FACILITATING REFLECTIVE LEARNING IN A WELLNESS CURRICULUM

THESIS

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Wellness is a bridge that takes people into realms far beyond treatment or therapy--into a domain of self-responsibility and self-empowerment

(Ryan & Travis, 1991, p. 3).

ABSTRACT

This thesis discusses the use of reflective learning in a wellness course in a northern community college setting. It explores how reflective learning was utilized to enhance students' understanding of their wellness and to engage them in subsequent positive health change. An action research approach that accommodated qualitative data collection was used in this study to modify an existing course curriculum. Study interventions were grounded in former student and colleague feedback. Former student data were the comparison point for the effectiveness of study. The interventions used included defining and integrating a reflective process into the study interventions, including a new journal format, and the use of increased class discussion.

General outcomes attest to the effectiveness of engaging learners in an inquiry into the reflective processes of the study interventions, in particular the integrated reflective journal approach. Discussion was helpful, although students indicated that more was needed. The majority of study group students developed an enhanced understanding of their wellness and their role in maintaining, effecting and fostering their personal wellness. In addition, reflection was demonstrated and played a large role in helping students engage in health- enhancing change.

This study illustrates that reflection is a dynamic process that can have a profound, empowering impact on adult learners' attempts to enhance their wellness. This process can be effectively facilitated using a supportive, respectful environment that ensures clarity of process, student safety, and ongoing dialogue. Finally, the comparative data presented endorses the use of an action research approach that combines inquiry into reflective processes and reflective learning activities to facilitate health change.

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CHAPTER 1

INTRODUCTION

Reflection is a term which has been gaining great interest in the field of adult education. As a nurse and adult educator, I clearly see the value of reflection and its utility for enhancing people's health and wellness. For example, most people apparently do not concern themselves with health until they are unwell. Reflection can stimulate a more proactive approach, enabling a deeper look at why one is well or unwell, and what assumptions or attitudes may have precipitated wellness.

Background Information

On a personal and professional note, reflection may also have great utility for developing healthy, well-prepared health workers; therefore, I decided to examine reflection in a community college wellness course that I teach and, depending on the findings, to develop an appropriate approach to enhance reflection. I developed and tested a modified curriculum based on input from previous students and former instructors of the wellness course. My preliminary investigation leading up to my project indicated that reflection was integral to the course, but students thought the process itself was vague and the tools to foster reflection were inadequate. I then designed a new approach to foster reflection and health change for students in the wellness course based on colleague and student feedback. My project was also informed by the current literature on this topic. This thesis focuses on my study interventions and the subsequent evaluation of the reflective learning that occurred.

I teach health workers as a member of a professional studies faculty in a northern community college. The curriculum that I teach requires students to examine their

attitudes and behavior in order to encourage greater self-awareness, growth, and thoughtful practice. Critical reflection can aid students to frame and to analyze the characteristics of their experiences and to discover how they can interpret those experiences to create new knowledge, values, behaviors and truths. As Boud, Keoug and Walker (1985) explain, reflective learning can assist us as people in recapturing our experiences and help us make meaning of them. Essential to this process is the ability to reflect.

I frequently teach a wellness course as part of the college's program. In this curriculum, students are required to reflect on and improve their personal health and wellness. However, I have became increasingly unsure whether reflection was actually fostered in this course. In addition, I wondered how best to foster reflection in a course such as this, and what the relationship was between reflecting on wellness and subsequent health change. The human service field that I teach in expects workers to be aware, healthy, persons who can reflect on their experiences to learn from these experiences, and to remain accountable, effective, ethical care providers. As a result, the nature of my work demands that I be skilled at facilitating reflective learning in the classroom.

When I began teaching this wellness course, I presumed it was reflective. However, I wished to test this premise. This is an important issue to explore due to the potential of reflection to increase self-knowledge, understanding, and personal empowerment (Brookfield, 1995; Jarvis, 1987; Mezirow, 1990). In fact, Brookfield (1985) states that reflection should be viewed as a guiding principle that all adult educators seek to foster:

> Adult education fosters a spirit of critical reflection; through education learners come to appreciate that values, beliefs and behaviors are culturally constructed and transmitted, and that they are provisional and relative. Adult educators are concerned, therefore, to prompt adults to consider ways of thinking and living alternative to those they already inhabit. (p. 48)

As an adult educator, I think it is essential to try to assist learners to make meaning of their studies and to relate knowledge to their life and work. I believe reflection can be a tool for accomplishing this.

The purpose of the wellness course is to engage students to reflect on personal and community wellness, using self-assessment and evaluation, so that insights gained may lead to a health-enhancing change experience. The students are typically enrolled in one of four programs: health/home care worker, early childhood educator, educational assistant, or group home worker. The goal of the wellness course is to assist students to develop a clear understanding of their health and wellness and how to maintain wellness in the face of what are often stressful careers. I anticipated that students would develop reflective skills to make informed choices in order to manage their own health, and act as effective role models and teachers for their clients.

A central component in the wellness course is the act of reflecting on one's health to learn how one's behavior, beliefs, and choices have influenced one's own state of wellness. Reflection, in essence, becomes an initial step in managing health. The process of reflecting on personal health begins with an awareness of one's present state of health and wellness (Kozier, Erb, Blais, & Wilkinson, 1995). Students are then asked to make an effort at positive health change based on insights that arise from their reflection.

My colleagues--who have also taught the wellness course--and I have always assumed that reflection was inherent in this course. However, by re-examining the recent student feedback (verbal and written), I concluded that some students attained insights and profound learning about their wellness through reflection in the course; conversely others; exhibited little tangible evidence of reflection and minimal personal change. My

colleagues concurred that they also were uncertain of the extent or the authenticity of reflection in the course, or even how to effectively facilitate reflective learning in this program. I recognized that, for some students, the wellness course might be their first encounter with reflective learning. In fact, anecdotal feedback from students and colleagues confirmed that some students felt uncomfortable--even threatened--by the reflective process.

My fellow instructors and dean agreed that examining reflection in this course and how best to facilitate it could benefit subsequent students and instructors. I set out to study the extent to which reflection was fostered in the course, how fostering reflection could be improved, and how the complexities of reflection might bring about health change.

On a personal note, I knew that disciplined reflection on what I have learned is not a strength of mine. Ironically, I was expecting my students to do this while unsure I was a credible role model. I reasoned that engaging in this study would not only assist students and colleagues, but might enhance my own reflective ability. In addition, I hoped to enhance my skills in teaching the reflective process and my ability to conduct research.

Focus of Inquiry

The focus of my inquiry for this study was on enhancing reflection in my wellness course and on understanding the role of reflection to foster subsequent health change during the period of the course and beyond. Specifically, I wished to find out, first, if reflection was in fact fostered within this course and what did or did not facilitate this process. Second, I wanted to know whether reflection actually assisted students to engage in *change* related to their health during the course. Third, I wanted to know if these changes were sustained after the course and if so to what extent. Finally, I was interested

in learning if there were implications of this approach for other adult educators teaching in similar settings.

Purpose of the Study

The purpose of my study was to improve my wellness course by accomplishing five goals: (a) To determine the degree to which reflection existed in the course, (b) to develop and enhance the students' ability to engage in and act upon their reflection, (c) to gain insights as to how reflective learning can be used to engage students in health change during and after the course, (d) to determine the extent to which the reflective process was utilized by students after the course, and (e) to improve my ability to foster reflectivity in adult learners. A secondary goal was to develop educational applications that could be utilized by other adult educators in similar settings. On a personal level, my subsequent goals were to develop my ability to reflect and teach reflection, and also increase my ability to design, implement and evaluate an action research project, using qualitative data collection tools.

In pursuing this purpose I decided to survey past students of the wellness course to assess the degree of reflection they perceived that they had engaged in during those earlier courses, and what specifically aided or impeded their in-course reflection. I also wanted their feedback regarding the impact of reflection on any health change that they had previously attempted during and subsequent to the course. Using this feedback and drawing upon supporting literature, I designed and implemented a new approach to facilitating reflection for health change in the wellness course of my college.

In order to evaluate this new approach, I developed several tools to survey the students and illuminate answers to specific questions. Briefly, past students of the wellness course

(comparison group) were surveyed using a student questionnaire and interviews. The resulting information was used to develop my modified course approach. With my new course as an intervention, I used practitioner action research (see Quigley & Kuhne, 1997) to determine if the new course was better than the old in enhancing student reflection. The new in-course assessment tools were used to identify the study group's perceived meaning of reflection and its application to wellness. As well, I sought to document students' progress and their use of reflection in the course. Finally, as a follow-up, the study group was surveyed a month later with the same tools used for the comparison group follow up.

This comparative practitioner action research approach enabled me to apply practice-based, student-centered knowledge and to assess its impact for meeting my project goals.

Scope and Limitations

The scope of this thesis is in the area of facilitating reflective learning in a northern community college wellness course. The primary focus of my study is the evaluation of various process interventions implemented during the course to enhance reflection and bring about subsequent health change. The specific course interventions utilized were: (a) changes and clarification in the format and evaluation processes used for the journals in the course, (b) explanation of the reflective learning process early in the course, and (c) increased small group discussion during the course. Although this study involved a comparison group and evaluated reflection and change both during and after the course, a limitation might be that I did not have a validated instrument to assess reflectivity during the course and I did not follow the study group students past 2 months.

Any conclusions arising from this thesis should be viewed in the context of my study parameters. I conducted this study in a rural northern community college and in a course

foundational to several health and human service programs. I began my study in June 1999 by surveying previous students, and then developed possible interventions that were implemented for the fall wellness course (September – December 1999). Follow-up surveys were completed during January and February of 2000. The findings may not be generalizable to other programs.

Students were asked to voluntarily participate after they had enrolled in the course and attended the first class. I was open and honest about my research intentions, as required by participatory action research in order to enable the students to make an informed choice as to whether they would participate or not.

Another limitation to my study concerns the ill-defined nature of "reflection" in the literature. In addition, there is little documented research on how to facilitate critical reflection with adult learners in a community college environment. A third limitation is that this study does not explore the relationship of reflection to wider issues of community health change, nor how community wellness can be facilitated through reflection. Only student's personal experience with wellness is emphasized.

A fourth limitation that presented itself as the study progressed is the time required to reflect. Some students indicated that reflection takes time and that a single semester might not be adequate to accomplish this. The issue is raised in the literature, and I discuss this point in Chapter 4.

A fifth limitation relates to my methodology. The comparison group of students was surveyed *after* it had had considerable time to apply and reflect back on the wellness course--1 to 2 years in most cases. However, the study group was surveyed 1 to 2 months following their course. I chose the latter timelines due to personal demands and my work

schedule. This close follow-up timeline was noted by my study group in their follow-up questionnaires and interviews, and may have influenced their responses.

My assessment of interventions and student reflection was largely based on the students' work in journals and on self-assessment questions related to reflection during the course, and in the subsequent questionnaire and interviews following the course. I opted to use this mode of self-report evaluation because the objective tests that I found in the literature to assess reflection or reflective ability were either irrelevant to my project or too cumbersome for the program that I was involved with. I wanted my conclusions and interpretations to be grounded in the students' own words; therefore, I used self reports. I also believe that emphasizing the students' own words helped to keep my own biases at a minimum.

My study is unique for two reasons. First, the participants are college level students, whereas most research on reflective learning has involved university-level students. Second, based on the research I have done for this project and my experience teaching in the north for 5 years, I believe I am the first instructor in a northern college to carry out formal research in a wellness course with students.

Assumptions

During this study, I assumed that the most viable input on how best to facilitate reflection would come from the participants themselves. I assumed that reflection would be difficult for some participants based on the feedback I had from past students and on my own personal experience with reflecting. I also assumed that reflection is a skill that students in caring professions should develop as a personal and professional resource for the future. As the wellness course is often taken early in our college students' respective

programs, I hypothesized that assisting students to develop their reflective ability early could aid them with further reflection in higher level course or practica work.

Due to the personal and confidential nature of student reflections on their health and wellness, I assumed that survey tools and processes that protected their anonymity were the most appropriate. I therefore sent questionnaires that could be returned to a third party, and student interviews were conducted by trained colleagues or experienced interviewers. Student questionnaires gave me an effective means of comparison, whereas the interview and in-course journals provided me with rich narrative that I believe best illustrates how the students reflected and applied that reflection to their wellness.

Definitions

Health refers to the current state of one's physical, mental, emotional, spiritual, and social well being.

Health change is a choice to move towards more optimal health and wellness. Turner, Sizer, Whitney, and Wilks (1992) describe the stages of changing health as including an awareness of the need to change, recognition of how to accomplish this, and commitment to do so. In this thesis health change is a change in behavior, actions or attitudes that alters health and well being.

Reflection is a process of examining one's experience to clarify the inherent meaning and discover new understandings and perspectives. Reflection in learning, or reflective learning, is defined by Boyd and Fales (1983) as "the process of internally examining and exploring an issue of concern, triggered by an experience, which creates and clarifies meaning in terms of self, and which results in a changed perceptual perspective" (p. 100).

Reflection helps individuals recapture and make meaning of their experience (Boud, Keogh &Walker, 1985).

Wellness for this thesis, is the balancing and maximizing of one's health through actions, behaviors, and attitudes in order to expand one's health potential and to improve the quality of one's life. As Byer and Shainberg (1991) explain, wellness is "an ongoing, active process, requiring positive attitudes and behaviors that contribute to the quality of our lives and the fulfillment of our potential" (p. 4). Wellness requires education, self-awareness, and personal growth (Travis & Ryan, 1988).

Wellness Plan is a central assignment in the Wellness Course of my college. The wellness plan asks students to engage in a positive health-enhancing change. This begins with a critical assessment of present health factors contributing to or impeding personal wellness, and it is followed by the development, implementation, and evaluation of a plan to maximize potential wellness.

Plan of Presentation

Following this introductory chapter, I present literature in chapter 2 that is relevant to this thesis. The literature review focuses on five areas: the concept of wellness, facilitating adult learning, using reflective learning to facilitate adult learning, the use of journals to foster reflection, and the use of action research to investigate aspects of adult learning. Chapter 3 presents an overview of my project, beginning with how I developed new interventions to foster reflection, how the implementation of a revised course took place, and the evaluation results of my interventions in terms of the impact of the new course curriculum on students. In Chapter 4, I discuss my findings in light of the literature and the

field of practice, and I give my own insights. Finally, I detail my conclusions and present recommendations for future practice and research.

CHAPTER 2

REVIEW OF THE LITERATURE

I begin this chapter with a review of wellness as defined in the literature. Then I proceed to a review of the general principles for facilitating adult learning. These two initial sections set the stage for the main components of this review--the process of reflective learning and how reflection may be facilitated in adult learners. Particular attention is given to the use of reflective journals to foster reflection. Finally, I briefly review the purpose and use of action research to study questions of adult learning.

Wellness

Wellness is a term that has evolved from traditional definitions of health beginning with the 12th century concept that health is the "absence of disease" (Byer & Shainberg, 1991). Efforts to define and explain wellness tend to focus either on it as a process or state or on its holistic nature.

Defining Wellness as a Process or State

Byer and Shainberg (1991) distinguish wellness from health by asserting wellness is a further development of health. They define wellness as "an ongoing, active process, requiring positive attitudes and behaviors that contribute to the quality of our lives and the fulfillment of our potential" (p. 4). Mullen (1986) similarly notes that wellness involves using "attitudes and activities which improve the quality of life and expand the potential for higher levels of functioning" (p. 34). Byer and Shainberg note that a central attitude is required if wellness is to be a workable "mindset." This attitude includes a belief that people have some control over their lives, a sense of commitment to their actions, the courage to face challenges, and a view of change as an opportunity to enhance their well

being. Individual perspective is elaborated on by Leddy and Pepper (1993), who argue that each person perceives wellness uniquely.

Similarly, Anspaugh, Hamrick, and Rosata (1991) and Mullen (1986) see wellness as engaging in attitudes and behaviors to increase one's potential as humans and improve one's quality of life. Leddy and Pepper (1993); however, refer to wellness or well-being as "a state that can be described objectively" (p. 221). In contrast, Travis and Ryan (1988), Byer and Shainberg (1991), and Kozier, Erb, Blais, and Wilkinson (1995) all describe wellness as an evolving process. Travis and Ryan concur, saying, "Wellness is a process, never a static state" (p. xvi).

As part of this state-versus-process debate, Leddy and Pepper (1993) argue that wellness occurs at levels on a continuum. This implies inherent movement or progression, indicating that wellness is process. Byer and Shainberg (1991) also see wellness as an open ended continuum in which one moves between levels of higher wellness or illness and disease. For Byer and Shainberg, the impetus for enhanced wellness is growth, which (in turn) comes through effort and commitment. As Byer and Shainberg note: "Throughout our entire lives each of us can continue to grow, develop and achieve higher levels of wellness" (p. 5). Travis and Ryan (1988) also endorse a wellness continuum that is based on self-responsibility and movement towards higher-level wellness. In their model, there is illness and death at one end of the continuum, and progressively higher levels of wellness at the opposite end. They stress that although individuals may be ill, it is their orientation *towards* wellness that reflects how well they actually are. For example, someone disabled or suffering from an illness can be as well as someone free of disease but who does not maximize her health potential through a positive approach to life. An individual with a

high level of wellness is characterized by "taking responsibility for his/her life and – consciously engaged in the experience" (p. xvii).

As outlined by Travis and Ryan (1988), the keys to progressing along the continuum towards enhanced wellness are awareness, education, and growth. Awareness involves clearly *seeing* one's present actions. Education is an exploration of one's options and choices, looking inward, accepting help. Growth is the attempt to use and act on new or different options. As one engages in these activities, one must evaluate and re-evaluate progress.

With the exception of Leddy and Pepper (1993), the overall agreement in the literature appears to be that wellness involves striving for an enhanced well being--this invariably includes a movement or progression; therefore, wellness as a process seems justified. As Kozier, Erb, Blais and Wilkinson (1995) put it, wellness is a "process of becoming aware of and making choices toward a higher level of well-being" (p. 267).

Viewing Wellness as Holistic

Wellness is noted by many authors to be multi-faceted, involving an interplay of at least five elements concerning the whole health of an individual (Anspaugh, et al., 1991; Byer & Shainberg, 1991; Kozier, et al., 1995; Travis & Ryan, 1988). As Turner et al. (1992) explain, wellness is used interchangeably with holistic health or high level wellness and involves physical health as well as these four other components--emotional, intellectual, social, interpersonal and spiritual. Turner (1992) says, "*Holistic health* refers to functioning well as a total person, achieving the full human potential" (p. 2). Being well means considering the plethora of factors influencing these aspects of one's wellness and seeking balance or harmony among them to enhance wellness (Anspaugh et. al., 1991,

Kozier et al., 1995, Travis & Ryan, 1988). Travis and Ryan add that wellness is a human right and an individual's purposeful choice to live to the fullest potential of well being.

In essence, wellness is seen as an intricate process of awareness and effort to understand one's physical, mental, spiritual, social, and emotional selves. It also involves the utilization of this knowledge, along with the factors influencing these elements, to enhance one's potential for wellness. The process then is characterized by examination, reflection, and subsequent action or change.

Facilitating Learning for Adults

Assisting adults to enhance their wellness requires attention to them as learners; this perspective implies understanding the ways educators can respond to the needs of adult learners. In this section I will discuss the central principles of facilitating learning with adults.

Attending to the Learner

Enhancing or facilitating adult learning begins with the learner. This means understanding who they are, including their needs and attitudes related to learning (Brookfield, 1990; Knowles, 1990). Attending to *who* the learner is means providing learning that is relevant and engaging (Knox, 1986; Vella, 1994; Wlodkowski, 1985). Learning can be made relevant by respecting and utilizing the adult's learning from previous experiences, or prior experience can be used as a starting point to understand new knowledge, skills and attitudes, and to develop an integrated perception of past and present learning (MacKeracher, 1996). Adult learners can be stimulated to engage in learning through ensuring active participation in learning. Vella defines learning engagement as learning that "invites the learners to put themselves into the learning task" (p. 21). This

includes designing learning activities that incorporate the cognitive, emotive, and psychomotor elements of learning. In a similar vein, Wlodkowski (1985) stresses that the emotive aspects of learning can deepen learning engagement, whereas Brookfield (1990) warns that the emotive elements of learning may threaten the self-esteem of some learners.

The Educator's Response

Essentially, one who seeks to facilitate adult learning is called upon to be responsive to the adult learner. As MacKeracher puts it: " Facilitating is regarded as a responsive activity adapting to the learners' activities and natural learning process" (p. 3). Knowles (1990) sees facilitating learning as not only transferring content but designing learning by responding to students. This requires "relationship building, needs assessment, involvement of students in planning, linking students to learning resources, and encouraging student initiative" (p. 181). Similarly, Cranton (1992) explains the role of facilitator as one who "responds to needs, encourages, supports" (p. 100).

In essence, an educator can facilitate learning that is active and relevant to the adult learner by using an empathetic approach to learners; providing a safe, respectful, and supportive learning environment; encouraging dialogue in the learning; and fostering a sense of responsibility for learning.

Tough (1979) and Rogers (1983) identify empathy as a desired characteristic attribute of adult educators. They describe empathetic educators as non-judgmental and understanding practitioners who employ attentive listening to understand and help their students. Similarly, Wlodkowski (1985) stresses an empathetic approach that considers the learners' perspective on learning: "Considering our learners' perspective is as much an attitude as a skill. It is a constant desired awareness of what our learners are living and

experiencing with us as they know and feel it" (p. 27). Brookfield (1990) agrees and implores educators to remember their own experiences with learning and to be more sensitive to learners.

Supportive Learning Environment

Knox (1986) notes that to foster a supportive learning environment, educators should understand learner expectations, involve students in learning objectives, and provide students with a balance of challenge and support. Brookfield (1990) concurs, adding, "The emotional sustenance students receive from a supportive learning community is reported as crucial to their survival" (p. 205).

The relationship between the educator and learner can also determine whether a learning environment will facilitate learning (Knowles, 1990; MacKeracher, 1996; Vella, 1994). Knowles describes a respectful, safe learning environment as one that accommodates physical comfort as well as human relations. A mutually trusting relationship between educator and adult learner is essential for such an environment. Vella (1994) attests that this mutuality evolves by respecting the learner; attentive listening; open, affirming, non-judgmental behavior; clarifying learner and educator roles; and using dialogue to develop the relationship. A relationship conducive to learning is also fostered if educators are genuine, and if their teaching truly expresses who they are as persons (Brookfield, 1990, Rogers, 1983).

Trust and safety are cornerstones of supportive learning environment (Brookfield, 1990; Vella, 1994). Trust can be induced by what educators do. As Brookfield notes: "When it comes to the most crucial emotional interaction of all between teachers and students--that of building trust--teachers' actions count more than anything else" (p. 209).

Vella states that trust can be fostered by sharing ability and experience with students, by letting them know who you are. This, she notes, will foster safety in the learning environment, which "enables the teacher to create an inviting setting for adult learners" (p. 6). Further, Vella (1994) notes that safety can also be fostered through attainable and relevant learning objectives, small group discussion, a sequencing of learning activities from simple to complex, groups oriented to independent activities, and, an affirming non-judgmental environment.

Dialogue and Responsibility

Many educators view dialogue as a central tenant of facilitating adult learning (Freire, 1993; MacKeracher, 1996; Vella, 1994). Tough (1979) defines the student teacher interaction as a dialogue; Knox (1986) views dialogue as essential for feedback; and Brookfield (1990) advises dialogue among educators to enhance their ability to facilitate learning. Freire (1993) views dialogue between student and teacher as liberating and essential for education, saying: "Without dialogue there is no communication, and without communication there can be no true education" (pp. 73-74).

