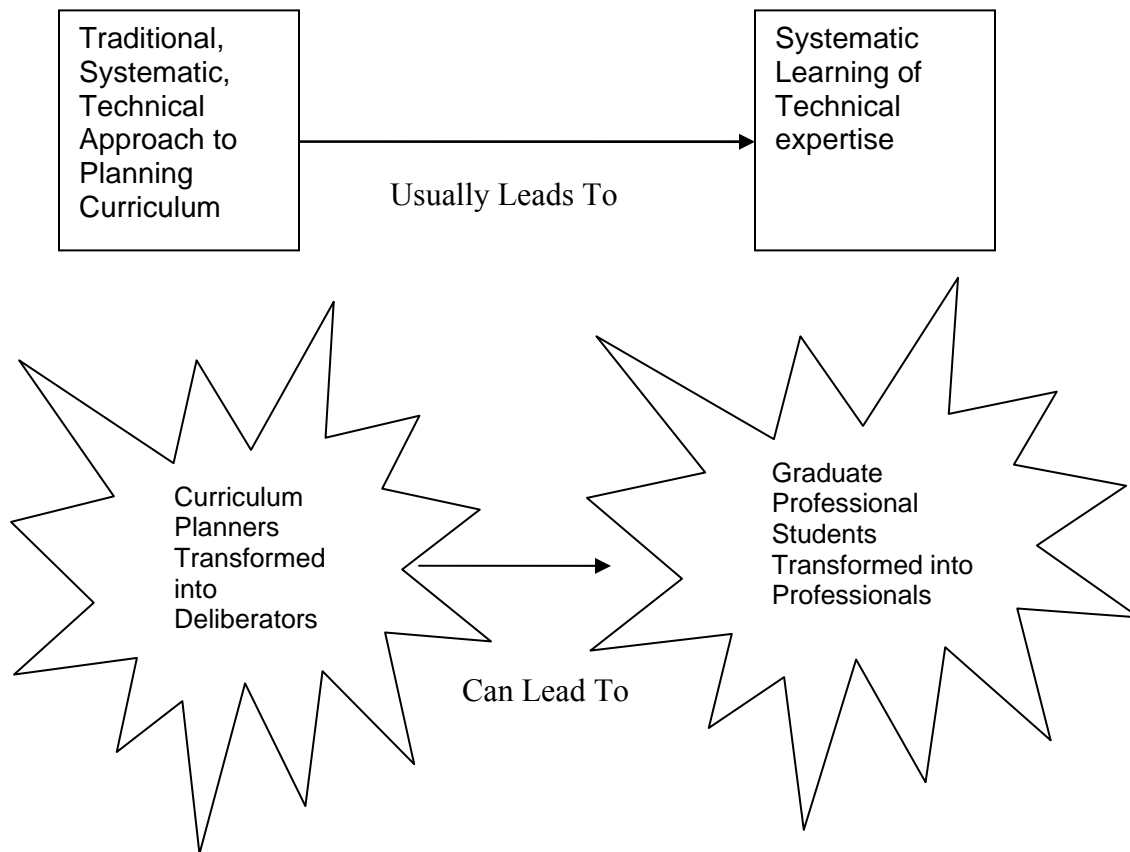handicap for this tradition moving forward. (Null, 2006, p. xviii)

Another way to state the problem at hand is to say that systematic, technical curriculum

planners are perpetuating systematic, technical learning, which is no longer adequate to help

students become professionals who serve the public good. Curriculum planners traditionally use

a piecemeal approach to creating curricula by naming what courses students should take in order

to complete the program, assuming that accumulating "x" number of credits would equal a

graduate professional education. Their approach mirrors how they expect students to go through

the program, taking isolated courses which focus on knowledge and then clinical or capstone

experiences which focus on application of skills. While some students are able to create

connections, coherence, and meaning from course to course, many are too focused on learning

the expert knowledge and skills of each particular course and struggle to see the bigger picture of

transforming into authentic professionals.

