A Qualitative Analysis of Reflection

In Undergraduate and Graduate Programs

Denise Rosemary Power, B.Ph.Ed.

Department of Graduate and Undergraduate Studies
in Education

Submitted in partial fulfillment of the
requirements for the degree of
Master of Education
Faculty of Education, Brock University
St.Catharines, Ontario

Abstract

The purpose of this study was to explore various types of reflection and to explore reflection on action, reflection as a practice, and reflection as a process. In doing this, the intent was to discover the perceived benefits of reflection in the classroom and to provide guidelines for future use at the undergraduate and graduate level.

The qualitative components in this study included the data collection strategy of semi-structured interviews with 2 undergraduate students, 2 graduate students, 1 undergraduate studies professor, and 1 graduate studies professor. The data analysis strategies included a within-case analysis and a cross-case analysis. Through the interviews participants discussed their experiences with the use of reflection in the classroom. Through the completion of this analysis the researcher expected to discover the benefits of reflection at this level of education, as well as provide suggestions for future use.

Both undergraduate and graduate students and professors were found to benefit from the use of reflection in the classroom. The use of reflection in the undergraduate and graduate classroom was found to improve student/teacher and student/peer relationships, foster critical thinking, allow for connections between learned theory and life experience, and improve students' writing abilities. Based on the results of the study the implications of reflection for the undergraduate and graduate classroom and for further research are provided

Acknowledgements

To Dr. Lorne Adams, I would not have been able to make it through this journey without your guidance, patience, understanding, and most of all your laughter. You always made the light shine for me on the darkest of days. I will never forget the immense amount of time you put forth to help me achieve my goals. I thank you for all that you have done and most of all I would like to thank you for introducing me to reflection in the first place.

To Dr. Maureen Connolly, thank you for pushing me to dig beneath the surface and look outside my own world--no matter how much I resisted. To Dr. Alice Schutz, thank you for your input and constant positive outlook no matter how difficult I thought the task was.

To the de Bray family, thank you for your constant support and encouragement during some difficult times. To Ben, thank you for being there for me when I needed you the most and never letting me give up.

Finally, I would like to thank my family for having faith in my abilities because without your support none of this would have ever been possible. To my mother I dedicate this thesis, as you are my inspiration in my educational journey.

Table of Contents

List of Figures

CHAPTER ONE: THE PROBLEM

Introduction

Through the course of my University career I have experienced various forms of instruction and evaluation. I have experienced examinations, large lecture halls, term papers, and seminar discussions. Although these are all extremely common to education, they did not truly connect to my needs as a learner. However, in my final year of my undergraduate degree I was given the opportunity to engage in a learning which not only engaged my needs as a learner, but immersed me into my education as well.

In my final year of university I registered in a physical education course entitled "The Reflective Practicum." This course was truly my favorite course in my entire university career. The purpose of the course was to help us as students learn about the many facets of being a teacher. The main focus; however, was on the importance of reflection within the practice of teaching. The goal of the professor was to show us how important it is for teachers to treat their classes as a learning experience. Furthermore, he also wanted to show us how important it is for teachers to take their experiences and reflect upon them to further their development as teachers. In short, he wanted us to become reflective practitioners.

The professor provided us with several exercises by which we were able to reflect on both our educational and our life experiences. One of the major assignments of the course was to keep a daily journal following each class (after every Monday night). The purpose of these journals was to provide us with a means to ponder our experiences within the educational environment. The experiences did not always have to be related to the classroom; some could be related to educational issues within the media. In some of the journals we discussed our

problems or concerns with the course itself. We were even encouraged to discuss more personal issues such as the reason why we wanted to enter the field of teaching. In general, we were encouraged to be honest and forthright with our responses, basically, to find a way to become comfortable with the class.

When I actually sat down and wrote my first entry I quickly found myself enjoying the process. I was able to do more than just write, I was able to think critically about what I was learning, I was able to reflect. I found myself sitting down in front of my computer after every class and divulging my thoughts of education, my place within the practice of teaching, and relating the course content to my own experiences. Most important, I found myself creating a dialogue with my professor a dialogue in which I felt comfortable asking my professor questions and expressing concerns, which I was unable to do in class. For the first time in my educational journey I was able to express myself in ways with which I had never felt comfortable before.

Although I found this class to be a truly amazing experience and a pivotal point in my journey, I really feel as though the experience was long overdue. The reflection process of the class proved to be a highly enlightening experience as it taught me to think critically, to express myself, and most important, it taught me how important my personal thoughts really are. I believe that had I been asked to reflect earlier in my education I might not have struggled as much as I did in the previous 3 years. If I had been given this opportunity I would have been able to ask my questions and express my concerns without the fear of rejection and humiliation within the class setting. Instead of sitting through classes confused, I might have actually been able to understand the given content.

As I continued in my graduate studies I had the opportunity to again engage in various forms of reflection. In four of my graduate classes reflection was used in the form of weekly journals, in-class electronic feedback, group reflections on readings, response cards, and end-of-term reflections. As I progressed through these classes my interest in reflection grew as my understanding of course content and overall enjoyment of education improved. I became so fascinated with reflection that I decided to write two term papers on the effects of reflection in the classroom. However when I began my research there were three concerns which arose and in turn disturbed me.

The first concern was that since reflection appeared to be such an amazing instructive tool, then why was I experiencing it only in my final year of undergraduate education? Second, I could not understand why I enjoyed and appreciated reflection and yet some of my peers completely detested it. Finally, when I went to research the actual topic of reflection in the undergraduate and graduate classroom, there was very little research completed with reflection at that level of education. All of these concerns bothered me; therefore I decided that I would investigate the use of reflection in the undergraduate and graduate classroom in hopes of discovering answers to the first two questions and filling the gap in the research of this topic. The purpose of this present study is to explore various types of reflection and to explore reflection in action, as a practice and as a process. Furthermore, the second purpose of this study is to propose Suggestions and recommendations for the use of reflection in the undergraduate and graduate classroom.

As a critical qualitative researcher I realize that there are four major assumptions to qualitative research. According to Marshall and Rossman (1990) these four assumptions are that research fundamentally involves issues of power; that the research report is not transparent, but

instead representive of individuals of different race, gender, class, and political standpoints; that race, class, and gender are crucial for the understanding of experience; and that "historic, traditional research has silenced members of oppressed and marginalized groups." Therefore I plan to examine the use of reflection in the undergraduate and graduate classroom with three perspectives, outlined by Marshall and Rossman, in mind. First, I examined closely how I represent the participants in this study. I planned to "scrutinize the complex interplay of" my " own personal biography, power, and status interactions with participants, and written words" (Rossman & Rallis, 1998 cited in Marshall & Rossman , 1990, p.5). Finally I planned to be attentive to the dynamics of the possible ethics and politics in my work.

The qualitative components in this study include a data collection strategy of semistructured interviews with 2 undergraduate students, 2 graduate students, 1undergraduate studies professor, and 1 graduate studies professor. The data analysis strategies also include within case analysis and cross case analysis. The purpose of the interviews was to discuss the particpants' experiences with the use of reflection in the classroom. Through the completion of this analysis I had hoped to discover the benefits of reflection at this level of education, as well as provide suggestions for future use.

Background of the Problem

The use of reflection in the classroom is a fairly recent instructive tool. Many researchers and educational professionals have based their work with reflection around the theories developed by Donald A. Schön (1983) in *The Reflective Practitioner*. Schön initially began his work in reflection to develop a tool to explore and expand professional knowledge. From this he

developed various ways to use reflection-on-action to give professionals a better understanding of their own professional conduct and beliefs.

Although Schon's theories were initially developed for professionals, over time researchers, teachers, and professors alike have all used his work within the classroom to develop the "reflective practitioner." Through tools such as journal writing, diagnostic portfolios, and reflective interviewing, educators have tried to foster reflective behavior among their students, a reflective behavior that includes critical thinking, self-expression, an integration of personal experience with course content, and in some cases pedagogy. The results of this work have been primarily positive. The majority of research done with reflection in the classroom has been at the educational level of elementary school, secondary school, preservice education, and professional practice.

Minimal research with reflection has been conducted in the university realm. Nonetheless, reflection is used in some undergraduate and graduate university classrooms. An investigation of the use of reflection at this level would provide a new dimension to educational research by allowing educators to see how reflection functions in the university context.

Statement of the Problem

Critical reflection has often been viewed as an important part of teaching and learning as it fosters a better understanding of course content (Betts, 2000). Reflection is often seen as an entity in itself; however, it can be broken down into three separate areas. These areas are known as reflection in action, reflection as a process, and reflection as a practice. In education it is important to explore these different areas and apply them to the classroom environment. In particular, the application of reflection to the undergraduate and graduate classroom has been shown to improve the student-professor relationship, improve critical thought processes, and

develop pedagogy (Hoover, 1994). The reflective experience may also encourage students to express their opinions and feelings about their education which they may otherwise suppress.

Purpose of the Study

The purpose of this study is to explore various types of reflection and to explore reflection on action, reflection as a practice, and reflection as a process. In doing this, the intent is to discover the perceived benefits of reflection in the classroom and to provide guidelines for future use at the undergraduate and graduate level.

Questions to be Answered and Objectives to be Investigated

In examining the premise of the various types of reflection and exploring reflection on action, as a process and as a practice, the following questions were asked at the initial stages of this qualitative study:

What are the different types of reflection and how do they affect the learning experience?

What is reflection in action? What is reflection as a process? What is reflection as a practice? How are these enacted by practitioners who employ them?

What are the advantages and disadvantages of reflection in the undergraduate and graduate classroom?

What are some of the guidelines for using reflection at the undergraduate and graduate level of education?

How do we make reflection a positive experience for undergraduate and graduate students?

Importance of the Study

The importance of reflection in education has been well documented in elementary education, secondary education, preservice education, and at the professional level. However, at the undergraduate and graduate level there appears to be a gap in the research on the effects of reflection in the classroom. According to Betts (2000), students at the undergraduate level often experience difficulty in articulating their thoughts and opinions in class discussion. However, with the introduction of a form of reflection such as journal entries, Betts was able to provide her students with a nonintimidating means to express themselves. In turn, the journal entries were found to provide a better understanding of the students, expand critical thought processes, and improve the overall student-teacher relationship.

For the current inquiry, exploring various types of reflection and examining reflection in action, as a process, and as a practice will provide university educators with options and ideas for improving student-teacher relationships, nurturing critical thought processes, and developing pedagogy. Furthermore, by gathering suggestions and recommendations for the use of reflection in the undergraduate and graduate classroom, professors will be provided with a medium for using reflection in their own classroom. Based on the suggestions and recommendations made in this study, professors will be able to use reflection to provide a positive learning experience for undergraduate and graduate students.

Definition of terms

Reflection: replaying of performances for the purpose of articulating what is or what was happening and making knowledge which is normally implicit more definitive; the critical assessment of one's actions, motivations and thoughts (Schön, 1983).

Reflection in action: reflection in the midst of ongoing action (Schön, 1983).

Reflection on action: reflection about a past event. (Schön, 1983)

Reflection as a process: the use of reflective tools to promote self-development. Research in this area focuses on the steps used in reflection and how these steps create a positive experience for the individual.

Reflection as a practice: Focus is placed on the individual's ability to use previously learned theory and knowledge, and integrate it with his/her own lives or professionally practice (Schön, 1983).

Types of reflection discussed in this study are:

Case Records: this type of reflection takes problematic situations, resolved or still in process, and describes them on case record forms. The forms include various questions such as: What is the nature of the problem? What alternatives should be considered? In reviewing your actions, what are your reflections, insights, or conclusions (Kottkamp, 1990)?

Collective autobiographies: used at the professional level to collect information on issues such as discipline approaches, evaluation and supervision, aspects of promoting self-morale, and instructional leadership (Hauserman, 1993). Similar to diagnostic reflective portfolios, however, the information for the autobiographies is gathered strictly from interaction in instructional workshops.

Commentaries: Betts (2000) describes commentaries as written reflections in which the students are asked to reflect on course content, express any thoughts or concerns, discuss teacher and course expectations, discuss teacher comments made on previous reflections, and make a final reflection at the end of the year.

Contrived situations: a combination of case studies, role-plays, simulations, and specialized applications such as microteaching. These tools are considered contrived as they lack the real dimensions of professional practice such as real outcomes and professional responsibility. Through these activities the practitioner works within the "dimension of thinking through doing." The learner has the opportunity to look at multiple situations and actually play out various options for handling the situation.

Diagnostic reflective portfolios: a booklet that includes a collection of learning strategies (what worked, did not work), math skills, reading skills, peer relationships, goal setting, and reflections on learning processes. This collection is expressed through writing, magazine clippings, drawings, and pictures.

Dialogue journals: a journal in which the individual is provided with the opportunity to record and reflect upon experiences and ask questions. With each entry, the instructor responds with comments and/or questions, in order to keep an ongoing dialogue with the student (Kottkamp, 1990).

Electronic feedback: the use of audio and visual tape recording devices to record and review certain behaviors such as communication skills (Kottkamp, 1990).

Journal Writing: weekly written entries reflecting on in-class or general educational experiences.

Instrument feedback: the use of instruments such as the Myers-Briggs Type Indicator and the Learning Style Inventory to help students do a self-evaluation of various thought processes (Kottkamp, 1990).

Letter Correspondence: students write a letter to the professor expressing their needs as a learner and what they need from the teacher in return. The teacher then writes a letter in

response, discussing how the student's needs will affect the teacher's own instruction (Adams, 2000).

Metaphors: a form of reflection which can help a student or professional categorize and attach meaning to his/her particular style of teaching and/or learning.

Platform: a platform is known as one's "epoused theory," a person's beliefs and assumptions (philosophy) for guiding his/her professional practice.

Response Journals: a means for students to reflect on educational experiences such as independent reading, reactions to film or television programs, small group discussions, and assignments. The students' responses are guided by specific questions about each experience.

Scope and Delimitation of the Study

Limitations

This study is limited by the interview and the small convenience sample. This study is also limited by the participants' ability to provide information.

Delimitation

This study is delimited to the students and the professors who have consented to participate in this study.

Assumptions

In this study it was assumed that the teachers and students would give open responses in the interview. It was also assumed that the interviews would provide the information necessary to assess the value of reflection in the classroom and provide suggestions to improve the use of reflection in the classroom.

Biases

As stated earlier, I have thoroughly enjoyed my own experiences with reflection in the undergraduate and graduate classroom. However, I do realize that there are other individuals who do not share the same opinion. Therefore, in order to cope with the possible interference of my own biases, I used open-ended questions in the interview which did not lead the participant. In turn, this allowed the participants to speak freely and provide their own views and opinions.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

Organization of the Present Chapter

In discussing reflection in the classroom, an examination of the literature of this topic forms a logical beginning point. The intent of this chapter is to provide an overview of the various types of reflection used in the classroom and to explore reflection in action, as a process and as a practice. This chapter also examines Suggestions and recommendations in the literature, for future use of reflection in the classroom.

Reflection in the classroom is the main context; topics under discussion are arranged under the headings of reflection on action, reflection as a process, and reflection as a practice. Within these categories of reflection there are subcategories that include various forms of reflection such as case records, collective autobiographies, commentaries, contrived situations, diagnostic reflective portfolios, dialogue journals, electronic feedback, journal writing, instrument feedback, letter correspondence, metaphors, and response journals. This chapter concludes by examining the manner in which reflection can be used in the undergraduate and graduate classroom.

Theoretical Background

In the school environment there are certain classes in which students feel comfortable expressing themselves. These classes are typically considered to be classes such as drama, visual arts, and music. However, not all students wish to participate in such classes. Therefore, several

teachers use writing as a tool to help students express their thoughts and opinions. One of the most effective tools of written expression used today is self-reflection. The reflection process is a potentially enlightening experience that allows students to think critically, to express themselves and most important, to help students realize how important their thoughts really are.

Reflection is not only a creative outlet for students but it is also beneficial for teachers, professors, and other professional educators. Reflection can be used in various settings and in various forms. According to Schön (1983) "the ability to reflect upon one's repertoire of knowledge and experience is essential for competence, but is rarely mentioned in the curriculum." It has been found by several researchers to be difficult to educate for and enhance reflective practice while still completing the course content requirements and objectives. However, Schön found that when reflections are incorporated into the learning environment, course content could be integrated with an individual's life experience. This integration of content and life experience is often the goal of most educators, but it is rarely achieved.

According to Lather (1991), there is often a resistance from students to critical self-reflection as it is seen as a discourse designed to "shake up their worlds" (p.29). Students are sometimes "caught in a false consciousness, and mistaken about the real nature of the relations and ideas shaping their world" (Lather, p.29). When they are asked to critically reflect upon course content and relate it to life experience, the world that they had created begins to fall apart as their previous conceptions about society are often challenged. The students are often left with an unsettling feeling which forces them to question the way they had previously functioned within society. In other words, students' resistances to reflection often lie in a fear of turning their entire lives upside down and watching everything they have previously learned "disintegrate into lies" (p.83). According to hooks (1994), when students are asked to look at the

world from a critical standpoint, they can no longer enjoy life, as there is a "degree of pain involved in giving up old ways of thinking and knowing and learning new approaches" (hooks, p. 43). As stated by Lather (1991) self-reflection is based on the so-called facts that give meaning to life; however these so-called facts are already the product of many levels of interpretation.

While some students need to develop this type of thought process, other students reject the use of reflection due to the difficulty associated with critical thinking. According to Argyris (1982), educators who base their courses solely around examinations and testing are viewed as individuals trying to control their classroom situation. When students view a teacher as controlling, they often resist providing their views openly due to a fear of the wrath of the superior. In this sense, the students feel that their higher level needs, such as self-expression and personal insights to their learning, "are not considered or are inconsistent with the context" (Argyris,p.28). The inconsistency between the context of the class and student needs leads to further frustration on the part of the learner. The frustration increases as the students are forced to regurgitate facts rather than discuss them and find meaning within the content. In turn, this frustration leads to the development of an apathetic, defensive, and ultimately withdrawn student.