There is a growing trend for educators to encourage learners to take more control or responsibility for their learning (Cranton, 1992; Knowles, 1990; Vella, 1994). Knox (1986) suggests the practical approach of ensuring that students have options or choices in their learning as a way of fostering confidence and self-direction. Knowles also stresses the importance of encouraging student initiative; he centers his principles of facilitating learning on involving students in planning, designing, and evaluating their own learning. Vella reinforces this point, insisting that students must be involved in deciding how and

what they learn. Cranton goes further, viewing responsibility for self-directedness not only as a way to facilitate learning but as a fundamental goal of adult education.

Learning to Reflect

Helping learners to become more reflective has been emphasized as an important goal for adult education (Brookfield, 1995; Cranton, 1992; Knox, 1986). MacKeracher (1996) stresses the essential utility of reflection to facilitate adult learning, stating, "Learning is facilitated when time and opportunities are provided to reflect on past experience, to find connections between past experience and new knowledge and skills, and to integrate these" (p. 41).

Both Dewey (1966) and, some 30 years later, Mezirow (1990a), have asserted that reflection helps individuals understand the how and why of their actions. As Mezirow states, "The central function of reflection is that of validating what is known" (p. 18). Boyd and Fales (1983) add that the central role of reflective learning is the continued growth of professionals, particularly in the helping professions, and, through them, their clients.

In summary, there are many variables to consider for effectively facilitating adult learning. Most prominently, facilitating adult education requires empathy and sensitivity to the learners' life experience, a supportive learning environment involving dialogue, and support to be more self-directed. It is also evident that reflection can add deeper meaning to adult learning experiences.

The Process of Reflective Learning

Reflection has been viewed as a way of responding to, and further understanding, one's experience (Boud, Keogh & Walker, 1985; Dewey, 1966; Montgomery, 1993). Boyd

and Fales (1983) describe reflection from this viewpoint as key to learning from experience: "Reflective learning is the process of internally examining and exploring an issue of concern, triggered by an experience, which creates and clarifies meaning in terms of self, and which results in a changed perceptual perspective" (p. 100). Williamson (1997) simply states that the purpose of reflection is "to explore what is happening and, more importantly, to make sense of it" (p. 95).

Boud, et al. (1985), as well as Tucker, Wood Foreman, and Buchanan (1996) note a lack of clarity regarding the reflective process. They relate this, in part, to the innate nature of reflection and also to student inexperience with this form of learning. Atkins (1993) confirms that there is little clarity and diverse opinion on the reflective process itself.

What is common in the literature on the reflective process is that it is viewed as an intentional, goal-oriented, sequential process (Boud, et al., 1985; Dewey, 1966; Mezirow, 1990a). Most authors also agree that reflection requires a "trigger" to begin with (Boud et. al., 1985; Boyd & Fales, 1983; Brookfield, 1987). This trigger is an event or experience producing unease. It causes people to fully attend to the experience. Kitchener (1983) notes that a trigger may arise from one or a combination of experiences. Other researchers add that reflection can be triggered by classroom learning experiences (Boud et. al; Kitchener, 1983; Mezirow, 1998). Jarvis (1987) says that insufficient "stock" knowledge (p. 167) can be the trigger, whereas Mezirow (1990a) says inadequate assumptions are the triggers for reflection. In either case, a trigger can make one attend very closely to the present experience so as to enhance one's understanding of it through reflection.

Cognitive and Affective Elements of Reflection

The literature on reflective learning has largely focused on the cognitive aspects of the reflective process (Dewey, 1966; Kitchener & King, 1981; Mezirow, 1990a). Boyd and Fales (1983), and Montgomery (1993), emphasize the cognitive to a lesser extent, and only a few authors (e.g., Boud et. al.,1985; Brookfield, 1994) detail the affective aspects of reflection. Therefore, the cognitive stream has tended to dominate the adult education literature.

Writing from the cognitive perspective, Dewey (1966) views reflection as a systematic, intentional, utilitarian approach to thinking and problem-solving related to experience. He describes the reflective experience as defining a problem, gaining an interpretation of the problem, gaining an analysis of the experience, and posing and verifying hypotheses (p. 150). Later researchers have focused on the examination of assumptions, a step inherent in reflection (e.g., Brookfield, 1995; Kitchener & King, 1990, 1994; Mezirow, 1990). Kitchener and King add to Dewey's perspective, stating that individuals develop their reflective ability by progressively moving towards *reflective judgment.* Kitchener and King (1981) say that reflective judgment is a critical inquiry approach to knowledge and reality using certain assumptions to inform thinking: "there is a particular set of assumptions about knowledge on which reflective thinking is based. Without these assumptions, reflective thinking processes cannot be internalized" (p. 79).

Both Mezirow (1990a) and Brookfield (1995) view critical reflection as the discovering of assumptions that guide how individuals understand and respond to their experience. Mezirow notes that these assumptions often become unconsciously embedded in the meaning schemes people use to interpret the world. By meaning schemes, he refers to

innate guidelines individuals use to understand the world, which may become distorted, but which influence how they allow themselves to think and know. Mezirow adds that critical reflection is necessary to critique the validity of prior learning assumptions, because "reflective interpretation is the process of correcting distortions in our reasoning and attitudes" (p. 7).

Critical reflection, he maintains, allows people to look at why we do what we do and the consequences formed in this action. In subsequent work, Mezirow (1998) articulates a critical reflection of assumptions which parallels Kitchener and King's (1981, 1994) reflective judgment model. Both of these models enable learners to examine inherent truths related to why and how they learn and how they use learning in new ways. Kitchener and King (1994) also note that reflective judgment is needed to help individuals deal with ambiguously structured problems that do not have a right or wrong answers.

The process models outlined by Boyd and Fales (1983), Boud, et al. (1985), and Montgomery (1993) also contain cognitive elements, but are more grounded in life experience. Boyd and Fales describe a six-stage reflective process, saying that first a sense of unease is triggered that is related to experience. The source of this dissonance may be unknown initially. Next, the concern is clarified in terms of one's related thoughts and feelings. This is followed by an openness to further internal and external sources of information, and a resolution of the concern occurs through integration and synthesis of insights obtained. In the fourth step, new insights are then merged with old knowledge to establish continuity, and a decision on whether to act on the resolution occurs. Although Boyd and Fales mention feelings early in their process, the emphasis remains on cognition.

Montgomery (1993), and Boud, et al. (1985), offer similar cognitive approaches in their process models. For Boud, et al., the process is: identify a concern, explore the nature of the concern, look at all the angles, integrate relevant information, and propose possible choices for action. In his meta-model, Montgomery (1996) summarizes this approach to reflection with a sequence: "Do, Look, Think, Evaluate and Plan" (p. 4). Montgomery says these steps can reframe one's inherent attitudes, values, beliefs and can result in changed perspectives for future experience.

The process models of Boyd and Fales (1983), Boud, et al. (1985), and Montgomery (1993) seem sequential, but Boyd and Fales hasten to note that integration and insight can occur unconsciously, independent of the process. Similarly, Boud, et. al. and Montgomery refer to a cycling movement between various phases of the reflective process. This is juxtaposed to the more controlled and developmental processes of Dewey (1966) and Kitchener and King (1981).

From within the affective stream, Brookfield (1994) laments:

> What is noticeably absent from this literature, however, is detailed attention to the visceral and emotional dimensions of critical reflection, to the ways it is experienced by adults in critical process as a contradictory reality, at once troubling and enticing (pp. 203-204).

Michelson (1996) concurs, though she adds a thoughtful critique of the current literature on the reflective process. She sees the literature as engendered with assumptions that prefer a more analytical, masculine definition of reflection. She explains that historically men are viewed as the rational being, woman emotive and more sensate. She observes that "the irrational, the bodily, the emotional and the concrete are not seen as directly productive of knowledge; they must be reworked--in effect appropriated--by reason so that the subjective and particular can be erased" (p. 441). As a result, Michelson believes the

current literature defines reflection through these same epistemologies of abstraction and control (p. 443). Both Mezirow (1990a, 1998) and Boyd and Fales (1983) go on to allude to the affective elements of reflection. However with regards to their respective reflective process models, Boyd and Fales simply mention feelings, while Mezirow omits the affective entirely.

Unlike earlier researchers, Boud, et al. (1985) view reflection as a complex mix of affective and cognitive processes and see them as "the totality of experiences of learners, the behavior in which they have engaged, the ideas of which learners are aware and the feelings which they have experienced" (p. 20). Boud, et al's process begins with (a) a returning to the feelings and thought accompanying an experience and any associated ideas, followed by (b) clarifying the positive and negative feelings related to the experience. And, finally, (c) re-evaluating the experience using the cognitive skills of association, integration, validation, and appropriation, while attending to any affective elements that arise. Boud, et al. add that simply recognizing the validity of a new perspective does not necessarily ensure it will become part of one's core belief or value system, or that it will become available to guide one's subsequent actions.

Action in the Reflective Process

The models presented thus far also reveal a difference in the degree to which reflective learners must *act* to complete the reflective process. Dewey (1966) requires re-evaluation of insight through action; Boyd and Fales (1983) believe students must decide whether to act on new insight; Boud, et al. (1985) note action is essential; this may include a mental commitment to act; and Montgomery (1993) emphasizes action to evaluate one's thoughts, feelings, observations, and analysis, and to revise plans to transform subsequent

experience. It seems that there is a broad trend towards Dewey's imperative to act, although more recent reflective processes root action in the many contextual assumptions and perspectives of an individual's experience.

The literature reveals that a consensus on the process of reflective learning has not fully emerged, although there are rudimentary similarities. These similarities can be summarized as follows. The reflective learning process seems to involve attending to the meaning of an experience which produces unresolved mental and emotional responses, followed by considering and using cognitive and affective processes to examine or understand the experience. Next, new insight into the meaning of the experience is discovered through creating new perspectives for understanding it. Finally, action or intent to utilize any new perspectives and confirm their validity is necessary. Although these seem to be the components of reflection, the differences of stages, phases, and skills discussed by the various authors seem at times to be ones of semantics. Atkins and Murphy (1993) concur, stating the differences are ones of terminology and hierarchy. Also noted is the emphasis of research on the reflective process with post-secondary, university level students (Boud, et al., 1985; Boyd & Fales, 1983; McAlpine, 1992; Montgomery, 1993). More research is needed to be done with reflection among other groups of adults.

Factors Contributing to Reflection in Adult Learners

There is little in the literature regarding what factors may predispose adult learners to reflection. Most literature and related research focuses on how to facilitate reflection and, as Atkins and Murphy (1993) note, on examining the process of reflection or the degree to which it is utilized by professionals or those training to be professionals. The notable exception is Fingeret (1993) who utilizes reflective journaling with literacy learners.

However, three factors are the most obvious as contributing to reflection in adult learners: student ability, time, and tradition.

In their early research, Kitchener and King (1981) clearly showed that more advanced levels of reflection can develop as participants' maturity and education increases. Thus, students operate with differing levels of reflective ability; therefore, teachers must accommodate this diversity in their goals for education.

Time is also an important factor noted by both Kitchener (1983) and Montgomery (1993). Adequate time is needed for students to assimilate new learning from experience and to incorporate this into changed assumptions or perspectives. A semester course may be too brief to accommodate this according to Kitchener. Further, Montgomery states that the more profound the reflection, the longer it takes to integrate new insights into life experience.

Kitchener (1983), Mezirow (1990b), Tucker, Wood Foreman, and Buchanan (1996) all raise the point that reflection and its associated processes are not traditionally embedded in formal classroom or course activity. This lack of exposure to reflection may impede developing an interest in it subsequently. Hence, factors predisposing students to reflect are not fully explored within present research and literature.

Facilitating Reflection in Learning

This section deals with how to foster or facilitate the process of reflection for adult learners. Overall, facilitating reflective learning requires attention to the needs of students engaged in reflection, the creation of a conducive environment for reflecting, and the use of appropriate methods to challenge and induce students to reflect.

Knowing Where Students Begin

Kitchener (1983), Mezirow (1990b), Eaton and Pougiales (1993) and Lavelle, Patterson, and Iphofen (1997) indicate that an understanding of the reflective level or ability students begin with is essential prior to interventions to foster further reflection. As noted in her research, Kitchener observes that students operate at varying levels of reflective ability and, therefore, educational goals and activities must adapt to their needs. Kitchener specifically indicates that those functioning at a higher level of reflective ability require assistance to examine views critically; in contrast, those new to reflection need to first recognize and identify alternative views. Mezirow similarly stresses that the educator must start where the student is. Eaton and Pougiales also note that critical reflection may be a foreign concept to some students. However, they believe some students "resist any movement toward self reflection, preferring to relegate the evaluation to an external agent" (p. 60). Mezirow recommends an "empathetic provocateur" (p. 366) approach from educators that gently challenges students to reflect, while being sensitive to the impact of reflection on the learner.

Lavelle, et al. (1997) have found it important to validate and enhance the reflective ability students already have. For some students, defining the meaning of reflection is necessary. Tucker, et al. (1996) add that reflection should be clearly defined in terms of the curriculum being studied. If this is to be done, how can reflective learning ability be measured or assessed? Kitchener and Kings' (1981) model indicates differing levels of reflective judgment, but requires several sophisticated tests to assess verbal ability, verbal fluency, and formal operations, all of which require significant resources and time to reproduce. Later, Kitchener and King (1994) propose a less onerous reflective judgment

interview to assess students. Recent work by Kember, et al. (1999) uses Mezirow's description of reflective thinking to codify and assess the level of reflection in the writing of professionals in training. Their coding strategy includes non-reflective and reflective thinking; they stratify the latter into progressively higher levels of reflectivity. For these researchers content reflection (*what* one perceives, thinks, feels, does) is followed by process reflection (*how* one perceives, thinks, feels, does) and finally, premise reflection (*why* one perceives, thinks, feels, does), as the highest level of reflection. This model is promising and easy to apply, though the authors concede it needs further application and testing in practical settings to confirm its utility.

A Supportive Environment

An environment that is supportive to learners is crucial for critical reflection. Boud, et al. (1985), Brookfield (1987), Rovengo (1992) and Eaton and Pougiales (1993) point out that safety is essential as students attend to the affective aspects of reflection and question assumptions underlying their understanding of the world. Engaging in reflection can be an emotionally laden experience that requires a sensitive, aware, patient educator to facilitate the process. Eaton and Pougiales as well as Brookfield (1994) suggest that educators should be aware of the impact of reflective processes on students and should prepare or caution students about the potential negative or disconcerting effects that may arise. Educators should listen respectfully and attentively to their students in the reflection process, yet they should know the limitations and the parameters of their own capacity to support students. Eaton and Pougiales add that educators should be aware of other sources of student support if emotional issues arise that the educator cannot address competently.

As noted earlier, adequate time is a factor for effective reflection (Boud, et al., 1985; Brookfield, 1994; Mezirow, 1990b). It follows that a form of support is to ensure adequate time for students to reflect within their course work. (Boud et. al.; Eaton & Pougiales, 1993). Regularly scheduling time to reflect allows students to develop their reflective ability and establishes reflection as an essential learning component: "If self reflection is built into the class on a regular basis, it eventually becomes a condition for learning, as necessary as reading and writing in building insight" (Eaton & Pougiales, p. 52).

Montgomery (1993) considers a supportive environment to have a more internal structure characterized by open, informal, reciprocal learning among students and teachers. Brookfield (1994) endorses this view by arguing for the use of learning communities to provide mutual support for those engaging in the reflective process. This reference to the need for community is strongly evidenced in the repeated inclusion of dialogue as a part of the reflective process.

Dialogue

Mezirow observes "No need is more fundamentally human than our need to understand the meaning of our experience. *Free full participation in critical and reflective discourse* may be interpreted as a basic human right" (1990a, p. 11). Mezirow insists that the best way to induce reflection is through critical reflective discourse with others to aid individuals to understand, validate, and justify their beliefs and assumptions. Boud, et al. (1985) add that sharing and interpreting one's feelings about an experience in a group or one-on-one setting can have a supportive impact on learners. Dialogue can help individuals test their perspectives on others, and, in voicing these views, they can further

reflect on, justify, and validate their ideas (Boyd & Fales, 1983). Eaton and Pougiales (1993) echo the utility of a collaborative approach, stating: "Such interactions foster reflection. By making their learning public, students can gauge what they are learning against the understanding of their peers. This kind of collaboration can lead naturally into self reflection" (p. 53). Rovengo (1992) sees dialogue as contributing to a safe and supportive environment for learners to reflect in.

In such learning communities of discourse, individuals and groups may transform their learning and construct their own knowledge relevant to their shared reality (Freire, 1993; Vella, 1995). Vella emphasizes that learning occurs in dialogue. Freire states that dialogue engages and produces critical reflection as well as assists one to act on one's reality. Hart (1990) and Marsick (1990), in their examinations of consciousness-raising groups in the community and action learning in the workplace, emphasize dialogue to help individuals and groups reflect on their experience.

Just as dialogue can be beneficial for learners involved in reflection, dialogue *between* educators and students can also be a catalyst for reflection. McAlpine (1992) and Mezirow (1998) both note that dialogue with an informed person or practice expert can aid student reflection on course-related experiences. Mezirow goes on to say that continuous, cumulative dialogue concerning the canons that frame various subjects can aid students to evaluate any assumptions evolving from these canons and can help them note whether these assumptions foster or smother insightful reflection (1998).

Boud, et al. (1985) see teachers as a sounding board of sorts to help clarify student intentions and goals. Both McAlpine (1992) and Rovengo (1992) view the educator as a means to encourage students to think at a level of reflection beyond their present tendency;

McAlpine encourages students to become more contextual thinkers, and Rovengo argues that learners should move to a level of belief where they can construct their own knowledge. However, educators must be wary that, as they help students clarify their reflective goals, they do not exert undue influence over their students. This issue is discussed later under teacher-student relationships.

Montgomery (1993), Mezirow (1990a), Brookfield (1987), and Eaton and Pougiales (1993) offer specifics, though varying in detail, as to *how* dialogue can be used to enhance reflection. Asking questions is a common strategy to foster reflection in students. Whether it be Mezirow's empathetic provacateur (1990b), or Brookfield's critical questioning to discover assumptions (1987), the teacher acts as a supportive catalyst to stimulate the reflective process. Brookfield suggests keeping the tone conversational and moving from more specific to general questions. Montgomery (1993) goes further by offering five questions to be asked related to an experience that will help learners begin to reflect: (a) What am I doing?; (b) Why am I doing it?; (c) What are the anticipated/previewed results?; (d) How could I improve the results?; and (e) What do I need to do to obtain better results?

Educators also need to respond appropriately by using substantive, affirming responses that encourage critical reflection (Eaton & Pougiales, 1993); non-judgmental comments and remarks (Boud, et al., 1985); and clear, honest, constructive feedback (Montgomery, 1993). Eaton and Pougiales add that educators must be committed to interaction characterized by open, spontaneous discussions pertaining to emerging student needs (1993). Dialogue with students in reflection demands considerable effort. However, as

Freire (1993) notes, dialogue between student and teacher creates an essential communication necessary for reflection.

The Ethics of Facilitating Reflection

Despite the wealth of supportive accolades on the virtues of reflection, Mezirow (1998) and Brookfield (1995) agree that challenging inherent assumptions through reflection can be uncomfortable and even threatening for some students. Reflection seems dualistic in nature. As Droegkramp and Taylor (1995) explain, reflection can be either exhilarating or harrowing as learners move towards a different consciousness (p. 32). Mezirow (1990b) warns that educators risk indoctrinating students to their own particular perspectives, even as they seek to challenge and transform the students' perspectives.

Brookfield's (1994) study of 311 adult educators, experiencing the critical reflective process themselves, reveals that the emotional consequences they experienced were at odds with the positive accolades predicted by most theorists. He describes the following affective reactions: impostership (disbelief in one's authority or ability to engage in critical reflection); cultural suicide (colleagues may be threatened by one's critical inquiry to practice); lost innocence (questioning may lead to more uncertainty, not firmer frames of reference); and road-running (fluctuations between extreme highs and lows in one's emotional experience with a slow movement forward). Community support is often needed to deal with these disconcerting emotions. As Brookfield states, his work is noteworthy because it contrasts with prevalent rhetoric endorsing the positive impacts of critical reflection.

As a word of caution, both Mezirow (1990b) and Brookfield (1987) point out some ethical implications in facilitating reflection. Mezirow warns that discussing personal

assumptions in a group can be risky when students have varied reflective ability and therefore differing degrees of readiness. Unfortunately, though both authors allude to these ethical elements, they do not discuss how educators might deal with these issues. Similarly, other theorists rarely discuss these ethical implications in substantive detail.

Attending to the Teacher-Student Relationship

Rovengo (1992), Brookfield (1995), Mezirow (1990b), and Eaton and Pougiales (1993) discuss changes in the student-teacher relationship and the shift in power differential that can accompany reflective learning. Rovengo (1992) explains: "The unequal power relationship between student and teacher would limit the safety of the reflection environment, thus potentially influencing the content, depth and range of reflection" (pp. 508-509). Brookfield explains that the difference in power between student and teacher often leaves the student with less power; therefore, educators must re-examine this inequity to build safety and trust. Trust, he adds, is essential to critical reflection.

Eaton and Pougiales (1993) examine the shift in power related to students' self-evaluation and the accompanying increased student control over their learning. They say that this change requires that teachers must acknowledge the individuality of their students and offer meaningful support, such as respectful listening and feedback:

> Thus faculty must listen carefully to the ideas of their students, enter into serious and sustained conversations with them, and try hard to find ways to connect the assignments and discussions to the lives of their students. (p. 59)

Eaton and Pougiales point out that some students may not feel safe reflecting. This can make it hard for teachers to assess whether these students are authentically reflecting or are aiming to please their teacher. Teachers must challenge these students to reflect without

inadvertently positioning the teacher as the one who knows the "right" way to reflect. Rovengo (1992) gives a similar argument that is especially applicable for learners who base their knowledge on sources outside themselves. As the teacher assists these learners to create their own knowledge, the learners may perceive the teacher as another authority and discount their own ability to generate knowledge. Rovengo explains:

> Explicit instruction about reflection is, at best, insufficient. Reflection is a personal act of constructing knowledge based on confidence in one's inner voice. At worst, more checklists, models, and explanations from an authority may drown out the still silenced voice of the received knower. (p. 508)

In contrast, Kitchener and King (1990) emphasize that instructors can intervene to enhance safety through clear explanation of expectations and assignments related to reflection. Further to this, Kitchener and King (1994) add that instructors can support students to use more advanced levels of reflective thinking by presenting ill-structured problems, then demonstrating how to examine the inherent contradictions in assumptions and reasoning that underlie these problems. Mezirow (1990b) believes that educators should intervene to help students discover and examine implicit and alternative perspectives, but he (Mezirow, 1992) warns educators not to indoctrinate students to any one particular perspective.

These divergent views on the implications of this power shift between students and educators are compounded because few authors describe how educators can safely accommodate this power differential with learners who have varying reflective ability. Rovengo (1992) is an exception; she identifies that, for some students, peers may help to create a safer reflective environment. She does not, however, expand on this point.

Using Cognitive Aids

In addition to the use of environment, dialogue, and attending to the affective elements of reflection, the use of exercises and methods to tap the cognitive aspects of the process are recommended (Atkins & Murphy, 1993; Boud, et al., 1985; Deshler, 1990). Boud, et al. (1985) briefly list specific exercises to aid the cognitive aspects of the reflective process. To enhance association, they recommend free association and brainstorming to find links between ideas. Concept maps, repertory grids, and metaphors are also suggested to enhance the process of integration in which various ideas are synthesized to make shared meaning. Finally, rehearsal and guided imagery are noted to foster validation (the testing and confirming) of a new perspective. Mezirow (1998) advocates a critical reflection on assumptions, as does Brookfield (1995), in order to justify assumptions. Kitchener and King (1990) further suggest that these assumptions can be challenged, with the educator modeling reflection and asking critical questions. The educator can offer alternative views, explain the corresponding evidence for each and interpret how and why one view may be chosen over another. Atkins and Murphy (1993) are less specific and note only the skills required to assist with reflection. For Atkins and Murphy, these include the cognitive processes of self-awareness, description, critical analysis, synthesis, and evaluation. They offer no further detail, however, as to what aids, approaches, or methods might best develop these skills in reflection.