To contribute to the resolution of this situation, this study has resulted in a new theory—

one which integrates a learning theory with a curriculum theory to break the technical rational

grip on curriculum work and professional education. It requires a new way of thinking about

learning and about curriculum planning. It is a structural shift in thinking about the teaching and

learning endeavor for graduate professional education. It is not the "normal science" Kuhn would

talk about, but a paradigm shift in the way curriculum planners view their role and task as well as

how they view learning for students, and also how students perceive learning in professional

school.

Hence, graduate professional education needs to be transformative, and in order for that

to happen, curriculum planning must be done in a deliberative fashion. This new theory reveals

that in order for curriculum planners to enter into a deliberative way of creating curricula, they

will likely need a transformative learning experience themselves, as Figure 10 below illustrates:

Figure 10 Relationship Between Curriculum Approach and Learning Experiences

```
┌─────────────────┐                              ┌─────────────────┐
│ Traditional,    │                              │ Systematic      │
│ Systematic,     │                              │ Learning of     │
│ Technical       │   Usually Leads To    ─────▶ │ Technical       │
│ Approach to     │                              │ expertise       │
│ Planning        │                              │                 │
│ Curriculum      │                              │                 │
└─────────────────┘                              └─────────────────┘
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Curriculum
Planners
Transformed
into
Deliberators

Graduate
Professional
Students
Transformed into
Professionals

Can Lead To

(Chapman, 2006)

This study has produced a heuristic (the curriculum caucus guide) to help the

transformations illustrated in Figure 10 to actually take place, i.e., for curriculum planners to

transform into deliberative curriculum designers who understand the value of discovering ill-

structured problems of the curriculum work and deliberating over resolutions for them and

subsequently planning for students to experience transformation in their professional studies.

Educators will likely change their personal paradigms regarding graduate professional education and students will more likely transform into authentic professionals when the heuristic, or curriculum caucus, is used. Instead of tinkering with new learning strategies or new formats, using the curriculum caucus guide will lead curriculum planners into a new way of thinking about the professional education enterprise and could contribute toward a transformation of the field.

Major Accomplishments of this Project

This project resulted in five major accomplishments. First, it offers a heuristic (the curriculum caucus guide) to help educators experience a transformation in how they view curriculum planning for graduate professional education, to deliberate for curriculum planning, and to help students experience transformation. This is significant because before now, the two theories existed in isolation, and one could not easily help the other. This heuristic integrates the theories in a way that makes the curriculum work more effectual in promoting transformation. It makes the connection happen between the two theories in a synergistic way—i.e., curriculum planners need to be transformed into deliberators over curricular problems in order to lead students to transformation into professionals. Deliberation in the classroom can promote transformation by creating a safe environment for students to explore disorienting dilemmas. Furthermore, the curriculum caucus guide is written in a deliberative style, modeling the deliberation process.

The second major accomplishment is that this new theory not only integrates the previously established theories, but the heuristic is poignantly informed by personal experience. Real life curriculum planning work, in the form of four very different scenarios provided practical information. In other words, clinical study brought the new theory to the real world of power differentials, political maneuvering, reified ideas about curriculum work, and narrow views of learning. I was able to see

problems first hand and in person, which gave me important information about how to develop the heuristic. In fact, these scenarios contributed significantly to the third section (Section C.) of the heuristic. Being more aware of power differentials should contribute toward ameliorating a complex and difficult curriculum process. It could even lead to disorienting dilemmas and transformative experiences within the process, named the curriculum caucus because of the political nature of curriculum work.

While attempting to raise consciousness regarding power differentials, and at the same time, keeping with Schwab's Aristotelian approach, the foundation of the heuristic is largely philosophical and theoretical rather than ideological. As such, the heuristic has no particular target of hegemony. Rather, it targets curriculum problems in general. To the extent that the curriculum deliberators work through the caucus guide and discover hegemonic practices, the heuristic calls for the problematization of the situation and for deliberation toward resolutions. The deliberation leader can use what Schwab called the arts of the eclectic in eliciting the views of all and guiding dialogic exchange that leads to more inclusiveness and less oppression. Therefore, this heuristic is not solely a tool to hunt out hegemony, to fight power imbalances, or to contribute toward social justice. I hope it will do all those things, and it should to some extent. However, the heuristic is more general and philosophical rather than specific and ideological. The main specific target included in this curriculum caucus guide is to help educators to create curricula that will contribute to the transformation of students into true professionals—those who eschew brute careerism and answer the call to serve the public good