In order to avoid the development of a frustrated learner, Cranton (1998) suggests the integration of emancipatory learning. The goals of emancipatory learning are to teach students to think for themselves, to question what they read, to take responsibility for their own learning, and to learn how to learn. In particular, "emancipatory learning takes place when students engage in critical self-reflection"(Cranton, p.145). By engaging in critical self-reflection, students gain the opportunity to examine their present knowledge, their social systems, and their

personal lives with a critical eye. By using self-reflection to uncover distorted or incomplete knowledge, an awareness of errors develops, which in turn results in emancipatory learning.

According to Cranton (1998), encouraging critical questioning is ultimately one goal of higher education. Cranton states that there are three types of reflection: Content reflection, process reflection, and premise reflection. Content reflection consists of considering the nature of the problem. Students engaging in content reflection reflect on what happened in the classroom, reflect on how things could have been different, and reflect on the feelings evoked in the experience. Process reflection entails "paying attention to how things came to be the way that they are" (Cranton, p.19). This type of reflection looks at what happens to cause the "problem." Finally, premise reflection questions whether to examine if the problem is of any importance. This type of reflection discusses the underlying assumption that the problem is meaningful in the first place.

Although Cranton (1998) discusses three different types of reflection, they are all geared around the process of learning, with very little consideration to the actual course content itself. However, Brookfield (1990) states that course content should not be sacrificed for the sake of process. Instead Brookfield states that reflection should be used as a vehicle to further understand course content. Although Brookfield does feel that some teachers delve too deeply into subject matter too early, reflection should not be used as a way of handing the learning over to the student. The student needs to find security in the teaching of his/her teacher or professor and needs to be spoken to in an informed and interesting manner about ideas that interest them. Through informed instruction, students can then explore the course, find ways in which the content relates to the their own experiences, question class discussion, and create a personal stance on the issues discussed in class.

The purpose of this study was to explore various types of reflection and to explore reflection on action, as a practice and as a process. Furthermore, the second purpose of this study was to propose suggestions and recommendations for the use of reflection in the undergraduate and graduate classroom.

Reflection-on-Action

Reflection can be used in various levels of education, however, it is important to observe the use of reflection-on-action. According to Schön (1983) reflection-on-action is reflection in the present about a past event. For several researchers this means using reflection on a daily basis and reflection upon events within the day that were found to be significant or meaningful.

The Use of Reflection-on-Action Through Dialogue Journals

Hannon (1999) has indicated that reflection can be used in the classroom as early as kindergarten. In her study, Hannon used dialogue journals as a form of reflection-on-action within her own kindergarten classroom. The original intention of the dialogue journals was to help the students to develop their writing skills. However, the journals turned out to be a much more useful educational tool than she had originally anticipated.

To begin the journal writing process, the students were given 20 sheets of blank paper in a binder, along with various writing and drawing supplies. For the first entry, the children were asked to develop journal covers with their initial placed somewhere on the page. The students were then told that they would be given journal writing time on a daily basis and that they were allowed to confer with their peers during the process. In the beginning, the journal entries were primarily drawings with occasional captions, copied environmental print, names from the class

list, or memorized words. Regardless, they were all considered to be valid forms of independent writing.

Hannon (1999) began to see some benefits of journal writing even in the early stages of the process. One of the benefits was that Hannon found herself demonstrating her appreciation of journal writing by sitting with a group of kindergarten writers and creating her own journal entry, which included events familiar to her students. After reading her journal entry to the class, the students appeared to be quite elated and felt comfortable in asking questions about her writing. Another benefit of the journal writing was that the children appeared to appreciate comparing and conferring on their writing and drawing with other students. Hannon believed that the students felt inspired by their conversations and were eager to continue writing upon receiving suggestions.

Although the journal entries appeared to be beneficial for the students' personal development, Hannon (1999) was unable to observe any improvements in the children's fluency or in their development of different writing forms. Therefore, Hannon decided to introduce dialogue (written communication with students) into the journal writing process. By writing and conferring with her students Hannon felt that she added greater purpose to the activity, which in turn allowed her to communicate with the young writers in a nonevaluative way. The children were then presented with this option and were given as much time as needed to come to a decision gradually and individually.

One by one the students slowly began to request teacher dialogue. When Hannon (1999) compared the entries after the invitation to respond, she found a wide array of changes. Students who normally drew pictures began to write captions, commentaries, and questions below their pictures. Some students began to write a form of correspondence with the teacher in which they

entitled their entries "Dear Dr. teejr." Even students who were originally capable of writing only letter-like shapes eventually were able to write full pages of invented spelling after the addition of dialogue. Furthermore, students who did not request teacher dialogue began to foster a written dialogue with their peers.

Hannon (1999) also found the addition of dialogue to the journals to be beneficial as it encouraged the writers to apply new and different skills. The use of dialogue also expanded the writer's audience and gave journal writing a new purpose. Hannon also found that the addition of dialogue to the journals helped to alleviate some of the competition for one-on-one teacher attention. Through this process, the children viewed journal writing as a valuable and comfortable time. However, there were a few downfalls to using the journal writing process. One of the major problems encountered was that some of the children complained that they had nothing to write about. Furthermore, there were also instances when students complained that they did not know how to write. This is why Hannon found it to be of the utmost importance not to force the children into journal writing. In order for the children to feel comfortable with journal writing, they needed to feel as though their teacher respected their need to take a break.

Similar to the findings of Hannon (1999), Hennings (1992) also discussed some benefits to the use of dialogue journals in the classroom. In particular, Hennings stated that there are major advantages to the use of dialogue journal writing at all levels of education. According to Hennings, dialogue journal writing helps the students at the primary and elementary levels of education become more relaxed as writers. Not only does dialogue journal writing help students become more fluent writers, but it also helps them to know their teacher on a personal basis and vice versa. Dialogue journal writing can also help the students reflect on their concerns and relax before class.

After discovering the benefits of dialogue journal writing in the younger grades, Hennings (1992) decided to implement the use of dialogue journal writing into her college method writing courses. Hennings hypothesized that there would be two advantages to using dialogue journals in collegiate studies. Her first hypothesis was that "students would realize the value of dialogue journals in a school writing program and would be more likely to use this kind of journal in their own teaching if they had experienced its use". Hennings's second assumption was that after using dialogue journals the students would become more aware of the importance of reflecting on what they had seen and done, especially since this kind of reflective behavior relates to their own classroom teaching.

Hennings (1992) used two undergraduate classes studying early childhood and elementary education, as well as a graduate class studying elementary and basic skills programs. The students in these classes were given background information on dialogue journal writing before commencing the entire writing process. After their introduction, Hennings provided the students with booklets that they were instructed to label "My Writing Journal." For their first entry it was suggested that the students introduce themselves to the teacher, and at the same time Hennings would make a self-reflection in her own journal. Upon completion, students were asked to return their journals to Hennings, who informed them that she would read and respond to the journals but they would not be edited in any way. At the beginning of each class the students were able to pick up their journals. Hennings would often read her own journal entries to the class, and the class was informed that they could feel free to do the same if desired. As this process continued for the duration of the course, students were encouraged to write about anything of interest to them.

Upon completion of the course, both the graduate and undergraduate students were asked to write a final journal entry discussing their feelings towards journal writing. In particular, the students were asked to discuss how they felt about the inclusion of journal writing in a methods college course. Along with their final journal entry the students were asked to complete a questionnaire surrounding their reactions to journal writing. Hennings's (1992) questionnaire included propositions about journal writing such as "a way to improve human relations," "a way to reflect, relax, and learn," " a way to give students opportunity to ask questions," "an opportunity to think about the mechanics of writing," and "some individuals often feel the need to hold back" (Hennings, p.15).

Hennings (1992) found the majority of the responses to the questionnaire to be extremely positive. Over half of both the undergraduate and graduate students found that journal writing helped them to know the instructor on a more personal basis and vice versa. The students also agreed that journal writing made them realize the value of the journals in school writing programs. The majority of the graduate students also stated that journal writing gave them the opportunity to ask the instructor questions. Furthermore, over half of both the undergraduate and graduate students found that journal writing gave them the opportunity to reflect upon their concerns and problems. Along with the positive comments received from the questionnaire, Hennings also discovered some of the difficulties students have with journal writing. According to Hennings, several of the students in both the graduate and undergraduate classes often had trouble knowing what to write about. However, only a small group of the students preferred when the instructor made suggestions on what to write about. To further complicate the situation, when suggestions were given, fewer than half the students used the

suggestions in their writing. Therefore, although the students complained about a lack of ideas for entries, they also ignored the attempts made to assist them in their writing.

Overall, Hennings (1992) found the dialogue journal writing to be a beneficial experience for both the students and herself. One of the major advantages discovered at the graduate level was that the dialogue journals encouraged the graduate students, who are teachers, to experiment with dialogue journals in their own classrooms. Another advantage discovered at the graduate level was the opportunity for the students and the professor to develop a close rapport, as the journals provided the students with a mechanism for asking questions of the instructor. The same communication advantage was also discovered with journal writing at the undergraduate level. According to Hennings, the undergraduate students also found that journal writing helped them to become more relaxed and fluent writers.

Although Hennings (1992) received a great deal of positive feedback, she does provide some necessary suggestions in order to make reflection a beneficial experience at the collegiate level. One of her first suggestions is that instructors must read and respond to all journal entries. According to Hennings, the instructor's responses are what drive the process as they "endow the activity with meaning"(Hennings, p.28). Furthermore one of the best ways for instructors to respond to the journals is to ask the students questions instead of correcting errors. In doing this, the teacher can help to trigger student writing, which is extremely important as some students feel the need for more direction in their writing. Moreover, although the students enjoyed the freedom provided, some students felt that in order for them to become a reflective practitioner, the instructors need to be more definitive in their expectations.

The Use of Reflection-on-Action Through Commentaries

The initial resistance to reflective writing found by Hannon (1999) is also common in other educators' attempts. Several educators have encountered this problem when using reflection as weekly assignments. According to Betts (2000), one way to rectify this situation is to change the use of weekly reflections to four separate reflections per term. Betts had her second-year undergraduate students do four separate commentaries per term. In the first commentary the students were asked to reflect on the course syllabus, to express any thoughts or concerns, and to state what they expected from the course and the teacher. In the second and third commentaries the students were given the opportunity to choose what they wished to discuss. Some suggestions, such as responding to teacher comments on the first commentary and discussing educational issues, were made to help guide the students in their reflection. Finally, in the last commentary, the students were asked to reflect on the entire term and what they had learned. The intent of the final commentary was to help Betts gain some insight into what the students learned in the class and what she needed to change.

Betts (2000) also found that the commentaries provided students who do not normally speak in class with the opportunity to express themselves. It was also found that the second and third commentaries helped the students to think critically about their expectations stated in the first commentary and about the course content in general. Furthermore, unlike in-class discussions, the commentaries allow professors and teachers to look at student discourse more than once, thus giving the instructor the opportunity to gain a better understanding of his/her students.

The Use of Reflection-on-Action Through Letter Correspondence

According to Adams (2000), teachers can also use letter correspondence with their

students as a means of reflection for both the teacher and the student. Although this

correspondence has been found to be effective for all levels of education, a fourth year

undergraduate class was used in this particular study. In this study the professor had the students

write a letter addressed to him regarding their needs as a learner. In this letter the students were

asked to reflect on what they felt best described their persona as a learner and to discuss what

they as students require from the teacher in order to succeed in their education. What started as a

small study turned into an amazing revelation for both the professor and the students.

In this study, the professor discovered three common themes among the letters. The first

and most predominant theme among the letters was that the students needed the professor to

realize that, as students, they lead busy and complex lives. In other words, the students needed

professors to realize that their life does not revolve solely around school. Many of the students

have part-time jobs, some are married and some have children, some of the students are varsity

athletes, and some are dealing with a family illness. Nevertheless, the students needed the

professor to understand these needs and to consider them when teaching and planning the class.

The second theme discovered by Adams (2000) was that students have a need to be cared

for, meaning that there were several students who viewed their professors as more than just

someone who instructs the class. Many of the students viewed their professor as someone that

they can trust and confide in. They value their professor's opinions and often look to their

professors for guidance. Therefore, several of the students expressed a need for their professor to

have an open-door policy with which the students could feel comfortable enough to turn to him for help, to be cared for, or just simply for a hug.

Finally, the last theme that Adams (2000) observed was that students expressed a need to be taught well. The students stated that they had more positive in-class experiences when they were interested in what the professor had to say. Furthermore, the students defined good teaching as the ability to be enthusiastic about the subject matter, to focus on the process rather than the product, to challenge students to work hard and succeed, to be approachable, and to be interested in what students have to offer. Most important, the students wanted to leave the professor's course inspired and ready to go forward.

According Adams (2000), the responses to the letters were found to be extremely positive and useful; however, some disadvantages were also identified. Adams found that there is a downside that teachers need to consider when applying the use of student letters. First, some students will lie and write what they feel the teacher would like to hear. Other students will "milk it for all it is worth," meaning that they will continue to use what they wrote in the letter as an excuse for incomplete assignments or missed classes. On the side, some students will seek help after it is already too late for the teacher to lend them some assistance. Last, by using student letters the professor or teacher's "belly is exposed." In other words the professor or teacher puts himself or herself in a position where he/she is subject to ridicule. If unprepared for criticism, then, teacher/professor runs the risk of damaged self-esteem. Although Adams was unable to find any real safeguards against these disadvantages, he concluded that the comments he received in the letters outweighed the possible drawbacks of the assignment.

The Use of Reflection-on-Action Through Case Records

According to Kottkamp (1990) it is important to look at all forms of reflection when discussing reflection-on-action. Kottkamp states that there are various means to facilitate reflection other than through simple writing and journaling. These substitute means of reflection include case records, contrived situations, instrument feedback, electronic feedback, metaphor, platforms, and reflective interviewing.

Case records are often used at the professional level to help foster reflection. As stated by Kottkamp (1990), the writing of a case study is a structured activity that supports Schön's (1983) reflection-on-action (reflection on a past event). Individuals using this type of reflection choose problematic situations, resolved or still in process, and describe them on case record forms. The case record forms include questions such as: "What is the nature of the problem? What alternatives did you consider? What do you hope to accomplish?" and "In reviewing your actions, what are your reflections, insights or conclusions?" (Kottkamp, p.186)

The reflective benefits of these writing processes are incorporated in the production of the case record. However, upon completion of the record there are still other uses that may stimulate reflection. According to Kottkamp (1990), these other uses include sharing and discussing the case records with other members of the profession and using them as alternative approaches to future incidents.

The use of Reflection-on-Action Through Contrived Situations

Kottkamp (1990) describes another alternative means for reflection as contrived situations. This type of reflection combines case studies, role-plays, simulations, and even

specialized applications such as microteaching. These tools are considered contrived, as they lack the real dimensions of professional practice such as real outcomes and professional responsibility. Through these activities the practitioner works within the "dimension of thinking through doing." The difference between the activities is that case studies allow the individual to examine multiple options for situations and to discuss what one "would do" or "wants to do," whereas simulations, role plays, and microteaching require the individual to put the "want to dos" into a form of action test (Kottkamp, 1990).

Although the contrived situations lack the complexity of practical situations, they provide individuals with an environment that is flexible, adaptable to the classroom, and able to generate public information that can be made available to a larger group of professionals. However, despite the numerous benefits of contrived situations, Kottkamp (1990) states that they are not reflective vehicles in themselves. Some individuals use contrived situations to help demonstrate a one "right answer," whereas others use them as an opportunity to reflect. When used in the reflective setting, the situations allow for the generation of a particular behavior in which the actor may choose to either process alone or with the support of others. Furthermore it is in this sense that Kottkamp (1992) uses contrived situations with his students as a means to test their educational and administrative principles. Through this process, Kottkamp provides his students with the opportunity to put their theory to use and further their professional development.

The Use of Reflection-on-Action Through Instrument Feedback

According to Kottkamp (1990) reflection-in-action and reflection-on-action can also be achieved through various types of feedback. These various types of feedback include instrument

feedback and electronic feedback. Instrument feedback helps to achieve a form of analytical feedback through standard diagnostic, counseling, and research instruments. Specifically, Kottkamp (1990) found that instruments such as the Myers-Briggs Type Indicator (MBTI) and the Learning Style Inventory (LSI) helped his students to do a self- evaluation of how their minds work. In particular, the MBTI was found to provide students with extensive, meaningful, and useful feedback on their writing and testing abilities, whereas, the LSI was found to give graduate students more information about the "particular stages of experiential learning they are most likely to apply" (Kottkamp, p.190). Furthermore, although Kottkamp found few instruments that help facilitate reflection, he did find that these two particular instruments help students and professionals reflect on their actions and thought processes.

The Use of Reflection-on-Action Through Electronic Feedback

Another form of feedback that Kottkamp (1990) has found to be beneficial in the facilitation of reflection is electronic feedback. Kottkamp found two types of electronic feedback to have the greatest influence on fostering reflective practices: audiotape and videotape recordings. Audiotape recordings were found to be an inexpensive way to produce complete records that were "readily available, relatively unobtrusive, and that can be operated by the individual seeking the data or by others." The use of audiotapes was found to be easily administered at all levels of education. For example, it was suggested that audiocassette tapes of meeting minutes could often be used as a way for professionals to reflect on their own communication skills in action.

Although Kottkamp (1990) found the use of audiotape to be beneficial for reflection, he found videotape to be the most comprehensive method that can be used to capture events in action that can later be used for reflection on action. The videotape allowed educational professionals to observe their own teaching methods and discover the areas in which they need to improve. In some instances, the videotapes provided the professors with a new view of themselves as teachers, which in turn sparked a desire for self-improvement.

For students, Kottkamp (1990) described a case in which the researcher used the videotapes as a means for student-teacher supervision in a reflective teaching practicum. The purpose of this exercise was to change the interpretation of classroom events from a student-teacher perspective to solely a student perspective. Through the videotapes, the teachers were given student ideas that they could replay and therefore fully understand, appreciate, and use as a tool to connect with their students.

Other teachers used videotape not only to look at student ideas but also to observe student behaviors and their ability to reflect on these behaviors. According to Kottkamp (1990), some educators have used videotape to help pinpoint specific behaviors (to their students) that need to be changed by the students before they become educators themselves. In this case, the teacher will often sit with the student and they view the videotape together. After viewing the videotape, the student is then asked to reflect on the behaviors that were emphasized and describe ways in which they can change the negative behaviors and enhance the positive actions. The intent of this process is to help the students develop a more objective view of their teaching practices and to introduce a different form of reflection.