Mezirow's (1990) comprehensive text, *Fostering Reflection in Adulthood* addresses the cognitive aspects of reflective learning through several specific tools aimed at uncovering and exploring what he calls people's meaning perspectives. These meaning perspectives are the unconscious expectations we apply to help us understand various experiences.

Candy (1990) advocates the use of repertory grids to make one's personal beliefs and values explicit. This is done with a systematic charted approach that records an individuals' internal thoughts and feelings about a person, thing, event, or idea related to their experience. As students chart pertinent responses to experience and cross-reference these, details or themes within their "personal construct system" are revealed (p. 237). The action-reason-thematic technique explained by J. Peters (1990, p. 314) follows a similar path in examining how people behave in certain types of situations. Peters' theory is based on the idea that, as we are exposed to various types of situations, we adapt our underlying assumptions and beliefs in order to deal with them. We develop a network of assumptions to deal with life's various circumstances. By looking at our actions and why we undertook them, we gain clues to the beliefs and assumptions motivating them. Deshler (1990) focuses on concept maps, which provide "a summary of what we say, we believe, think, feel or value at a particular point in time" (p. 336). Like repertory grids, these maps help individuals see their implicit meanings visually.

Although these tools may seem different, they have the common goal of making one's underlying cognitive assumptions or givens salient. Deshler stresses the importance of fostering the cognitive aspects of reflection: "For learning to be transformative, a change in the cognitive meaning of experience must occur. That change can occur when learners critically reflect on their existing cognitive meanings of experience" (p. 343).

Processes that assist students to develop the cognitive elements of reflection are well discussed in the literature. However, details to foster the emotive aspects are vague or absent. This may be due to the discrepancy over the components of reflection or, as Brookfield (1994) notes, the potentially negative impact of these emotive aspects.

Writing and Reflection

Writing as a mode to foster and enhance reflection is strongly advocated (Brookfield, 1995; Droegkramp, 1995; Eaton and Pougiales, 1993; McAlpine, 1992; Lukinsky, 1990; Rovengo, 1992; Walker, 1985; Williamson, 1997). Reflection through writing involves coming to know the processes by which we as people learn, acknowledging feelings that shape our interpretation of experience, and understanding how we integrate our past and present knowledge to apply it to future experience (McAlpine; Walker). Walker goes on to delineate the relationship between writing and reflection, saying this relationship can: (a) foster increased objectivity and clarity about events; (b) capture the original moment for later reflection; (c) increase one's awareness of the affective elements influencing the interpretation of that experience; (d) enable one to associate old and new ideas; and (e) provide a record of reflections that can help one recognize personal growth. Walker adds, "The use of writing was not only helping them to reflect and learn, but also helping them to appreciate the actual process of reflection within learning" (p. 65). Droegkramp concurs with Walker that writing helps to distance or objectify an experience, saying: "The process of putting their thoughts and feelings on paper is often a necessary first step toward developing the distance and (relative) objectivity that may eventually make self-analysis possible" (p. 32). Williamson echoes the sentiments of both Walker and Droegkramp by asserting that writing can capture, illuminate, and interrogate one's experience: "Committing reflections to writing has been found to be a reliable way to document them, interrogate them, creatively respond to them and express possible future scenarios out of the progress" (p. 97).

This reflective writing approach can also help to develop students training to be professionals by allowing them to relive, rethink, and understand their experience in light of both theory and practice. It can help one "to reflect intentionally upon experience in the practicum and try to integrate it with previous classroom learning in order to construct a professional stance" (McAlpine, 1992, p. 15).

Writing is an expressive venture, and, as such, can enable individuals to discover their own tale of what is happening as they describe it on paper (Craig, 1983). D'Arcy (1987) agrees, noting that writing draws one's own voice forward. Individuals not only come to understand themselves, but may be empowered in narrating the particulars of their experience.

Using writing to reflect is often done through the use of personal narrative or biography (Brookfield, 1995; Dominice, 1990; Rovengo, 1992). There are only slight differences among the leading authors about the subject of the narrative. Brookfield (1995) focuses on biography in light of educators' practice -- what they do and have done as teachers and professionals. Dominice (1990) uses their personal histories of learning and their experience with education itself, and how this has shaped their subsequent learning. Finally, Rovengo (1992) calls for an increased focus on educators' history of creating their own knowledge. She notes that a more feminist approach to meaning constructs is required to discover whether one trusts oneself as a creator of knowledge and how such assumptions evolved. Droegkramp's (1995) study of women re-entering education supports this approach, along with the use of self-reflective experiential essays in a chronological biographied format to help women understand what they know and why they have applied knowledge in a certain manner in the past. Despite differences in

application, all of these authors have utilized personal narrative to help learners name and discover the underlying beliefs, values, and assumptions that frame and direct their lives.

Clearly, the most frequently referred to mode of writing to facilitate reflection is the journal (Atkins & Murphy, 1993; Eaton & Pougiales, 1993; Lukinsky, 1990; McAlpine, 1992; Walker, 1985; Williamson, 1997). The journal is a tool that can link thought, feeling, and action and integrate one's inner and outer lives:

> Keeping a journal may help adults break habitual modes of thinking and change life direction through reflective withdrawal and reentry. . . being able to step back from an incident, a conversation or reading, from something heard or seen and to reflect upon it and return to it with understanding. (Lukinsky, p. 213)

Eaton and Pougiales view the journal as a self-diagnostic tool to aid students in asking and answering their own reflective questions. McAlpine adds that journaling can foster an organized approach to reflecting for those becoming professionals: "We know from research studies that keeping a journal about professional experience is especially useful for practitioners; it enables us to engage in reflection intentionally and somewhat systematically" (p. 15).

In addition to the journal form being conducive to reflection, Williamson (1997) and Atkins and Murphy (1993) advocate using it in combination with other methods to gain a deeper understanding of the reflective process itself and to improve research on reflection.

Using Journals to Induce Reflection

The use of journals to gain insight into and develop the self has gained a marked increase in the past century. Rainer (1978) notes that many prominent diarists have "recognized a need in the modern world to reflect calmly upon knowledge that comes from within" (p. 21). Journaling can lead not only to improved understanding of self but to greater clarity of the self in the context of one's world: "The journal or diary is not an

isolated phenomenon, unrelated to cultures or government. Although usually written by one person, it can reflect on and respond to prevailing societal issues, beliefs and constraints" (Lowenstein, 1987, p. 95). Lukinsky (1990) views journals as an introspective tool to give an immediate capsule of one's experience, and to link one's thoughts, feelings and actions. The act of writing creates meaning over time in this case.

Texts by Progoff (1975), Rainer (1978), and Fulwiler (1987) figure dominantly in the process and facilitation of journal writing for increased self awareness, personal knowledge, and reflection. Progoff's intensive journal process involves a systematic, loosely structured approach to journaling that can help individuals to explore and discover underlying meanings that shape their lives. The aim is to integrate one's unconscious and conscious experience and knowledge so as to understand the abilities and resources one has to respond to life: "The intense journal process and its procedures for personal work provide an instrument and a method by which we can each develop interior capacities strong enough to be relied upon in meeting the trials of our life" (p. 15).

Rainer's work, especially *The New Diary* (1978), is similar to Progoff's in that she emphasizes the use of writing for growth and creativity. Rainer adds that writing helps individuals to identify the innate and potential resources they have to cope with life in a new way: "Through the journal process of expression and reflection they [students] discover new solutions to problems, enter into and appreciate the process of their lives, and exercise their creative capacities" (p. 17). Rainer's journal process differs from Progoff's in that it is explicitly more structured. Rainer focuses on the various modes of expressive writing: catharsis (dealing with and venting emotion); description (recording

events); free- intuitive writing (drawing on the subconscious--similar to Progoff's approach); and reflection, which she describes as follows :

> Reflection as a mode of expression in the New Diary is an observation of the process of one's life and writing. It seems to occur when you stand back, even if only momentarily, and see connections or significances that you had not noticed before. (p. 68)

Rainer describes specific techniques to develop these expressive writing forms. It is interesting that reflective writing is viewed within this journal process as an objective, "psychologically distancing" way of inquiring into the self to draw forth innate knowledge or wisdom. Reflection is viewed here as being an intellectual process that can give "voice to your more objective, rational adult self while catharsis and free-intuitive writing give voice to your more subjective, emotional, intuitive self" (p. 71).

What is evident in both Rainer and Progoff's journal process is an intentional approach to working through cognitive and emotive aspects of experience to understand them better. This common characteristic parallels that of reflective learning. Fulwiler's (1987) text is a composite of suggestions to facilitate journal writing. D'Arcy (1987) sees journals as being effective to understand self because journals are not format bound; instead, they emphasize process. They free the student to express self, speculate, question, and doubt. This type of writing, he notes, serves many purposes. It can (a) connect ideas on paper and perpetuate further ideas, (b) mean a re-discovery of what one already knows, (c) help form questions, (d) express feelings, (e) create a possible dialogue with oneself and others, (f) be a representation of the writer's own voice, and (g) offer a personal map to one's progress with an issue (p. 45). Again, these characteristics of journals echo components of the reflective process. Fulwiler (1987) asserts that good journals include cognitive activities, such as observation, questioning, speculation, self-awareness, digression,

synthesis, revision, and information. These cognitive activities bear more than a passing resemblance to the stages and phases of reflection, as laid out by Boud, et al. (1985), and Boyd and Fales (1983).

Lukinsky (1990) stresses the utility of journals for education. Drawing on ideas from Progoff (1975), Rainer (1978), and Fulwiler (1987), he notes that journals can allow students to think for themselves, enable reflection while learning, and provide the means for post reflection or reviewing our learning.

Burnham (1987) supports Progoff's use of journals for personal development by devising a 14-day cycle of exercises. One of the steps involved is reflection. Burnham adds that the journal process can also develop advanced thinking and formal writing skills.

To sum up, Holt (1994) says: "The act of reflection is very simply, taking time to think about and analyze past performance in order to improve future performance. Collecting these thoughts in written form is journal writing" (p. 39). Carswell used journals with graduate students based on his conviction that the expressive and exploratory style of journaling can clarify meaning in personal and professional experiences. He found that journals allowed the students to test and to reformulate perceptions, and helped them clarify and make tentative conclusions: "Through this type of writing, the students impose order and structure on ideas and expose their thoughts for further clarification and refinement" (p. 105). Journals, it seems, can serve to develop reflective ability for personal and professional growth. By their very nature, they can also foster the cognitive and emotive aspects required for reflection.

Facilitating Reflective Journaling

Just as reflective learning in adults is best facilitated within a supportive environment, through the use of dialogue, the same conditions are useful for facilitating reflection in journals--as I delineate in this section. In addition, there is a need to focus on clarifying the nature and purpose of reflective journaling through the use of clear process guidelines, appropriate evaluation, and enhanced student control over disclosure.

Clear Process Guidelines

Many authors agree that, to start, students need to know what reflection is and how it can be applied in journals to gain insight into personal, curricular, or professional experience (Cameron & Mitchell, 1993; Fulwiler, 1987; Holt, 1994; Patterson, 1994; Walker, 1985). Holt explains, "Providing reading material and discussion before the project begins is important in order for the writers to understand what reflection is and what rewards it offer" (p. 14). In the literature guidelines for clear process and format include: writing on only the course/practice experiences that the student sees as important (Carswell, 1988; Walker); writing at regular times, for set durations and as needed (Hallberg, 1987; Walker); and organizing journals in binders for easy removal or addition of materials (Cameron & Mitchell; Fulwiler; Walker). Walker (1985) and Fulwiler (1987) add that re-reading journals can help students to evaluate their progress. Riley-Doucet and Wilson (1997) note that a process to document and critically analyze journal work should be predetermined and agreed upon prior to their use. They also reinforce the importance of clear expectations to facilitate reflection and learning.

Interestingly, few authors of reflective journal writing incorporate students' writing or reflective ability into their process suggestions. Patterson (1994) alone expressly indicates

that the reflective level students begin with greatly influences their ability to reflect in writing and must be considered: "The perspective of students in the initial phase of reflective development, like all differences among individual students, requires respect and understanding" (p. 214).

Maintaining a Supportive Environment

Reflecting in journals requires a supportive environment. Instructor feedback can help facilitate or guide the reflective process for students (Carswell, 1988; Holt, 1994; Landeen, Byrne, & Brown, 1992; Patterson, 1994; Wodlinger, 1990). This feedback should be supportive and non-judgmental to aid students and not direct them in a predetermined manner (Carswell; Wodlinger).

Supportive instructor feedback is also described as the use of reflective questioning in the journals. These questions help students explore new themes (Craig, 1983), focus their reflections (Holt, 1994), and can demonstrate the instructors' commitment to helping students examine alternative views (Kreeft Peyton, 1988b). "Rather than exerting conversational control and testing student knowledge, her questions serve to maintain and advance topics the students have initiated, leading students to higher levels of reflection and self-expression about these topics" (Kreeft Peyton, p. 163). Details on specific questions to ask and how they relate to the reflective process are not well delineated in the literature. Responding to students with reflective questions requires time. Carswell (1988) notes that instructors themselves must be willing to commit time to give thoughtful responses to students using journals.

Dialogue

Journal dialogue more often relates to the student-teacher exchange: "Dialogue journal writing is the use of a journal for the purpose of carrying out a written conversation between two persons" (Staton, 1988a, p. 4). Dialogue journals involve regular, reciprocal conversations that form a unique student-teacher relationship (Kreeft Peyton, 1988a). Stanton (1988b) adds that this relationship is characterized by joint learning, student support, and enhanced rapport. Such mutual conversations can empower students and educators (Bode, 1989). Ongoing dialogue with a teacher can also build trust, which is the basis for a safe environment in which students can explore new ideas and perspectives (Carswell, 1988).

Dialogue with peers can also help with the reflective process (Fulwiler, 1987; Walker, 1985). More specifically, Cameron & Mitchell (1993) and Riley-Doucett (1997) find that peer dialogue can integrate reflections from experience with knowledge. Similarly, Kember et. al. (1996) report: "Students found that the combination of journal writing and critical discussion with colleagues led to insights and knowledge which would not have come from either element alone" (p. 220).

Patterson (1994) and Landeen, Byrne, and Brown (1992) find that journaling builds trust and rapport, but Patterson cautions, "Writing about experiences, feelings, ideas and opinions in dialogue journals places the student in an extremely vulnerable position" (p. 216). Wodlinger (1990) and Roe and Stallman (1993) add that educators must realize that in dialogue with students (in journals) there is the real danger the instructor will become the authority and overpower the students' voice, thus diminishing their reflective

exploration. Clearly, respectful dialogue to foster safety and trust is essential for journal dialogue.

Student Control of Disclosure

Walker (1985), Craig (1983), and Hallberg (1987) note that students need some control over what they choose to share from their journals with instructors. Hallberg emphasizes that a measure of student control over what is disclosed and how it is interpreted can greatly minimize the inherent emotional risks of disclosure and equalize the power differential between student and teacher. Walker and Hallberg suggest students should censor what they share by removing, turning over, or stapling passages not to be read by the instructor.

Carswell (1988) acknowledges the need for student privacy, but stresses that an instructor's review of a journal can help a student reflect. However, he warns that students may in turn alter the nature of their reflections by writing for the instructor. In contrast, Riley-Doucett and Wilson (1997) and Cameron and Mitchell (1993) maintain that reflective journals are a private tool for students. Sharing journal content with peers is recommended, but the student should retain control over what and how much is shared: "Feeling safe and knowing that their work is confidential , and under their control, is a strong factor influencing their ability to write and reflect on clinical experiences honestly and openly" (Riley-Doucett & Wilson, p. 966).

Appropriate Evaluation

The literature is clear in the area of appropriate evaluation. Journal work of a personal nature should not be marked. Craig (1983) asks, "How can you mark an individual's own personal development?" Fulwiler (1987), Carswell (1988), Cameron and Mitchell (1993),

and Riley-Doucett and Wilson (1997) all concur, although they insist that the journal should count in some way to reinforce its value within the curriculum. The latter three suggest alternative ways to count the journal within course evaluation. Their approaches vary in the nature of criteria used and the degree to which student or teacher should be involved. Carswell believes that journals should not be marked, but alludes to the use of cooperative evaluations or process criteria by those who insist on an evaluation of some kind. Cameron and Mitchell advise that the use of a set grade or percentage based on simple completion of the journal is effective, whereas Riley-Doucett suggests indirectly evaluating the journal, insisting that students should submit a course evaluation that is referenced with journal entries to support that the students met course goals. In each case, few specifics are described of how these methods can be implemented. Even so, any attempt to include students in evaluating their journals is a sound approach, as it is their lived experience represented.

Despite differences in *how* to apply dialogue, evaluate journals, use format guidelines, and ensure students control over what they disclose, these themes emerge as the predominant modes to facilitate reflective journaling. With the exception of Fingeret's work (e.g., 1993), a recurrent weakness is that the majority of research into facilitating reflective journaling has been done with the well educated (Cameron and Mitchell, 1993; Carswell, 1988; Landeen, et al., 1992; Riley-Doucett and Wilson, 1997; Wodlinger, 1990).

The Impact of Reflection on Adult Learners

The significance of reflective *learning* has been well established by prominent adult educators, but what impact does reflection *itself* have on adult learners? A synthesis of the

literature reveals that transformation, empowerment, and increased self knowledge are prominent themes for adult learners.

Personal Transformation

An overriding theme arising in the literature on reflection is the transformation of self. Self transformation is described in terms of changing one's perspectives--how one understands and relates to experience--to transform how one can and does interpret that experience. This transformation seems synonymous with the process of reflection as new insights, ideas, and perspectives are discovered and integrated into one's view of oneself and the world (Boud, et al., 1985; Boyd & Fales, 1983; Brookfield, 1995; Mezirow, 1990a; Tucker, et al., 1996). Critical reflection is at the heart of transforming one's consciousness, according to Brookfield (1985). Montgomery (1993) also views reflection as the transforming component of learning from experience. Mezirow is perhaps the strongest proponent of this view, noting, "Reflection on one's own premises can lead to transformative learning" (1990a, p. 18). In his later work Mezirow (1998) adds that, as individuals examine their premises for understanding, this exploration can lead to further insights that bring change regarding what they know and how they know it. Mezirow asserts that critical reflection of one's assumptions is a key tool for fostering this personal transformation. This personal transformation takes the form of enhanced self knowledge and an increased feeling of empowerment or control over shaping one's experience.

Enhanced Self Knowledge

As learners examine and discover the nature of their own thinking processes during reflection, they can increase their awareness of self (Atkins, 1993; Boyd & Fales, 1983). Through reflection, there is increased personal synthesis, integration, and use of both

existing and new knowledge that presents itself. In reflection individuals are able to confirm what they already know and examine it further (Boud, et al., 1985). Brookfield (1995) notes that challenging students to articulate their experience helps them to find their voice amidst their unconscious assumptions and assumptions of others: "I believe that the discovery of one's authentic voice is at the heart of the critically reflective process" (p. 47).

In their study of women re-entering the education system, Droegkramp and Taylor (1995) note the importance of developing voice through the further understanding of self. Boud, et al. (1985) report a more positive affective state in learners following reflection; Boyd and Fales (1983) also report that an increased sense of excitement, energy, and self-worth emerges as learners make self discoveries. They explain, "The changed perspective or resolution is self affirming" (p. 110). Brookfield (1995) adds that, as learners name their experiences and understand the nature of their implicit assumptions, a sense of personal power and increased self-worth can result.

Empowerment

Brookfield (1995) claims that reflection can have an empowering influence. By becoming more aware of how one understands experience, one can evaluate that experience and decide what to do about changing perspectives that limit one's options or choices. Moreover, Boyd and Fales (1983) say that considering other perspectives for dealing with experience, opens doors to new ways of acting and can help individuals realize new choices that broaden their ability to respond to circumstances.

In addition, Brookfield (1995) and Mezirow (1990a) see reflection fostering emancipatory education; Mezirow explains, "Emancipatory education is an organized

effort to help the learner challenge presuppositions, explore alternative perspectives, transform old ways of understanding, and act on new perspectives" (p. 19).

Finally, Tucker, et al. (1996) see reflection as integrating the value of work experience into course curricula. Similarly, Eaton and Pougiales (1993) highlight reflective ability as key to learners developing more advanced levels of cognition and understanding regarding course content. Despite varying opinion on the impact of reflection, educators must seek to maximize the learning-enhancing character of reflection, while minimizing its potential risks. I now turn to the process of action research and its utility to enhance understanding of adult education.

Action Research

Reflection underpins the action research approach. Action research enables educators to reflect on and inform their practice by learning "to value the power of reflection on action in order to learn and shape future actions" (O'Neil & Marsick, 1997, p. 29). The use of action research in education arose in response to the lack of practitioner generated research. Traditionally, research knowledge came from outside the profession--from those not actively practising (Cochran-Smith & Lytle, 1993; Drennon, 1994; Quigley, 1997; Stringer, 1996). In this section I discuss the nature and purpose of action research and its utility for adult educators and learners.

Action Research Defined

Brooks and Watkins (1994) reasoned that if people could collect and analyze information about their experience they could learn more effectively. They add that action inquiry connects practice to theory, and vice versa. Cochran-Smith and Lytle (1993), and Drennon (1994) have written on the importance of education practitioners creating their

own knowledge as informed by their daily practice. Stringer (1993), and Kuhne and Quigley (1997) define action research as a response to a real problem; the latter stress the understanding or improvement of problems in practice; the former argues for broadening the aim of action research to address problems in the professional, community, or personal realm. Drennon and J. M. Peters (1997) point out that action research not only deals with problems but can be used to examine new ideas to augment present theory, or (as Drennon notes) simply to look at what is. Action research is also viewed as a collaborative approach to inquiry that includes the research participants as contributors or co-researchers in the process of inquiry (Quigley, 1997).

Action research has some common characteristics: it is systematic, inductive, and practical (Cochran-Smith & Lytle, 1993; Kuhne & Quigley, 1997; J. M. Peters, 1997; Stringer, 1996). It is a collaborative approach of reviewing one's own experience or the experience of others (Cochran-Smith & Lytle; J. M. Peters; Stringer). Drennon (1994) and Elden and Gjersvik (1994) note that action research investigates real-world problems arising from real practice settings. As Drennon states: "It is a process of generating ideas through reflection and examination of practice, and exploring the implications of those ideas within the practitioner's setting" (p. 2).

The process of action research has been referred to as cyclical by Watkins and Brooks (1994) and Kuhne and Quigley (1997), but most commonly it is characterized as a combination of action and reflection: "This cycle of action-reflection-action is basic to most models of action research that I have examined" (J. M. Peters, 1997, p. 68). Kuhne and Quigley describe action research as a process of "problem-posing and problem-solving" (p. 23). Most authors agree on the following process elements: there is first the

collective examination and identification of a problem in context; then the gathering of further information on the problem; reflection on the problem to understand it fully; an analysis of the problem to develop interventions to address it; the actual implementation of those interventions; the evaluating of actions; and a determining if further action is appropriate (Drennon, 1994; Kuhne & Quigley; Stringer, 1996; Watkins & Brooks). Stringer encapsulates the action research mode with the simple *look-act-think* maxim.

The Utility of Action Research for Educators and Learners

Action research can foster a deeper understanding of what one does and why one does it. O'Neil and Marsick (1994) act on Cochran-Smith and Lytle's (1993) challenge to educators to examine the assumptions underlying their practice. They employ action research to help practitioners recognize the beliefs informing their actions and how these actions influence their practice. In this way, those involved learn how they learn by paying more attention to what they normally do. Any resulting insight can perpetuate reflection and further learning.