The third important accomplishment of this project pertains to the language used by the original theorists. The new integrated theory updates and reinvigorates the particular learning and curriculum theories used toward a more postmodern stance. Schwab wrote most of his significant essays and Mezirow conducted his seminal research three decades ago, and their theories are clearly marked with modern influences. They spoke of objectivity and solutions to

problems. This study updates their language to a more postmodern stance and calls for curriculum caucus participants to reflect upon power differentials that exist within the group, their own position within the activity, how to think about using power with people rather than over people, and how to work toward proposing resolutions rather than naively offering solutions. Furthermore, the curriculum caucus guide presents the integration of these two very dense theories into a language easily understood, with little jargon, making two theories heretofore inaccessible available and transparent for curriculum planners.

The fourth major accomplishment of this study is that the heuristic contributes toward a paradigm shift in the way much of graduate professional education is currently practiced. It targets a different kind of outcome for students (professionalism) and offers a different route to get there (deliberative curriculum planning). Furthermore, this heuristic, the curriculum caucus guide, could be adapted for other audiences, which is described more fully later in this chapter.

The final major accomplishment of this study is that it offers and models a ten-phase framework for theory integration. The ten phases that emerged from the study of theory-building could be adapted and used by others and applied to other theories in the future to create new theories of integration.

Problems Likely to be Encountered in Implementation and Ways to Ameliorate them

    Resistance to the Deliberative Curriculum Approach. Harris (1993) pointed out that in the past reforms were not implemented because they have not been well understood and because they have not been adequately shaped within the context of economic, political, and cultural considerations (p. 484). Indeed, the writings of Mezirow and Schwab are often dense, complex, and injected with special jargon, making them less accessible to educators who are specialists in their own field, but who do not want to become immersed in educational jargon. While the

curriculum caucus guide is purposely written with less dependence upon special jargon and in an

inquiry-based fashion to pull the reader in, the deliberation leader must be cognizant of the fact

that most educators and other curriculum workers (representing the commonplaces) will be

hesitant because the experience is new. According to Schwab, most people do not know how to

deliberate (1996/1983, p. 93); it will take time and effort to discuss this process for participants

to understand the nature of the experience. Further, in higher education, faculty often design

courses and programs alone or with small groups of other faculty. The notion of hearing the

voices of other stakeholders such as students, subject matter experts from the field or

professional organizations, curriculum workers, and others who could speak to the milieus

represented may seem foreign.

The deliberation process is one that is not well understood or regularly practiced. The

traditional, systematic way of creating curriculum needs to change. Effectively leading change is

a challenge and requires the careful attention to guidelines that can be gleaned from the

leadership and change literature. For instance, the entire caucus process should be viewed as an

adaptive approach rather than a technical solution (Heifetz, 1994). As the process unfolds, there

will be false starts, missteps, uncertainty, and ambiguity, and all sorts of problems Vaill (1996)

would call white water. Heifetz encourages leaders to embrace this chaos and to keep the people

engaged in the work—it is they who must work on the problem—and the leader should move

back and forth from the balcony to the dance floor to keep the process moving forward. In

essence, the deliberation leader must create a holding environment for the caucus to be effective.

At the same time the leader is focused on group dynamics and processes, individuals will

experience disorienting dilemmas and transformation as they examine their assumptions, beliefs,

and values about curriculum work and learning. The deliberation leader needs to find the delicate balance of facilitating group deliberation while fostering individual transformation.