The Use of Reflection-on-Action Through Metaphors

One of the major benefits of using electronic feedback as a means for reflection is that it gives students a break from regular journaling and writing. However, although Kottkamp (1990) does find electronic feedback to be an extremely advantageous form of reflection, it can also be somewhat of an expense to already tight budgets. Therefore Kottkamp also describes the use of metaphor for reflection as an alternative to reflective journals. According to Bowers (1980 cited in Kottkamp 1990) a metaphor "is a human construction created as part of the fundamental drive to name categorize and give meaning to the events of life" (p.191). In this sense a metaphor can be used to reflect on and understand previous actions and practices. Specifically, teachers and administrators who work in somewhat complicated and irregular environments can use metaphors to help clarify situations by helping create personal meaning amidst different values, allegations, and pressures.

Furthermore, metaphors can help a professional categorize and attach meaning to his/her particular style of teaching. By reflecting and defining themselves through a metaphor, the professional can see how they fit with the intentions of their colleagues. The metaphor gives professionals the basis for reflecting on their teaching behavior and allows them to see if they meet their intentions. According to Kottkamp (1990), instances of reflection-in-action can be seen in the use of metaphors. In certain metaphors described by Kottkamp individuals often make statements about discrepancies between their intentions and their actual behaviors. Moreover, the metaphors help professionals to get their thoughts together and decide what the big issues of reflection really are.

Reflection as a Process

When introducing reflection to the educational setting it is important to explore not only reflection on action but reflection as a process as well. The focus of reflection as a process is based primarily on the use of reflective tools to promote self-development. Research in this area looks at the various steps used in reflection and how these steps create a positive experience for the individual.

The Use of Reflection as a Process Through Response Journals

Although reflective journals have proven to be an extremely positive activity, there are several teachers who encounter problems upon introducing them to the classroom. According to Parsons (1990), some teachers have found that students do not know what to write about or they find journal writing to be a pointless chore. Therefore, Parsons developed response journals as a tool for using reflective writing in the classroom. Response journals were developed as a means for students to reflect on personal responses to various educational experiences within their own classroom. Some of the experiences included independent reading, viewing film or television programs, listening to read-aloud, and small group discussions. Parsons also viewed response journals as a resource book filled with ideas, thoughts, opinions, and first drafts which can be saved for later use in other contexts such as a writing folder.

These response journals were found to be extremely beneficial for students as they gave students a place to record their observations and questions instead of voicing them aloud to the class. According to Parsons (1990), response journals provide students with a "tracking device" to record what and how much they have read and to record what their group discussions

consisted of and their role within the group dynamic. Furthermore the response journals can also be used as a reference file for both students and teachers to monitor individual progress and development through both formative and summative evaluations.

The major benefit of these response journals is that students are not forced to develop the ideas for journal writing on their own. According to Parsons (1990) the main purpose of response journals is to provide students with a guided form of journal writing. In each of the response journals the students are given guidelines as to how to write each particular entry. The guidelines are not in place to control the students' entries, but to give them a sense of what is expected. For example, in a response journal to a particular film, the students are asked to reflect on the film with the following sample questions in mind: What connections are you thinking about? What personal feelings or memories are surfacing? What seems important about the film? In doing this the students have some idea of what to write in their journals and at the same time are not controlled in what they choose to discuss. Furthermore, the students are deterred from simply regurgitating the film's plot line.

This type of reflective writing can be used in any level of education. However, the reception of response journals has been found to be the most positive in grades 3-8. Parsons (1990) feels that this is primarily due to the type of content that is covered at these levels of education. Regardless of the age, the most important aspect of the response journals is to include a summative and formative self-evaluation at the end of the response process. In doing this, the students are given the opportunity to reflect on the previous year and to discuss what they felt they have or have not gained from the entire response journal experience. Furthermore, they can see how they have changed both as a student and a person over the course of the year. Through

the self-evaluation process, the teachers are not forced to place their own evaluation upon the students' journals. Furthermore, the teachers receive the opportunity to gain some insight into their students' needs, questions, and concerns.

The Use of Reflection as a Process Through Diagnostic Reflective Portfolios

Although response journals are viewed as an effective tool for the promotion of reflection within the classroom, they are often found to be difficult to use at all levels of education. Many of the older students felt that the questions used to help guide the journals often limited their ability to be open and candid about their experiences. According to Courtney and Abodeed (1999), diagnostic reflective portfolios can be used across all grade levels to help students create a better sense of self-awareness of the learning process. Through reflective portfolios the teacher and the student can work together to develop a portfolio for the student to create over the course of the year. Courtney and Abodeed used reflective portfolios to promote student growth and development within a grade 2 classroom. The reflective portfolios used by Courtney and Abodeed included goal setting, reflections on learning processes, learning strategies (what worked, what did not work), math skills, reading skills, and peer relationships. When using portfolios, the students are not forced to use writing as their sole form of expression. The students are encouraged to use pictures, magazine clippings, drawing, and other forms of expression to describe their own learning experience. Through this process, the students develop a portfolio demonstrating their development to their peers, their teachers, and even their parents. Most important, when the students are asked, "what did you do at school today?" the student can use the portfolio as a way to respond.

At the end of the school year the students are left with a compilation of the steps in their personal educational journey. According to Courtney and Abodeed (1999), the students are able to look at their diagnostic reflective portfolios at the end of the year and view their growth and development as a student. By looking at their completed portfolios the students were able to increase their self-awareness of what it takes for them to progress as a learner individually. This self-awareness was primarily developed from the large goal-setting component of diagnostic portfolios.

Courtney and Abodeed (1999) found that the portfolios are driven by the goals of the learner; that is why in the beginning of the portfolios the students were instructed on the entire goal setting process. Through discussion and interaction the students are taught how to set realistic goals and how to track these goals with their portfolios. After the students have set their goals for learning, they are then instructed to write them in their portfolios and then develop a path to achieve their goals. The process thereafter becomes the collection of information or events that help them move closer to the attainment of their goal. This collection of information and events can include tests, book reports, teacher feedback, and field trip memorabilia. In the end, the students are left with a portfolio that outlines their progress throughout the year and shows them the steps they took to achieve their goal.

Reflection as a Practice

Although it is important to view reflection as a process, it is also important for educators to view reflection as a practice that takes time to develop. When discussing reflection as a practice, it is important to look at the continual use of reflection on a day-to-day basis.

According to Schön (1983), reflection as a practice focuses on the individual's ability to use previously learned theory and knowledge. Furthermore, reflections in this area focus on a person's individual belief in their ability to apply previously learned theory. Specifically, researchers have looked at the use of reflective portfolios at the professional level as a means for discussing reflection as a practice.

The Use of Reflection as a Practice Through Collective Autobiographies

According to Hauserman (1993), reflective portfolios can be used in different forms and at different levels in education. Hauserman found the use of reflective portfolios in the form of collaborative autobiographies to be a very effective reflection tool when used with educational professionals. Specifically, vice-principals were asked to participate in the creation of collaborative biographies. The intent of this study/workshop was to promote a system of mutual support in their development and growth as school administrators.

According to Hauserman (1993), the vice-principals used these biographies to discuss and collect information on issues such as: "discipline approaches, evaluation and supervision of teachers, aspects of promoting staff morale, daily duties, district involvement on committees, instructional leadership, establishing collegiality, and other events in their work"(p. 19). In order to create the biographies, the participants volunteered 2 days of their own time for a workshop to engage in the collaborative autobiography process. The participants explored various educational questions, such as "what is the nature of my own working reality?" through discussion, self-evaluation, and prior experiences (Hauserman, p.20).

Through the creation of these collaborative autobiographies, the vice-principals developed a relationship that was based on mutual trust and respect. According to Hauserman

(1993), the autobiographies allowed the vice-principals to be introspective and to reflect on the personal issues that shaped their perspectives of teaching. Furthermore, the vice-principals were also given the opportunity to relive and reevaluate real cases they had recently experienced. The autobiographies helped the vice-principals explore, clarify, and discuss alternative actions. Finally, the major benefit of these autobiographies proved to be the opportunity for feedback and critical analysis.

The Use of Reflection as a Practice Through Journal Writing

Reflection as a practice has not only been researched at the professional level, but it can also be introduced at the preservice level. According to Hoover (1993), reflection helps teachers to move away from a "competency based evaluation," and toward a philosophy that encourages and helps teachers to monitor their teaching behavior (p.91). Furthermore, reflection also gives teachers the opportunity to look at the way their behavior affects the behavior of their students. Because of this, the reflection becomes a process of inquiry for teachers that "takes into consideration the contexts that shape their practice". Despite all of the benefits described, Hoover has found that there is still little research on how to foster a reflective ability in a teacher.

As a consequence, Hoover (1993) decided to look at the reflective ability and techniques in the journal writing of two secondary preservice teachers participating in a teacher education program. The intent of the journal writing was to prepare them to become self-directing educators who can solve classroom problems "by recognizing how and when to apply previously learned textbook theories and instructional strategies". Furthermore, Hoover also proposed that these experiences would help the students develop a sensitivity towards ways of dealing with future beliefs concerning teaching. However, Hoover wondered how effective the required

journal writing and reflection-on-action following teaching really was for enhancing preservice teachers' ability to interpret and construct meaning from their personal experiences.

Hoover (1993) collected data that included initial and exit open-ended questionnaires, autobiographical and confirmatory interviews with the participants, and semistructured interviews with their cooperating teachers and university faculty. The main focus of the data analysis, however, was the analysis of the required writing. The required writing included a weekly journal with suggested topics exploring preservice teachers' observations, development of an educational philosophy, and questions for exploration. Their writing also included assigned daily lesson analyses following teaching episodes. The purpose of the analyses was to consider the effectiveness of the lesson used in terms of intended student outcomes, reasons for success or failure of the lesson, and proposed alternative approaches. Finally, their writing also included the observational comments of the videotaped analyses.

The data interpretation helped Hoover (1993) to trace the nature of the participant's reflective thinking during their final practicum experience. The analysis specifically charted the content of reflection, stages of developmental concerns, and corresponding professional growth shown through their writing. Through the analysis Hoover found that the writing did promote a higher level of thinking, but the reflection did not necessarily promote more analytical thoughts about teaching. However, her findings did support the notion that writing does provide "a window on implicit thought processes"(Hoover, p.90). In particular, the personal reflections provide a record of personal thoughts and feelings of preservice teachers.

For the two students involved, the praticum was found to encourage more reflective writing. However the reflections varied depending on the type of guidance provided for each of the students. For instance, assignments without a predetermined focus usually resulted in an

outlet for complaints and concerns of survival in the educational setting. In this scenario,

Hoover (1993) found that the students were extremely critical of themselves and spent most of

their reflections venting their negative thoughts of teaching, whereas the reflections that had a

predetermined focus appeared to include responses geared towards their personal educational

vision. In particular, the students seemed to focus more on teaching actions in light of pedagogy.

In light of her findings, Hoover (1993) suggested that one of the first steps necessary in

fostering a reflective practice among preservice teachers is encouraging students to move their

reflective writing beyond their personal concerns and discuss the educational principles and

practices that relate to today's society. Hoover referred to this process as an "educational

socialization", where an individual moves from a preoccupation with self towards a sense of

others, and is able to regard this socialization as a vital component in the "preparation of

successful, empowered professionals" (p.91). In order to promote this type of socialization

Hoover stated that it is necessary to include some direction in the reflection tasks required of

preservice teachers. Furthermore, this "direction" needs to include aspects that are meaningful

and that will help lead the students to develop a reflective stance that is both problem based and

practical.

The use of reflection as a practice through a platform

The development of a reflective stance described by Hoover (1993) has also been found

by other researchers to be a crucial part of education for students and professionals. According

to Kottkamp (1990) a reflective stance is the essence of reflection as a practice. Kottkamp found

that this reflective stance is often developed through discrepancies between one's intent and the

actual result. When an individual reflects on these discrepancies, he/she recognizes the problem and are able to make a behavioral change.

According to Kottkamp (1990), professionals can help alleviate the discrepancies between intention and action through a reflective tool known as platforms. A platform is known as one's epoused theory, a person's beliefs and assumptions (philosophy) for guiding his/her professional practice. The actual writing of a platform is what engages an individual in reflective practice and is considered to be a tough, but rewarding experience.

Several issues have been suggested to be included in platforms; some of these issues include the aims of education, the image of the learner, the value of the curriculum, the image of the teacher, and the preferred teacher-student relationship. Kottkamp (1990) has found that it is important to include these issues in order to give the platform some structure; however, he also suggests his students develop platforms that are authentic representations of themselves. In order to achieve this, he suggests that the students write a preliminary platform and then a revised one. In doing this, the students become more comfortable with writing more personal statements. This kind of personal representation is important when writing a platform, as it is needed when it comes time to test it against performance discrepancies.

The process of platform writing begins with a small group discussion of personal feelings and the content of their work. From this, the participants go off individually to reflect on their group discussion and begin writing their platform. Once the platforms are written, Kottkamp (1990) asks them to respond to the work of the others in their group with particular items in mind. These items include internal logical consistency and inconsistency among the parts and unidentified assumptions that seem to underlie the platform. Furthermore all responses are to be

descriptive rather than judgmental. The point of this feedback is to provide the writer with information that is both useful for and likely to trigger reflection about the platform.

Once the platform is developed, it has the prospect of becoming a medium for reflection on the discrepancies between one's epoused theory (intentions) and theory-in-use (actions). However, the platform must first be tested by what Kottkamp (1990) describes as "segments of professional action" (p.196). These tests can be generated from actual daily practice, events in an internship, small group behavior during class, or contrived situations like role-plays. Again, when doing these tests, it is important to use descriptive data such as instrument and electronic feedback, as it is often difficult for a human being to provide descriptive feedback due to their own assumptions and beliefs. Furthermore, if the platform writing and testing is done frequently and properly it can help the individual to develop as a professional and become more aware of his or her daily practices.

Regardless of what type of reflection is used, it is important to keep in mind that the individual must be capable of reflection before beginning the reflective process. Specifically, when reflection is used in professional development the individuals involved must be in control of deciding whether to reflect, and as a result, whether and how the reflection will change his/her practice. The introduction of reflective practice can not be forced, just as behavioral change through reflection can not be forced. Therefore, it is important to remember that while reflection is an important means for self-improvement (both professional and personal), it is beneficial only to those who desire self-improvement (Kottkamp, 1990).

The Use of Reflection as a Practice Through Journal Writing

Aside from Kottkamp's (1990) advice, other suggestions for enhancing the reflective

practice have been made with particular reference to reflective journals. Tryssenaar (1994)

stated that one of the biggest problems encountered with the use of reflective journals is that

students often turn reflective journals into personal diaries and/or daily activity lists. In other

words, students often use reflective journals to vent complaints and/or to record their daily

activities in the form of a "grocery list." To avoid this type of journaling, Tryssenaar suggests

that professors and teachers clearly define the difference between a diary (a writing resource that

documents information) and a reflective journal (a form of writing that describes a person's

observations on ideas, concerns, and beliefs).

One of the best ways that educators can help students produce reflective journals that are

descriptive of one's ideas, beliefs and concerns is to begin a correspondence from as early as the

first journal entry. In particular, Tryssenaar (1994) suggests that educators respond to the

student's first entry by asking them questions about the issues mentioned in their journal. In

doing this, the educator helps guide the students in their future responses by asking them to

respond to their questions in the next entry. According to Tryssenaar, this process of continual

teacher-student correspondence helps to keep the students on track, but it also prevents

complaining and grocery list entries. Furthermore, by asking questions, the instructor can also

help the more reluctant students open up by giving them something to talk about.

Although Tryssenaar (1994) discussed the importance of responding to journal entries,

she also stated that the instructor must be first educated in the art of journal response. According

to Tryssenaar, there are six different ways to respond to reflective journals. The first type of

response is known as universalizing. This type of response is achieved by responding to phrases

that one can relate to. When using universalizing responses, a professor often agrees with a point made in the journal entry and engages in some form of self-disclosure. Another type of response is known as reciprocal reflecting. In this case, the instructor asks the student to consider either their own point of view or that of another researcher.

The third type of journal response is known as challenging. This type of teacher response is often used in response to concerns or complaints by asking the student to state what they need to do in order to rectify a particular situation. The next type of response discussed by Tryssenaar (1994) is known as affirming and inspiring. This response simply involves the acknowledgement of a good point or an innovative thought by praising it with encouraging statements. Similar to reciprocal reflecting, another type of response is known as linking. The major difference in this type of response is that the purpose or intent of the instructor is to demonstrate relationships between the student's thoughts and those of others. Finally, the most important type of response is a role model response in which the instructor uses reflective behavior and language when they respond.

Tryssenaar (1994) states that these types of responses to reflective journals are extremely time consuming for the professor. However, the benefits of taking the extra time to respond properly can often exceed the expectations of any instructor. By responding to the journal entries, both the student and the instructor receive feedback, and furthermore, the revisions help the students and the instructor to develop a very different type of relationship, a relationship that often reaches outside the course content. Finally, the most common benefit recognized through journal writing is that it helps to move students out of a somewhat "cognitive place" and into a more "affective" learning environment.

Summary of Literature Review

The main intention of the literature review was to provide an overview of the different forms of reflection and the use of reflection in action, reflection as a process, and reflection as a practice in the classroom. Through this overview, the general concepts and forms of reflection have been considered and a background of knowledge has been created. The background of information created is the basis for discussion in the remainder of this study.

In the subsequent chapters, the use of reflection in the undergraduate and graduate classroom is examined. Interviews were conducted with both undergraduate and graduate students and teachers to further explore various forms of reflection and to provide Suggestions and recommendations for future use.

CHAPTER THREE: METHODOLOGY AND PROCEDURES

Overview

This chapter discusses the methodology and procedures used to complete this study. A description of the methodology, research design, participants, and instrumentation is presented. An outline of data collection, data processing, and data analysis is also provided.

Description of Research Methodology and Approach

The intention of this study was to discuss the perceived benefits of various forms of reflection and discuss reflection on action, reflection as a process, and reflection as a practice. In order to discuss these issues it was important to speak with individuals who have experienced or have used reflection in the classroom. In this particular study the classrooms selected were at both the undergraduate and graduate level. The experiences of the professors and students at this level were examined thoroughly in order to provide suggestions and recommendations for the future use of reflection. With this in mind, the paradigm chosen for this study, case study design, is a design ideal for understanding and interpreting observations of educational phenomena (Merriam, 1988). According to Merriam, this approach makes it possible to look at a variety of perspectives and build a theory encompassing the foundations of the problem, in this particular case, a theory based on the foundations of reflection in the classroom.