Stringer (1996), Quigley (1997), and Watkins and Brooks (1994) note that action research changes the power dynamics of research. To accomplish this, researchers must be skilled at generating trust between themselves, administrators within the research environment, and subjects who traditionally have had a minimal voice in research (Stringer). Adequate time to reflect within action research and a collaborative, supportive, inclusive research environment are also necessary (Cochran-Smith & Lytle, 1993; Drennon, 1994; Stringer).

This participatory type of research not only involves subjects more, but can be empowering for educators as they begin to understand and affect their own practice

(Cochran-Smith & Lytle, 1993; Kuhne & Quigley, 1997; Stringer, 1996). The reflective nature of action research allows practitioners to monitor their actions in an informed way. As adult education practitioners generate their own knowledge they can also develop interpretive and evaluative criteria, which can strengthen the insights that arise from this approach (Cochran-Smith & Lytle; Kuhne & Quigley). Practice becomes illuminated, as Stringer notes:

> The mere act of observing and reflecting on our own practices can be an enlightening experience, enabling us to see ourselves more clearly and to formulate ways of working that are more effective and that enhance the lives of the people with whom we work. (p. 143)

As Cochran-Smith and Lytle note, educators learn with their students in a more student-centered research approach that confirms for student and teacher what they each know.

Watkins and Brooks (1994) summarize that action research, with its open, questioning perspective is conducive to adult learning and reflection:

> Action technologies are particularly consistent with the philosophical orientation of many adult and continuing educators. The emphasis on group reflection and empowerment, and the aim of social action, which are hallmarks of these action technologies, are also issues that permeate adult education literature. (p. 110)

Summary of the Literature

As discussed in this chapter, wellness is a process of reflecting on the aspects of one's health that can enhance one's ability to make informed decisions for well-being. Wellness is intentional; it involves self knowledge, and an analysis of behavior and growth through purposeful change.

Adult learning is facilitated through an understanding of the learners: who they are, what their experience is, and what their knowledge and past learning consists of. Adults learn when they actively participate and engage their cognitive, emotive, and kinesthetic

abilities. The adult educator must respond to adults with empathy and respect, and must foster a safe learning environment that promotes dialogue and self-direction of the learner. Recently, reflection has been cited as central to enhancing and facilitating adult learning.

Reflection is a dynamic, personal process involving both the cognitive and emotive domains to elicit awareness of the assumptions underlying one's inherent meanings. As individuals explore their experience, they can discover new perspectives that may enable them to act on subsequent experience in a new, more informed way.

The literature reveals that facilitating reflection involves a consideration of the context of learning, appropriate supports, and the use of facilitation strategies. The process of reflective journaling parallels the reflective process, making journals an effective learning tool. Reflective journals can be facilitated through a supportive learning environment, a clear format, process parameters, dialogue, student control of disclosure, and appropriate evaluation processes.

The literature concerning the process of reflection, its facilitation, and the use of reflective journals is currently based on students at a university or advanced level of education, albeit Fingeret's (1993) work stands out as an exception. Surely reflection is not the domain of the highly educated. If practitioners believe the literature, which exalts reflective learning as enlightening, transforming, and empowering to adult learners, further research is needed into what facilitates reflection, in its entirety, for students with diverse needs and various levels of education and personal preparedness.

Action research is a systematic practice-based inquiry to improve the practitioners understanding and response to an issue of concern. It is a critical, collaborative approach

to research that parallels principles key to adult education--namely, reflection, empowerment, and social reform.

The next chapter describes my research study, including its process and outcomes. My study was developed in response to a relevant practice challenge and contributes to the current research on reflection with college level students.

CHAPTER 3

DESCRIPTION OF THE STUDY

In this chapter I describe how I planned, implemented and evaluated a modified curriculum to enhance reflection, and subsequent health change, in a wellness course for paraprofessionals in a northern community college. I review the nature, process, and outcomes of the study, including the design, preliminary findings, interventions, in-course findings, and post-course findings.

Project Design

I used an action research approach as the methodology for my study. My aim in using this method was to develop a systematic and comparative approach that could indicate the impact of my interventions but be flexible enough to respond to context, participants, and my own evolving insight. I complemented the overall design by developing various qualitative tools grounded in the literature.

Study Context and Participants

As noted in chapter 1, I teach a wellness course in which I invite students to examine and assess their present state of health and wellness. The purpose of this self assessment is to help students to identify and attempt what they see as a needed positive health change. Students are enabled to do this once they have become aware of the behaviors, beliefs, and choices they make that have an impact on their state of health. In essence, I ask students to first reflect on what is, in order to understand how they might better influence or manage their health. The emphasis in this exercise is on the use of reflection to *attempt* change and promote learning.

Despite these noble aims, I began to notice, via student work and my own observation, that there was quite a range in the tangible impact reflection seemed to have on student insights into their wellness. I wondered whether reflection on wellness was actually fostered during the course, and if this process had longer term effects on health following the course. Two colleagues who also taught the wellness course during previous semesters had similar concerns. One colleague explained:

> The authenticity of students' reflections was difficult to gauge and sometimes I felt I was reading what the student thought I expected from them. It was hard to know if they were actually doing what they stated in their wellness plans, or if they just filled in a chart to get marks.

Colleague feedback, minimal documented research on reflective learning in colleges, and the literature endorsing reflection to enhance meaning for adult learners, (in combination) convinced me to pursue this study on reflection in the wellness course.

My study took place in a northern community college and was part of my wellness course, which ran for 15 weeks, from September through December, 1999. The course involved one 3-hour class each week. The classroom was comfortable, well equipped, and had a diversity of audio and visual aids available.

Participants in the study consisted of students in my wellness course, who were typically enrolled in paraprofessional health, human services, and early childhood education programs at the college. The wellness course is a required course within these programs. The student age varied from 19 to 60 years, and their educational level ranged from grade 10 to university level completion. They were full or part time students with the majority being women (approximately 88%) in the past four course offerings. This may reflect the strong representation of females in the health and human service fields. Although the college student body consists of 50% First Nations students, the wellness

course has typically had a lower percentage of First Nations students. This variation may relate to the level of interest of First Nations students to the particular programs that include the wellness course. I have taught the wellness course twice prior, and in these classes less than 3% of students were First Nations; therefore, the First Nations perspective is not examined in this study.

Process and Methods

An excerpt from a book by Quigley and Kuhne (1997), discussing the process and use of action research (see Appendix A), became a "touch stone" for my design. I also utilized *Experience, Research and Social Change; Methods from the Margins* (Kirby & McKenna, 1989), to focus my ongoing questions and to help me develop "the record of the experience and reflections of the researcher that relates to the focus of research" (p. 49). I used my own ongoing journal to collect these reflections. Regular discussion with my colleague support group, and with two experienced research experts, provided feedback on the feasibility and logistics of my study. I also had administrative support to distribute and transcribe input from participants. My basic research design and methodology is summarized in Figure 1.

Ethical Considerations

I used an ethical research design which maintained participant confidentiality and anonymity. I purposefully included excerpts from student work that are less personal, but support emerging themes. The informed written consent of student participants was obtained and I asked interviewers and transcriptionists to sign an oath of confidentiality to keep student feedback confidential. I was clear with students participating how I might use

March - April (1999)	***Preliminary Work:*** • Focus questions/scope of project and develop survey tools with input from colleague support group.
May	***Determining Baseline:*** • Survey former wellness course students (that I have taught), using a Questionnaire.
May-June	• Develop colleague and former student interview guides • Interview 2 colleagues who have taught the wellness course.
July-August	• Develop my '*Guidelines for Qualitative Interviewers*', and my student consent. • Met with interviewers to gain feedback on interview guide and questions.
August	• Arrange for one member of my colleague support group to interview Former wellness students. • Review themes arising from student surveys and develop preliminary study intervention ideas.
August-(early) Sept.	• Facilitate a focus group of former students. • Review all student input. Decide on the best study interventions.
September - (early) Oct.	***Implementation & Data Collection:*** • Explain research to students and ask for their written consent to participate. • Implement interventions in the fall 1999 Wellness Course with my study group of students. • Assess the study groups' initial understanding/level of reflection.
September - December	• Monitor student progress throughout the course via reflective wellness journal and wellness plans. • Discuss and reflect on study progress with colleague support group and in my journal.
December	• Assess the understanding/level of study group students related to reflection at the course end and gain general feedback in the final class meeting.
Jan. - Feb. 2000	• Survey study group 6 weeks post course to determine effectiveness of study interventions (use interview and questionnaire tools used with comparison group)

Figure 1 Summary of the research design and methodology

their feedback and course work, specifically to inform my study and thesis and to improve the wellness course for future students and instructors.

Data Collection Tools

I used qualitative research methods to collect data to inform and evaluate my study interventions. This approach grounded my research in the students' experience. As Merriam and Simpson (1995) note:

> The overall purposes of qualitative research are to achieve an understanding of how people make sense out of their lives, to delineate the process (rather than the outcomes or product) of meaning-making, and to describe how people interpret what they experience. (p. 98)

As explained by Merriam and Simpson (1995), and Patton (1987), I used interviewing and written documents such as the student questionnaire, journals, and case study assignment as my primary sources of data. The baseline data for the comparison group was obtained from my previous students (whom I refer to as the "comparison group" throughout the remainder of this thesis). The study group students represented the participants in the fall 1999 wellness course. All the data collection tools were developed to provide insight into the degree of reflection and health change in the course and what enhanced or impeded reflection and wellness change in the course.

Finally, I developed and utilized a variety of data collection tools including interviews, surveys, and in-course exercises (journal, case study, and questions on reflection) in order to ensure my data were sufficient and informed by a diverse range of sources. These tools are described below.

Former student questionnaire . A questionnaire was developed and used to gain baseline data from the comparison group students. The questionnaire was mailed, by a third party, to all the students who had participated in the two former wellness courses that

I had taught. A cover letter and a self addressed stamped envelope was also included, to be returned to me. I used texts by Fink (1995), Patton (1987), and Kirby and McKenna (1989) to extract the principles behind surveying students. I used yes/no questions, open-ended questions, and questions based on a Likert-scale. In the questionnaire former students were asked about their perceptions of the reflection component of the course, what enhanced or impeded their reflection in the course, and if health change resulted from reflection. The same questionnaire was used to survey the study group following my wellness course to provide comparison data.

Colleague and former-student interviews. Interviews with colleagues who had taught the wellness course and interviews with a sample of former students, were completed prior to the start of the study course to augment the questionnaire, to provide a baseline for comparison with the upcoming study group, and to assist me in devising possible intervention ideas for the study course. I chose to survey (using the questionnaire) and interview former students to ensure a sufficient and diversely sourced pool of data. Kirby and McKenna's (1989) text helped me envision an overall approach to qualitative interviewing. I also used a combination of formal and standardized open-ended questions described by Patton (1987, p. 109) to develop interview guides for the colleague and student interviews. Ongoing discussions with my research experts were also helpful. I interviewed two colleagues who had taught the wellness course to gain their perceptions about reflection in the course and to help clarify my study focus.

Five comparison group students were interviewed by two members of my colleague support group. Following the study course, the students in this course were also interviewed for follow-up data to compare to the comparison group students. Only one of

the colleagues who had facilitated the interviews with the comparison group was available to interview the study group students. Therefore, I hired an experienced interviewer to help with some of these interviews. To address the range of these interviewers' experience, I developed a "guide to qualitative interviewing" which summarized the philosophy and principles behind my interview approach.

Student focus group interview. The focus group interview I developed based on principles from Krueger (1988) and Patton (1987) and feedback from my focus colleagues and research experts. In the end, timelines prevented me from utilizing the focus group data. In fact, I had sufficient data from the questionnaires. However, the focus group interview was still helpful as I did present the possible interventions that I had derived from the former students to the students in the focus group and gained valuable feedback on their possible utility in the upcoming course.

Reflective journals. Students' reflective journals became both an intervention and a data collection tool for my study. These reflective journals provided powerful, personal, student insight and, as Atkins and Murphy (1993) note, "The use of reflective diaries in conjunction with other methods may contribute to a more valid research approach" (p. 1191). I made the assumption that the course would trigger feelings of dissonance related to the students' wellness as they began to assess their health and were exposed to course materials that introduced new perspectives on health and wellness. As students recorded their personal experience in their journals and considered different views, I hoped they would discover patterns in their behavior and use new insights gained to develop further insights or perspectives. I was looking for movement in how the students expressed and understood their wellness experience. Throughout this thesis I quote student reflective

journals directly. My explanatory outline to students for their reflective wellness journal and the specific assignments that I asked them to respond to in their journals are outlined in Appendix B and Appendix C respectively. The journal assignments involved questions with an inherent reflective learning process.

I developed two simple, non-threatening tools to give me a basic idea of how students defined and applied reflection at the beginning and end of the course. These are described below.

Case study. The case study that I used was designed to encourage students to reflect on a hypothetical, but commonplace, scenario of an individual from the perspective of health and wellness. Students were asked questions that paralleled a reflective learning process. I hoped that their response might indicate a degree of reflection on the scenario. This approach, I believe, was a less intrusive way of easing the students into reflecting as the case study did not directly relate to their personal wellness. The case study was to be used twice, first at home by the students at the beginning of the course, and second in class at the end of the course.

Questions on reflection. At the beginning of the course, I asked the students two questions: to define reflection; and explain how they had applied it to their wellness in the past. At course end, similar questions were asked, except that they were applied to reflection during the course. Any differences in definition or application of reflection became apparent on comparison.

Combining these various data collection tools gave triangulation to my research design and methodology, as recommended by Merriam and Simpson (1995).

Data Analysis

I approached my data analysis in an inductive, systematic, comparative way. My analysis methods were informed by the literature and my local research experts. My data collection and analysis are sequentially summarized in Figure 2.

I utilized a content analysis approach, as advocated by Fink (1995), to interpret the student questionnaires. The initial interviews were analyzed using an inductive approach specific to interviews as explained by Seidman (1998). After the initial analysis, I settled on a process that combined principles of content and inductive analysis: I highlighted significant points; sorted these by similarity into categories; merged common categories or created new ones; identified and named patterns/themes within and between categories; and looked for rival themes or patterns that did not fit (see Kirby & McKenna, 1989; Patton, 1987). I applied this process to the data from student interviews, case study exercises, reflective questions, and reflective journals. Themes were cut, sorted, and pasted in conformity with Patton's (1987) advice: "Interpretation involves attaching meaning and significance to the analysis, explaining descriptive patterns, and looking for relationships and linkages among descriptive dimensions (p. 144)." The data were interpreted in relation to the context of my research and by noting differences in both student groups.

Preliminary Findings and Interventions

This section consists of a summary of the main findings from the comparison group questionnaires and interviews. In addition, colleague interviews and feedback from the student focus group added to the preliminary data. These data gave me a baseline for

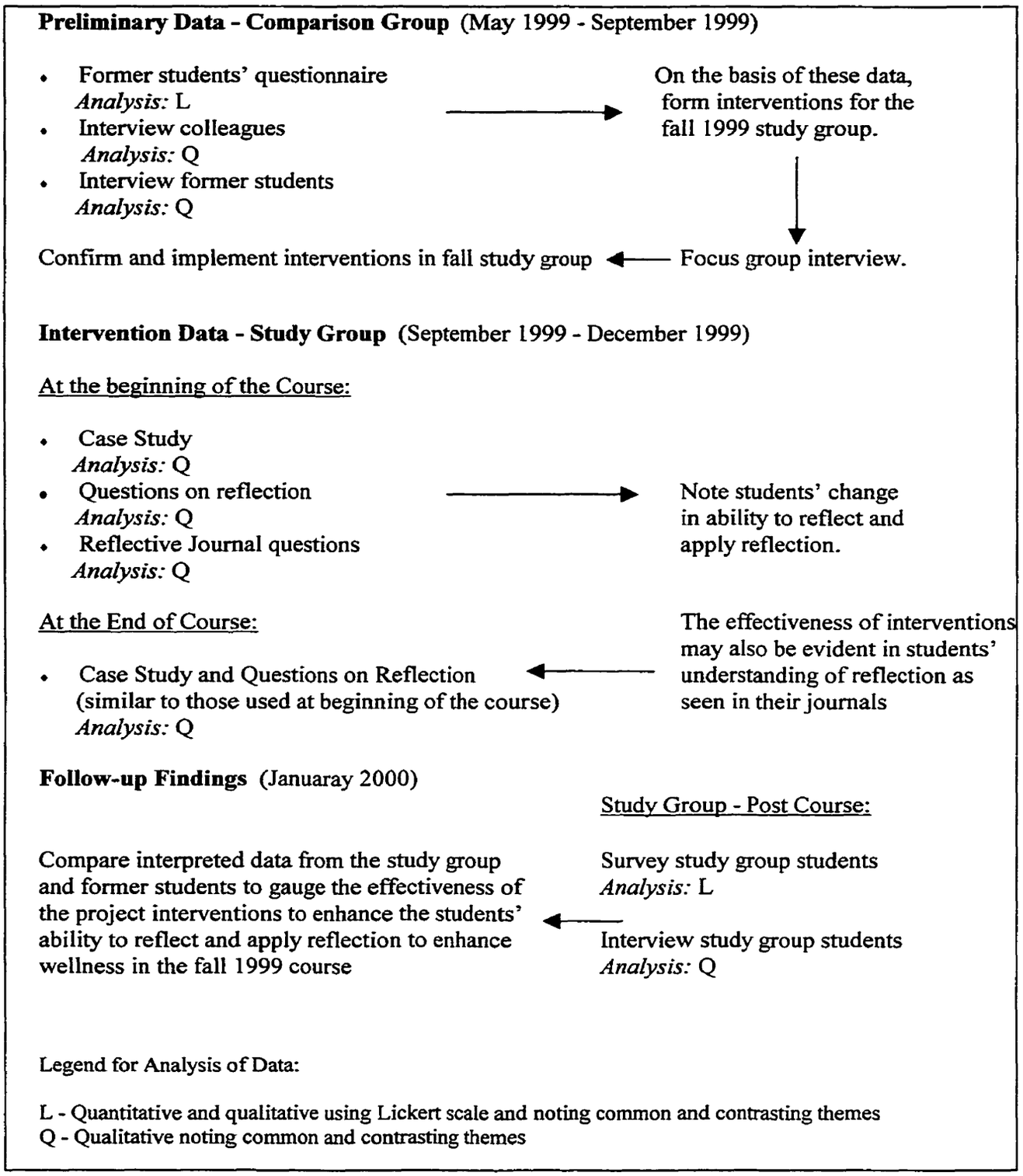

Figure 2. Outline of the data collection and analysis processes.

subsequent study analysis. I used a synthesis of these data to help select interventions for the study group.

Wellness Course Questionnaire (May 1999)

The questionnaire from the former students (comparison group) in the early stages of the project had a 48% (12 of 25) response rate. The main themes emerging from this survey were: the previously delivered wellness courses increased student awareness of the importance of reflection and a belief that journaling, discussion, and the course content all aided reflection in the wellness course. Conversely, some group activities and the journal may also have impeded the reflection process in some cases. The following briefly expands on these points.

When asked to indicate whether the course helped them reflect more than they typically did, 42% of students (5 of 12 responses) answered yes; "quite a bit to a great deal more," was one student's response. These students explained that they noticed an increased awareness of themselves and the importance of reflection; another noted profound impact, while another said s/he sensed personal growth. These students explained the impact of reflection in the course in the following examples:

> Made me more aware of how important reflection is. Also without realizing it - how much I did reflect.
>
> It helped me to identify and confirm my purpose in life.
>
> I was in a place of denial and not ready to be open. With this course I started to reflect and grow. I also found that part of the curriculum forced the issue of reflection which isn't necessarily a good thing.

Two students (16%) noted that they reflected "not at all," saying, "I did a lot of reflecting, but on my own terms. I feel very uncomfortable having to do it, or reflecting on things I don't see need to be reflected on."

Half of the students surveyed said the course enhanced their ability to reflect "most or all of the time." These students added that journaling, group brainstorming and feedback from teachers and fellow students were significant for enhancing reflection. These students focused their comments on various reflective learning activities utilized within the course and not the process elements of reflection itself. The latter is perhaps understandable as the curriculum for the comparison group did not emphasize a reflective process. Others said that they reflected more because they had to, that is, because it was part of the course. These students most frequently indicated that journals and course content (i.e., handouts, readings) enhanced their reflection. "Discussion with others" was less frequently noted. In answer to the question "Were any parts of the course useful in enhancing your ability to reflect?" students responded with the following examples:

> Yes, by doing our wellness plans, our journal and class discussions and activities.
>
> All the above (wellness journal, group brainstorms/group discussion). The course created a safe environment where reflections on past experiences came easily.
>
> Journal enhanced ability to reflect. However questions were very personal and I did not always wish to share reflections.
>
> Journaling throughout the course increased self reflection although again putting a time pressure or course mark I found sometimes limiting or even to the point of contriving an issue to write about.

Although the journal was noted as helpful, there was also some discomfort associated with reflecting in journals, as noted by one student who did not wish to share reflection on personal questions. Half of the students (6 of 12) indicated they were comfortable reflecting during the course, especially when sharing reflections in class.

The least helpful aspects of the course for enhancing reflection seemed to be group activities, participation, and sharing personal reflections. Workload, insufficient time to reflect in journals, and "reflecting for a grade" were also noted by one respondent.

Fifty percent of students said reflection *did* significantly help them try change--that is health change--("all or most of the time"), whereas 23% (3 of 12) indicated this occurred only "some of the time." Reflection helped them try change in their health/wellness, through increased awareness and focusing and confirming if their goals were met.

Findings included the need for students' readiness to reflect. Too much stress to manage the new health changes meant some students did not successfully change their health/wellness until after the course. Two examples of this are as follow:

> Again time pressure didn't allow an environment for change unless you really want to. It did help me after when I really wanted to move forward.

> My lifestyle did not change during the course as far as my "wellness plan" to acquire a fitness routine-- I am so happy to announce however I am more active now than I ever have been before, and I love it.

Student boundaries resonated through the questionnaire. Some students were confident in their reflecting, others saw it as a risk--usually because of the personal nature of the reflections. Further data from this questionnaire are compared to the study group in the post-course findings section.

Colleague Interview (May-June 1999)

I conducted interviews with two colleagues who had taught the wellness course to confirm my ideas about the role of reflection in the course and to elicit any concerns or suggestions to enhance reflection and change within the course. The two instructors agreed that the wellness course facilitated reflective learning or new realization/understanding.

However, similar to my suspicions, they believed students engaged in reflection in differing degrees, some reflecting in a "pat"' way:

> You sense pat answers. Very concrete, immediate now answers rather than anything that ties to anything else.
>
> I think it was the case that the answers were too pat--I wish that I felt confident that everyone did in fact reflect.

These instructors added that some students are just not at a "stage" to reflect personally and may think, as one instructor noted, "You're asking me to dig into myself and it can be very threatening for some students." The other instructor explained, "We make some assumptions-- that everyone's kind of at the same place and ask them to reflect on it but they don't necessarily cause they don't have the experience and we weren't just teaching them how." This instructor was alluding to the necessity of ensuring students know what is meant by reflection; its components and how it occurs. To address some of the potential threat of reflecting and facilitating reflection, one instructor suggested we introduce the reflective process earlier:

> I probably didn't introduce a discussion about reflective learning early on, and by not doing that, you are doing exercises that some students have never considered as part of learning. They have just COME, they have come to school and school doesn't relate concretely to their own experience.

Journal questions, collaborative class exercises (i.e., describing the significance of an object to ones' spiritual health), and creative expression were all identified as ways in which the course already facilitated reflection. Further suggestions to facilitate reflection in the future included asking good journal questions, making the process of reflection relevant to students' lives, introducing a "real" reflective learning process early, and using a method to assess student progress with their understanding of reflection or the use of it. These ideas are illustrated in the following faculty comments:

> Hopefully [we]would take them to another level without offending them.