Being able to lead individuals and groups through transformation and deliberation requires an understanding of systems thinking. To look for systems at work in any environment is to look for wholes, patterns and processes rather than snapshots or simple answers to questions. Systems thinking requires "…a shift of mind from seeing parts to seeing wholes, from seeing people as helpless reactors to seeing them as active participants in shaping their reality, from reacting to the present to creating the future" (Senge, 1990, p. 69). The curriculum caucus will help people to focus on different systems that exist, such as systems of power, communication, and emotions. To view the process from above (the balcony), but to be able to enter at any time to engage the people in their work (the dance floor) is to be able to view the work as a system of systems. To be able to guide systems in this transformative and deliberative way requires patience. It is an art that will develop with practice and experience.

It is also important to build relationships of trust among the curriculum workers. Using the curriculum caucus guide helps to shift the responsibility for the problem (the curriculum work) away from a single expert or authority to the primary stakeholders (Heifetz, p. 100). The curriculum workers will not see the leader as an authority, but rather as one who builds a foundation of trust on which the group can build its curriculum. In the same way that Carl Rogers encourages psychologists to use positive ongoing regard when listening to clients (Segal, 1997), the deliberation leader needs to hold in high esteem the small steps the curriculum workers take toward transformation and deliberation.

Curriculum caucus workers need to listen to each other carefully. The guide is written in an inquiry style purposely to elicit the voices of the stakeholders. Since "attention is the currency

of leadership," (Heifetz, p. 113), the caucus participants need to listen intensely to all the perspectives and in order to deliberate effectively.

Any time a new paradigm is introduced the biggest problem will be that people will think they know what to expect and what they will be doing, but then they find out it is different from business as usual, the status quo, or tradition. It does not fit into their perspective of expectation. In the case of educators who plan curriculum, the situation is exacerbated because they are used to having the answers, to being the teachers and not the students. However, now they must become learners. This is a double disorienting dilemma—they are being asked to engage in a new way to doing curriculum planning, and in order to learn that new way of doing the work, they must switch from being a experts to being learners who examine their assumptions, beliefs, and values. The caucus leader must work closely with the program director, academic department chair, or whoever is responsible for the curriculum design to help him or her to understand that this will be different, and may be difficult at first.

The first step, then, for the caucus leader, is to have one or two meetings with the person responsible for the curriculum work (here called the program director). The program director should read through the caucus guide before the caucus leader sits down to meet with him or her. During those preliminary meetings, the caucus leader can assess whether the program director has at least a beginning understanding about how the deliberative process will be different from the systematic process. It is not necessary for the program director to have a complete understanding of this, but that there be some common agreement on how the process will go. The program director will likely eventually experience a perspective transformation regarding curriculum planning along with the other caucus participants.

Learning to deliberate over curriculum work should not be entirely new for academics. To be an academic is to be able to think critically, to bring intellectual ideas and realistic issues to bear upon commonly accepted practices. However, they may be victims of the "Abilene Paradox" (Harvey, 1996), which states that it is easier to go for the short term agreement of the group than to avoid long term difficulty. Specifically the Abilene paradox is story of a family who decided to take a hot one-hour drive to Abilene for dinner one Sunday afternoon, only to discover later that no one had actually wanted to go. They were part of the group dynamic that propelled them to do something in the short term because it seemed easier than going against the apparent will of the group. The apparent will of a curriculum committee might be to systematically develop curriculum in a linear, cause/effect fashion, using a technical approach to getting the job done. Many curriculum committees fall prey to this type of momentum that keeps them locked into one way of doing things. While it may seem harder at first to go against the obvious ways of doing curriculum planning, the group will see that the benefits of deliberative processes outweigh the difficulties of learning how to do it and engaging in it. The caucus leader could use a video about the Abilene paradox, or ask them to read a short synopsis of the group phenomenon to generate conversation about it. Furthermore, it will be helpful for the caucus leader to ask the faculty participants to use the same academic critique that they typically use in their own field of study to reflect upon the ways in which they have done curriculum work in the past. Using the Abilene paradox and appealing to the participants' ability to engage in academic critique could open the discussion to new ways of doing the work.

The caucus leader should plan carefully for the initial disorienting dilemma for faculty by providing the participants with a reading to do before coming to the caucus meeting. The reading could come from the guide itself, but the entire guide should not be given to the participants. To