Methodological Assumptions

In order to achieve a complete understanding and interpretation of the participants' experiences, a case study design was applied. According to Merriam (1988), case studies provide a thick description of the phenomenon under study. Case studies include as many variables as possible and portray the interaction of these variables. The descriptions provided by case studies are usually considered qualitative as they "use prose and literary techniques to describe, elicit images, and analyze situations. They present documentation of events, quotes samples and artifacts" (Wilson, 1979 cited in Merriam,1988, p. 10). Overall the main objective of this qualitative approach is to understand the meaning of an experience.

Description of Design

Qualitative methodology and a case study design were used in this study. According to Merriam (1988), qualitative research "assumes that there are multiple realities and that the world is a function of personal interaction and perception". Due to these multiple realities it is important to look at each situation in depth and separately. Therefore, case study design was selected for this study due to the need to discover individualized outcomes. Qualitative methods were used in this study as these methods "permit the (evaluation) researcher to study selected issues in depth and detail: the fact that data collection is not constrained by predetermined categories of analysis contributes to the depth and detail of qualitative data" (Quinn Patton, 1990, p.40).

According to Quinn Patton (1990), case studies help to "gather in depth information about new clients and their experiences with a particular program" (p.68). Furthermore, Quinn Patton also states that case studies have become somewhat of a pillar for educational research and evaluation as they can contribute "both theoretically and pragmatically in educational research" (p.68).

The phenomenon under investigation in this case is the experiences of individuals who have incorporated a reflective activity as part of their classroom experience.

Justification of Design

The strengths of a qualitative methodological design, which aims to achieve a complete understanding and interpretation of the participants' experiences, will rest in the design's validity. A case study design provided an in-depth description showing the complexities of processes and interactions that made the study "so embedded with data derived from the setting that it cannot help but be valid" (Marshall & Rossman, 1999, p.15). Case study strategies, such as member checks and peer examinations, are also used to help ensure internal validity through verification of comments and results (Merriam, 1988). The thick and rich descriptions provided by case study design can improve the external validity through the generalizability of the findings, which in turn create a base of information appropriate for judgement and transferability. In other words, case studies allow the researcher to describe how their findings can compare with others in the same class, so that users can make comparisons with their own situations (Merriam). Furthermore, the reader or user of specific research can see, through case

study design, how the research ties into a body of theory through the transferability that this design provides.

Selection of Participants

The study sample was composed of two separate groups. The first group included 2 university professors from a southern Ontario university. One of the professors was selected from the faculty of an undergraduate program. The other professor was selected from the faculty of a Masters program. Both professors were selected based on their history of using reflection within their practice and within their classroom. The professors were selected if they used some form of reflection within their course content. For example, if they have used dialogue journals, diagnostic portfolios, and reflective interviewing they qualify as participants. Furthermore, in order to be selected for this study the professors must have used reflection as an integral part of their course for a minimum of 3 years prior to this study.

The second group included 4 university students also from the same southern Ontario university. Two of the students were enrolled in or recently graduated from (June 2000) the undergraduate physical education program. The other 2 students were enrolled in the Masters of education program. All students have participated in a class which involved a reflective component such as dialogue journals, reflective portfolios, or response cards.

The small sample was used in order to discover detailed experiences. According to Quinn Patton (1990), a smaller sample allows the research to produce a wealth of detailed data and gain a greater understanding of a particular case or person. Furthermore, "in depth information from a small number of people can be very valuable, especially if the cases are information rich" (Quinn Patton, 1990, p.89).

Recruitment Process

The students and professors were invited to participate via phone calls and/or e-mails. Some of the students were former classmates; therefore they were reminded that they were under no obligation to participate in the study and were free to withdraw at any time. If they agreed to participate, they were given a letter of information (Appendix A) and an Informed Consent Form (Appendix B). Once they had signed the Consent Form an interview was arranged at a time and place convenient to each participant.

Instrumentation

The group of professors was asked to participate in a semistructured interview which included questions pertaining to the type of reflection used in their classroom, their intent to continue with the use of reflection, perceived benefits of reflection, and suggestions for the use of reflection in the classroom (Appendix C).

The students were also asked to participate in a semistructured interview including questions pertaining to their opinions of participating in class reflection, the perceived advantages and disadvantages of reflection, their intent to continue with the use of reflection, and their suggestions to enhance the use of reflection in the classroom.
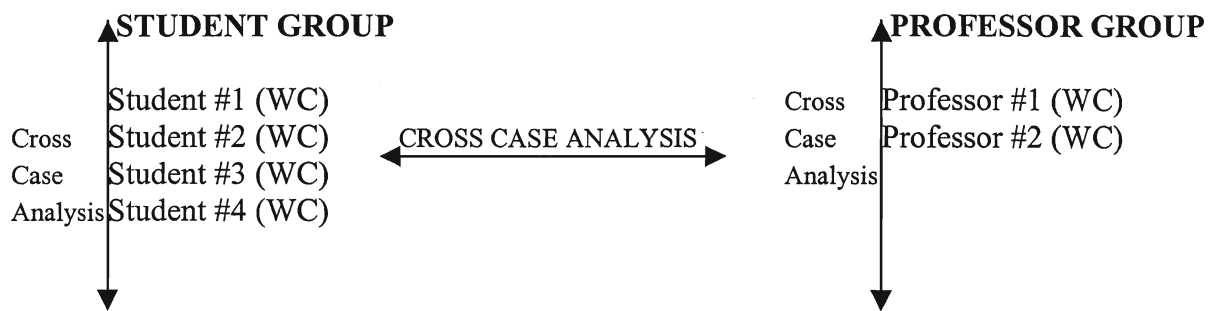
Data Collection and Recording

Personal in depth interviews were conducted with the selected participants in an office at the southern Ontario university. The interviews were tape-recorded and field notes were taken during and following the interview. The length of the interviews ranged from 1 hour to 2 hours.

The information on the tapes was kept confidential by coding the individual's responses and will be destroyed upon the completion of the study.

Data Processing and Analysis

The interview tapes were transcribed by the researcher and checked for accuracy with the participants (member checks). After the data were recorded and analyzed, participants were asked to review their transcripts for correctness and to check themes for accuracy. Any changes were then added to the study. The data were then analyzed by a within-case analysis. The within-case analysis will include the organization of data by descriptive categories. The categories were selected based on common issues that arise in the interview. The intent of this analysis was to discover resonant and idiosyncratic themes from each case.

Upon completion of the within-case analysis two cross-case analyses will be done. The first cross-case analysis was done within the professor group and the student group separately. The purpose of this cross-case analysis was to compare and contrast themes within each group. The second cross-case analysis was done with both groups combined. The purpose of this analysis was to make a content analysis of the entire sample (see figure 1).

STUDENT GROUP　　　　　　　　　　　　　　**PROFESSOR GROUP**

Student #1 (WC)　　　　　　　　　　　Cross　　Professor #1 (WC)
Cross　　Student #2 (WC)　　CROSS CASE ANALYSIS　　Case　　Professor #2 (WC)
Case　　Student #3 (WC)　　　　　　　　　　　　Analysis
Analysis Student #4 (WC)

- WC--Within Case Analysis

<u>Figure 1</u>. Method of data analysis

CHAPTER FOUR: RESULTS AND DISCUSSION

Overview

The purpose of this chapter is to present the results of this study. Since this research

followed a qualitative methodology, the data were collected and interpreted and a summary of

the manner in which the data were analyzed is presented. This summary is followed by the

analysis of the interviews with the students (D.B., C.K., G.A., and U.C.) and the teachers (A.O.

and N.E.).

Summary of Data Analysis Process

In order to analyze the data of this study it was important to use an approach that would

provide a complete understanding and explanation of the participants' experience. The first step

in the process was to complete a member check with the participants. This member check

entailed their reading the transcripts for accuracy. The next step was to do a within-case analysis

of each interview in order to develop descriptive categories. In turn, this analysis provided

distinctive descriptive categories from each case. Upon completion of the interviews, the

categories were then checked by the participants for correctness so that internal validity could be

strengthened. The second level of analysis completed was two cross-case analyses within the

student sample and within the professor sample.   The purpose of the cross-case analysis was to

compare and contrast the content in each group. The third and final level of analysis was

completed with both the student group and the professor group combined. The intent of this final level of analysis was to make a content analysis of the entire sample.

Analysis Level I: Within Case Analysis of Student Interviews

The core of this study is the collection of information through semistructured interviews with the 6 participants. Interviews were done with each of the participants; they were then transcribed and names were coded for confidentiality. The names of the southern Ontario university professors and southern Ontario university courses mentioned in the interviews were also coded to protect those individuals. Direct references to the interviews are accounted for by the individual's code (i.e., C.K.) and the page number of the interview from which the quote is taken.

The first level of analysis was a within-case analysis of each individual interview. The interviews were divided into two separate groups, the student group and the professor group. Within the student group, the following descriptive categories were generated and emerged as points of departure: type of reflection, process focused reflection, content focused reflection, resistance, critical thinking, student/teacher relationships, disadvantages of reflection, benefits of reflection, Desire to continue with reflection, and suggestions/recommendations. Each category was then subdivided using headings that emulate the different components of their reflective experiences. The entries fitting these subheadings were defined as they emerged from the data. To illustrate this process, some categories, their description and a sample taken from each of the four interviews, are provided as examples:

Type of Reflection:

Weekly written reflection   -weekly reflections were done on the

required class readings and how it related to education (e.g., "It was a weekly reflection on the stuff that we read. We had to discuss how it applied to education." [C.K. p. 1])

Letter Correspondence

- Students write a letter to the teacher expressing their needs as a learner and what they need from the teacher in return. (e.g., "He actually made you write him a letter stating what your needs were as a learner and what you needed from him." [D.B., p. 6]).

End-of-term Reflection

-A reflection done upon the completion of a course. ("One reflection at the end of the whole course" [U.C., p.1])

Response Cards

-The use of cards to reflect on weekly assigned course readings. ("I enjoyed the index cards. A lot of ways to reflect on the readings."[U.C., p.1])

Process Focused Reflection - Reflection that focuses on one's experiences, beliefs, and what happens to cause a problem. ("He was pushing us to personally reflect, maybe not on the requirements for the course but definitely pushing us to do some kind of reflection on our old ideas, old ideals, see if we could change that kind of perception to other things." [U.C., p.1])

Content Focused Reflection -Reflection on the content covered in in class. ("There was some sort of reflection on the readings." [G.A., p.1].)

Resistance -Resistance from the students to do reflection in the classroom. ("It was really hard to say how I really felt about the class"). [C.K., p. 1]

Critical Thinking: -the ability to delve deep into the content and find the underlying meaning of certain issues or behaviors.

Personal stance

-the opportunity to use reflection to take a personal stance on an issue. ("You can put your personal stamp on something too, reflect on it and then reflect on it."[G.A., p.1]).

Critical Thinking:

Higher level needs

-the notion that Higher level needs, such as self-expression and realization of individual needs, are met or are not met through reflection. ("It was nice for the professor to take an interest in you and he can write down what your needs are and that may cause you to think what are your needs as a learner." [G.A., p. 2])

Desire to continue with reflection

-the participants stated whether they would continue to use reflection or not.

Several benefits, disadvantages, and suggestions/recommendations were made by each of the participants.

Student Participant Descriptions

As stated in the methodology in Chapter Three, the student participant group consisted of

4 students. Two of the students had recently graduated (June 2000) from an undergraduate

program at the southern Ontario university and participated in a course (or courses) that involved

a reflective component. The other two students were currently enrolled in a Master's program at

the southern Ontario university and had also participated in a course (or courses), at the graduate

level, that included a reflective component. The participants were recruited via e-mail or through

telephone conversations. All of the participants participated in a tape-recorded semi-structured

interview in an office at the southern Ontario university. The purpose of this section will be to

introduce the participants and to describe their experiences with reflection through the use of the

descriptive categories.

G.A

G.A. graduated from the southern Ontario university in June 2000 from an undergraduate

program. At the time of the interview he was enrolled in Teachers College also at the southern

Ontario university and had hopes of becoming a teacher at the secondary school level. In his last

semester of his undergraduate degree he was enrolled in a course that was based on the

development of reflective practitioners. This fourth-year course involved a mandatory reflective

component that was to be completed by each of the students. The interview was approximately

40 minutes long and focused on his experience with this course.

Type of reflection. As part of the course requirement, G.A. had to complete a weekly

reflection after every class (Monday nights only). The weekly reflection included discussion of

various aspects of the course such as the required readings and in-classroom experiences. G.A. also participated in a letter correspondence in which the students were asked to write a letter to the professor describing their needs as a learner.

Process reflection. G.A. participated in process reflection through a letter correspondence assignment in which he discussed his needs as a learner.

Content reflection. G.A. described his weekly journals as very content-based reflections. "There was some sort of reflection on the readings and what took place in class and what we got out of the class and the assignment we had to do was that we were supposed to reflect on all those things and even some of what happened within the group work" (G.A., p. 1). He did enjoy this type of reflection as it helped him to understand his readings.

Resistance. G.A. appeared to have no resistance towards reflection in the classroom.

Student/teacher relationships. Through the weekly reflections and the letter correspondence G.A. found that he was able to develop a positive relationship with the process and the professor. After reading G.A.'s reflection the professor provided him with advice by writing comments on his reflections, and G.A. was able to help the professor understand his needs as a learner through the letter correspondence. Furthermore, G.A. also developed a new respect for the teacher. "It was more one on one because you knew that he was going to read it and he would offer some advice back. Definitely, I mean that's a lot of work for the Professor to

read all of those journals, so definitely there's a credit for that and it's good to get feedback; it's always useful" (G.A., p. 1).

Critical thinking. G.A. did find that he participated in critical thinking in several ways because of the weekly reflections and the letter correspondence. He found that the weekly journals helped him to take a second look at what was going on in the classroom and to dissect the different aspects of that classroom. "The activity of reflection is always good and it causes you to critically think about what you have learned and what you've read and then be able to convey it on paper, you know, that's good". (G.A., p. 3).

Personal stance. G.A. stated that one of the reasons he enjoyed reflection was because the weekly reflections allowed him to take a personal stance on an issue and reflect on that stance and how it affected him in his own practice.

Higher level needs. Through the letter correspondence G.A. found that by writing out his needs as a learner his higher level needs were met by the professor. The professor met his higher level needs through reading his letter, as G. A. felt that the professor took an interest in him. The letter also caused G.A. to think about what his needs as learner actually were, which was something he had never done before.

Disadvantages of reflection. G.A. enjoyed his experience with reflection and therefore was unable to see any real negative aspects of reflection in the classroom. However, he did think that the time component involved in weekly reflections could be problematic for some people.

"I'm sure some students wouldn't want to take the time it takes to sit down and type out two pages of reflections. It's not something a lot of people want to do, so I can see that as the only negative part of reflection. It's just the time component of it. It didn't bother me. It didn't take that long. There is not a lot of research in reflection. It happens. You just type down what happened or what you read" (G.A., p. 2).

Benefits of reflection. Although the critical thinking aspects of reflection mentioned by G.A. can also be seen as benefits of reflection, there were other benefits that G.A. was able to discover in the classroom. One of the first benefits that G.A. recalled was that the weekly reflections acted as an aid to his memory. When he did the reflections after class he found he was able to reflect on what happened and take certain aspects away from the experience, instead of losing it in his memory. G.A. also stated that he found the reflection helped him to do his required readings. "The reflection in our course is good too because if there were readings you were supposed to reflect on the readings so the reflection kind of caused you to do your reading so you had to reflect on it"(G.A., p.1).

Suggestions and recommendations. Even though G.A. did have a very positive experience with reflection in the classroom he did have some suggestions for professors who use reflection in the undergraduate classroom. One of the first suggestions was that weekly reflections do take some time and perhaps teachers should allow for students to miss one reflection. If you're having a bad week and you just can't remember and you don't have time to reflect, maybe just a freebie or something like that" (G.A., p. 3). G.A. also suggested that professors should be making sure that the instructions were clear and providing students with

some sort of guidance with the reflection so that the students know what is expected of them in their writing. One final suggestion G.A. mentioned was that professors should respond to the weekly entries. When G.A. received responses from the professor he felt as though his professor took an interest in his work. "I always appreciate comments and you can tell which professors take an interest in the work that he asked you for or she asked for. Any comment like this is good, you should work on this or whatever, and that's greatly appreciated, and especially J.D., a guy that I hold a lot of respect for, so it was good to see what he had to say about my work and that leaves me, especially if you are doing graduate work or courses, you know, okay this is more of what I have to focus on or what not" (G.A., p. 3-4).

Desire to continue with reflection. Overall, G.A. stated that he had an extremely positive experience with reflection. Therefore, he felt that I would definitely continue to use reflection in his practice. As a future teacher he felt that people learn "by doing it" and that reflection helps you to not only achieve that but also gives you the opportunity to evaluate what you have done. According to G.A., reflection allows one to "look back at the lesson or the activity you did and think, what can I take from that or what went wrong and how can I fix that? Reflection is vital to any type of success. It's kind of incremental. When you do something, you reflect what was good, what was bad, and you step to the next step and try it again. Reflection is, I think, is relevant to a lot of success in a lot of areas." (G.A., p. 4). G.A. also stated that he would most definitely use reflection with his students to help them reflect on what they have learned, and he would also use it as a vehicle to provide his students with feedback.

D.B.

D.B. also graduated from an undergraduate program at the southern Ontario university in June 2001. At the time of the interview he was working at the southern Ontario university and was not sure if he was going to further his education. In the last semester of his undergraduate degree, D.B. was enrolled in the same course as G.A. that was based on the development of reflective practitioners. Therefore, he was required to complete the same reflective component. The interview was approximately 40 minutes in length and focused on his experience with the reflection in the undergraduate classroom.

Type of reflection. As part of the course requirement, D.B. was also required to complete a weekly reflection after every class (Monday nights only). In his weekly reflection he recorded what his group did in each class, what went on during the class, and what his own behavior was during the class. D.B. also used the weekly reflections to discuss the required readings for the class. D.B. also participated in a letter correspondence in which he wrote a letter to the professor describing his needs as a learner.