> Try and design some kind of an exercise early on that helps people take something concrete in their lives and see what meaning they can pull from it. . . . I also always feel that, as instructors, we need to develop better comments or questions or ways of responding to people both in the classroom and on paper--questions that you ask that help them to move along that path.

I believe these interviews pointed to some of the same themes noted by former students in the questionnaires--namely encouraging students to reflect but respecting student boundaries at the same time. These instructors noted that the impact and degree of reflection might relate to where students start; therefore the relevance of the course depends on the students' ability to reflect on, and ground wellness in their own experience. Similar to the former students' questionnaire, they noted that reflection aided the students to focus on their plans for health change. Finally, introducing an accessible, reflective process and making it less intellectual, more clearly defined, and more applicable to the students' lives were also advocated.

Interviews of Former Students (July-August 1999)

Five former students, all female, were interviewed to investigate three areas: critical reflection, the wellness plan, and personal change. Here I focus only on data related to what facilitated or impeded reflection and health change in the course and on suggestions to aid either of these processes.

These former students noted that a safe class atmosphere, journaling, readings, handouts, the group project, and a patient, approachable, receptive instructor attitude were most helpful in assisting them to reflect. New approaches to increase reflection in the course included adapting the existing journal, as two students explained:

> Let's take what we've got and digest it for a week and then we go back in and during that week. . . reflecting at what you've already taken and then also you're introduced to more stuff to journal that week.
>
> I think just even defining what reflection is, what journaling is, it's not a diary, it's not I went to the store today. Actually giving it a definition and then letting people go and reflect. . . . Give the journal question as two separate questions, what did I learn today and how am I going to use it and then the reflection in the journal.

Students recommended clarity on assignments--including defining reflection and how to assess it. This indicates the absence of a clear representation of the reflective process in the wellness course. Students were also in favor of using more group work, increased discussion with classmates and the instructor, reduced workload, and adapting the course to individual student needs. Some of the comments included the following:

> I think it would have done a lot better if we did more in personal group work, just like talk to each other. . a lot more explanations. She [the instructor] didn't thoroughly explain what she completely wanted on the assignments.
>
> Even just communicating with other people, getting other people's ideas. I mean communication, you could have a talking session each week. Maybe have a 15-minute session where each person has a minute or something to talk about things they've discovered that week.
>
> Maybe like little exercises you could do yourself at home or in class for 10 minutes just to see how your ability to reflect is or even if you can to know what you are doing, you know to figure it out.

Students also stated what impeded reflection: the journal format; unclear boundaries; the concern of a teacher grading the journals; and the time commitment involved in reflecting. These points are illustrated in the following responses:

> It was really hard to have a course where we are dealing with your life and your reflections for a grade. It's very difficult.
>
> That's my private thoughts, its my feelings, I don't think I should be graded.
>
> It's a difficult process, I think, you have to be really honest with yourself and sometimes I think that there's our own inner fears.

> I wasn't into it at all and it was just kind of like a chore to do the journal. A lot of people just wrote, just made up stuff just to make [the instructor] happy, you know. And it was I think it had a lot to do with that she was a stranger really. . . I think it depends on the student, though. I didn't really get anything much out of it though, cause I knew that she was reading it. So I felt restricted to what I could say and do.
>
> I found myself going to a place I did not want to go. . . more my problem though. I felt pushed sometimes to reflect and wasn't in the mood. It was extensive and time consuming.

The students seemed to be at varying degree of readiness or comfort with reflecting. Indeed some students may have felt quite vulnerable sharing reflections in the journal or through discussion. To the question, "What was most helpful in the course to assist you to act on your wellness plan," students indicated that the act of writing or documenting a plan was most helpful, along with the instructor's support:

> The journal is the first thing that comes to mind. Because you are writing down things and then you are reading back and you are constantly thinking about those goals you are setting and whether you are keeping them.
>
> I might not have reached my goals in my Wellness plan but I do remember feeling better and having more ideas of maybe well that isn't working, maybe I can try this, because I had actually documented it.
>
> She [the instructor] was very understanding about it and we talked about it for a while and she completely understood, which was awesome.

On the question "What was least helpful to assist you to act on your wellness plan?", there was either no answer at all or answers without much detail. Those who did answer noted a lack of explanation and clarity on the journal and wellness plan and they requested that, in the future, more detail and perhaps examples be given on how to use the journal to make subsequent changes in their wellness plan.

When asked for new ideas to assist students to act on their wellness plans, responses were diverse and specific to each student's particular needs. Perhaps this reinforces the need for a more student-centered approach that respects the uniqueness of each student.

One theme that emerged reinforced a current practice of meeting with students during the course to discuss their wellness plan:

> Part way through the course, the instructor collected ours [journals] to see if we were on the right track or reading through our things and seeing and we had to reflect on how we were meeting those goals each day or each week.
>
> She just talked to us. She talked to us out of class. . . just the way she spoke to us had a lot to do with it, she had a very calm and quiet voice and she just made me feel relaxed.

The student interview data echo the questionnaire and the colleague focus group interviews on three topics: respecting student boundaries and ability to reflect; offering supportive feedback; and giving clear expectations of the process related to reflection and the wellness plan. The journal was seen as a powerful tool, but it clearly needed adjustment in the format and the evaluation to meet students' needs for clarity, safety, feedback, and reasonable workload. Discussion with classmates and the instructor was also cited by the students to help them reflect and act on their wellness plan.

Student Focus Group Interview (August 1999)

At a focus group with past students of the wellness course, I had presented participants with my proposed interventions for the coming fall (intervention) wellness course. These tentative suggestions to improve the wellness course were: change the journal format to include dialogue; make the journal separate from the wellness plan; omit a grade for the journal; give fewer, more general questions for responding to in the journal; and define the reflective process earlier in the course. The participants supported all of these ideas, in particular omitting a journal grade and clarifying the reflective process by explaining the process of reflection and how such a process might be utilized in the wellness course. This feedback, together with input from my colleague support group, and research advisors, and

along with further analysis of my baseline survey data, contributed to forming my study interventions.

Interventions

To accommodate student concerns about the journal, personal boundaries, discussion, clarity, and workload, I developed the following interventions for my project: (a) Clarify the journal format by (i) separating the journal from the wellness plan, (ii) not grading the journal, simply assigning a standard percentage to the final mark if it is complete, (iii) giving fewer journal questions at regular intervals, (iv) giving journal questions that parallel a reflective learning process, and (v) using a dialogue approach to journaling that allows for written feedback between student and instructor; (b) Outline and explain the process of reflective learning early in the course; (c) Increase discussion among students in class. All these interventions were evaluated by noting if they were specifically identified in the follow-up data, to be obtained from the study group 5 to 6 weeks following the study course, or acknowledged as influential in some way in their journals during the course.

Group work was noted as an impediment to reflection in the comparison group, as some students were not comfortable trusting their reflections with other group members. I chose not to pursue this due to the complex nature of group dynamics; I was more interested in individual student growth in this project. Finally, I believed journals were central to reflection in the course, as corroborated in the literature (Fulwiler, 1987; Progoff, 1975; Rainer, 1978) and my local research expert.

Intervention Tools

I developed three specific intervention tools for my project. First, in order to familiarize students with the process of reflection early in the course, I developed a composite reflective learning process (see Appendix D) based on various process models (Boud, Keogh & Walker, 1985; Boyd & Fales, 1983; Montgomery, 1993). This process was given as a handout to students. It illustrated a more systematic approach to reflecting.

Concurrently, I revised the Wellness journal format to foster reflection, safety, and dialogue. To do this, students were given a handout explaining reflective journaling and the new format (as shown in Appendix B) for journaling. There were six sets of journal questions designed to guide or assist students to move progressively to more advanced types of reflection (as shown in Appendix C). These questions corresponded to the reflective learning process handout. Students had one week to complete these assignments, and frequently had class time to work on these. I received and returned these with feedback to a secured location the following day.

Finally, in order to increase discussion in the course, I incorporated four open 30-minute discussion sessions during the course. I intended to have more but curriculum and time demands prevented this. I used a piece of paper with a trigger question such as: "What issues or questions were raised for you from tonight's class ?" Students then discussed their ideas, summarizing these in sentences or picture form for my review. Later in the course, I asked students to summarize their discussions in a more detailed paragraph form.

My action research approach responded to the study context and the needs of my participants. I was still developing and changing my interventions when the course had

commenced; for instance, I had planned a fourth intervention (to devise a new outline for the wellness plan) but decided to not impose any more structure to student work, as the journal already provided this. In addition, although I briefly had described the reflective process early in the course, I did not have a handout summarizing it until the seventh class. This delay stemmed from a need to discover each student's understanding of reflection (using the questions on reflection exercise), before giving them my handout on reflective learning, which spelled it out for them. In the next section I discuss the implementation and in-course findings.

In-Course Findings

The in-course findings consisted of data obtained from the study group at beginning and end of the study course, and the subsequent comparison of these data. These study group data were collected using the case study and the questions on reflection. These findings, along with the student's wellness journal assignments, illustrate student feedback and their work related to reflection and health change. Emerging themes are noted in terms of the students' understanding of reflection and health change, and how various interventions may have influenced or enhanced their perception of the role and meaning of reflection.

Case Study (September 15 & December 15, 1999)

In week 2 I gave the students a case study with corresponding questions that were loosely based on the reflective process. This case study was used at the beginning of the course in order to induce students to reflect on a fictitious individual's wellness ("Janet"). Questions progressed from describing underlying facts, feelings, and thoughts to surmising the values, beliefs and assumptions that might be informing these feelings and thoughts.

The next questions focused on how Janet could change her health/wellness and what resources she had to do this. Students were given a similar case study at the end of the course for comparison with the data from the earlier case study to see if they reflected differently.

At the end of the course, 4 of 11 students (36%) were simply noting the facts, feelings, or thoughts given in the scenario, in response to the first question. This was an increase from 2 of 11 students at the beginning of the course. I wondered why a greater number were not giving their own opinions. Perhaps they were saturated with reflecting, or having to do this during class time might have been a factor. Regarding what values, beliefs or assumptions might be underlying Janet's feelings and thoughts, few students delineated these elements. Sometimes students vaguely alluded to the possible values and beliefs, but assumptions were rarely noted. The latter may indicate that this question was ill-defined and needs further explanation for students to contemplate underlying values, beliefs, and assumptions as distinctive concepts.

At course end an equal number of students (7 of 11) as compared to the beginning of the course, noted that Janet could change her health by using "others" (experts or professionals) as a resource. However by the end of the course there was a slight difference as "family" was also indicated as a resource. Secondly, students at the beginning of the course said that Janet could change by using some priority-setting--for example:

> Janet could look at herself and her situation and prioritize her obligations and values and goals.
>
> Janet needs to re-evaluate what she considers important and fulfilling in her life and concentrate her energies in those areas.

As these comments indicate, Janet seems to become her own resource and, at the end of the course, two students explicitly indicated that Janet was her own best resource for change, as follows:

> Janet's only resource is her own assertiveness. The bottom line is that she must consciously assess her position, analyze possible changes and their implications, and make decisions based on her own knowledge of herself. If she can't or won't act on this process all of the externals, family, friends, and community can't help effect change.

> I see her resources as being her own ability to care for others: she should apply some of this caring toward herself and take time for just her.

The end-of-course case study included two further questions related to what Janet could learn from her experience and how she could apply this in the future. Similar to the previous questions, students noted that an awareness of self and developing a new understanding are essential to learn and apply wellness approaches:

> Janet could learn that living unconsciously is bad for one's mental and physical health.

> If Janet doesn't learn to reflect on the real cause and effect of relationships and behavior she will [not] learn that one cannot be all things and be well at her core.

> She has to be aware that she has put herself in this situation. . . . She has to learn to assess her health and well being, how she got there, what the real problem is.

This progression was one indication that the students were becoming more insightful and reflective. It is interesting to note that a few students had suggestions for Janet that paralleled the ideas they mentioned for themselves in their journals. One such theme related to the above comments on the importance of self-awareness and self-knowledge to aid change. It seems that the case study, although hypothetical, engaged students in reflecting on their *own* lives. This is evident in the following feedback excerpt:

> It was really helpful, it really made me think about what I would do in the same situation.

> Working on the assignment about Janet has brought to light just how busy and out of control and unconscious my life can become.

In summary, although the case study questions may need further work to help student examine possible assumptions for thoughts and feelings related to wellness, it nonetheless proved to be an effective tool for stimulating students to start reflecting on wellness in a relevant and real life context.

Questions on Reflection (October 8 & December 15, 1999)

A second tool engaged the students in responding to basic questions about reflection. Students were asked at the beginning and end of the course to explain what reflection meant to them and how they had reflected in the past. A comparison of the two sets of responses was used to indicate an overall student change in how they perceived reflection and engaged in it.

In answer to "what does the term 'reflection' mean to you?", 7 of 11 students at the beginning of the course said reflection is the act of looking back at one's experience. Some students explained this by using a mirror as a metaphor. Some noted reflection involved looking at self to understand how past experience and behavior can impact present circumstances. Only one student specifically related reflection to a thinking process. It is clear that the depth of perception of reflection varied, although most saw reflection as including a look at one's self, one's experience in relation to one's subsequent life. However, by course end, students still said reflection was looking back at experience, but they added that it also involved the consideration of why and how things are as they are. Two examples of this are:

> [Reflection is]To look back at past experience and learning to understand why and how things happened.

> [Reflection] Means to look at oneself to understand where you come from, how your habits were formed, were they passed on from family growing up, or was it something you learned by yourself?

In addition, some students defined reflection as involving a more action-oriented component, or a more cognitive, critical analysis process; the latter is indicative of more advanced reflection. The following quotes illustrate these findings at course end:

> Reflection is considering past experiences with new wisdom and realizing new insights to apply to future experiences.

> [Reflection is] the analysis of a particular circumstance or hypothetical criteria and filling that analysis into a viewpoint over time. . . this process entails using new information or a new perspective from having seen old information from a different perspective.

> Reflection means to review, analyze, look back on thoughts and issues, and determine the effects on one's whole self. To use critical thinking.

Student responses at the end to the course revealed an enhanced breadth and scope of what reflection is--as both a process to understand self, and as a way to affect one's future experience.

In response to the second question on *how* students had reflected in the past, 6 of 11 students, at the beginning of the course, indicated that they talked with others or used external resources such as reading journals or writing poetry. Most spoke of areas of wellness that they had reflected on. Three students described an internal/thinking process that involved examining the choices within a situation:

> [I] analyzed past situations. . . why did they turn out the way they did?. . . could they have turned out differently? I've broadened my views, accepted things more readily by putting them in perspective and a priority order.

> When I think about a stressful event in my past, I consider what led me to that event and how I was prepared to deal with it (internal). . . also how the actions of others, the environment, the situation itself affected the outcome (external).

It was interesting, that one student, while noting s/he wished to avoid reflecting, actually did just that:

> I think I try really hard to not reflect on wellness. I've done some soul searching in the past and know I need to [relates some very personal changes attempted]. . . . I didn't even make one week before it all started falling apart. I felt like a total failure and stopped all of it.

And another comment was representative of those who had not thought about this before: "I guess I have been reflecting on my well being ever since, but not knowing that I was doing it."

At the end of the course, when asked to note how they had reflected *during* the course, most students named specific handouts or the journal as their prompt for reflecting. Others went beyond this to comment on the personal impact of reflection and how that gave them a sense of empowerment on their own wellness:

> Using my journal and your questions made me look at and become aware of all of me. Something I have never done before.
>
> I was able to see and choose the direction and patterns to my wellness. See what I could actually change and use a process to get there.
>
> I feel I've gained more personal control.

Overall, students were recounting insights about their wellness and discussing their enhanced reflection in a direct way. They indicated an enhanced self understanding, not present at the beginning of the course. Comments such as the following reveal this growth:

> The essay on the discovery of the importance of deep, regular breathing, on physical and mental health will stay in my conscious mind because I feel very identified with the experience.
>
> Through the course I reflected on the achievements that mean the most to me. I realized that these experiences [personal challenges] were all frightening in some way, but I met the challenges. I know now that a challenge is worth the effort.

> I finally came to realize that putting things off to tomorrow was the main cause of my stress.

Three students even noted an increase in the amount that they reflected. One said, "I have actually started to reflect," another noted just reflecting differently, whereas the last said:

> Since this course began, for the first time in many years, I took the time to think about me and my values and beliefs as well as my needs. I never give time to myself, but [I am] learning to do so thanks to what I've learned in class.

In summary, the questions on reflection revealed that 10 of 11 students (91%) experienced an enhanced understanding of reflection. This was expressed in terms of an increased depth of reflection by 3 of the 10 students, or a more personal application of reflection towards wellness, noted by 7 of the 10 students at the end of the course.

Reflective Journal Assignments

As noted earlier, the purpose of the reflective journals was to encourage the students to reflect increasingly through the use of journal questions--questions that paralleled the reflective learning process used in the course. I also used more questions and feedback than ever before to move students to consider different perspectives or reflect differently. As well, I used a sensitive, non-critical, approach that paraphrased their words and helped to clarify questions. Students were encouraged to re-read their journals and to note inherent insights while they responded to my questions. There were six journal assignments over 15 weeks. Here I review the prominent themes that emerged from each assignment. This chronological approach reveals the movement, change, or growth in the students during the course even more conclusively.

Journal Assignment 1 (September 22). The first journal assignment consisted of five questions asking students to describe wellness, to note issues raised in the course, to specify what they were doing to maintain wellness, and to note their thoughts and feelings

related to their present wellness. In this initial journal entry students were asked to choose three of five questions to answer, to ease them into reflecting and to give them some choice as to how deeply they reflected. Most students--6 of 11--chose to describe their own wellness and the issues currently arising. These students described their wellness as multi-faceted and included the physical, mental, emotional, and social aspects of health in the description. Balance was a common issue brought to light for students through the course. For example:

> I feel my present state of health is poor [related personal physical issues]. . . . I feel I am in good mental health, I have a good relationship with my partner and I enjoy my continuing education and my work.

> I do not have a balance in this area of my life. It effects me psychologically, which until this course I didn't put two and two together. So it was a real eye-opener when I realized that everything has something to do with the next.

There was a range of depth in how these students were able to explore/describe their wellness. Meanwhile four students commented briefly on their wellness in a factual manner, with no reflection. They said, very briefly, with no further explanation:

> My present state of health/wellness sitting at about 90-95% perfect.

> My present state of health/wellness has definite room for improvement, to say the least.

Four students chose to comment on their thoughts and feelings related to their wellness; they were similarly brief:

> I think that my present state of wellness is average.

> I think that my present state of wellness is on the right track of completing my goals.

> How I feel about my present state of health/wellness all depends on the day.

It is evident that describing the facts of one's wellness is easier than relating feelings or thoughts. Reflection does not come easily for some. Others confided that reflection on wellness was unusual for them:

> Prior to this course I never took the time to think much about my state of wellness.
>
> The wellness course is starting to get me thinking about my health again and what I should be doing to improve it.

A total of four students said they were maintaining their wellness by taking some sort of action. One student said that, after doing the case study, s/he realized a desire to "become more aware," and then proceeded to demonstrate just such an awareness, saying, "What I discovered in this class is that I'm always concerned about the end and miss the good stuff in the middle."

In addition to the variance in the students' degree or ability to reflect, there was some question as to the willingness of students to do any reflection, as evidenced when I asked two students to clarify in more detail; they responded:

> This course seems to focus on improving your wellness and I don't feel I need to right now.
>
> That was personal to the fact that that's all I want to say. [This student also reported that the questions were redundant.] I thought that choosing three of these questions for myself could have been combined into one.

I was glad to gain such feedback early on to alert me to student boundaries and to remind me to respect their responses to my questions of clarification. If students refused to elaborate further after a second question, I simply said "OK" or "fair enough" and did not press for more detail in that journal assignment.

Journal Assignment 2 (September 29). Students had a choice of commenting on three of five questions dealing with their beliefs and values on wellness, what they had learned

in the past concerning their health experiences, and what barriers or supports they had for wellness. The most commonly answered questions had to do with past learning about wellness. At this point 9 of the 11 students revealed more depth and insight related to their understanding of health, as compared to their first journal entries. When reflecting on past learning, behavioral changes in relationships and physical changes were common themes:

> I found that under pressure and without adequate preparation I can still accomplish my goals--I've always been able to get by. . . . Perhaps this is why, when it comes to my physical wellness, I've been reluctant to put much effort into it.

> With all the hours I was working we were not really able to enjoy it, it became more work. The intent was good but I let the jog have control over me. . . you get caught up in trying to "achieve" all the while losing ground and doing yourself mental harm.

Another student was encouraged to reflect further on her past learning and to consider underlying thoughts and beliefs:

> I've given a lot of thought to my beliefs and values relating to my health and wellness and have come to the conclusion that I don't allow myself to consciously think about it or take care of my well-being [she then related that in her workplace a 'preventative maintenance' approach to practice is stressed.]. . . . I wonder why this is more important to me than my own health? or when it comes right down to it, is it more important ?. . . I seem to carry the belief that I come last on my list of priorities.

Similarly nine students commented on the values/beliefs underlying their wellness; some interpreted the question to refer to what they believe about their wellness; others took the question to refer to where their beliefs originated. Similar to the case study, their *assumptions* about wellness were rarely delineated or mentioned. Perhaps this journal question was unclear. Also similar to case study findings was the identification of outside resources--family and location--especially as the supports and barriers to wellness. The self as a resource was only alluded to briefly, and any internal barriers were only indirectly recognized:

> The only barrier that I can see to improving my health and wellness at this time, it's the lack of understanding at why I should even worry about it?
>
> Certainly some [barriers] that are even illogical and outdated, but a little voice in my head is still there.

I did not probe these students here, but encouraged them through questions in successive journals to explore areas or underlying themes that they had omitted earlier. At the end of the second journal assignment, I noted increasingly detailed explanations in the students' journals as students explored their wellness and gave specific examples of their wellness.

Journal Assignments 3&4 (October 20 & November 10). For the third and fourth journal assignments I asked students to reflect on what they had learned about their health/wellness prior to the course and how they had learned it back then. In addition, I asked students to consider how they choose among options for health change, and how this change is then evaluated. I hoped this would encourage them to examine past behavior and recognize the impact the past had on their present health status.

Nine of 11 students noted past learning related to their physical wellness. Again, I maintain this dimension is probably easier to reflect on. When asked *how* they developed this new understanding, six of the students said it was the tangible results of the change that cued them, while a few others explained that a process of realizing underlying values, beliefs, or attitudes influenced their behavior:

> I finally came to the realization that my body was exhausted and could just not function anymore. My careless attitude towards my state of health had finally caught up to me.
>
> An insight that I had about my basic wellness was the importance of breathing. . . . How I happened to make this shift was to start living fully in the present moment and letting go of fear and uncertainty and focusing on the action taking place. . . so I changed my way of thinking to focus fully on each moment as it presented itself.

> An ah-ha moment prior to the course could be when I realized through reading that my eating habits were promoting the weight to stay on. . . maybe there's a commitment issue here as well.

Two students said the questions and writing in the journal helped them discover new learning. Although the question was about their learning prior to the course, their comments about the course are valuable nonetheless:

> What it [the course] has done is to bring a lot of issues to the surface and forced me to start thinking about them. I rarely ever think about myself or express my inner feelings.

> This is a very therapeutic outlet, sometimes it's not easy to share these feelings and thoughts. I am now recognizing what a large part this is in mental wellness. Writing things out in reflection is [to me] very similar to writing out and planning goals. It makes you face all the things around you. . . clearing up the mysteries of "What's going on? Where am I going?"

One of the journal questions encouraged students to think of a current gap in their wellness, why it was not being addressed, and how it could be dealt with. I had hoped this further examination might prompt personal insight into what was hindering them; perhaps such insights could subsequently help them with their wellness plans. On this, five students noted a specific gap, and others were vague. Of these five, three noted using a variety of approaches, including the course components, readings, or personal assessments to address the gap they had identified. Some students described their underlying thoughts or feelings related to this gap and noted a general plan to address the gap, for instance:

> relationships. . . I always feel rather inadequate talking about relationships. . . knowing more and feeling more comfortable with myself is a good start. . . as long as I keep focusing and am open to learn about myself.