give them the whole guide would overwhelm them. They are not ready to see the whole picture yet. They need to be met where they are in their level of self-directed learning to where they need to be. Grow (1991) integrated a situational leadership model with a self-directed learning model to help leaders and educators understand that good teaching matches the learner's stage of self-direction and helps the learner advance toward greater self-direction. While most of the caucus participants are no doubt very self-directed in their own fields of study, they may be in a very dependent stage as far as curriculum work is concerned. According to Grow's stages of becoming self-directed learners, caucus participants would need to work through stages of being dependent to interested to involved to being self-directed.

The caucus leader would take the role of the respective teacher—some sense of authority and coaching to meet the participants who are in the dependent stage. If caucus participants are in the dependent stage, then the caucus leader will need to give them information about the different approaches to doing curriculum work, coach them in their understanding of these approaches, and help them overcome deficiencies in their understanding of curriculum planning, paradigm shifts and/or transformative learning, and deliberation. The caucus leaders will also need to help them overcome their resistance by being open to their ideas, creating a safe environment to talk about their concerns, and inviting them respectfully to try out this new way of doing the work. The curriculum caucus leader may need to work through the different roles the teacher plays as the participants move along the continuum to becoming self-directed. Therefore, the caucus leader will need to be a motivator and guide, a facilitator of the process, and eventually, a consultant and delegator.

It is important for the caucus leader to move deftly through these different roles because a mismatch between the caucus leader's role and the type of learner the caucus participants are

would be counterproductive. Grow (1991) demonstrates the problem of the disconnect by pointing out that the "most severe problems occur when dependent learners are mismatched with non-directive teachers and when self-directed learners are mismatched with directive teachers" (p. 137). Therefore, if caucus participants are dependent learners and the caucus leader gives them the guide, expecting them to read it and understand how to deliberate, there will be a mismatch.

The caucus leader needs to be flexible, tactful, respectful, attentive, and caring to help the program director and participants to move along in the direction of being able to fully participate in deliberation over curriculum problems and resolutions. At first, this may seem a bit awkward for the caucus leader, but it will become more natural as time goes on. In fact, the caucus leader may be a bit concerned about how the sessions will go at first. Talking with the program director first will set the stage. Having regular caucus meetings, such as every two or three weeks, over a period of a semester or two will allow for an ongoing deliberation toward the redesign of an existing program or a design of a new program.

Resistance to the New Ideas about Learning and Professionalism. In the same way that caucus participants will likely struggle to understand the deliberative approach to doing curriculum work, they may also hold on to technical ideas of learning and the idea that if students can apply knowledge (practice the theory) then they are ready to become professionals. Some time should be built into the caucus sessions to discuss deep, critically reflective learning, or transformative learning, as well as professionalism versus careerism. Short quotations from the caucus guide or selected readings chosen from the reference list of the caucus guide could serve as an impetus to discussing what it means to enter into a fiduciary relationship with society, to serve the public good. These are critical conversations that will require time for

participants to work through their perceptions and values. It is possible that some participants may disagree and may choose to value a technical degree for students who simply want lucrative careers (and thus boost enrollment). If this perspective fits within the mission of the university and school, then it should not be challenged. Otherwise, the caucus leader should emphasize that the transformative, deliberative process does not ignore the technical skills professionals need. Instead, it builds on those skills and takes students further to their transformation into authentic professionalism.

Resistance to the Amount of Time and Work the Deliberative Process requires. At first, it will seem to caucus participants that regular curriculum meetings are unnecessary. However, they will soon realize that by deliberating with key stakeholders and representatives of important contexts (subject matter, milieus, and curriculum making) they are actually capitalizing on the synergy the group creates and the work seems lighter because it is not all on one or two people. In using a deliberative process to plan an MBA program for Life Sciences professionals, I was amazed at seeing the new ideas that emerged from the group as it discussed the format of the program. Part-time faculty were the participants and they would be the instructors of the program, but there were no courses. The instructors would have to collaborate without the structure of courses. One of the part-time instructors blurted out, "We'll have a cohort of faculty working with a cohort of students." It was a new idea that emerged from the group that we probably would not have come up with on our own. The synergy that emerges from deliberations of the caucus meetings will be positive, productive, and energizing. As participants experience this synergy and realize how it actually cuts down on individual work, they will be more inclined to participate.