Process reflection. D.B. preferred to do more process-based reflection. In doing his reflections he enjoyed writing about what was going on in the actual classroom itself. "I preferred more on what was going on in the classroom. Ah, because it was more of a social level, and the readings you could always look back and say, "Oh yeah I remember reading about this or it goes along with what we were doing in the class" (D.B., p. 2)

Content reflection. Although D.B. did prefer engaging in a more process-based reflection he knew that he was also required to base his reflections on course content. Therefore, D.B. would include the required readings as part of his reflections, even though he did not enjoy doing so. "But I think it was too much theory actually in the readings that, you know, you don't really-- you need, but it's always to back things up, you don't want to requote what you read. You want to write more about what you saw and what you did" (D.B., p. 2).

Resistance. D.B. appeared to have resistance only towards content reflection. However, he did notice resistance among his classmates. According, to D.B., certain classmates did not want to reflect on their past within the group discussions, as they did not feel comfortable sharing their stories. He said that he felt that some of the students were shy and therefore did not feel safe enough to reflect openly. However, he did realize that some students did not enjoy both the group and the written reflection, as they just simply did not want to do the work.

Student/teacher relationship. Prior to the class, D.B. felt that he already had a good relationship with the professor and therefore the reflections did not really have an effect on his student/teacher relationship.

Critical thinking. D.B. found that the weekly reflections encouraged him to look beyond the required readings and relate them to his past experiences. Through the reflections he was able to see his past experiences in a new light. "And you know, in every journal I wrote I had brought up discussion from when maybe I was in kindergarten--not kindergarten, but public school or high school about my teachers and the way they would teach the class or about, um,

classrooms in general and how the class activated with the teacher and how they taught" (D.B., p. 2).

Higher level needs. Through the letter correspondence it was evident that D.B.'s higher level needs had been met through a discussion of his needs as a learner. However, this was the first time that D.B. had ever been asked to think about what his needs as a learner were, and therefore it was difficult for him to actually name his needs. Even though he felt extremely comfortable doing the activity, he was unable to describe his needs as a learner. "I felt very comfortable doing it, I actually had to do it in another course at the same time that this course was going on. But I felt very comfortable, but I didn't know what I needed. I wasn't sure what kind of learner I am. And I don't know if I still do. It was a very hard question for me to answer to him. And I didn't know exactly--it wasn't that I wasn't comfortable, I was very comfortable, but I don't know what kind of learner I am. And I think it's just a combination of everything that I am. I found it hard writing that to him, because I didn't know what to write, like I said. And that was just me, not knowing"(D.B. p.6). However, D.B. did find that reflection allowed him to look at things more closely. "You look at it more closely to what is going on and you think about what's going on that's good and what's bad and what you need."

Disadvantages of reflection. D.B. appeared to have had a relatively positive experience with reflection at the undergraduate level; however, he did see some disadvantages to reflection in the classroom. One of the first disadvantages that D.B. described was that the weekly reflections became somewhat repetitive by the end of the term, and therefore his interest in

reflection began to decrease. "I thought a lot of it was, ah, it was overlapping. From week to week, it was the same old thing. A lot of the weeks and the journals I would think about the same stories that I thought about from when I was in public school or high school, whatever. So I was often writing the same idea from week to week or from one discussion to the next, and using that in my examples"(D.B., p. 2). "Well, I think because it was repetitive for me, I think the beginning it was more, well, it wasn't as easy to reflect but it was more interesting to me to reflect on what I thought. But by the end it had got, you know repetitive, but also easier by the end because I knew what I was thinking about and I knew what I needed to write" (D.B., p. 3). Another disadvantage mentioned by D.B. was in the open group discussions that involved reflection. Certain students within his group did not feel comfortable sharing experiences with the rest of the group, and therefore it made it difficult for the group to have discussions.

Benefits of reflection. One of the major benefits that D.B. was able to see in reflection was that it enabled him to relate the course content to his own life experiences. "I think that was a major learning that anyone really—well, I myself, I think everyone did—that because you could reflect on what was going on in your life"(D.B., p.2). Another benefit of reflection in the classroom that D.B. noticed was that it allowed him and others to express themselves. Furthermore, D.B. felt that the opportunity for students to express themselves was important, as he saw it as the best way for people to discuss what they feel, and if they do not know how to do that then reflection is a good way for them to learn.

Suggestions and recommendations. D.B. had some suggestions for undergraduate professors who use reflection, one of which was that the guidelines for classroom reflection

should be open ended. He felt that if the professor left the reflections open, then it would allow for greater opportunities for self-expression. However, D.B. did state that the professor needs to make sure that the expectations are clear. In D.B.'s class he found there was a lot of confusion among the students as to what the professor expected as the end product. So, even though D.B. felt that the reflections need to open ended, the professor does need to provide the students with some sort of guidance and a little bit of structure. "I think if the structure was better it wouldn't have been as repetitive…because when it came down to it, no one liked talking about it within the class--we didn't know what we were doing. And a lot of people had to keep going back on the subject and saying, 'we don't know what we're doing, we have to just--you know, tell us what we're doing.' And whereas the teacher had already said 'this is what needs to be done, just do it.' But I think they didn't know how to put it in their words, how to fit the structure"(D.B., p.4).

Desire to continue with reflection. D.B. appeared to have a generally positive experience with reflection; however, he did not feel as though he learned how to reflect from the course itself. D.B. felt as though reflection was just part of his life and it will continue to be a part of his life, just not in the form of writing.

D.B.: "Well, I think--I don't think it's something that I would have learned from the course itself, maybe keeping a journal is something that I should do. But I think I've reflected on everything that's happened in my life and it's just something that humans do. They always reflect on: should I have done this, should I do it this way, should they be like this, should they be like that. I don't think it's anything that the course itself taught me, but I'm sure that everything I do in life I do reflect on it. Either I look at it as being a

positive, benefits me or maybe a negative or should I have done this should I have done that?"

D.P.: "But you don't necessarily feel that you need to write it down?"

D.B.: "No I don't think you need to write it down, but it's often--it's the lessons in life that we learn but then do we remember them the next time we come to the same fork in the road kind of thing" (D.B., p.6).

C.K.

At the time of the interview C.K. was currently enrolled in a Master's program at the southern Ontario university and was in the process of writing her Master's thesis. The year previous to the interview, C.K. had participated in two classes that included a reflective component. In addition to writing her Master's thesis, C.K. was also enrolled in the preservice program at the southern Ontario university, in which she was also experiencing reflection in the classroom. The interview was approximately 45 minutes in length and focused on her experience with reflection at the graduate level; however, she did have some interesting comparisons with reflection at the preservice level.

Type of reflection. In the first graduate class (taught by S.O.), C.K. was required to do a weekly reflection after every class (Thursday nights only). Each reflection was to be divided into two separate columns; one column discussed the required readings and previous class discussions and the other column discussed how the issues in the readings applied to education. At the end of the semester the students were also asked to write an end-of-term reflection discussing their experiences with the course. Each weekly reflection was to be two pages in

length and the final one was to be five to six pages in length. In her other class (taught by J.D.) she was just asked to write an end-of-term reflection on the class itself and provide a general description of how she felt about the class.

Process reflection. C.K. felt as though she did not experience a great deal of process reflection in her graduate classes. Although the end-of-term reflection in J.D.'s class was intended to be a process-based reflection, C.K. did not feel comfortable reflecting on the process of the class. C.K. did not enjoy the class, but did have a lot of respect for the professor and did not want to insult him, so she chose to reflect on the course content. "Even though I enjoy him, I didn't enjoy the class as much as I thought I would. And I found it really hard to reflect negatively on somebody that I respected a lot" (C.K., p.1).

Content reflection.   In S.O.'s class, C.K. found the reflections to be extremely content based, which she did not enjoy. C.K. stated that the reflections were to be based in discussions of the required readings, which made it difficult for her to reflect as she had trouble with the readings themselves. "And a lot of the reflecting that we did was just on the readings or, you know, what we had mostly the readings and stuff. It didn't really have to do with your own personal experiences. It didn't have to do with um--Maybe a lot had to do with topics that didn't have any personal attributes to them. You know, like theories of education and stuff. How can you have a personal note on stuff that you can hardly understand, you know…and also and a lot of the issues which we talked about in S.O.'s class had a personal content too or could have had a personal content too, but I felt like it was too much on the theory part and less on the education part" (C.K. p. 5).

Resistance. C.K. had a great deal of resistance towards the reflective component in her graduate classes, and the source of her resistance lay in lack of safety in her environment. C.K. did want to reflect, however, she did not feel safe enough or comfortable enough in her graduate classes to express herself and her true feelings about certain issues. Furthermore, she felt that the structure of the reflections in S.O.'s class did not leave room for her to include her own insights about particular issues. C.K. also did not feel comfortable with the fact that the professors were grading her on her reflections. To her, reflections were a time to comment and discuss what was going on in the classroom and the course content, and she did not always agree with what was transpiring. However, since the reflections were graded, C.K. felt that she marks would be deducted if she expressed her true feelings. Therefore, in order to avoid this degradation, C.K. would write about what she felt the professor wanted to hear. "Like at the start you think, Oh okay, everything is going to go okay. They are not--they are going to like this, but if, then, what if they start to not like what you are writing? You kind of are going to start to pander to them. So, you have to turn directions and you try to write down what you know they are going to want. Which totally defeats the purpose of reflective writing"(C.K., p. 2).

Student/teacher relationship. In J.D.'s class C.K. found that her existing positive relationship with the professor had a negative affect on her reflections. As stated earlier, C.K. enjoyed J.D. as a professor and held a lot of respect for him; however, she did not enjoy his class. She initially enrolled in the class because he was teaching it and she had a good rapport with him. However, when it came time to reflect on the course she could not be as open and honest as she would have liked because she did not want to personally offend. Instead, she wrote

what she thought he would want to hear. However, C.K. does not necessarily blame the professor for this occurrence. "It's not necessarily the prof that makes you feel that that way. I think it is the process. I don't think it has to be with the prof personally, it just has to be with the fact that they are the professor. This is something that they care about. Obviously, because if they are getting you to write this way obviously it means a lot to them. So if you don't enjoy the process, then in a way you are kind of doubting them but you are not--it is not supposed to be a personal thing I mean, the writing is not supposed to be personal, but the way that you feel about the writing is personal toward them, but it's not the prof that makes you feel that way it's just the fact that there is a prof involved" (C.K., p. 2).

Critical thinking . C.K. did not enjoy her experience with reflection at the graduate level, and part of what she did not enjoy was the overemphasis on critical thinking. She felt that some teachers were pushing too hard for critical thinking and at the same time,because they were her reflections, she did not feel as though she could truly provide her critical view on the course and the content. "I think in the Masters they teach you to think critically and to question and stuff, but I think the profs do a little too much of it. To make you feel comfortable--like they are trying to teach you to question everything but they are questioning you, so you find you can't really express yourself." (C.K. p. 5)

Personal stance. Since the reflections in S.O.'s class focused primarily on the course content and educational theory, C.K. felt as though there was not a lot of room for personal growth. C.K. felt that the focus on educational theory did not leave her room to express herself and take a personal stance on the issues discussed in the course.

Furthermore, since she was concerned that she would be graded poorly or that she would offend the professor if she disagreed, she was also afraid to take a personal stance on the issues discussed in class.

Higher level needs. C.K.'s higher level needs were not met in her reflective experience at the graduate level as she did not feel comfortable in the reflective setting and did not feel free to fully express herself.

Disadvantages. Overall, C.K. had a very negative experience with reflection at the graduate level. There were several factors that played a role in her experience; however, one of the dominant factors was that she did not feel safe within her reflective environment. As stated previously, since she did not feel comfortable expressing herself, she started pandering to what she thought the teacher wanted to hear. Another disadvantage that C.K. encountered was that professors pushed her too hard to critically reflect, which in turn made her even more uncomfortable. Another disadvantage was that if the reflections are evaluated and graded, then the student is sometimes incapable of writing a true reflection. "Well, the fact that they were handed in to the prof every week or whenever. I found that we couldn't really reflect in an open manner because you couldn't say exactly what you felt because the prof was reading it, so it wasn't as much about the writing. It was more about being correct about what you said. You know what I mean. Because I didn't--like if you didn't agree with something or if you didn't like something you felt like you had to put a positive spin on it. Which isn't necessarily how you want to write" (C.K. p. 1).

Benefits of reflection. Although C.K. did have a rather negative experience with reflection at the graduate level, she was able to see one benefit of reflection. C.K. stated that reflection is a good way to make sure that students are doing their readings and performing the required tasks. She also stated that "the weekly journals were also a way of, if you have the guts to I guess, to tell the professor what you like about the course or like--having to do it, like I mean you can do the same kind of thing in class but it is harder to say something to somebody's face than it is to write what you feel and then just hand the thing in. Yeah, they know who did it, but by the time it gets back to you, if something was really upsetting to the prof, they've cooled down or you've cooled down and all parties are okay. So it's kind of a nice way of airing things without making things too difficult for anyone. Okay. A lot of people are more expressive in writing than they are in speaking" (C.K., p.3).

Suggestions and recommendations. Although C.K. had a relatively negative experience with reflection in the graduate classroom, she did feel that reflection in the classroom can be positive, but educators need to use it carefully. She said that her experience could have been better if she was not afraid that the professor would critique or judge her responses. One way that she thought this could be avoided was if reflection was not graded but rather just checked for completion. "Maybe not have things handed in, like we were to hand it in and they were marked every week…Maybe just even a visual that you had it done…Because I don't think it is a contest then. I think because it is such a personal, a personal nature, like reflective writing, the title has a personal nature involved in it, so if you are. If you know it's not going to be handed in maybe you will be putting more personal things in there and then it is better writing. And I don't know

how they are really going to mark your reflective writing if they don't read it but-it just kind of seems a little bit hard to write properly if you know it is going to be graded" (C.K., p.4). Another suggestion that was proposed by C.K. came from her experience with reflection in the preservice program. In one preservice class she found that her experience with reflection improved when she was given better guidance by the professor on what was expected. "She not just [only] tells us what to do, but shows us how to complete things, like we have had countless examples on reflective writing and writing the kids have done and have seen the positive outcomes of it. So I think, definitely, after that experience I definitely would. Like I have kids doing, writing logs down in my classes and poetry and stuff that I normally wouldn't do. She has had such a positive effect on what I think about it" (C.K., p.4).

One final suggestion that was made by C.K. was that in order for the students to enjoy reflection in the classroom it is important that the professor shows that he or she has a vested interest in reflection as well. An example she gave was that her preservice professor was extremely passionate about doing classroom reflection, so in turn she was positive about reflection. "I think it is good that I have had both positive and negative experiences, but based on what I have encountered in teachers college in the language arts class with the teacher I am doing it with now she absolutely loves writing, and reflective writing, journals, logs all that kind of stuff. She enjoys it, and I think in turn I have learned to enjoy it more because she does. She has passed that on and she has us do a lot of it" (C.K., pg 4).

Desire to continue with reflection. Based on her experience with reflection in the graduate classroom, C.K. said that she would not continue using reflection in her life or practice.

However, after her experience with reflection in the preservice classroom, C.K. said that she would continue to use reflection with her future students and within her own practice.

U.C.

At the time of the interview U.C. was currently enrolled in a Master's program at the southern Ontario university and was in the process of writing her Master's thesis. The year previous to the interview, U.C. had also participated in three classes that included a reflective component. The interview was approximately 40 minutes in length and focused on her experience with reflection at the graduate level.

Type of reflection. U.C. participated in three different types of reflection. The first two classes in which U.C. was enrolled were the same classes as C.K. In the one class (instructed by S.O.), she too was expected to do a weekly reflection after each Thursday night class. In the second class (instructed by J.D.), the reflective component consisted of a 5-7 page end-of-term reflection on the course itself. In the third class, in which U.C. was enrolled, the reflective component consisted of the completion of weekly response cards that pertained to the required course readings. In the response cards, the students were encouraged to comment on the readings and ask questions pertaining to the course, the readings, and education in general.

Process reflection. U.C. experienced process reflection in J.D.'s class through the end-of-term reflection. According to U.C., through the end-of-term reflection she was able to reflect on what made her the person she was. " J.D. I think, was more pushing us to personally reflect, maybe not our requirement for the course but definitely pushing us to do some kind of reflection

on our old ideas, old ideals, see if we could change that kind of perception of other things" (U.C., p. 1).

Content reflection. The weekly reflections completed by U.C. appeared to be content--oriented reflections through her description of the experience. "In S.O.'s class we had to reflect on the readings we had done, so we would read something and reflect on that but we would also reflect on the classroom. We'd reflect, pretty much, pretty open on what we wanted to reflect on" (U.C., p.2). The response cards also appeared to be rather content focused, as the main purpose of the cards was to reflect on the readings and provide comments and questions pertaining to the content of those readings.

Resistance. U.C. appeared to have no resistance towards reflection at the graduate level, nor did she notice it among her fellow classmates.

Student/teacher relationship. U.C. found that in the three courses the reflections allowed her to be closer to the professor and allowed her to ask the professor questions that she might not ask in class. "I think what would be of benefit would be that you get that instructor's time. You know what I mean, it's not time you sitting they're talking to them but its time they are spending on you outside of the class. They're reading what you write down and as long as you are understanding and you do the reflection in a proper way then it should benefit what the teacher is learning about you and through that learning about you then that should come out in the way they teach. And that makes me feel special in the classroom. You know what I mean. Or whether it's like I write on the day I wasn't feeling well this week. I'm sorry I'm not into this

journal entry, but next week or whatever some teacher pulled me aside and asked 'How are you feeling this week? Are you feeling better?' It's kind of like caring for you and a lot of university students don't get that. The reflections allow them to show you, you know, a personal side of the instructor and the instructor shows it back"(U.C., p. 1).

Critical thinking. Through the reflections at the graduate level, U.C. was able to engage in critical thinking as J.D. encouraged her, specifically, to evaluate her ideas and ideals in her end-of-term reflection.

Personal stance. U.C. mentioned that through her reflections she was able to make personal notes on specific issues discussed in class or in the readings. By making the reflections personal, it made the experience worthwhile for her.