> I have a great concern over the relationships in my family. . . . I don't feel ready or equipped to solve the problem. I am also not sure who's problem this really is. . . . I have started to put delicate little stops, i.e. gossiping. . . . I wonder if addressing the root of these problems might help ?

> I have discovered that there are many people who take from me and have little or nothing to give in return. . . . I believe I can change this firstly by becoming aware of the people who do most of the taking. . . . I must start with small steps and have reasonable boundaries to follow.

Three other students gave little detail regarding how to address the gap in their wellness and one of these students initially indicated there was no gap.

The following shows how I used dialogue with these students in their journals to encourage them to give more detail and, in one case, to clarify the meaning of the journal question (my questions to them are in italics):

> *(What could you do yourself related to this issue, to impact your wellness?)* I know I can change this attitude. I have to give myself a good swift kick in the butt.
>
> *(How could you address this issue, give details please ?)* I don't know, quit everything ! You said we were allowed to be brief.
>
> *(Is there not even one issue you would like to address differently?)* Can I make any changes now? NO, I can't and I won't. (*Consider how you could change not whether you would)* Well the only thing I could do to effect any aspect of my wellness is to try to get a better understanding of what I should be doing to improve myself. . . . There may be a concern I have about my attitude. At this moment in my life they are not foremost on my list of priorities.

Although my dialogue in the journal appears to have aided the latter student in recognizing a gap, the issue of student comfort and boundaries is evident. The students were giving minimal detail on the gaps in their wellness at this point.

The aim of the fourth journal question was to stimulate students to examine how they discriminate in their thinking process, or analyze options for health change. In addition, they were asked to reflect on a successful change they might have made and describe how that occurred and was evaluated. Most students (9) indicated that they used a process to choose from options for change. Seven of these students described a multi-faceted approach to their process. Examples of these are as follows:

> I consider how necessary the change is, how much time do I need to spend on making this change. . . . I consider how effective the approach is. . . does it effect anyone in a negative manner?

> I consider time factors, how necessary the change is, the effect on others, benefits of change, the impact on wellness and whether it is worth my time and effort.
>
> I first go over an approach or options in my head, then I write down the pro's and con's. . . if after that I am still concerned I will call a family member to run it by.

Three students said they use the advice of others to aid them. I questioned one student here for more detail and this student said I seemed to be wanting answers that were too concrete. I asked the student; "How do you evaluate your options to decide to change?" The student then revealed an intuitive approach to choosing between options. Two other students noted that they do not use a process; then they went on to describe one:

> I feel that I don't use a process. Well, I guess maybe in a way. . . I have to consider how [my decisions] will affect my child [and] others in my life. . . . I would talk with them about what I was going to do.
>
> I do not really have a set process on deciding on which option to take, it depends on the situation. . . . The only type of process I use is when I have picked the quickest option I weigh the pro's and con's of following through with a particular option and decide if it is worth my time and energy.

Six students noted they did not use a specific process to evaluate options for change. Two other students said they always consider the impact of their choice on others, while one student recognized, through answering these journal questions, that s/he had a habit of not using a process to evaluate options which was having a negative impact:

> I really do not evaluate my options, I am successful if the problem/issue was solved with everyone involved. I know I should change this habit because it takes 2 or 3 times for something to be solved, and in reality it probably takes about the same amount of time [to evaluate?].

When asked if they had made a sustained change in their wellness in the past 3 years, all of the students indicated that they had made a personal change of some magnitude: divorce, moving, career change, or changing harmful health habits. In addition, 10 students spoke in a detailed, holistic manner about the impact of change on their wellness--thus

indicating a broader perspective in reflecting on experience, compared to their earlier journal entries. Further, although 7 of 10 students indicated that their process for change was the same one that they used to choose between options, 2 of these students demonstrated that they had a more reflective approach after all, which involved analysis of why something occurred, followed by an application of any insight to their actions:

> mostly just thought and analysis, when and why the behavior occurred.
>
> I would describe area of concern, analyze and think about the issue(s), then evaluate and develop new understanding and coping methods, then act upon my new understanding.

How change was evaluated seemed to be an ineffective, confusing question for students, as they either noted very briefly that they went by how they "feel," or they evaluated the change they had described. One clearly stated, "I don't understand what you mean about how did I evaluate." I am unsure of the utility of this journal assignment. Although nine students identified a process they used to make choices, it is not clear whether they recognized an underlying thinking process.

Journal Assignments 5& 6 (November 24 & December 8). The final two journal assignments sought to see if the students had developed insights or new understandings during the course and how this might be applied to action. These questions paralleled the synthesis of understanding and action in the reflective learning process.

Most of the students (10) indicated that they had had an insight during the course. Some noted that specific aspects of their wellness were enhanced; others said that they experienced increased self understanding. Two examples follow:

> During the course I discovered that change is difficult for me. . . . even though I've always believed that I was an adaptable person, when it comes to personal issues about my wellness. . . I'm not so willing to take a risk.

> A resistance to schedule my change into my daily routine. . . . An insight was becoming aware of the many other things that were changing at the same time. . . .[I became] aware that I jump into plans without checking impact. I seem to jump to conclusions before I have the whole idea.

I asked how this new understanding was different from what they knew before. The general reply was the fact they had a broadened view of wellness and of the implications of their own behavior:

> I had never combined so many factors of change before or seen any measurable results before. . . . Now I know how much of what kind of behavior would result in desired change.
>
> Before I thought spirituality was about prayer and church. . . . Now I know it is what I make it.
>
> This understanding of wellness is different from what I knew before because what I knew before was nothing. . . . I have always looked at emotional, mental, spiritual, physical and social parts of my life as independent entities neither having an effect on the other.

When asked how they developed their new understanding during the course, in these last two assignments, the responses were: doing their wellness plans first hand; through journaling; and by using reflection or the reflective process discussed. The following quotes illustrate each of these themes:

> How I discovered this "ah-ha" was by working on my wellness plan.
>
> I discovered this new perspective from first hand experience. . . . This personal experience of actually living through the wellness change has been more meaningful and rewarding than any type of abstract knowledge about wellness change.
>
> The journal made me think because I read back over what I've written and analyze my thoughts. It also made me more committed because writing to me is like signing a contract.
>
> I developed this new understanding when I answered one of the journal questions.
>
> I developed this new understanding through time and reflection.

Discussion with others (classmates/instructor) and specific handouts (self assessment tools) were also indicated, to a lesser degree, as helpful to develop new understanding; the former was noted by one student, "This insight came about by having discussions with yourself [the instructor] and fellow classmates."

However, despite the fact that the majority of students had new insights during the course, one student indicated that she did not have an insight during the course:

> No, I don't think I developed any insights or had any ah-ha moments. . . because everything we've talked about was a review from other classes, or I've experienced ways to take care of my five dimensions. . . . I've gained my knowledge through spiritual workshops, conferences and recognizing the signs of stress and change.

This student also noted that she found this question the same as journal assignment 3.

For journal assignment 6, students were asked how they could act on their new perspective or understanding in the future. Most gave clear detailed action statements of what they would do using "I will," apparently denoting a commitment to put these actions into effect. Four students explained they could "act" by continuing to use the process they had articulated in their journals to make change. Two examples of this are:

> I will continue to use my process for change. . . evaluate the situation, think it out, test plan A, B or C and follow the steps to make the change.

> Writing my feelings and reflections has been good for me to analyze and see where I do or don't need to investigate further for my optimum performance.

Two students did not give this type of response--one because she said she they had no insight during the course, the other noting a new insight and then saying it is not a priority to change it at this time:

> To take any steps now to improve my spirituality would be inappropriate at this moment, because I'm not ready to make the change. . . when a person decides to make a change that change comes after many years of personal reflection.

Five students noted the *impact* of these proposed actions on their wellness as a whole; four students noted that the action plan itself was the "result" of their actions. A subsequent increase in self confidence and self esteem was also evident. Comments from students included:

> I can't quite explain it but my self-esteem and pride and motivation has just been given a terrific boost.
>
> I'm gaining my self confidence.
>
> Also, I have come to actually trust my writings, another big ah-ha for me.
>
> I feel taking better care of my self will improve my self esteem and help me to keep a more positive attitude.

Journal assignment 6 also asked how students could ensure these actions were carried out, based on their new personal insights. Students resoundingly suggested some form of writing to aid this:

> Journaling in regard to the five dimensions of my wellness is definitely instrumental in my continuing wellness. . . . By writing I think this will ensure that I keep grounded where, when, how, what, why I need to grow or not in areas of my life. . . . Reassessment is easier when I can read through and see/observe/assess me on the written page.
>
> I am more committed to what I've written. . . . The journal that's what I'm going to use as a tool to ensure my actions are carried out.

Two students further noted that they realized new insights in reading through their journals. One example of this follows:

> By reading through my journal I realized that I don't have to be superwoman; but just feel comfortable with myself. I also realized through re-reading my journal I have made a few positive changes over the past few months and didn't even realize it.

In conclusion, the reflective journal entries portray facilitated movement and change for students. Clearly 10 of 11 (91%) of the students had changed their perspective on their wellness and their role in affecting positive change. At the end of the course, nine students

could identify their thoughts and feelings related to wellness and understood how to use reflection as a tool to enhance their wellness. I am not certain how well the journal activity fostered the synthesis of their knowledge or critique of perspectives, however. Some students did discover new ways to understand issues whereas others were not at this level of reflectivity. The success of the journal as a synthesizer and mode for critique was highly individualistic. The issue of boundaries was also noted. Two of 11 students did not wish to go into detail in the journal, and one student simply noted that there was no need to change. Despite this, I believe the journal was an effective study intervention that allowed 10 of the 11 students to increase their awareness and develop insights into their health and wellness.

Post-course Findings

The in-course findings pointed to student changes *during* the course and gave me reason to think that the journal and the class discussion interventions were successful. To gain a fuller evaluation of my study, I surveyed and interviewed the study group approximately 1 month after the course was over, in January, 2000. The resulting data were compared to the comparison group findings (from May-July/1999) to note the overall effectiveness of my study interventions.

Wellness Course Questionnaire (January, 2000)

The study group data revealed an increase in the number of students who said that the wellness course helped them to reflect more than they typically did (6 of 11; 54%). This compared with 5 of 12 (41%) who said the same thing in the comparison group. The number of study group students indicating that their ability to reflect was frequently (i.e., "all of the time/most of the time") enhanced during the course was 5 of 11 (45%). The

comparison group was 6 of 12 (50%). In responding to how they knew they had enhanced their reflection, and what specific course components helped them to do so, the study group, like the comparison group, indicated that the journals were the best for this. Both groups also noted the group discussions as a specific part of the course that helped them to reflect. As well, the study group added that the journal questions, the act of writing in the journal, and the instructors' help to clarify the journal content were also aids to reflection in the course. The following quotes illustrate these points:

> The journal questions forced me to think about things I would normally avoid. During the course I learned the importance of wellness as a whole and have started steps to improve my personal wellness.
>
> The wellness course focused on specific issues, provided ways to view them, checklists and pie graphs. The exercise of self evaluation provides perspective and direction for reflection.
>
> The journal part of the course enhanced my ability to reflect on myself.
>
> The course content reinforced the knowledge I already had and added to it thus increasing my awareness. The activities helped me to get started on a self improvement plan. The instruction helped me to seek, find, and implement a plan toward my wellness goal.
>
> The most useful parts of the course were journaling, analysis and planning. The activities and small group discussions were good for comparing different viewpoints.

In both groups, students said their reflection was enhanced specifically due to course requirements.

There was little consensus or detail in the study group about the *least useful* part of the course for enhancing reflection. Most students (4 of 11) could identify nothing in particular, making any comparative analysis with the comparison group difficult. However, there was less overt objection and discomfort related to sharing than had been indicated by the comparison group.

Five of 11students (45%) in the study group said reflection helped them try health change, as compared with 6 of 12 (50%) in the comparison group. Although both the study and comparison group students indicated they used reflection to focus on their wellness plans, at least one study group student's analysis demonstrates what and how they learned--at a level not seen in the comparison group:

> During the course, I found that keeping the journal helped me reflect on all the elements within myself that were being affected by the change I was proposing. It was quite challenging, and an eye opener to how unconsciously I do things and continue with unhealthy habits.

The real difference was depth of reflection. The study group had more students, (5 of 11; 45%) using reflection to continue their wellness plans 1 month after the course, as compared to 4 of 12 (33%) in the comparison group. However, a slightly smaller number of study group students (6 of 11; 54%), were using reflection to address new issues 1 month after the course, as compared to 7 of 12 (58%) within the comparison group. This difference may owe to the short time that elapsed between course and survey for the study group. The study group had only 1 month, whereas the comparison group may have had up to 2 years. As noted in the limitations section of chapter 1, one month may not allow students time to reflect and further apply any learning from the course. One student directly indicated that this time lapse was a problem; others hinted that they were beginning to see how they could apply reflection skills for future action: "I've been away on holidays, but I guess, I did use the reflection skills from class as I did some evaluating of my life and have made some conscious choices to move in a different direction."

In hindsight, the final survey question disadvantaged the study group due to the short time lapse following the course. Despite this disadvantage, 82% (9 of 11) of the study group students said they currently were using reflection to deal with new issues or

problems compared with 83%(10 of 12) in the comparison group. The study group were also able to explain the reflective process objectively and both examine and synthesize their experience, as the following examples indicate:

> I try to look at things from different perspectives and weigh them out rather than making a snap decision.
>
> Looking for overall balance calls for reflection on a wide variety of factors that influence daily life. Reflecting on the relationship of these factors puts some things in a more long range perspective.
>
> I compare what has worked in past situations combined with new knowledge to decide my approach with situations at work.

Based on the qualitative data, the students in the study group seemed to recognize their own ability to change and to effectively enhance their wellness. This empowerment is clear, for instance, in one student's statement: "I think I am more apt to stand on my own after taking the course and I know now I can do anything I put my mind to doing".

The follow-up questionnaire revealed that the study group was using a more process-oriented approach to applying reflection than the comparison group, including more analysis and synthesis of new and old knowledge. This, I believe, suggests the effectiveness of the reflective learning interventions used. The journal intervention was shown to be very effective; the journal questions were viewed as most helpful to aid reflection and make change in the wellness plan. Two students expressed some concern related to the journal-- one was uncomfortable sharing, the other was unclear about some questions. This does not diminish the positive impact of the journals and only briefly raises boundary issues--issues which were more evident in the comparison group.

Student Interviews (January, 2000)

The comparison group students, interviewed in July, 1999, as well as the study group students, who were interviewed in January, 2000, both defined reflection as a tool to apply to experience. As well, reflection was viewed as a way to understand oneself. The study group was given a handout summarizing the reflection process (see Appendix D) which included the component of analyzing ones' thoughts and feelings to understand an experience further. Unlike the comparison group, the study group more explicitly found reflection to include analysis and to function by personalizing the curriculum and facilitating health change. Three study group graduates said:

> [Reflection means] Not just think but analyze your thoughts before acting on them and myself, what I use, I base it on past experience and make decisions mostly on past experience, but to thoroughly analyze it.
>
> I think the main role of reflection in the wellness course is to personalize information presented, so that the student has a personal, intellectual and emotional connection with the material presented in the course.
>
> I believe it helps the individual to make change, by reflecting on yourself, you are then able to see what things need to be done.

The study group also differed from the comparison group by overwhelmingly indicating that the journal was the primary way they reflected during the course. Seven of 10 students said it was the most helpful aid to reflection in the course. The study group specifically noted that the journal questions, instructor feedback, and exploring the self through writing were the keys for increasing their awareness and reflection--for example:

> I think, Kim's interactions, I think her comments in the journal encourage you to go even deeper and to think further and just her questions brought out things that I didn't even know were inside. I didn't even know that I even knew! It was totally unconscious but she make me aware, just by the questions she asked.

> Having the questions, so I did have a direction, and you just got used to doing it and one thing would lead to another, so it's just a different way of thinking. . . . It's a guided reflection.
>
> The journal is the main tool of that personalization, that when you write that information down and commit it in a physical, real way to the page, you're defining it in a way that is very different than reflecting about it mentally but not necessarily acting on the reflection.

The comparison group had noted that the class atmosphere and the journals in a general way were the most helpful in aiding reflection. As noted earlier, two comparison group students had expressed overt discomfort journaling. The study group students expressed less overall discomfort with journaling, although one said the journal questions were "repetitive" and "vague," and another responded with what seems to be discomfort, "I hated it, I just thought it was a waste of time."

Sharing personal reflections in a group or in the journal raised boundary issues, and grading the journal was also viewed as the least helpful by the comparison group. These concerns were not evident in the study group interviews. A study group student did say that at times the journal was not helpful. This student would have preferred to ask and answer their own questions instead of the instructors'. This may reflect the student's propensity to reflect. In the study group, a few students noted "nothing" to this point. None of the study interventions were named as unhelpful for reflection; nevertheless, students did have suggestions regarding the reflective process and the wellness plan:

> It would be nice to have a student come in and talk to the class and tell us how he or she felt about it. That would be more beneficial than anything else, cause then it would be easier to relate to somebody else, who has gone through all the changes and what they thought about it.
>
> A little more concrete information and discussion of what reflection really is, and that process itself be emphasized from the beginning.

When asked what suggestions they had to improve reflection in the course, the study group reinforced current practices, although one concern raised was:

> Our journals, we didn't start them until a couple of weeks after the class started. I would have thought that if we had started them right away, without direction, just gone in and started writing about how we felt about the class, to be able to reflect on that right from the very beginning of the class would have helped and been interesting.

The majority of students in both the comparison and study group courses--with one exception in the latter--indicated that they were still using learning from their wellness plan 1 month following the course. The study group were not as specific in their comments on how they were applying learning from the wellness plan after the course. This may be due to the insufficient time following the course. Nevertheless, the study group members had increased their understanding of the importance of self care, and three students added:

> I don't spend enough time on wellness and how important it is to start at square one, to take care of yourself before you take care of others.

> I learned that I need to take the time to sit and think about my own health. I lived for 25 years for my kids and ignored myself and it is time for me to have a look and take care of myself.

> There's a lot of things that I'd like to change, but I also learned that I need to make really small steps, cause I can be quite critical of myself, so I would say, I think that it's broadened my outlook on things.

There was little consensus or clarity within the comparison group as to whether reflection actually helped them to make changes. I am not sure these students understood the question. In contrast, 7 of 9 (78%) study group students noted that reflection, specifically through re-reading their journals, was key to change in their wellness plans::

> I looked back on what hadn't worked in the past and I used that to, I always took something really huge, and realized that that wasn't realistic, I couldn't take something that big and have it work, I cut down and I just did the basics and it was way more successful. . . . It was a good idea but totally unrealistic, so it (reflection) did help me keep things in perspective.

> I think I had a narrower view of how to make change, where this opened it up. . . . so I think it helped me look at things that need to be changed with myself and think of a process that works for me.

The study and comparison groups both said that documenting a wellness plan in class and the instructor feedback on it were the most helpful aids for these plans. However, general study group responses demonstrate that instructor feedback in the journal was also very helpful:

> Again I would have to say, the journal writing. Kim seems to have the knack, she just knows the right questions to ask to make you think.

> During the course there was a constant flow of information, but I think that personal monitoring with the instructor, even if only for a few minutes, say 5 minutes every 2 weeks would have made it even more personalized.

The last interview question sought to discover how students had applied what they learned to make change in other areas of their lives. The comparison group students noted specific behavior changes in reply to this. Two students said they used introspective thinking processes (listening to inner thoughts, looking at underlying reasons for things) more. As in their questionnaire responses, the study group said they were still working on their wellness plans and had not applied learning elsewhere. But despite the short time frame, two study group students were continuing to write in their journals and others described insights into their health behavior along with a clearly enhanced awareness of how self care can positively impact their wellness. The following quotes demonstrate these points:

> There's at least once a day, something that comes up that I think oh yes, the course, I remember I should do this now, or I'm not being fair, or I'm being closed minded, or I should listen better and that's a part of it a lot.

> I'm more *aware*, especially with my work environment, that if I'm not feeling well in certain areas then I'm not pushing myself, so I choose to acknowledge and look after myself more.

> It gave me a sense that I can accomplish change, positive change, and through the course, I sort of realized for myself how I go about doing that and how I've done it in the past and what works and what hasn't worked.

As with the previous comments in this chapter, the study group students seemed to be experiencing new perspectives on change and caring for themselves; by implication, it is this new approach to viewing their lives that is being reflected in their post-course comments. They have gone beyond their wellness plans.

Nevertheless, one student stressed that not all students want to change. This raises the issue of student boundaries and readiness to engage in reflection. This student stated:

> There's a concept that people don't want to change because they're uncomfortable, and [the instructor] will have to accept that fact that change for some people may not be beneficial, even though change is positive, it might upset them too much psychologically.

Significantly, this student showed some growth from reflecting. This particular student had become more conscious of the when and the why of their reflection. Three other students noted that the instructor's approach of enthusiasm, prompt journal feedback, and being open to discussing ideas was helpful throughout the course. This, I hope, can offset some of the potentially threatening effects of personal reflection articulated above.

In essence, the study group interview results mirrored the journals. They defined reflection to include analysis--a term not noted by the comparison group. Reflection was also viewed by the study group members as a tool to make course content more relevant, and a way to focus on their own health change.

It is evident from the questionnaire, the interviews, and the journals that the reflective questions given for the journal helped students to reflect and enhanced their awareness of their wellness and how they could maintain or improve it. From their comments it was clear that the actual act of writing seemed to assist students to reflect and discover new

insights, and helped them also to follow or commit to a plan for change. In this way, the journal did assist students to act on their wellness plans. Students noted that interaction with the instructor and others also helped them to reflect and act on the wellness plan. The theme of dialogue was noted by the comparison and study group, the latter indicating in both the interviews and the questionnaires that even more dialogue was needed to clarify and aid action on their wellness plans and increase reflection in the course.

It is interesting that both the comparison and study group students all applied reflective learning to new issues following the course much more, and that a few were continuing to act on their developed wellness plans. Could it be that once they were finished with the course, they preferred to choose other issues that had more relevance, or were not limited by course expectations, or time parameters? Despite the overall stated preference for acting on new issues as compared to continuing with their wellness plan, the study group members clearly were not applying what they had learned in the course to address new issues as much as the comparison group. As explained earlier, the short time in which the study group had to reflect between the course and when the data were collected may account for this, and points to a limitation in my method. I am convinced, nonetheless, that these students developed valuable insights to apply in other areas concerning caring for themselves.

Summative Analysis

I set out to facilitate reflection and study the subsequent health changes of college students in the context of a wellness course. My project interventions comprised a guided approach to reflection to enhance a health change process. I utilized journaling, respect for student boundaries, and dialogue--both written and verbal--to foster reflective learning. To

some extent, I was successful. However, students gave me clear indication that I could improve my approach to enhance reflectivity and health change in the course. I briefly illustrate these assertions by relating my original project goals to the overall themes that emerged from the data.

The student journals and the interviews strongly suggest that their reflection ability and amount that they reflected were enhanced during the fall 1999 course. The extent to which reflection was developed varied among the students, though all noted that they had an increased awareness of some sort on their reflective ability. All the students in both groups recognized reflection as a tool and a process to apply in their future to make the health changes that they had identified. Reflection was demonstrated in their journal work and in their feedback describing how and why they were well or unwell. Though some students displayed the use of a more analytical process of thinking about their wellness, it is hard to be certain about the extent to which all the students were able to analyze and synthesize their knowledge and experience on wellness. New perspectives were clearly gained by the majority of students (8 of 11) in my study group, as evidenced by the recurrent theme of discovering the importance of self care, the seemingly related confidence theme, and (perhaps) the empowerment that resulted for some students.