Power Differentials in the Deliberative Process. The program director needs to trust the caucus leader to be able to keep the process going forward. The caucus leader needs to trust the program director on decisions such as who should participate in the caucus. The caucus leader can suggest people who would represent technology, accreditation, and the like, but the program director needs to be able to suggest key faculty, student, and subject matter representatives (perhaps people from professional organizations, members of advisory boards, etc.).

A good relationship between the caucus leader and the program director is essential. Along with that open relationship of communication and trust, however, is the need for the caucus leader to be aware of the power differentials that will exist in the room. Participants will have varying levels of positional status—students, alumni, part-time instructors, instructors, assistant professors, associate professors, full professors, administrative staff, senior staff, etc. Other power differentials that will impact the group will be gender, race, and class. The caucus leader should discuss with the caucus how to set the stage for ground rules for deliberation or rules of engagement, or agreed upon principles for deliberation and planning. These principles should come from the group themselves and should become the touchstone to which they can return when problems arise, such as when some people are quiet and reluctant to speak. The caucus leader may want to use some of the strategies suggested in Section C. 1. in the Curriculum Caucus Guide to help set the ground rules or principles for deliberation, but the decisions must come from within the group.

In sum, there are six ways to ameliorate the difficulties of implementing the curriculum caucus. First, curriculum workers need to shape the caucus work in the context of economic, political, and cultural considerations of the students' educational experience, looking more broadly at their learning experience—at multiple milieus and at the socialization process they

encounter. Second, caucus work needs to be viewed as a paradigmatic culture change that requires leadership. Caucus participants should be encouraged to develop adaptive approaches to propose resolutions to curriculum problems rather than technical solutions. The deliberation leader should foster a holding environment of trust and safety while moving back and forth from the balcony (allowing the participants to do the work) to the dance floor (keeping them engaged). Third, the caucus leader needs to be cognizant of the fact that both transformation and deliberation could be taking place at the same time—within the individual "system" and the group learning system. That is, people could be transforming as they are deliberating. The deliberation leader needs to be able to step outside the process to see the wholes over the parts, the patterns and connections rather than isolated statements, snapshots, or events, and support individuals as they encounter disorienting dilemmas while encouraging the whole group. Fourth, the group needs to build relationships of trust and to practice ongoing positive regard with careful attention to the perspectives of all the commonplaces or stakeholders. Fifth, the caucus leader needs to be able to assess at what stage of self-directed learning toward curriculum planning the caucus participants are and how to move them along to being truly self-directed. Finally, the caucus leader and program director need to elicit from the group a set of ground rules or rules, engagement, or principles that reflect an understanding of the influence of power differentials in the group. These principles will be from the participants for the participants and will become a touchstone for them as they move through the process.

Other Domains Where the Heuristic Can Be Used

 Education. The curriculum caucus guide can be adapted and applied to other educational settings. For instance, a liberal arts college may use the guide to explore the tension between offering an undergraduate curriculum that contributes to the well-rounded education of the

individual and a preparation of students to earn a profitable living. Specific questions that target the issue of education versus training could be inserted in section VII. B. of the caucus guide. Another educational setting that could benefit from the curriculum caucus guide is community college developmental education, which seeks to help underprepared students to become successful in college. Educators can use this guide to discover and explore the unique curriculum problems that exist within this milieu and to deliberate toward potential resolutions. A few adaptations to the questions in the guide, as noted above, would make this tool appropriate for a different setting.

The curriculum caucus guide could also be used as a heuristic to integrate a reconceptualist curriculum inquiry approach with deliberative inquiry (Harris, 1993b). A reconceptualist approach uses perspectives and methods from a broad range of disciplines (such as ethnography, politics, and economics) to focus on the relationship between curricula and their economic, political, social, and cultural contexts, and on the experiential, personal, and hidden meanings associated with curricula. (p. 484)