Higher level needs. In the interview, it did appear that U.C.'s higher level needs were met as she did mention that the reflections allowed for self-expression. "You can say things that maybe you don't want the rest of the class to know, or maybe you come from a situation that directly reflects the article you're reading and you have a situation that, you know, you would like to ask or have questions about but it's not, you know, full class activity" (U.C. p. 2).

Disadvantages of reflection. U.C. had an extremely positive experience with reflection at the graduate level; however, she did see one negative aspect to the weekly reflections. "I think it was every week. I thought that was too much. It got a little repetitive. I felt like I could just

cut and paste stuff because really the class wasn't that interesting. For me there are certain things I like to reflect on because this was the first introduction to this as graduates but it got to be pretty repetitive very quickly and I think that was just the way it was set up" (U.C., p.1).

Benefits of reflection. Overall, U.C. had a positive experience with reflection and was able to see several benefits in the use of reflection at the graduate level. To her, one of the greatest benefits was that reflection allowed the student to have some of the professor's time, even though it was not face to face. Through all of the reflections U.C. found that the students were able to ask the professor questions that perhaps they would not normally ask in class, and in return the teacher was able to respond. Furthermore, with the response cards in particular, U.C. found that she was able to ask questions, and since it was only an index card she did not have to write a great deal to get her point across, nor did the professor have to read a lot to get to know her students. U.C. also found that reflections at this level allowed her to connect the course content and learning theory to her personal experience. "I think at this point if it's course content and not connecting with your actual real life, it's beyond. You know what I mean? We're talking, 5, 6 years in university. If I'm not specialized by now I'm wasting my money, so I think it allows you to connect to the content, for sure, but it allows you to do it in a personal way more so than sitting there reading it, going to a seminar, and asking questions, and you can never talk, especially for those people who don't enjoy speaking in class. For me it has never been a problem, but there are definitely some people who are very intelligent and have great points but just can't bring them up in class, and it gets brought up in their reflection instead" (U.C., p. 2).

Suggestions and recommendations. Even though her experience with reflection was a positive one, U.C. did have some Suggestions and recommendations for professors using reflection at the graduate level. U.C. did enjoy the weekly reflections; however, she felt somewhat restricted by the format and therefore suggested that professors need to take the students' needs into account and give minimal restrictions when assigning class reflection. She also felt that professors need to make sure that they do not overload the students when they are introducing reflection to the classroom. "I think you have to watch too much too soon. For us the first time running to doing reflections was in S.O.'s class, and you have to reflect and you have to do it every week. And you have to do two pages and I don't think that's fair just because, you know, that was the first time for a lot of us that we ever had to really reflect and putting limitations on it and saying you have to do this and you have to do that kind of made a lot of us feel that we were just doing it for the sake of doing it, and that's not how it should be done. I really think if you are going to initiate a reflective as part of your program or anything like that, then you need to really think about what your students need and how it will benefit them. It's not going to benefit them if it's every week and you set certain criteria on it, I don't think"(U.C., p. 2).

U.C. felt that professors should replace the limitations on reflection with guidance. Especially in her case where it was her first class as a graduate student and her background was extremely science based, she needed clear instruction so that she knew what was expected in the reflections. "For me, I'm more science based than most of the people in education, and I think that could be the reason why I found fault with it. I'm not the writer. I'm not. I, like, this is the information, that kind of thing, so for me, I think, I needed something more along the lines, this is where we'll start and this is what I want, so maybe the first week I will ask you to reflect on

the class itself. Okay, the next week we're going to reflect on something else, so it's not pages of upon reflecting pages that is not relevant. It's kind of a process. I know you talked about doing that with smaller children in a classroom, you know, doing pictures and things like that. I think that procedure needs to be followed, and I think for a graduate student coming into that there also should be a procedure, you know" (U.C., p.4).

Desire to continue with reflection. After her experience with reflection at the graduate level, U.C. stated that she would definitely continue using reflection within her own practice. "Definitely, simply because no matter what I do I'll be working with people, and yes I do do exercise physiology and I do all that, but reflections should be a component in that and it may not be a component where I write down in a journal or something like that, but I definitely need to take time to reflect. You know reflecting on, for me, I'm dealing with menstrual cycles and things like that and, you know, these girls are 14, 15 years old and I need to keep an eye on them that they rather I wouldn't...I need a temperature and the only way you get that temperature safely is not the way any other person would want it. You know when you reflect on that and think about, you know, if I was 14, how would I feel, so I think it's really important how reflections and life experiences with it, I think, are good in general. That was the most relaxed year, that was my first, kind of, eye opener, so I really think you need to, I really do, no matter what field it's in, whether you're a teacher and you want to reflect on a class or a lecture you have had or whether you're under-grad students and you want to reflect on the bad mark you got" (U.C., p. 3-4).

Analysis Level I: Within-Case Analysis of Professor Interviews

As stated previously, this study involved semistructured interviews with the 6 participants. Along with 4 students, interviews were also conducted with 2 professors. Upon completion, the interviews were transcribed and names were coded for confidentiality. Again, the names of any southern Ontario university professors, southern Ontario university courses or students mentioned in the interviews were also coded to protect the anonymity of those individuals. Direct references to the interviews are accounted for by the individual's code (i.e., T.H. and C.D.) and the page number of the interview from which the quote is taken.

As with the student group, a within-case analysis was done in order to develop resonant themes. Within the professor group, the following descriptive categories were generated and emerged as points of departure: type of reflection, process focused reflection, content focused reflection, resistance, critical thinking, relationships, engagement, disadvantages of reflection, benefits of reflection and suggestions/recommendations. Each category was then subdivided using headings that emulate the different components of their reflective experiences. The entries fitting these subheadings were also defined as they emerged from the data. The description of the categories were the same as the student group except for the following:

Relationships:

Student/teacher relationship   -the notion that reflection
                                                helps improve the
                                                student/teacher relationship.
                                                "I'm very invested in their
                                                work, I care about how they

turn out. I think they know

that" (T.H., p. 10).

Relationships

Peer-student

-the notion that reflection affects peer student relationships. "They write the journals, I get a copy of it, but they also share it with two or three people in the group for the whole entire time. I find that's the most powerful of them all because, I don't know, they push each other" (C.D., p.1).

Resistance

-The professor's observations of resistance from the students towards reflection in the undergraduate or graduate classroom. "You know, they resist and in the 12 weeks I have with them some students have an incredible

journey and some see me as someone who has imposed her beliefs on them" (T.H., p.3).

Engagement

-The professor's comments on whether the students were engaged in the reflective activity or not. "Some people really embrace it and off they go, you know, and other students they're not ready to engage in anything, critically or reflectively" (T.H., p.3).

Several suggestions, recommendations, disadvantages and benefits for reflection were described by the participants and will be listed within the respective categories.

Professor Participant Descriptions

As stated in the methodology in Chapter Three, the professor participant group consisted of 2 professors. One of the professors was a professor from the faculty of Physical Education at Brock University and taught various courses within the department as well as in the department of Women's Studies and in the Master of Education program. However, she was selected primarily based on her experience with using reflection as an instructive tool at the undergraduate level. The other professor was teaching in the Master of Education program and

81

the preservice program at Brock University at the time of the interview. She was selected based

on her experience using reflection as an instructive tool at the graduate level. The participants

were recruited via e-mail or through telephone conversations. Both participants participated in a

tape-recorded semistructured interview in their respective offices at Brock University.

T.H.

At the time of the interview, T.H. had been a professor in the faculty of an undergraduate

program for 10 years and had been using reflection in the undergraduate classroom for over 12

years. Through her years of teaching she has tried different types of reflection in various

undergraduate and graduate classrooms. The main focus of the interview was on her experiences

using reflection specifically in the undergraduate classroom. The interview was approximately

50 minutes in length and described several of her experiences using reflection in the classroom.

Type of reflection. T.H. described several different kinds of reflection that she used in

the classroom. One of the more explicit types of reflection used in her classroom was described

as journal writing. In these journals the students are asked to discuss their experiences within

their out-of-class placements which were a requirement of the course. "And in the journal I ask

them the explicit question, 'Please reflect on how this experience affected you as a person.' So

that's explicit reflection. Um, sort of hitting them in the face with a shovel reflection, right?"

(T.H., p. 1). In addition to the journal, the students are also asked to organize a physical program

delivery for their disability placement. T.H. found this exercise to be reflective as it "forces

reflection on their own abilities as administrators, um, and the policy that they come up against

in the disability field. The resistances in the field itself, the barriers to, ah, running programs within the field itself. In spite of everyone's best intentions and awareness that this is good for people, we still have barriers and we still have resistances. Um, and those are valuable lessons for students to learn. Those are explicit reflective assignments built into the disability courses, and I put them in there explicitly as reflective assignments" (T.H. p. 2).

T.H. also uses a "Policy or Practice Critique" as a form of reflection in her teaching. Within this reflective exercise the students are asked to go into their field of study, in this case, disability, and do an analysis of readiness to deal with their field of study (disability). T.H. gives her students a choice of doing this exercise or participating in an exercise she calls "an invisible theatre." In this performative reflective exercise, groups of students pick a disability that they have studied and go out into society with one student pretending to actually have the disability. The students go to various places, such as the mall and the movie theatre, to observe people's reaction to the individual's disability and to discover the available accessibility for individuals with a disability. T.H. found this activity to be extremely reflective "Because you can't do invisible theatre without fairly deep reflection on the issue that you are trying to perform and the disability that you're trying to perform. So that is a reflective assignment as well" (T.H., p. 2). Within this course the students are also asked to do a video analysis in which they watch a video that involves an individual with a disability. After watching the video, the students are asked to analyze the video and discuss what transpired.

Two final reflective course components T.H. discussed were a critical incident report that she used in another course and a reflective activity with her thesis writers. This assignment entails the student writing about a critical incident in their life, and at the time of the interview she also had the students share their critical incident with their peers to do a peer evaluation. For

her thesis writers, T.H. asks them to write about how the process of writing their thesis has affected their life. In this process, she finds that she gets to learn about her students and see how they change throughout the course of their thesis.

Process based reflection. Although T.H. described herself as a somewhat content-anxious professor, she did describe some ways in which she tried to do some process-based reflection. In particular she found that the video analysis helped her to include process in reflection. "You unpack the video, you unpack your own bag in the process of unpacking the video. Um, so that's significant reflective action" (T.H., p. 2). She also found that it was easier to focus on process in her education-based courses, as she felt that the process of learning to teach can often become the student's content. She felt that the content that one learns in the reflective process often has a transfer to the content of teaching. "In some courses it's easier than others. In education-based courses the process can very easily be converted to content, so I'm much more loose and free in my education courses with the process content flux. Right?...Because it's easy for one to become the other" (T.H. p.6).

Content based reflection. T.H. found that she was particularly content anxious in her disability courses; therefore, her reflective assignments were strongly based in the recognition of the theories taught in class. "In courses where I have to teach movement education as a theoretical framework and where I actually have to teach background on a specific disability, so that when they leave they know the difference between a spinal cord injury and cerebral palsy. Because there is actually a human who will be affected by their incompetence. Then I'm a little more anxious, and so the assignment has more structure. So the reflection is part of a larger

structure; it's not the only focus of the assignment. But in a course where I can actually show how reflection becomes reflection in action, how you make that shift to the, ah, sort of--your whole comportment is infused by your philosophy. So, you can no longer tell, you know, the deed from the doer as it were. Now I would like to see that happen in disability, but I'm anxious that if I don't do content in some way, shape, or form with some intensity and some sanctions for not knowing it, then they will leave and not know it" (T.H., p. 7).

Resistance. After several years of using reflection at the undergraduate level, T.H. was able to describe instances in which students were resistant towards reflective assignments. T.H. was also able to discuss where some of the sources of resistance existed and was able to provide some suggestions specifically for dealing with resistance. To begin with, T.H. stated that there are two levels of resistance, active and passive resistance. She stated that some students would often passively resist reflection, especially critical reflection, because they are simply afraid or unable to think in that manner. For example, in one of her classes in which I participated, she would constantly ask her students to reflect on her readings and dig deep into the subject matter and reflect. Most of the students were unable to do this and therefore did not reflect. T.H. had to walk her students through the process during the first few weeks, in order to receive the reflective answer she desired.

> T.H.: "Um, and it was tough, you know, and you got to do a fair bit of handholding when you do that the first 2 or 3 weeks.
>
> D.P.: Yeah, like 'what does this mean? What does this mean?'
>
> T.H.: 'What does this mean? What does this mean? What does this mean?' But you guys rolled it over, like three weeks in, you rolled it over. You got it. You know? Um, you

weren't actively resisting, you were just bloody terrified. So there's a difference

between, like terror and resistance. You know?

D.P.: Yes.

T.H.: Because you weren't resisting learning, you were just catching up"(T.H. p.5).

Other students who participated in T.H.'s class actively resisted reflection; in other words

they deliberately to do not complete the reflective component or just simply did not engage in the

experience. "So, I'm fairly interventionist around passive and active resistance. In my seminars I

take off grades for it, in [a course involving women's issues]. If I have someone who's an active

resister in my seminars I take off marks for it. They can express their opinion, but they can't

dominate with their expression of their opinion. So when they become a dominator they're

resisting the process and I will take off marks. And I tell them at the start of the year, 'this is

what I will do if you dominate, I'll take off marks.' Speak all you want. Um, so there's a um, but

then you got to follow through with that, you got to have the guts to follow through with it then.

So that's how I deal with resistance, but I don't pretend that it won't happen and I don't make it

personal. I never assume it's personal. I assume it's timing. Developmental [laugh]. It's not

personal, it's developmental" (T.H., p. 5-6).

Relationships. T.H. stated that through reflection in the classroom she observed a

positive development in both teacher/student relationships and peer-student relationships.

Peer-student relationships. Through peer evaluations of critical incident reports,

T.H. stated that her students learned about their fellow classmates and learned how to

evaluate their peers properly. "So they have to describe a critical incident and they have to tell me what made it critical. And then they have to relate it to a theory. Um and this year in [one course] I've got them to do a peer evaluation of each other's critical incident and I evaluate their evaluation of their peer. So it gains you nothing to give your buddy a great evaluation because your evaluation will be evaluated" (T.H., p. 3).

Teacher-student relationships. In regards to student/teacher relationships, T.H. found that the use of reflection in the undergraduate classroom helped her to develop a better relationship with her students. She felt that through reflection she was able to become closer with her students in two ways. She first was able to become closer with her students by using the journals and critical incident reports as a way to find out how the course or their placement experiences have affected their lives. The second way in which reflection helped T.H. build a better relationship with her students was by allowing her to show her students that she cared about their needs. "I think they understand what drives me, I think they see me as a political person. Not some dispassionate individual, who just grades their work. You know? I'm very invested in their work; I care about how they turn out. I think they know that. I mean, they don't like everything I do, but they know I care about how they turn out. They might not be crazy about the things I put them through, but I think there are very few people who leave my classes who don't feel like I gave a shit. You know? Or about how they functioned as learners, number one, and about the people they are going to interact with, number two. You know? So I think those are valuable for the learner" (T.H. p.8).

Engagement. After over 10 years of using reflection in the undergraduate classroom, T.H. has had the opportunity to see students become engaged in the reflective experience and also see other students reject the experience completely. However, she said that the level of engagement was dependent on whether the students were ready for reflection or not. "And some of them have profound experiences in the disability placement and some of them are just as pathetic coming out as they were going in. So they didn't engage in it in a reflective way, you know, and it could be a measure of their emotional maturity at the point of their placement. That they want to get in and they want to get out of there, and this isn't something they are investing in. I have spent a number of years with journals in the disability courses and it was excellent because it was de-cored a number of years ago, like an apple right. So it was core when I first got here and I had big classes, half of whom didn't wish to take it, but it's core they had to take it and the journals reflected that" (T.H., p. 1).

Critical thinking. Through classroom reflection, T.H. felt that the students were able to engage in critical thinking. The reflections allowed the students to dig deep into the readings and go beyond just the surface meaning of the content theory involved.

Personal Stance. T.H. stated that the reflective assignments, such as video analysis and critical incident reports, help the students to take the required course readings and deconstruct the theory involved so that they could place a personal philosophy on the issues involved. "So the reflection is part of a larger structure, it's not the only focus of the assignment. But in a course where I can actually show how reflection becomes reflection in action, how you make that shift to the ah sort of--your whole comportment is infused by your philosophy" (T.H., p. 6).

Higher level needs. According to T.H., reflection in the classroom helped her to meet the higher level needs of her students by giving them opportunities to learn about themselves through critical incident reports and placement journals. "Um, so they learn something about themselves as learners and they learn something about themselves as people. They learn their good points and they learn their not-so-good points. Whether that becomes explicit in the reflection is irrelevant to me, I know it's happening. You cannot do critical self-reflection and not find out your flaws as well as your good points. You know? And people don't like talking about their flaws, but you can't run from them when you do reflection in a course, you can't. You might not write it, but you can't hide. So, people in my disability class, for example, might not say 'I just don't think that I'm cut out for this work,' although some of them do. It's valuable insight to know what you shouldn't be doing" (T.H., p. 8).

Disadvantages of reflection. Although T.H. found reflection to be a positive experience for both her and her students at the undergraduate level, she did state that there were some disadvantages to the process. The main disadvantage to reflection in the classroom was the time component involved in evaluating the reflections. "The time investment is profound, um, like you really have to be willing to give over immense amounts of time to do evaluation. Like, you really have to believe that the evaluative process is a significant enough component of your life as an academic to devote immense amounts of your time to it. Because, you know, depending on how you time your assignments, and I time mine pretty well, from about week five onward, I do nothing but grade and evaluate. Nothing but that, every day. Right? Every day! Because if I get

behind then I can't do a worthwhile evaluation, I have to do a cursory, superficial response. Which defeats the purpose of doing reflective work" (T.H., p.10). Another part of reflection that T.H. found time consuming was that she had to keep long office hours so that the students could feel free to come and talk to her about their experiences when necessary.

The other disadvantage that T.H. saw in using reflection in the classroom was that it was not recognized by some of her colleagues as a valid form of instruction or study. Specifically with her "Revise and Resubmit" policy, some colleagues felt as though she was just trying to gain the students' popularity, whereas she saw it as a way for them to work at their writing and improve their literary skills "They think you're breeding popularity with your students. But it's a total misunderstanding of what goes on in the process, like people don't realize that a student doing the same paper three times is working. They're earning the A; I'm not giving them the A. Right? In many cases, the student would just as soon get the paper back and say forget it. And making them do it again, and then again. This is not fun for the student, right?" (T.H., p.11).