The most effective tool to foster reflection was the journal. Specifically, the journal questions clearly helped to foster reflection. The act of writing in response to these seemed to stimulate students to reflect and learn about themselves. Reflection was also aided through class activities, discussion in class, and verbal and written instructor feedback. A few students noted that the journal questions were too personal or repetitive. The challenge for me as an educator was to recognize the readiness of students to reflect on

and to challenge these questions, based on where they were, all the while trying to maintain their trust. Both the comparison and study groups recommended that increased clarity on the reflection process was needed to do the wellness plan and to improve the possibility of health change for students in future wellness courses. Looking ahead, I believe I need to emphasize and delineate these processes earlier and in more depth. I can foster reflection through clear, guided dialogue and by encouraging students to write. As well, students need the opportunity to share their learning with others. The instructor must establish a supportive accepting rapport early in the course. The study group students were more comfortable reflecting. Although a few students expressed impatience or frustration with reflecting, their very ability to tell me this candidly, verbally or in writing, may be indicative of a developed level of trust.

Reflective learning does appear to assist students to engage in change. The very act of reflecting opens them to a new awareness of self and that, alone, can constitute a changed view of personal health. I must admit that reflection was so entwined in the course that students had little choice but to reflect and relate this back to their wellness plans. An increased number of students in the study group did note that they were using reflection to continue with their wellness plans following the course. They were using reflection to examine their thoughts, beliefs, and feelings about their health, and noting the effects of their behavior. Others were changing their perspectives or viewing their wellness with a more critical eye. During the course, the holistic approach of looking at the five dimensions of wellness, increased discussion, and the opportunity to document their plans were most helpful in engaging the students in health change. The journal was also viewed

as a primary tool to facilitate change during the course and for acting on wellness in the future, although a few students believed it was a hindrance.

I believe my interventions were effective largely. I believe changing the journal format to include dialogue with the instructor and to ask fewer questions but ones that parallel a reflective process were effective. In addition, not grading the journals also proved beneficial. Regular questions and written feedback from me seemed beneficial for most students in order to engage them in the reflective process. Students also noted that journal questions needed clarification, as some questions were too similar to others, and a few students indicated that the journal questions were too personal. In the future, delineating reflective components (i.e. distinguishing between values, assumptions) in the journal questions and attending more to student safety may reduce these issues.

However, I did not feel the discussion groups were successful. I had too few and, as one student noted, discussion can assist reflection but not to the same extent as the journals. Although students said the group discussions were helpful to aid reflection, I could not always distinguish if this feedback concerned my discussion group intervention, general class discussion, or group exercises. In addition, students indicated in both the interviews and questionnaires that they wanted more dialogue with others.

In chapter 4 I further analyze my study process and the outcomes through the lens of the literature reviewed in chapter 2. I summarize the central learning themes that have arisen, give conclusions, and offer recommendations for other adult educators seeking to facilitate reflective learning in a similar setting.

CHAPTER 4

DISCUSSION, RECOMMENDATIONS, AND CONCLUSIONS

In this chapter, I discuss my findings to interpret the outcomes and comment on their significance in light of the relevant literature. My study demonstrates the use of reflective learning in specific college settings and programs to enhance an understanding of wellness and to promote health change. Using an action research methodology, the interventions of reflective journaling and discussion helped to enhance and engage students in reflection and positive health change. I close this chapter with concluding statements and recommendations for others who are working to facilitate reflective learning in a similar context.

The Utility of the Action Research Approach

I planned and developed my research design and interventions using an action research approach. This approach led me to define a problem and to test a modified practice approach to address this issue.

Practitioner Support

Action research, I soon found, required considerable dialogue to focus the problem and to ensure interventions were grounded in the experience of past students and instructors. As Drennon (1994) notes, this type of inquiry requires "collaboration and collegiality" (p. 3). I was fortunate to have colleagues and the administrative support to undertake this process. As I progressed, I found dialogue to be essential. Discussion with colleagues and my advisor helped me understand the various issues framing my problem. As Kuhne and Quigley (1997) state, "A combination of fact-finding and dialogue with fellow practitioners should help to clarify the problem enough to begin problem solving" (p. 26).

I found that, as the study progressed, I relied on this dialogue to test my assumptions and to create a supportive environment (Cochran-Smith & Lytle, 1993; Drennon, 1994; Stringer, 1996). I also used my own reflectiv8e journal, as recommended by Kuhne and Quigley, to enrich my evolving design and to define my interventions. As action research is, by its design, reflective, I also found myself engaging in reflection. This supports Brookfield's (1994) assertion that "educators' reflections on their own struggles as critical learners are invaluable in helping them to work sympathetically but usefully with others in critical process" (p. 204).

Keeping Students in the Process

I believe my research approach was successful in ensuring that the students' feedback informed my study interventions. I surveyed and interviewed past students and colleagues who had taught Wellness to gain their perspective of how to foster reflection in the wellness course. The synthesis of this feedback gave me some common themes: define reflection, augment the journals for reflection, and increase in-class discussion. I was particularly happy to use journals, as I knew they would give me rich detail in the students' own words. In addition, the literature confirms that journals are underutilized and can increase research validity (see Atkins, 1993; Williamson, 1997). The questionnaires I administered to the comparison group in the early planning stage had a 48% response rate whereas the study group questionnaire had a 91% response rate. These rates and the qualitative feedback from the interviewers who helped me indicate that the students were enthusiastic and keen to give feedback. I endeavored to be open and to explain that I was learning as I went. This facilitative approach seemed to put participants at ease, as students saw me wanting to improve the course based on their input. As Stringer (1996) notes, the

role of the researcher in action research "becomes more facilitative and less directive," when collecting data and managing the research process (p. 10).

Furthermore, the personal nature of the students' reflecting on health and wellness seemed conducive to a research approach that valued equality, inclusion, and open communication--all principles that can build trust and reduce the potential threat for reflecting effectively. The fact that the study group expressed more comfort with reflection during the course, as compared to the comparison group, may attest to the utility of action research to foster reflection. As students engage in a collaborative process of inquiry that values their input, in turn they may feel that they have ownership in both the reflective and research processes. Action research becomes a reflective activity in its own right. I will expand on this later in this chapter.

A Contextually Responsive Process

The action research approach was systematic and critical; it allowed me to respond to participants' needs and various situational constraints. For example, I felt free to conduct data collection and to develop intervention tools that incorporated the literature, student comments, colleagues' suggestions, and my own judgment. Similarly, J. M. Peters (1997) suggests that action research is done in differing ways; this echoes Patton's (1987) assertion about qualitative research: "Any given design is necessarily an interplay of resources, practicalities, methodological choices, creativity, and personal judgments by the people involved" (p. 9).

Due to insufficient time, I had to disregard most of the focus group data for comparative analysis early in my research. Instead of being forced to use it or lamenting that I would not be able to use it, I modified the focus group discussion to include

feedback from preliminary findings; specifically, the former student interviews and questionnaires. In this way, I responded to time pressures, and my need for a reaction to the preliminary student data. I was able to focus on the most promising interventions for my study through the focus group. During the course, I wrote the reflective journal questions. With action research this was possible because I was adapting these to accommodate course content and the students' levels of understanding.

As there were various complex models of the reflective learning process, I combined and simplified those of Boyd and Fales (1983), Boud, et al. (1985), and Montgomery (1993) to make an accessible handout for students (see Appendix D). I feel that I drew the best ideas from each and was very satisfied with the results.

As another example of adapting to the research context, I was unable to find a test to assess reflective ability in the literature. Kitchener and King (1994) refer to a reflective judgment interview, but I did not have the time or a detailed understanding of this tool to utilize it. I therefore devised a comparative self-report tool using a case study activity and questions on how the students perceived and used reflection in the course. Initially, I felt this was inadequate, but the literature on action research and qualitative research encouraged me to devise systems of measurement appropriate to the context. Subsequently, I used a recently published assessment tool for reflective journals, which I discuss in the following section, "Facilitating Reflection in a Wellness Curriculum."

Time is of the Essence

Reflection takes time (Kitchener, 1983; Montgomery, 1993). Reflection is a key component in action research (Quigley & Kuhne, 1997), but this approach requires time to determine an issue, to define it, to act on it, to reflect on the actions, and to determine a

new course of action. Looking at my project, it was unfortunate that the study group had only 1 month's hindsight from which to view the course, whereas the comparison group had a year or more. The study group noted that they barely had time to apply reflections from the course to any new issues. One student indicated that the time span was inadequate for further reflection; another said no circumstances for application had arisen. This supports Mezirow's (1990b) and Brookfield's (1994) cautions that reflection may take more than one semester.

Facilitating Reflection in a Wellness Curriculum

The student journals and interviews in my project strongly suggested that reflection was enhanced during the fall 1999 course. All students noted an increased awareness of their own reflective ability, and a large majority of students (8 of 11; 73%) gained new perspectives, as evidenced by the common theme of realizing that they could care for themselves better, had increased confidence, and had improved their reflective ability. I now analyze the outcomes of my interventions in light of the literature, my learning, and the students' insights through the study.

Integrating the Reflective Process

I have come to realize that reflection is a personal process involving an individual's feelings, thoughts, perceptions and the resulting actions. I assumed reflection would be new to some students, as they might be used to a more fact-based learning process consistent with Mezirow's (1990b), and Pougiales's (1993) stance. Tucker, Wood Foreman, and Buchanan (1996) agree, observing that reflection "appeared to be a struggle for most students who have traditionally not been asked to really think about what they are learning and why they are learning it, but rather to report the facts" (p. 6). This point was

corroborated in the comments of two students: "Since this course began I have actually started to reflect on my wellness"; and, "I think I tried really hard not to reflect on wellness [in the past]."

I used a process model for reflection that included several cognitive and emotive elements raised in the literature. This model supports the research of Pougiales (1993) and Lavelle, et al. (1997), who indicate a need to begin with the students' understanding of reflection--for some this means defining it first. I outlined to the students the reflective model that I used and integrated into the journal question process. This guided approach to facilitating reflection is new or at least not seen in the literature. Although Montgomery (1993) devises basic questions to ask for reflection, and McAlpine (1992) wants the instructor to model the reflective process, neither utilize a detailed, guided process of reflective learning within a course tool. Although few students directly cited the reflective process as helping them understand reflection, the positive impact of this tool was evidenced in their ways of deferring to and referring to reflection when the course concluded.

Specifically, data from study group questionnaires and interviews support that these students developed a more process-oriented approach to reflection. The study group refers to particular elements of reflection such as analysis and examining differing perspectives, "I try to look at things from different perspectives." These students demonstrate an enhanced understanding of the reflective process as compared to the comparison group students. Some study group students did suggest that the process should be introduced earlier. This suggestion supports the literature on the time needed to reflect and to utilize the skill of reflection.

All the students recognized the utility of reflection and its significance to learning. As one eloquently stated:

> I think "reflection" has great value as a way of recycling information beyond its first, and sometimes superficial reading, or experiencing in another way. It is an underdeveloped skill in our culture with its emphasis on speed and novelty. We are mostly unaware of the deep value and meaning of experience and information.

These sentiments support arguments made in the literature for the significance of reflection in learning (see Boud, et al., 1985; Brookfield, 1985; Mezirow, 1990a, 1990b). As Boud, et al. state:

> It is only when we bring our ideas to our consciousness that we can evaluate them and begin to make choices about what we will and will not do. For these reasons it is important for the learner to be aware of the role of reflection in learning, and how the processes involved can be facilitated. (p. 19)

I am not confident that all of the students in the study were able to progress successfully to the cognitive components of analysis and synthesis of past and present knowledge. In fact, my attempts to encourage this level of reflection in the journal questions were sometimes met with confusion. However, all the students were able to explain their thoughts and feelings related to wellness but how they evaluated or critiqued alternative views was not always clear. I believe cognitive aids such as repertory grids and concept maps could be utilized in the future to develop this, as noted by Boud, et al. (1985), Candy (1990), and Deshler (1990).

Taking this a step further, there is no agreement in the literature on the exact number of components of reflection. The process that I used emphasized the more cognitive aspects of reflection. Only Boud, et al. (1985) emphasize the affective aspects of the reflective process. I believe this emphasis on cognition in the literature may result in a one-dimensional view of the reflective process that negates the more intuitive ways one may

reflect. Michelson stresses this point in her criticism of the accepted definitions of reflection: "The discourse on reflection, in effect, tells us not to trust our bodies or our feelings" (p. 449). I may have helped to perpetuate this in questioning one student who seemed to reflect intuitively, by "the gut." This student said I was looking for too many concrete answers, and noted:

> A lot of the time I don't use a thinking process. I listen to the voice within!. . . It's when I try to break down, analyze what I need/and or want to do, that things become unclear. . . . The detail seems to confuse the issue.

Even so my study addresses a gap in the research literature--that of applying a reflective process that integrates and fosters the emotive aspects as well with students in a college setting.

Finally, the assessment of the reflective ability of my students was based on comparisons of study group work at the beginning and end of the course using the case study and questions on reflection activities, as well as the students' journal work. By course end, all the students in my study could identify their thoughts and feelings about wellness and describe the state of their present wellness. This is similar to Kember et al's (1999) content reflection--a simple form of reflecting. Many students could also see that they reflected and how they reflected; they could also see the process by which they thought about and analyzed their ideas, feelings, and beliefs on wellness. Data from the questions on reflection support this: "I could see what could actually change and use a process to get there." This is process reflection, according to Kember et.al. I did have difficulty here in terms of facilitating the students' examination of any synthesis of their knowledge. That is, the data does not support the effectiveness of integrating a reflective process to help students critique and fully synthesize alternate perspectives. In addition,

although students used more analysis in reflecting on the case study at the end of the course, they could not always distinguish between elements that impact the how and why of reflection--namely the underlying values, assumptions, and beliefs that may be present. This was also evident in their journal assignments. I believe in the future that these components of reflection must be delineated to ensure students can differentiate and operationalize reflective processes to the fullest. Nevertheless, 8 of 11students (73%) indicated that they had developed a new perspective on wellness, and their ability to effect change had grown. As well, they had a new recognition of the importance of self-care. I am not certain if this represents premise reflection--in which, according to Kember et. al., individuals understand why they perceive or understand wellness in a certain way. I am certain, however that students gained personal awareness and, in many cases the new insights resulted in empowerment.

Reflective Journaling

The reflective journal proved to be the most useful tool I used to foster reflection in my study group. Although the comparison group also noted journaling was helpful, they did so in a general way and some were not pleased with the journal. The study group had only two objections to the journal: it was "personal at times," and "repetitive." In addition, the study group explained how the journal helped; they particularly noted that the journal questions and the act of writing were aids to reflection. This is significant as the journal questions or "assignments" were explicitly based on the reflective learning process (see Appendix D). It seems that the process of reflection itself, as inherent in the journal process, fostered reflection in the study group.

Although the journal was a mirror of the reflective process, some students in the study group noted they "had to reflect," and felt compelled to do so. Others seemed unaware of their reflective ability but, as they wrote, they realized what they knew: "those journal assignments brought new reflection because once you started reflecting on say a significant subject that was part of the journal then that led you to memories and thinking about experiences related to the topic." This insight into reflective ability was not so evident in the comparison group.

As students wrote, they made meaning of their experience. As D'Arcy (1987) states: "Journals provide that space essential for rehearsal and reflection, finding out what you know, discovering new thoughts, fresh perceptions, dealing with feelings, asking questions" (p. 46). Travis and Ryan (1988) add that writing in a wellness journal brings out the learning inherent in the learning experience: "Writing helps to integrate separate aspects of wellness into a whole piece. As you put your practices and experiences into words, you are using another modality that will strengthen their impact on your life" (p. 7).

Although, D'Arcy emphasizes that journals should be concerned with process, not format, I found that a journal format that paralleled the reflective process helped students reflect. This extends Walker's (1985) and Carswell's (1988) work endorsing a format related to writing about important course experiences. It also supports the literature's emphasis on clear process guidelines. In my study, I developed a clear outline for reflective journaling to explain my expectations regarding reflection in the journals, and how this related to course content and associated assignments. The comparison group students did not have such an explicit format for journaling and it did not parallel a reflective process grounded in the literature. This might account the greater depth of

reflection and progression through the reflective process evident in the study group and not in the comparison group. Tucker, et al. (1996) similarly advocate this approach so reflection is understood in terms of the curriculum. Kitchener and King (1990) claim that this step can enhance safety where reflection is required.

In addition to the "act of writing," the journal questions prompted self learning for students, as illustrated in these comments:

> I think writing helps my understanding by getting me to analyze my thoughts and review them throughout the process. Writing how I am feeling reinforces the understanding.

> I never spent a lot of time questioning why I do things, or wondering what made things happen, but when I had to answer the questions I had to do a lot of thinking, a lot of remembering and analyzing, and when I started writing it out it would trigger other thoughts, and it was like opening a window-- and just a little bit at first-- and then it just came all out.

The format of regular, progressive, questions moved most students to reflect further, as suggested by McAlpine (1992) and Rovengo (1992). They view this "mentored" approach as being useful to engage students to think at higher levels of reflection than they normally would. Similarly, Holt (1994), Craig (1983), and Kreeft Peyton (1988a) note that reflective questioning from instructors can help focus the students' reflection and can advance reflection. Interestingly, none of the aforementioned authors gives specific types of questions to ask, or how such questions actually relate to the reflective process. This point gives originality to my approach and allows me to apply theory to practice. O'Neil and Marsick's (1994) study of action reflection learning may have some similarities to my approach. They helped "participants dig below the surface and reflect on the values, expectations, norms and beliefs that shape the way in which they understand the problem"

(p. 21). They do not, however, refer to the use of a specific reflective process, as used in this study.

The Use of Dialogue

The reflective journal format included dialogue between student and teacher related to regular journal questions and other desired feedback. Students found that this approach helped them to reflect, as one noted: "[The instructor's] interactions, I think her comments in the journal encourage you to go even deeper and to think further."

I learned that, in responding to students in their journal, I had to respect their boundaries and be, as Mezirow (1990b) advises, an "empathetic provocateur" (p. 366). or two students, my questions seemed repetitive and personal. My challenge was to be non-judgmental and accepting in my responses. I discuss this further under "Creating an Environment Conducive to Reflecting."

As a facilitator I found reflective journaling was very time consuming. As Carswell (1988) explains, "Clarifying, inquiring, non-judgmental responses require thought and time that I had to be willing to invest" (p. 110). I endeavored to return the journals within a day or two, but this promptness became very demanding. Short turn around might not always be feasible for teachers, given the many course work responsibilities of teaching. However, students indicated that my dialogue and feedback enhanced their reflection and self-awareness; therefore, the prompt return of journals should be attempted if possible. This outcome reinforces Carswell's suggestion that commitment to expedient and thoughtful feedback has a beneficial effect. As he notes, "If the journal is returned quickly, the students know the instructor does care and, as a consequence, their attitudes to the task will be more positive" (p. 110).

In addition to the reflective process and reflective journaling, I implemented more class discussion than in previous courses. Students implied these class discussions were helpful, thus supporting the research of Walker (1985), Cameron and Mitchell (1993), and Riley-Doucett and Wilson (1997). The latter note: "Peer group discussions reinforce their [students'] ability to articulate their experience of critical thinking and analyzing clinical incidents for their own learning" (p. 966). One student in my study suggested that in the future, group discussion could be used as a way to see how different students reflect: "If they already reflect, how do they reflect? To exchange ideas of reflection and say each week, put up different ideas on the board and choose each week how to do the reflection." This suggested approach could allow future students to learn from each other and be more student-centered. In addition it could level out the teacher-student journal exchange and make the journaling experience part of a broader discussion.

Despite noting the positive impact of discussion, some students commented that more discussion was needed around what reflection is, and what its use is in wellness change. This outcome corroborates the claims of Kember, et. al. (1996) and Riley-Doucett and Wilson (1997), who say that peer dialogue can integrate reflection and experience. Kember, et. al. add that using peer dialogue with journaling can enhance the reflective impact of both tools. Based on my project findings and these reference ideas, I know I will endeavor to use both journaling and discussion in unison to improve reflection in my future wellness courses.

Creating an Environment Conducive to Reflection

I assumed reflecting would be hard for some students, and indeed it was for two students who found the idea "politically correct," a "fad." The two who disliked reflecting

noted the journal questions were repetitive and not always clear. One did not like sharing personal issues. This echoes Kitchener and King (1990) who advise that clear expectations of reflection and its use can enhance safety. Perhaps clarity on the journal questions may do the same.

Secondly, although journaling is known to build trust and rapport, the process can leave students more powerless and vulnerable (Patterson, 1994). Patterson suggests too many questions from the instructor, or not allowing students to creatively explore and discover new ideas, can diminish trust when students are trying to reflect. Therefore, the instructor must be sensitive to student comments. I attempted to do this in my responses to students who expressed frustration or confusion in the journal. I sought to gently clarify, but if students remained firm in their resolve to not reflect further, I respected that.

The literature argues for dialogue with, and feedback from, the instructor as ways to build trust and to promote safety for the reflection process (Carswell, 1988; Eaton & Pougiales, 1993; Rovengo, 1992). Non-critical feedback and attentive listening are ways this can occur. My study group did not specifically pinpoint these as factors, although I deduce that there must have been some level of trust built as students seemed at ease enough to tell me frankly if they could not understand. They felt free to disagree with my feedback.

I was clear with students that they should share only when they were comfortable doing so and I did not mark the journals--both of these steps are recommended in the literature (Craig, 1983; Hallberg, 1987; Walker, 1985), and Carswell (1988). Craig emphatically states, "How can you mark an individual's own personal development ?" (p. 377). Although one student did not like sharing in the journal, overall, the comfort with

reflecting in the course improved in the study group. This is evidenced in 5 of 9 (55%) study group students who noted comfort in reflecting, whereas 3 of 5 (60%) in the comparison group were "uncomfortable." The issue of grades was not raised at all by the study group--reinforcing the usefulness of this measure and endorsing the existing literature. Furthermore, I believe I valued student journals by making completion of the journal assignments worth a preset percentage of their final grade. This procedure is corroborated in the literature by Cameron and Mitchell (1993) and Riley-Doucett and Wilson (1997), and is argued by Fulwiler (1987) as follows: "Count but do not grade student journals--good journals should count in some quantitative way: a certain number of points, a plus added to a grade, as an in-class resource for taking tests" (p. 7).

Finally, my study demonstrates that respectful dialogue, supportive feedback, and respecting the limits of students' ability to reflect helps to facilitate reflection. Similarly, Boud, et al. (1985) state:

> Generally speaking, the role of those who assist the learner is to provide a context and a space to learn, to give support and encouragement, listen to the learner and provide access to particular devices which may be of use. (p. 38)

Reflective Learning for Health Change

Reflection helped the students in the study group engage in health change as evidenced by increased self-awareness and a new personal view of wellness. Travis and Ryan (1988) stress that wellness is a process facilitated through awareness, education, and growth. Interestingly, Travis and Ryan define each of these elements in such a way as to resemble the reflective process discussed in this thesis. Awareness, according to Travis and Ryan is truly recognizing one's actions; education, they say, encompasses exploring one's options through inward examination and the support of others; and growth is seen as the

application of new options followed by a re-evaluation of one's actions. On the basis of student comments and my own reflections, I am convinced that the parallel nature of the wellness and reflective process is what made reflection so useful for health change in my Wellness study. In addition, Travis and Ryan (prominent health educators), name self-understanding, empowerment, and transformation (important outcomes of reflective learning) as outcomes for adults moving towards enhanced wellness. In addition, the idiosyncratic, ill-structured nature of personal wellness lends it to the application of reflective thinking as endorsed by Kitchener and King (1994).

With this framework in mind, in this section, I analyze the study outcomes related to health change through a discussion of: reflection as an enhancement of self-knowledge, reflection as a tool to manage health change, and the application of post-course reflective learning.