The curriculum caucus guide could be easily adapted to become specialized for medical education by incorporating appropriate aspects of the reconceptualist approach, as agreed upon by the deliberation group. In that sense, the heuristic becomes the property of the group to be adapted in meaningful and pertinent ways. Sections of the heuristic could focus on economic, political, social, and cultural contexts. Other parts of the guide could focus on the experiential, personal, and hidden meanings of the curricula. The curriculum caucus guide already focuses on the nature of professional practice, but for medical schools, it could also add a component on national concerns about the state of medical education as Harris suggested (p.485). In fact, in October 2006, the new president of the Association of American Medical Colleges (AAMC),

Darrell G. Kirch, M.D., called for a restoring of a commitment to the notion of serving the public good (AAMC President Calls for Restoring Nation's Commitment to the "Public Good"). The curriculum caucus guide would serve to help curriculum planners to intentionally plan for the transformation of students to value a vocation, or calling, to serve the public good.

The curriculum caucus guide can provide documentation for and enhancement of the accreditation process. For instance, the Accreditation Council for Graduate Medical Education (ACGME) seeks to provide accreditation that is "efficient and effective, outcomes-based, improvement-oriented, and innovative" (ACGME Mission, Vision, Values, 2006). The curriculum caucus guide can serve to demonstrate the outcomes-based nature of deliberations, the discovery of curriculum problems and the resolutions designed to improve curricula, as well as the innovative approach of doing deliberative curriculum work, which is different from the standard systematic, linear, traditional approach. Likewise, the Association to Advance Collegiate Schools of Business (AACSB) requires business schools to demonstrate continuous improvement efforts (AACSB Eligibility Procedures and Accreditation Standards, p. 13), which could be exhibited by displaying the deliberation guide process. However, the AACSB standards are traditional and competency-based, relying upon a systematic and naïve way of designing curricula. The standards state that faculty are to be the ones to create the curricula, without making allowances for other stakeholders. The deliberative curriculum caucus guide would inform and enhance the accreditation standards by promoting the participation of all the appropriate commonplaces: teacher, student, subject matter, milieu, and the curriculum making process.

Continuing Education or Professional Development. The curriculum caucus guide could also be used for continuing education or professional development. For instance, the mission

statement for the Continuing Medical Education section of the Association of American Medical Colleges states that it fosters the development and continued improvement of programs of continuing medical education to enhance physician learning (AAMC, Continuing Medical Education Section, Mission Statement). The curriculum caucus guide could be used in many different professional development settings to design continuing education for professionals—for health care providers, lawyers, teachers, public safety officials, and other professionals who serve the public good.

Organization development and human resource professionals in the business and nonprofit world would also find the curriculum caucus guide to be useful. It is a tool that builds discourse and dialogue, and therefore it could be used to effect change within organizations. Rather than training, human resource officials could bring together the voices of all the stakeholders involved and deliberate over what and how they should learn in order to grow and develop in ways that are mutually significant for the employees as well as the employers. This guide is a heuristic that would propel organizations toward becoming the kind of learning organization Senge described sixteen years ago.

Evaluation of the New Theory

The heuristic I have proposed, because it is a synthesis of two previously independent theories, is itself a new theory. Traditionally in theoretical scholarship, new theories are evaluated by generating testable propositions. Because the caucus guide will be used in a highly action-oriented setting, a slightly different approach will be appropriate: namely, to determine whether the heuristic suggested here does in fact result in the kind of honest, genuine deliberation that leads to professional curricula which better serve the public good. The next step

in the model's development, therefore, will be to conduct evaluation studies which address questions such as the following:

1. How well does the caucus guide prepare the caucus leader to facilitate the deliberative process?

2. How well do the caucus participants understand the purpose and function of the caucus guide?

3. Does the caucus guide help faculty to deliberate over curriculum problems and plan transformative learning experiences for students?

4. In what ways can the caucus guide become more engaging or useful?

5. Would the caucus participants benefit from having their own caucus guide? If so, what should it look like?

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Figure 3. Mithaug's model for recursive theorizing

Table 4. Mithaug's Problem Solving and Constructive Theorizing

Figure 4. Jarvis's Model for Theory, Practice, and Research

Figure 5. Barbour's Example of the Relationship Between a Theory and a Model

Figure 3 of the Curriculum Caucus Guide. Wiggins and McTighe's Understanding by Design

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