Benefits of reflection. One of the first benefits of reflection in the undergraduate classroom was described by T.H. as the development of self-honesty. Through reflections, T.H. felt as though the students were able to look at themselves and discover inner thoughts on various issues and followed through on what she described as a "political transformation." For example, the video analysis allows her students to not only "unpack the video" but also "unpack their own bags as well"(T.H., p. 2). T.H. also noted that, through reflection, students appeared to develop a narrative style in which they were able to discover the positive and negative aspects of their actions. T.H. felt this was important as it allowed the students to continue their political transformation and take a stance on the course content. "You find your 'plus' and your 'minus.' I

think you learn to write in different ways; you learn to create narratives instead of reports. I think that's very helpful for students to develop their narrative style, how do I write as a writer. Um, I don't think you get to do that if all you do is formal papers. Because you write like the APA journal tells you. But you don't develop a narrative style. I think narrative style can be very liberating. I think it allows them to expand their vocabulary, I think it gives them access to a political discourse that subject matter need not give them access to, as content per se. Because most content pretends to be apolitical [neutral] too. So you don't get a sense of a political discourse, but I think you can with reflection" (T.H, p. 9)

Suggestions and recommendations. In the interview, T.H. described a few suggestions and recommendations that she felt could help professors with their use of reflection in the undergraduate classroom. T.H. found that in order to keep students interested in reflection it was important to be creative and to provide students with options. As mentioned earlier, T.H. felt that it was important for professors to make sure that the students were emotionally ready to participate in reflection. Therefore when first introducing reflection to the classroom, T.H. felt it was important to start small and to always have a back-up plan. "I would say start small and get your feet wet. There is no need to jump in up to your nose on the first reflective getgo, right? Out of the gate. Start small and see if it's what you want. It's like with my personal training clients. I ask them what time they can give me and they say 'Oh, I'll train as many days as you're going to give me. I'll train 7 days a week!' And I'm thinking, wow, and you'll hate it. So I say, why don't you train 2 days a week and then if you really like it we'll improve it, we'll increase it to 3. You know? So, I'd say for reflective work for someone who's never done it before or who's new to this kind of thinking progressive, loading is the way to go. You need to

start small and then as you get more comfortable with it you, you know, you infuse it more into your course. And I'd say, um, shadow someone else who does it for a semester and see how it works. Right?" (T.H., p.10). Once the students have moved into reflection, T.H. also felt that it was important for professors to remind their students to keep on top of their reflections (journals specifically) as the true reflections only work over time.

Along with having a back-up plan, T.H. also felt it was important not to take things too seriously and to remember that reflection is very dependent on development. If students are not developmentally ready, then chances are they will not be able to reflect immediately; therefore, she felt it was important for professors not to take that personally. "You know, have a back-up plan. Have plan B, if plan A just blows up, have plan B. Always have plan B. You know, have a sense of humor. Don't take yourself too seriously, that's what I would say. And don't take anything personally, some people are not ready" (T.H., pg 11).

Finally, to help alleviate some of the time investment involved in introducing reflection into the classroom, T.H. felt it was important for professors to set some limits. "And then having to create limits, so students know you have limits. No, I won't be reading my e-mail after 10:00 p.m. and getting back to you then. You know, I'm not going to do that. So setting limits is tough, because you have to hold to them or else you'll be just at everyone's beck and call 7-24. Because then you will become resentful when you get to that point. I don't want to be resentful, but I don't want to be taken advantage of because of the time that I am willing to give my students" (T.H., p.11).

C.D.

At the time of the interview, C.D. was a professor in a Masters program at the southern Ontario university. Through her time as a professor she used various types of reflection in both the graduate and the preservice classroom. She was selected for the study based on her experience using reflection as all instructive tool within the graduate classroom.

Type of reflection. C.D. named three different types of reflection that she uses in the graduate classroom. The first reflective exercise that C.D. uses in the classroom is a journaling process in which the students write about the literature discussed in the course and C.D. responds to create a dialogue. Another form of reflection that was used in C.D.'s classroom was discussion group in which the students share and discuss their journal entries. The third and final form of reflection that C.D used in the classroom was an activity in which the students wrote individual stories to discuss how the literature affected their practice. "Well, I would say that basically I have done two things mostly, one is journaling and the other thing is--sometimes that journal is just back and forth with me in dialogue journals and it often includes the literature. The second way I've done it and I finds it's actually the most effective way is to have, to make small groups that stay together during the whole course time. They write the journals, I get a copy of it, but they also share it with two or three people in the group for the whole entire time. And the third thing I do, which is very much the same as the last one, but for example, the last course I just did. We did stories as opposed to literature, as opposed to the first kinds of–the more traditional ones, looking at the literature and reflecting on it how it affects your practice. But the last one, the last class we did, we did personal stories about the classroom and it's about whatever is going on and it's dictated by what's going on in the classroom" (C.D. p. 1).

Process focus. The majority of C.D.'s reflective exercises were extremely process based. In particular, the individual stories that she used in the classroom were based on the students' experience with teaching and learning. "And I did that [process based reflection] for a number of years, and it does produce very reflective work, but I abandoned it this year and focused on their experience. Well, it's a very interpretive assignment, very analytic. What did happen was a number of them became teacher-researchers" (C.D., p.2).

Content focus. In the first few years of using reflection in the classroom, C.D. used a more content-based reflection. This content-based reflection was a separate journal writing assignment. In this exercise the students were required to divide their journals into two separate columns. One column was to be used to describe the educational theory discussed in class and the other column was to be used to describe how the theory could be applied to the classroom.

Resistance. When C.D. was first asked about the sense of resistance from the students towards reflection, she stated that she had never observed it in her classroom. However, as the interview progressed she mentioned ways it could happen. One of the first markers of resistance was described by C.D. as the possibility that students will do the work somewhat superficially. C.D. also stated that another cause of resistance towards reflection was that some students do not want to reveal their inner thoughts and feelings. "But in the end you will have some people who will never be reflective. Whether it is that their brains just don't work that way or they choose not to. But I think they choose not to because it can be painful, it can have tension, all of those negative things involved in it. So, why do it? Because 'I want my life to still be nice,' that's what students think. 'I don't want to have to deal with any of those other things'" (C.D., p. 14).

Critical thinking. Critical thinking was C.D.'s instructive goal when she first introduced reflection into the graduate classroom. Through reflection, C.D. was able to provide students with the opportunity to evaluate the world in which they lived and push their thinking to another level. The reflections helped her students to dig below the surface and ask questions. "They are just ways to push people's thinking. And when they are most successful is, if and when—this happens fairly often—there is a shift in the way they see the world" (C.D. p. 2).

Personal stance. C.D. also felt that the reflections enabled her students to evaluate themselves and their practice and in turn develop a personal stance within their education. C.D. stated that with reflection students are "looking at their values and their beliefs and how they are living them out and whether they are or not…adding to their professional knowledge base" (C.D. p.4).

Relationships. C.D. was unable to state whether or not reflection helped to develop her relationship with her graduate students; however, she did have some strong feelings about the effect of reflection on the student peer relationships.

Student peer relationships. C.D. felt that the journal discussion groups helped the students to develop strong bonds with each other. Through evaluations of each other's reflective writing, the students were able to push each other to not only write better but to think in a different realm. C.D. discussed one situation in particular where one student had resisted the reflective process until her fellow classmates showed her

how to engage in the process. "She had a small group in the course, but she also had a small group where she worked with one of the students just finishing her project or her thesis and another one in the middle of the course but who had done some courses with me. And they taught her how to do a journal, they looked at her journals and said 'Oh no you have to be...' and they pushed, pushed, pushed. And by the fourth journal she had it, it was day and night difference. But see the ingredients there, were not just me saying 'Deeper, deeper, deeper,' it was them saying 'Push, push, push. Harder, harder, go below the surface,' those kinds of things. And so it was an amazing transition in a very short time. But again, there was that added piece that I think really was a catalyst to the process" (C.D., p.8).

Engagement. In general, C.D. found that most of her students were able to engage in the reflective process. She said that she was unable to give a concrete reason for some people engaging in the reflective process at the graduate level and why some students did not. C.D. stated that some students are just reflective; its part of their nature, whereas some students are just unable to deal with the uncertainty involved with reflection. She stated that it is not a level of how smart they are or are not, they are just unable to get through the ambiguity of the process.

Disadvantages of reflection. Although C.D. felt that tension had to exist in order for reflection to be meaningful, the introduction of tension was also a negative aspect of reflection. Not only do the tension and pain involved with reflection make the students uncomfortable, but C.D. also found that it was difficult for her to handle as well. C.D. described one situation in particular in which the first time she introduced reflection to the classroom, she actually suffered

physical side effects. "My very first time doing the reflective practitioner, I had never done it, I had everybody doing an action research project. We were doing a lot of work on evaluation and the assumptions behind that and everybody got so tense during the course that we didn't know what was going to happen, I didn't know what was going to happen. They all sort of got very angry with me, very angry. They came to me furious and angry in the middle of the course. I didn't know, I had never taught it before, whether it was going to unfold properly or not. I ended up with a rash down my entire leg, in the middle of the course. Because I was so upset by their being upset…But I just want to show the power of the anxiety and the tension with that--was my first experience" (C.D. p.10).

Benefits of reflection. As stated previously, C.D. found that the graduate students benefited from the reflective experience as they engaged in critical thinking and were able to develop relationships with their peers. C.D. also found that, through reflection, the students were able to make connections between their learned theory and their own life experience. "I don't care who you are, I don't care what learning style you are. I still think that's basically how people learn… So, when I try to teach it, I always try to get the students to connect to their own stories" (C.D. p.6).

C.D. also stated that graduate students benefited from reflection (specifically the personal stories), as they were able to develop a narrative writing style. This newly developed narrative style allowed them to make what C.D. described as a shift in worldview, in turn fostering a sense of personal growth. "I think for some of them there's a shift in their world view and I liked to think it's for the positive. A lot of the stuff that I do works with, um, personal growth,

professional growth, and depending on which route somebody takes, although they fit together--I mean if you're going to change personally, you're going to change professionally" (C.D. p. 3).

Suggestions and recommendations. One of the things that C.D. found to be the most helpful in introducing reflection to the graduate classroom was trying different things. C.D. felt it was important to use different kinds of reflection because different reflections work for different people. When starting out she felt that one of the best ways to know which type of reflection should be used was to try it personally. She felt that if the reflection worked for the professor it might work for the student. She stated the selection of reflection worked at a "very gut intuitive level". (C.D. p.1)

As stated earlier C.D. felt that in order for reflection to be a powerful experience it required a couple key ingredients: peer interaction/evaluation, pain, anxiety and tension. However, C.D. also felt that in order for reflections to be successful they also need to include a certain amount of ambiguity, so that the students can do some soul searching. "I talked about planned ambiguity and pedagogy meaning if you want people to be reflective you have to have a certain amount of ambiguity in your course. The students don't know what to expect, they don't know what you want. For a lot of people that's what they're pushing." (C.D., p. 10) Finally, C.D. also felt that in order for students to become interested in reflection it is important for the professor to show a certain amount of energy and enthusiasm.

Analysis Level 2: Cross-Case Analysis of the Student Interviews

After doing a within-case analysis of each of the student interviews, a cross-case analysis was done among the student interviews. The purpose of this cross-case analysis was to compare

and contrast the various themes that arose from the interviews. The cross-case analysis was organized by the descriptive categories that were developed in the within-case analyses.

Type of Reflection

Both the undergraduate and graduate students experienced weekly reflection as a course component within their respective classes. In addition to the weekly reflections, both G.A. and D.B. participated in a letter correspondence with the professor. U.C. and C.K. also participated in an end-of-term reflection that they completed at the end of the semester. As well as the weekly reflections, U.C. also completed weekly response cards for another graduate course.

Process Reflection

All of the students participated in some form of process-based reflection; however, D.B. was the only participant to state that he preferred the process-based reflections to the content-based reflections.

Content Reflection

The participants all participated in a form of content reflection through the weekly reflections they completed. U.C. also did content-based reflection in the response card assignments she completed.

Resistance

U.C. and G.A. did not show any sort of resistance towards classroom reflection. However, D.B. did show resistance towards content-based reflection and was able to recognize

resistance among his fellow classmates. C.K. showed a great deal of resistance towards reflection at the graduate level. The cause of her resistance was due to the lack of safety in her reflective environment, which in turn prevented her from truly expressing herself.

Student/Teacher Relationships

U.C. and G.A. both stated that classroom reflection helped to improve their student/teacher relationship, due to the personal nature involved. Through reflections, they were able to ask questions and express their thoughts and feelings. In turn, U.C. and G.A. were able to become closer with their professors and they felt the professors learned more about individual composition. In contrast, C.K. felt that her previous positive relationship with the professor hindered her ability to reflect and in turn did not help improve her relationship with the professor. Finally, D.B. stated that reflection did not have an effect on his relationship with the professor.

Critical Thinking

All of the student participants did engage in critical thinking during their reflective experience. U.C., D.B., and G.A. enjoyed the critical thinking aspects of reflection, as it helped them to analyze and dissect the course content as well as their actions. However, C.K. did not enjoy the critical thinking aspects of reflection, as she felt it was forced upon her, in turn making her feel overloaded.

Personal stance. U.C. and G.A. felt as though reflection allowed for personal growth and helped them to develop a personal stance on issues discussed within the

course. However, C.K. felt that emphasis on content in her reflective experience prevented her from experiencing any sort of personal or professional development.

Higher level needs. Through reflection, it appeared as though the higher level needs of U.C., G.A., and D.B. were individually met. Due to her discomfort with classroom reflection, C.K. was unable to have her higher level needs met.

Disadvantages of Reflection

The common disadvantage mentioned by U.C., D.B., and A.G. was the time component involved in reflective work. All 3 participants felt that as though the weekly assignments were extremely time consuming. Furthermore, U.C. and D.B. both agreed that, as the weeks passed, the reflective process became extremely repetitive as they often found themselves "overlapping" or "cutting and pasting" previously mentioned experiences in order to get complete page requirements. C.K. differed, as she felt the major disadvantage was the evaluation aspect of reflection. C.K. felt that evaluations of reflective activities decreased a student's ability to truly reflect, as she would often pander to what the professor wanted in order to get a good grade, instead of stating her true feelings.

Benefits

U.C., D.B., and G.A. all felt that one of the major benefits of reflection was that it allowed them to relate the course content and learned theory to their own life experiences. All of the participants stated that reflection allows students to express themselves in a manner that

might not be available to them in the actual classroom. G.A. and C.K. both related to the fact that the weekly reflections also help students to keep on top of the required class readings.

Suggestions and Recommendations

One suggestion that was made by all of the student participants was that it was important for teachers to provide the students with clear expectations. The students felt it was important for the professor to guide students in the beginning of the reflective process so that they know what is expected in the final product.

Desire to Continue with Reflection

U.C., D.B., and G.A. all stated that based on their experiences with reflection at the undergraduate and graduate levels, they would continue to use reflection. Based on her experience with reflection at the graduate level, C.K. stated that she would not continue to use reflection.

Analysis Level 2: Cross-Case Analysis Between Professor Interviews

The purpose of this of this cross-case analysis was to compare and contrast the themes that surfaced in the professor interviews. Again, this analysis was organized by the descriptive categories that arose in the within-case analyses.

Type of reflection

Both T.H. and C.D. used a form of journal reflection in their teaching. Although the actual format of the journals was different, the purpose of the journals was the same. Both

professors wanted the students to use the journals to discuss their experiences within the discipline of study. Other than the journaling, C.D. and T.H. used different types of reflection within their classes.

Process Reflection

Although the professors did have similarities in their methods of reflection, they differed in their focus. C.D. preferred to use very process-based reflective activities in her classroom, whereas T.H. felt compelled to remain content based within her activities.

Content Reflection

Due to the subject matter covered in some of her courses, T.H. felt as though she had to keep her reflective activities content based to ensure that the students understood the content discussed in class. C.D. did not prefer to use content-based reflective activities in her teaching, but she did use them in her early years of teaching.

Resistance

Both professors were able to identify signs of resistance from students towards reflection. The main sign of resistance described by both professors was the completion of superficial responses in reflection. T.H. and C.D. both felt that students resisted engaging in reflection as they did not want to delve deep into the content and perhaps experience some discomfort. Although C.D. was able to name reasons for resistance, she did not feel that it had ever happened in her classroom, whereas T.H. had experienced the resistance and stated that there is an active resistance and passive resistance.

Relationships

Peer student relationships. Both of the professors felt that reflection exercises helped to improve student peer relationships; however, they each had different reasons for the occurrence. T.H. felt that peer relationships were improved as students learned how to evaluate each other properly, whereas C.D. felt that through reflection the students improved their relationships by learning to push and support each other.

Teacher/student relationships. T.H. was the only one to discuss the effect of reflection on student/teacher relationships. As stated earlier, she felt as though it had a positive effect as it helped her show her students that she cared.

Engagement

The participants both stated that some students engage in reflection and some students do not. Their reasons for engagement or lack thereof were somewhat different, as T.H. felt it had to do with developmental readiness, whereas C.D. felt that some students are just not capable of engaging in reflective work.

Critical Thinking

The two participants both stated that the goal of their teaching was to get their students to think critically about their lives and what they were learning. They both felt that reflection was the best way for them to achieve this.

Personal stance. T.H. and C.D. felt that reflection allowed their students to grow as people and to develop their own philosophy.

Higher level needs. Both participants felt that reflections helped them to meet the higher needs of their students by giving the students opportunities to express themselves and learn about their needs as individuals.

Disadvantages of Reflection

The 2 participants did not appear to have similarities in what they saw as disadvantages in reflection.

Benefits of Reflection

Both T.H. and C.D. felt that one of the major benefits of reflection was that it helped give the students insight into their own lives. Furthermore, through this insightful reflection process the students are also able to develop a narrative style of writing. To T.H. and C.D., this development of a narrative style was also an asset. Another similarity that arose was that reflection helps the students to change their viewpoint. T.H. called it an "unpacking of your own bag" whereas C.D. described it as a "shift in world view."