Enhanced Understanding of Personal Wellness

All the students in the study group noted an increased awareness in their own ability to reflect and to recognize the feelings, thoughts, and facts that they had associated with their wellness. Many also articulated a relationship among these thoughts, beliefs, and their subsequent actions. As one student expressed it: "I feel that I have a more detailed understanding of the complexity of wellness and the relationships of the many aspects of life that overlap and influence behavior changes." Another student noted that as she wrote about and examined her wellness, she became aware of "unconscious habits" and how these impacted her health status. Travis and Ryan (1988), Anspaugh et al. (1991), and Kozier, et al. (1995) all refer to knowledge of self and wellness behavior as being essential to initiate health change. In the wellness course, I asked students to do an examination of

self, to act on any insights, and to reflect on these actions through the journal and wellness plan. The literature supports the utility of this approach, as cited by Droegkramp and Taylor (1995):

> Most significantly, processes that require a student to examine and explore her life, to articulate her goals and dreams, to describe the significance to her understanding (of herself or the world at large) of her experiences and observations -- these are the processes that encourage discovery and development of self, voice, and mind, of an identity that is self-authorized and self-defined. (p. 35)

As students defined their experience, they realized that they could influence their health and wellness and, in turn, they gained self-confidence.

Reflection as a Resource for Managing Wellness

When I envisioned this study, I assumed that reflection was a valuable personal and professional resource. My study outcomes attest to this, as 7 of 9 students (78%) in the study group identified reflection as an aid to change--this was not so high in the comparison group. Further, 7 of 10 study group students (70%) viewed reflection as a tool for health change. The study students indicated that the result of this application of reflection was an enhanced sense of confidence and self worth. One stated: "I know now I can do anything I put my mind to doing," which provides insight into how this student discovered she could manage her own wellness positively.

The literature supports these findings, indicating the empowering nature of reflective learning (Freire, 1993; Brookfield, 1995); this is also evident in the perspective of Ryan and Travis (1991) who say, "Wellness is a bridge that takes people into realms far beyond treatment or therapy--into a domain of self-responsibility and self-empowerment" (p. 3).

The most common vehicles for applying reflection to make change in my wellness course were the journal (in particular, re-reading it) and actually *doing* the wellness plan. These themes are illustrated in two students' statements:

> I think writing helps my understanding by getting me to analyze my thoughts and review them throughout the process. Writing how I am feeling reinforces the understanding.
>
> After examining my journal entries and reflecting on the insights developed during the course I think that the most valuable insight is the experience of change from the perspective of having enacted and planned change and observed the results. . .

These students' comments are echoed in the literature on facilitating reflective journaling, highlighting how journaling enhances reflection and students' ability to maximize and evaluate their learning experience. As Riley-Doucett and Wilson (1997) report: "Students exclaimed they felt as if they had been given the permission to initiate self-direction, and were empowered by this personalized learning experience" (p. 966).

Travis and Ryan (1988) also recommend keeping a wellness journal for personal motivation and to assess one's progress with enhancing wellness. Both the study group journals and interviews revealed that students believed reviewing the journals gave them further insight to act and to make health change during the course and into the future. This confirms the assertions of Walker (1985) and Fulwiler (1987) who recommend regular review of journals. Similarly, Travis and Ryan point out that "Reading back over the history of your changing process will help you to chart your progress, and that will give you additional encouragement to keep it going" (p. 7).

Notably, the study group cited doing the wellness plan as the most helpful activity to affect health change. This differed from the comparison group, who noted that dialogue with the instructor and documentation were the most helpful. This could be a simple

difference in student learning styles or, as I propose, an indication that the study group was empowered to make health change as a result of the increased clarity and integration of reflection into their journals and subsequent wellness plans. The comparison group did not have this advantage and, therefore, may have required more dialogue with the instructor to understand and attempt health change in the course. On a similar vein, the study groups' understanding of the process of reflection itself (unlike the comparison group) may have enabled them to readily apply reflection to health change. Further, their involvement in reflective inquiry could have also influenced their ability to reflect and engage in health change.

Action Research as a Reflective Learning Resource for Effecting Change

As noted earlier, the study group differed from the comparison group in its reference to and use of the particular operators of reflection embedded in action research and the reflective process (e.g., identifying the problem, examining perspectives, analysis, etc.). The study group also strongly identified reflection, itself, as an aid to health change. Both these points illustrate that the study group benefited from a clearer understanding of the reflective process. However, my interaction with these students in reflective inquiry may have helped them to reflect further. As an example, I used the journal and its regular questions to encourage students to systematically engage in the reflective process. I believe this approach mirrors the support recommended by Kitchener and King (1994) and Mezirow, (1990b) in terms of provocatively challenging the students to look deeper and discover inconsistencies or patterns in their thought processes and subsequent actions. In essence, I purposefully engaged students in their own reflective inquiry through their journals. Just as I was initiating action research myself, they too were similarly responding

to their own "itches" and defining and addressing real challenges in their lives. Students were learners and co-researchers into reflection and health change. They understood reflection as it applied to their wellness, and their role in creating new insight and potential for themselves. This is eloquently represented in the following student comment:

> After examining my journal entries and reflecting on the insights developed during the course I think that the most valuable insight is the experience of change from the perspective of having enacted and planned change and observed the results. . . as well as being aware of the mental processes during the change. This magnitude of reflection, a requirement of the wellness course, has a more powerful effect than simply planning and recording a structured program aimed at one aspect of physical change to improve wellness.

Applying Reflection beyond the Wellness Course

All the students in both groups acknowledged reflection as a worthwhile process to apply in their future in order to make health changes. As one student said, reflection is "for students to learn how to apply that technique to make changes in their lives."

As discussed earlier, time is essential to fully realize and act on reflection. Following the course, the study group continued to apply reflection in their wellness plans more than the comparison group. However, the limited data suggest that they were applying this learning to new issues at a level that was lower than that seen with the comparison group. Again, these comparative data are not trustworthy because the study group did not have sufficient time to work on new applications of their learning. The literature on reflective learning and wellness is silent on the issue of what may be a reasonable time span to bring reflection to fruition, but does speak to individual differences in readiness for reflection (Kitchener & King, 1994). Despite the limited application time span, the study group was continuing to discover new insights into their wellness and health behavior. One example of this is a student who said in her interview:

> It gave me a sense that I can accomplish change, positive change, and through the course, I sort of realized for myself how I go about doing that and how I've done it in the past and what works and what hasn't worked.

Clearly, reflection fostered and focused health change for the majority of the students in my fall 1999 Wellness study course. As the students described and came to understand how and why they were well, and to see the connections to their expressed health behaviors, they were able to act purposefully to address gaps or challenges to their well-being.

Equally, the process of reflection can be frightening and yet thrilling (Brookfield, 1995; Droegkramp, 1995; Mezirow, 1998). This is supported by the range of student input--some noting personal empowerment and deeply changed perspectives. In contrast, a few students challenged the potentially positive impact of change, noting that it may not always be comfortable, necessary, or even a priority. Instructors must realize that, for some students, it may even be harmful. Reflection and its application through change seem to require a fine line between appropriate encouragement and empathetic acceptance of things as they are if instructors are to facilitate skillfully the process for adult learners. Even so, the challenge is clearly a worthy one based on the insight evident in student feedback and course work.

Conclusions

The conclusions and recommendations I make relate to my study, how it was facilitated and how it had an impact on students' health changes. These points are the culmination of my observations as a facilitator and instructor, the analysis of the feedback from both groups of students obtained through various data collection tools, and the prevailing themes in the literature.

1. Reflection is a dynamic, multi-faceted process involving emotive, cognitive, and experiential elements that can be developed and understood. The process models of Boyd and Fales (1983), Boud, et al. (1985), and Montgomery (1993) provided me with the foundations of a composite tool to aid students to understand and to use the reflective learning process. This process helped students understand reflection and its utility to make health change. Some students indicated that they could benefit from being exposed to this process earlier in the course. In addition students did not seem to distinguish between values, assumptions and beliefs; all elements of the reflective process. In the future these elements should be delineated to minimize confusion for students engaging in reflection.

2. I learned that reflection is a potentially empowering and insightful process; however, it can also be threatening and a foreign concept for some students. Safety is therefore essential to minimize risk. Establishing a trusting, reciprocal relationship between students and the facilitator helps support students as they examine and challenge their ideas, values, and beliefs. Clarifying the reflective process, the facilitator expectations, and how reflection will be used can reduce student anxiety in the reflective learning experience.

3. Students come with varying degrees of reflective ability or desire to change. They should be respected for where they are and gently challenged to engage in more advanced reflection. Assessing students' reflective ability can help demonstrate movement or change; however, the literature has few accessible tests for reflection and only the odd tool to gauge the reflective thinking level of students. Even so, the individuality of each student must direct how the facilitator assists students in reflection.

4. Dialogue among students and with the instructor can engage students to understand and apply reflection. Dialogue in the form of reflective questions in the journaling process

can help students to consider alternative views or to look deeper into the what, how, and why of their perceptions on wellness and their role in maintaining wellness. Students in the study group indicated that more discussion with classmates was warranted. This suggestion may support students' efforts to reflect by allowing them to help each other learn new approaches to reflection. As well, this peer dialogue may offset the unequal power differential as students attempt reflection and instructors attempt to facilitate this process. Prompt, respectful instructor dialogue, which is attentive to student needs, can foster reflection and change in a wellness curriculum.

5. I believe the study confirmed the utility of journals to aid reflection on wellness and to facilitate health change. Through their writing, students were able to identify the personal resources and barriers they had to wellness. With this new knowledge, they were empowered to enact a plan for change. Reflecting on their progress and patterns of self-care and change helped them to realize how they could successfully focus and manage positive health change. Journals also provide a personal forum for the student-instructor dialogue. This *reflective* dialogue requires time and commitment from both parties.

6. Students found that reflection was an effective tool to make change during the course, and they indicated that they believed it would help them in the future. Actually *engaging in change* during the course made reflection meaningful and verified its importance for students. Reflective learning is enriched when it relates to real projects or goals and is grounded in real life student experience.

7. I discovered that an action research approach can complement projects trying to examine and improve reflective learning, as reflection is a key component of action inquiry. By using the students' feedback to allow them to define an issue and to suggest

ways of addressing it, I set up a study design that was student-focused and based on the comparative and progressive expressions of their experience. As students collaborate in action inquiry they are further engaging in reflective activity which can, in turn, enhance their understanding and use of reflection. I also learned that reflection in inquiry or learning takes time, and this point should be considered in research design and implementation.

Recommendations

1. My study indicates that the use of reflective learning in a wellness curriculum is an effective approach to understand and enhance personal wellness. The nature of the reflective process and its use may be new to students. I therefore recommend an action research approach in which the reflective process is clearly defined and students become co-researchers reflecting on their own reflective processes embodied in the reflective learning activities of the wellness curriculum, e.g., journal-writing and student-instructor dialogue. As action research engages the facilitator and learners as co-researchers, students define reflective learning and its practical application early in a course (see Appendix D). As well, those facilitating the reflective process of action research should provide cognitive and emotive aids or exercises to help students develop these aspects of the process.

2. I demonstrated the use of a guided approach to journaling. Using questions that paralleled the reflective process, students were encouraged to examine and critique their current health status and contributing behaviors. Some students had difficulty distinguishing between these questions and commenting on underlying assumptions, alternate views, prioritizing options, synthesis of their knowledge, and acting on new

perspectives. Based on these findings, I recommend that educators integrate a process of reflection within the student journal and that any reflective questions be clearly articulated to the students.

3. An ongoing, open, dialogue in the journals facilitated feedback between student and instructor which helped to clarify, support, and aid students to develop a more advanced reflective process. I recommend that the instructors provide feedback that is prompt, sensitive, and thought provoking. This probably entails a significant time commitment from the instructor, which must be a consideration before using this approach.

4. The students in my study indicated that dialogue with the instructor and their classmates aided them in their reflective process. They added that there was insufficient dialogue with other students, or those who had used reflection in a similar way. Such dialogue can enhance student safety and clarify any misconceptions in applying reflection. I therefore recommend that students have more frequent time for group discussion in class and that these sessions be coupled with the reflective journal to enhance students' insight and to give students the opportunity to model and assist their peers to reflect.

5. The issue of student safety was evident in my study. As students attempt to reflect and document their expressions of trust, and boundaries around self-disclosure, they must be seen as individuals with varying degrees of reflective ability. Building trust early is essential. My study revealed that clarifying expectations related to reflection, and not grading the journals, helped increase student comfort, as compared to the comparison group. With these themes in mind, I recommend a student-centered approach that respects and identifies the uniqueness of each student's reflections, their ability to reflect, and ease in doing so. This may mean using alternate forms of expression--visual or intuitive--in the

journal, or enabling students who are competent with reflection to go through the reflection process and action planning earlier in the course.

6. Students in my study found that applying reflection to a plan for improved wellness illustrated the importance and use of reflection. In experiencing this reflective change process first hand, students' learning was enhanced. Journals and dialogue were also instrumental in this process. I recommend that reflection be fostered in conjunction with a real life issue of some significance to the student, and that the instructor provide needed support and encouragement in a tangible, consistent manner.

7. In planning the evaluation component of my research design I found that I did not allow sufficient time for the study group to apply reflective learning beyond the course. Reflection for the learner and researcher takes time. I recommend that those developing projects to aid reflection in learning allow substantial time--especially after the study or course--before asking students to offer their responses on ways they apply reflection to address new issues. In this way, the long term impact of reflection on life experience may be evaluated.

My seminal learning related to this thesis centers on the powerful and evocative nature of the reflective process. Through my action inquiry I say first hand the utility of reflective processes and learning activities to enhance personal wellness. As an educator I realized the importance of my own reflectivity in practice and the opportunity I have to share with students engaged in a similar journey. I will continue to pursue the use of reflection with regards to health and wellness, and focus on improving my reflective interventions to ensure inclusion, safety, and more thorough development of all elements of reflection.

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APPENDIX A

DEVELOPING AN ACTION RESEARCH PROJECT

PLANNING PHASE ***Step 1: Understanding the Problem***

(1). What is actual problem? (state in one sentence)
(2). Why do I and others think problem exists?
(3). What studies/literature are available on the issue and what is said?
(4). Do you want to spend time on this problem; will others help?
(5). What are the most obvious reasons or causes of the problem?
(6). Any initial ideas to intervene?

Step 2: Defining the Project

(1). How will you intervene to make a difference/what strategy will you use? What will you do and how? (describe in general terms)
(2). When will you start and why?
(3). Can you conduct the project in a manner that enables you to manage and observe activities? How will you manage effects that will result?
(4). What materials/equipment are needed and why?
(5). Whose approval/consent is needed?
(6). How will you gain participants' consent and explain the project? What will you do if some do not wish to participate?
(7). Which colleagues would you like to discuss/evaluate your work? With whom can you discuss the project along the way and help you assess it at its conclusion?

Step 3: Determining the Measures

(1). Specify the current or past baseline that will be used as a point of comparison? How will this new approach be compared to the old one?
(2). Specify criteria for success and why you have chosen these?
(3). What is the exact timeline for the evaluation? How long will you run the project?
(4). Specify data collection methods. How will action/change be observed and documented? How can you observe the project in a systematic way?
(5). What might discourage you from finishing this project?

ACTION PHASE ***Step 4: Implementing an Action and Observing the Results***

(1). Are you still true to the initial aim? Are you collecting data the way you initially specified? Does your data collection allow effective tracking of what is going on?
(2). Are you keeping in touch with your colleague for support to complete project and to formulate ideas for the next iteration of the project?
(3). Summarize data collected.

REFLECTION PHASE ***Step 5: Evaluating the Results***

(1). What does the data reveal about the problem and your intervention?
(2). Were criteria for success met? How far was I from attaining them? What were the tangible gains, if any?
(3). What do others think about the project?

Step 6: Reflecting on the Project

(1). How could you/ or others repeat this intervention to develop more validity?
(2). Will you enter a second or third cycle of the project? If not discuss why?

The above is summarized from the work of:
Kuhne, G. & Quigley, B. A. (1997). Understanding and using action research in practice settings. In B. A. Quigley and G.W. Kuhne (Eds.), Creating practical knowledge through action research: Posing problems, solving problems, and improving daily practice (pp. 23-40). New Directions for Adult and Continuing Education, no. 73, San Francisco: Jossey-Bass.

APPENDIX B

REFLECTIVE WELLNESS JOURNAL OUTLINE

[Note: The following was in the course outline]

During this course you will be expected to keep a wellness journal. The purpose of the journal is to assist you to reflect on your wellness to discover any emerging themes or patterns relating to your health and wellness.

Principles of Journal Writing:

- Journal writing is a personal journey, a way to examine your experience and your understanding of that experience.
- Sharing ideas, thoughts and feelings can assist you to discover and challenge any assumptions or accepted views that prevent alternative interpretations and possibilities.
- A deeper understanding of your experience enables you to integrate former and new knowledge and learn to develop new perspectives useful for positive change.

Journal Format :

- Regular questions will be assigned to help you consider various aspects of your health/wellness. Answer these questions *and* comment on any issues or questions raised from the course, class discussion or daily life.
- Journal questions will be handed in regularly to the instructor.
- Divide each journal page by a single vertical line.
- On the left side enter all your initial answers/comments/reflections.
- The right side is left open for :
  - additional comments, questions you have after your initial entries
  - responses, comments, questions from the instructor
  - your response to comments from the instructor

The idea is to get a "conversation" going between you and the instructor and to reflect back on what you are writing

- Double space all entries
- Date all entries including your additional comments/responses made in right column.

Very Important :

- Only write what you are comfortable sharing.
- There is no right or wrong, simply your discussion of your reflections about wellness. The instructor will comment and give positive feedback as needed.
- Journals are confidential between student and instructor.

- Be creative--you can use prose, point-form, poetry--whatever clearly gets your ideas across. You can also add photos or pictures as desired.

THE JOURNAL IS NOT MARKED

This journal is an integral part of the course and is necessary to help you do your Wellness Plan assignment. You must complete the journal to pass the course.

Criteria for completion include:

* Used format indicated
* Answered all questions and commented on related class content
* Described your own experience
* Provided some supporting detail/specific examples from your experience to elaborate your ideas.

Each set of journal questions will have these criteria.
AND one or two more criteria will be added to journal questions later in the course.

Completion of your journal accounts for 30% of your final course grade.

You will be given some class time to work on these questions.

Some helpful hints for journaling :

- write ideas down when they are "fresh" in your mind
- try writing at a regularly scheduled time
- try using a book or binder that you can add or remove pages from
- go back and read what you have written regularly and before handing into instructor to see emerging themes/ideas and comment on these.
- you can use a computer to help you format the journal pages if you wish

APPENDIX C

REFLECTIVE WELLNESS JOURNAL ASSIGNMENTS

REFLECTIVE JOURNAL #1 (Sept 22/99)

Comment on any 3 of the following :

(1). Describe your present state of health/wellness.
(2). What issues or questions have been raised for you in the wellness course so far?
(3). Describe what you doing to care for yourself or maintain your wellness in the various dimensions of wellness?
(4). What are your thoughts on your present state of wellness?
(5) How do you feel about your present state of wellness?

REFLECTIVE JOURNAL #2 (SEPT 29)

Comment on any 3 of the following :

(1). Describe your beliefs and values related to your health and wellness.
(2). Describe a positive experience you've had related to your wellness (in the past). What did you learn about your health and wellness?
(3). Describe a negative experience you've had related to your wellness (in the past). What did you learn about your health and wellness?
(4). What barriers have you experienced related to maintaining or improving your health and wellness? (Describe what has hindered you in the past)
(5). What supports have existed for you to maintain or improve your health and wellness?
(Describe what has helped you in the past)

REFLECTIVE JOURNAL #3 (Oct. 20/99)

Comment on

(1) Describe an insight or ah-ha moment (when you recognized or understood something in a new way) you have had related to your health/wellness prior to this course.

- What did you discover that was new about your health/wellness?
- How did you develop this new understanding or insight?

(2) Identify a gap or concern you have related to your health/wellness that so far you have not addressed.

- Describe what is contributing to you NOT addressing this concern/gap.
- Can you change this? HOW?

REFLECTIVE JOURNAL #4 (Nov. 10/99)

Comment on

(1) If you are faced with a *choice* of various approaches/options which could help you address/meet a need related to your health/wellness, how do you decide which approach/option to go with?

- Do you use a process? IF so, describe.
- How do you evaluate your options to decide which is best?

(2) Describe a successful *(sustained)* change you have made related to your health/wellness in the past 3 years, including the following;

- What was the change?
- How did it impact your wellness? (consider all dimensions)
- What enabled you to make this change?

- Did you use a process to decide what to change? If so, describe this
- How did you evaluate that change?

***Evaluation Criteria :* Applies to the first 4 journal assignments**

- Used format indicated for journal
- Answered 3 out of 5 questions
- Describe your experience and comment on related issues raised in class
- Provide supporting detail - examples from your experience to elaborate your ideas/comments.

REFLECTIVE JOURNAL #5 (Nov. 24/99)

Comment on

During this course, have you discovered anything new (developed any insights or had any ah-ha moments) about wellness?

IF YES; Describe what you discovered
How was this new understanding different from what you knew before?
Explain how you developed this new understanding.
What assisted you to develop this new perspective/insight (illustrate this with specifics)?

IF NO; Describe/explain why you think that is so.

REFLECTIVE JOURNAL #6 (Dec. 8/99)

Review your past journal entries and comment on the following :

Examine the insights/ah-ha moments you indicated were developed **DURING** the course (see your previous journal entries);

Describe how you could use this new perspective/understanding to take **ACTION** to positively impact your wellness in the future, Please include:

- At least 3 specific Action Statements of what you will do. These should related directly to your new perspective/understanding.
- Explain the effects of these actions on all dimensions of your wellness
- Briefly outline how you could ensure these actions will be carried out (note what you have learned about yourself that could help you here)

NOTE : IF you did not have any insights/ah-ha moments DURING the course, please refer to insights/ah-ha moments developed PRIOR to the course (see previous journal entry) ; **THEN answer the above questions**

***Evaluation Criteria :* Applies to journal assignments 5&6**

- Used format indicated for journal
- Answered 3 out of 5 questions
- Describe your experience and comment on related issues raised in class
- Provide supporting detail - examples from your own experience during the course, in particular **relevant past journal entries** and comments/feedback from others to elaborate your ideas/comments.

[Students had a week to work on each of these journal assignments]

APPENDIX D

REFLECTIVE LEARNING PROCESS

REFLECTIVE LEARNING is the process of exploring an issue or concern related to an experience. This involves awareness of our experience, analysis of the experience and re-evaluating the experience to develop a new understanding or perspective about the experience.

EXPERIENCE
Something within our experience causes us discomfort/concern. This can be related to an activity or new information, etc.

DESCRIBE/CLARIFY THE CONCERN
Awareness of the concern. What feelings are present? What thoughts are present?

ANALYZE/THINK about the feelings/thoughts
What beliefs, values, assumptions, existing knowledge is behind them?
Are there alternative ways to understand the concern/experience?

SYNTHESIZE/EVALUATE
Compare what I know with other possible meanings to re-evaluate the experience.
How can I combine what I knew before with what I know now?
Develop new understanding or perspectives related to the experience.

ACT
Decide whether to use this new understanding in future experience.

Note: These concepts are based on the ideas of the following authors :

Boud, D., Keogh, R., & Walker, D. (1985). Reflection: Turning experience into learning. London: Kogan Page.

Boyd, E.M., & Fales, A. (1983). Reflective learning : Key to learning from experience, Journal of Humanistic Psychology, 23(2), 99-117.

Montgomery, J. (1993, August). Reflection: A meta-model for learning, and a proposal to improve the quality of university teaching. Paper presented at the Faculty Seminar on Reflection and Improving the Quality of University Teaching, Nueva Leon, Mexico.