Suggestions and recommendations

Both participants suggested that it was important for students to try different types of reflection in the classroom and adjust the type of reflection to the type of course involved. Other

than this issue, the professors both had different suggestions for professors considering the use of reflection in the classroom.

Analysis Level 3: Cross-Case Analysis Between Student and Professor Groups

After the two cross-case analyses were completed, a cross-case analysis was done among all the interviews. This second analysis was done in order to compare and contrast the themes of both groups. The purpose of this analysis was to do a thematic analysis of the entire sample. Some of the descriptive categories were also used as a template for analysis.

Content Reflection

All students participated in content reflection, and they found that reflection based on theory and course content helped them to understand the content better. This finding is congruent with T.H.'s reasons for focusing on content in her reflective classroom activities. T.H. did content-based reflection because there was a certain knowledge base that she required her students to know in particular courses.

Process Reflection

All of the students participated in process-based reflection and found that the process–based reflections pushed them to reflect on their ideas, thoughts, and their needs as learners. Similarly, T.H. and C.D. both wanted their process-based reflections to push students to unload their opinions and discover different viewpoints.

Resistance

The professor's views of student resistance towards reflection differed from some of the students' views. The professors felt that students resisted reflection perhaps because they did not want to delve deep into the content and that perhaps some students are not emotionally mature enough yet, whereas D.B. felt that some students just are not comfortable expressing themselves with others. However, C.D. did state that some students resist reflection because it is simply too revealing. This was similar to C.K.'s reasons for resisting, as she resisted reflection because she did not want to reveal her true feelings about a course to a professor she respected.

Critical Thinking

As stated earlier, implementing reflection was the goal of both professors in order to inspire the students to think critically about their course content and their life experience. Correspondingly, U.C., D.B., and G.A. enjoyed the critical thought that was involved in reflection as it allowed them to examine their course content and behavior intimately. However, C.K. felt that she was overloaded with critical thinking because of reflection.

Personal stance. T.H. and C.D. felt that reflection in the classroom allows students to grow as people and to develop a personal stance that is political and meaningful to them. Similarly, U.C. and G.A. felt as though reflection allowed for personal growth and helped them to develop a personal perspective on issues discussed within the course and society as a whole.

Higher level needs. C.K.'s higher level needs were not met through reflection, as she was unable to express her feelings openly to do the evaluation component involved. However, both T.H. and C.D. believed that reflection at the university level helps professors to meet the higher level needs of their students by giving the students opportunities to express themselves and learn about their needs as individuals. This statement was true for U.C., G.A., and D.B., as in the interview it appeared that the higher level needs were met as they stated that reflection aided in their self-expression and realization of their needs as learners.

Teacher/Student Relationships

U.C. and G.A. both found that reflection allowed the professor to get to know them on a more personal basis. They felt that through reflection it seemed as though the teacher took an interest in what they had to say and what they wanted to do. Likewise T.H. felt that reflection allowed her the opportunity to show her students that she had a vested interest in what they did and that she cared how they developed.

Disadvantages of Reflection

Just as reflection was found to be time consuming by the students, T.H. also found the time component involved in reflection to be somewhat overwhelming. The students found the completion of weekly reflections to be time consuming and repetitive and, in turn, T.H. found the evaluations of the reflections to require a great deal of time and patience.

Benefits of Reflection

The students stated that the major benefit of reflection for them was the opportunity it gave them to relate the content learned in class to their own life experience. Correspondingly, C.D. stated strongly that most people learned by relating what their readings meant to their life. She too felt as though reflection permitted students to explore in such a manner that they could relate learned theory to their own behavior and background.

Suggestions and recommendations

All of the students suggested that professors need to be cautious when they introduce reflection into the undergraduate or graduate classroom. Specifically the students responded that it is important for professors to provide their students with plenty of guidance so that they know what is expected in the final product. Similarly, T.H. stated that there is a fair bit of hand-holding that needs to go on before a student should be left on their own with reflection. They need to be guided through the process instead of just thrown in, in which case T.H. also felt it was important for professors to "progressively load" the students into reflection, let them get the idea of it slowly. Correspondingly, U.C. felt that her reflective experience in the graduate classroom could have been better if the professor had started things out slower. She also stated that teachers need to make sure that they do not start out with too much too soon.

CHAPTER FIVE: DISCUSSION, CONCLUSIONS AND IMPLICATIONS

Summary

The purpose of this chapter will be to summarize the findings of this study and provide suggestions and implications for the future use of reflection. In light of the fact that Chapter Four provided an extensive account of the data as well as thorough summaries for each of the participants, the focus of this chapter is on the general findings and implications that arose from this study.

Conclusions

This study was initially designed to explore the use of reflection in the undergraduate and graduate classroom and discover suggestions for future use. Through analysis of interviews with both students and professors at these levels of education, conclusions about reflection can be summarized into the following six categories: process reflection versus content reflection, student resistance, relationships, benefits of reflection, disadvantages of reflection, and suggestions.

Process Reflection versus Content Reflection

Through the analysis of the interviews, it appeared as though both the student and professorial participants preferred to participate in process reflection. The participants' reasons for enjoying process-based reflection were similar to the characteristics Cranton (1998)

described as emancipatory learning. In the present study, process-based reflection was found to enable undergraduate and graduate students to reflect on their ideas and to discuss and evaluate their opinions on various issues within their learning environment. Similarly, Cranton found that reflection allowed students to engage in emancipatory learning skills such as thinking for themselves, questioning what they read, and taking responsibility for their own learning.

Although the participants preferred process-based reflection, this study also showed the benefits of content reflection. The students saw content reflection as a way to gain a better understanding of their course readings and theory. Furthermore, although T.H. enjoyed process reflection, she felt it was necessary to use content reflection in courses where one student's lack of content knowledge was detrimental to others. Similar to Brookfield (1990), T.H. did not feel it was appropriate to sacrifice content for the sake of process. In T.H.'s case specifically, she stated that if her students left the course without having been taught the course content she had concerns that they would work with a person with a disability and not understand the needs of that individual. Therefore, instead of sacrificing content, T.H. chose to do as Brookfield suggests, use reflection to deliver her content in an interesting and informed manner.

Content-based reflection and process-based reflection both appeared to have their own merits. It can be concluded that reflection in the undergraduate and graduate classroom needs to have a mix of both content reflection and process reflection in order to satisfy the needs of the professor and the student

Student Resistance Towards Reflection

From the results of this study, it can be concluded that the greatest cause of resistance towards reflection is the revealing process involved. Similar to Lather (1991) it was evident in the professor interviews that some students are unable to engage in the reflective process because there is a great deal of pain involved in deconstructing one's beliefs and discovering that they are no longer true. This "pain" was also noted by hooks (1994) who found that when critical reflection was introduced to the classroom several of the students informed her that after they completed her class they could no longer enjoy life. The reason they could no longer enjoy life was because they stepped out of their own personally crafted world and saw that, in reality, there were injustices and problems in the world that they had never seen before. In the present study, C.D. also found that students resisted because of the pain involved in letting go of previously held personal notions and beliefs. "But I think they choose not to, because it can be painful, it can have tension, all of those negative things involved in it. So, why not do it? Because 'I want my life to still be nice,' that's what students think. 'I don't want to have to deal with any of those other things.'"

Although the pain involved with reflection was viewed by the professors as being caused by the self-revelation involved, through the student interviews it can also be concluded that the painful part of reflection is due to the discomfort of revealing one's beliefs to the professor. For example, some students resisted reflection in courses where they were asked to comment on the class itself. Students may resist this reflective activity due to a fear of insulting the professor with a constructive criticism or stating the "wrong answer" and in turn receiving a poor grade. "Even though I enjoy him, I didn't enjoy the class as much as I thought I would. And I found it

really hard to reflect negatively on someone I respected a lot." (C.K., p. 1). In essence, some students do not want to reflect, as they do not feel safe within their reflective environment.

In order to diffuse this type of resistance, it was concluded that professors need to create an environment in which students can feel comfortable reflecting openly and honestly. Parallel with Argyris (1982) it was concluded that when introducing reflection to the classroom professors need to provide their students with an environment that includes security and opportunities for personal growth. In order to achieve this, it was suggested that perhaps the professors could consider that no grade be applied to the reflection based on content, but instead an assignment of a grade-based on completion of the assignment. With the absence of evaluation pressures, the students will feel comfortable to reflect openly and honestly, and in turn will be able to have a meaningful reflective experience.

According to Adams (2000), students also need to find security with their professor. Professors need to have an open-door policy in which the students can feel comfortable in approaching the professor at any time. In doing this, the students will feel safe, as they will know that they have someone to turn to who is willing to understand their needs and to listen to their concerns. Similarly, T.H. also found that when introducing reflection to the classroom it is important to let your students know that you are available to them if they need to talk about the course or even other issues in their lives. However, she also felt that it is important to set some limits so that professors do not feel overloaded or as though they are being taken advantage of. Although some professors, such as Adams (2000), are willing to take phone calls at home at 2:00 a.m., T.H.'s limits included stating that e-mails and phone calls will not be returned after a certain time, as she needs some time to attend to her own needs. It was concluded that there is definitely a fine line that professors need to address when creating availability for students, to

increase the safety of the environment. "That's the down side, and the long office hours, needing to be present. And then having to create limits, so students know you have limits. No, I won't be reading my e-mail after 10:00 p.m. and getting back to you then. You know, I'm not going to do that. So setting limits is tough, because you have to hold to them or else you'll be just at everyone's beck and call 24-7. Because then you will become resentful when you get to that point. I don't want to be resentful, but I don't want to be taken advantage of because of the time that I am willing to give my students"(T.H., p.11).

Critical Thinking

From the content analysis, it may be concluded that reflection in the undergraduate and graduate classroom helps students to think critically about themselves and the course content. Introspective aspects of reflection such, as self-evaluation and problem solving, allow students to dig below the surface of content knowledge-based creation and engage in deeper learning. Such results are similar to those of Trysenaar (1994), as reflection has been found to help students move from a "cognitive" place to a more "affective" domain.

Through this analysis, reflection was also shown to allow students the opportunity to take a personal stance on issues that were not only discussed in class, but also that mattered to them as individuals. Just as Kottkamp (1990) discovered, the use of reflection in the classroom was found to teach students to test their beliefs against the course content and make a personal statement about their studies. Reflection was found to give students the time to discuss what they actually thought of the course and how they felt they benefited from the course itself. Furthermore, similar to the findings of Hoover (1999), the students were able to develop a personal stance that is both problem based and practical. In other words, the students create a

stance that resonates the pain and tension they experience and in turn challenge the opinion of others.

Also, the analysis of the interviews showed that most of the students' higher level needs, such as self-expression and self-discovery, were met through reflection at the undergraduate level. However, not all students felt that reflection met their higher level needs. In particular, C.K. was not able to meet her higher level needs through reflection. C.K. was not able to achieve Maslow's higher level need of self-actualization because her reflective environment was not made safe and secure for her to express herself honestly. Similar to the theories of Argyris (1982), since C.K. was unable to meet her higher level needs she became a frustrated learner who was apathetic and defensive, as she would constantly "pander" to what she felt the teacher wanted in her reflections. Therefore, it was concluded that when introducing reflection into the undergraduate and graduate classroom it is important to take the needs of the learner into consideration first. In doing this, the professor will create an environment that would be safe for students to express themselves clearly and in turn be able to develop a reflective exercise which will meet the higher level needs of the students.

Relationship Development

Student/teacher relationships were discovered to be improved through the use of reflection at the undergraduate and graduate level. It was concluded that reflection helped the students to introduce themselves to the professor on a personal level. Reflection was found to help students feel as though their teacher cared about their learning and how they turned out as individuals. As Adams (2000) stated, reflection was shown to help professors see their students as people, people with different needs and abilities. Through reflection, professors do not do

what Brookfield (1990) describes as handing the learning over to the students; instead they are intensely involved in the students' educational journey. In turn, the students can feel as though their professor has a vested interest in their learning and can feel further security in their environment.

Benefits of Reflection at the Undergraduate and Graduate Level

The major reason for the author's researching the use of reflection at the graduate level of education was due to a personal, positive experience engaging in this process. One of the reasons why she enjoyed reflection so much was because it allowed her to relate the course content to her own life experience and to express herself on a more personal level.

Through the data analysis, it can be concluded that reflection can benefit students at the undergraduate and graduate level by allowing students to make connections between courses content and life experience. Similar to the findings of Hoover (1994), it was concluded that reflections allow students to evaluate course content by developing problem-solving strategies through the application of course content to their life and practice.

Finally, it was also concluded that reflection at the undergraduate and graduate level helped to improve the student's writing abilities. In particular, students are able to use reflection to develop a more personal narrative writing style. Like the findings of Hannon (1999), students were able to try new and different things in their reflections and in turn give their writing a new purpose.

Disadvantages of Reflection at the Undergraduate and Graduate Level

One of the questions proposed at the beginning of this study was, if reflection is considered to be such a positive activity for students' then why do some students detest it? Therefore, the interviews asked the participants to describe some of the disadvantages of reflection at the undergraduate and graduate level. In turn, the analysis concluded that a major disadvantage of reflection is the time component involved. It was concluded that students find reflective activities such as weekly reflection to be extremely time consuming and at times overwhelming. For the professors, the time-consuming part of reflection was the evaluation component. Resembling the findings of Tryssenar (1994), it was concluded that in order for professors to give the students meaningful responses in their reflections, a great deal of time and interest was required for each separate entry.

In order to decrease this type of time component, professors should consider using response cards or what Betts (2000) described as four commentaries per term. As stated previously, response cards involve students using index cards to reflect on course readings and/or various personal experiences relevant to the course. Due to the size of the cards the students are more relaxed in their reflections, as they do not feel pressured to create pages upon pages of reflective thought. Corresponding to these findings, Betts states that by lowering the volume of the reflective activity, students are expected to put more effort and thought into the reflections as they do not feel overwhelmed or repetitious.

Implications and Recommendations for the Use of Reflection at the Undergraduate and Graduate Level

Several suggestions for the future use of reflection at the undergraduate and graduate level were provided through the completion of this study. It was concluded that in order for students to be able to engage in the reflective process, it is important for professors to provide guidance and to provide clear instructions. In this way, students are able to understand the expectations of the assignment and in turn feel comfortable in their writing. Just as Hoover (1994) found with preservice students, undergraduate and graduate students also require direction in the early stages of the reflective process. However, whatever instruction is used, it needs to be meaningful and to lead the students to the development of a reflective stance.

At the beginning of this study the author wondered why one had to wait until fourth year of university to experience reflection in the classroom when it was considered to be such a positive learning experience. However, it was concluded in this study that in order for reflection to be meaningful for students, a certain level of emotional maturity needs to exist among them. According to Tryssenar (1994) students cannot be forced to reflect; they need to be ready for reflection or they will not engage in the process. Although it was concluded that reflection in the classroom could occur at any level, students should be eased into the process so that they are not overwhelmed. In particular, professors should start with different, small reflective activities, so that they can find the type of reflections that works best for them. In addition to starting with small reflective activities, it was also concluded that professors need to have a back-up plan in case the first activity does not work out. In order to create a back-up plan for undergraduate and graduate classes, it is important for professors to experiment with different types of reflection, as Hoover (1994) did with preservice students. "I would say, before you want to, before you do it, I

would say start small and get your feet wet. There is no need to jump in up to your nose on the first reflective getgo, right? Out of the gate. Start small and see if it's what you want.... have a back-up plan. Have plan B, if plan A just blows up, have plan B. Always have plan B" (T.H., p.12).

Finally, when introducing reflection to the undergraduate and graduate classroom it is important to have a sense of humour. Professors need to remember to not take themselves too seriously, as some students are not developmentally ready for the use of reflection and their resistance is not a personal reflection on the professor's ability to introduce it to the classroom. "It's not personal, it's developmental!" (T.H., p.6).

Revisiting Theoretical Assumptions: A Reflection-on-Action

At the beginning of this study, I stated that I am a critical qualitative researcher and that I realize that there are four major assumptions to qualitative research. These four assumptions, defined by Marshall and Rossman (1990), are that research fundamentally involves issues of power; that the research report is not transparent, but instead composed by individuals of different race, gender, class, and political standpoints; that race, class, and gender are crucial for the understanding of experience; and that previous traditional research has silenced members of oppressed groups. As a critical qualitative researcher, I used my own reflections to scrutinize between my own personal biography, power, and status interactions with the participants. I used individuals of different genders, class, and political standpoints. However, my research was not composed of individuals of different races, and although people of different genders were used in this study, the separate groups consisted of individuals of the same gender. All the participants in this study were Caucasian individuals of various European descent. Therefore, I was unable

to look at issues of power and status between individuals of different races. Furthermore, since the only individuals who agreed to participate in this study were Caucasian, I was unable to allow silenced individuals to have their voice in this study.

Although the participants in this study were of different genders the undergraduate student group consisted of male participants only, the graduate student group consisted of female participants only, and the professor group consisted of female participants. Even though the participants each had different experiences within each group, the participants each came from the same back ground. Therefore, a contrast between different genders at the same level of education was unable to be provided.

Implications for Further Research

hooks (1994) states that critical reflection allows students to look at the world from a critical standpoint that includes recognition of race, gender, power, and status. Therefore, it is important for research surrounding the use of reflection in the classroom to include people of different race, gender, power, and status. In the present study, the only participants who responded to the recruitment process were Caucasian individuals, and therefore the researcher was provided with somewhat transparent experiences. To further increase the depth of knowledge surrounding the topic of reflection at the undergraduate and graduate level, it would be interesting for future research to look at the reflective experiences of individuals of different race and background. In turn, research would be provided with a more global perspective that could be applied to a greater population of students and educators.

Part of the rationale for investigating the topic of the use of reflection at the undergraduate and graduate level is to narrow the existing gap in the research of reflection at this

level of education. Several new issues and suggestions arose from this study. However, there are other areas of reflection at the undergraduate and graduate level that remain to be investigated. In the present study, the students were asked to share their experiences with reflection; however, the actual reflective activities that were completed were never examined. In order to obtain a further understanding of a student's reflective experience, it would be necessary to look at their reflective activities and to examine how their narrative writing style develops. As well, it would be informative to observe the actual reflective writing of a resisting student and to observe a student's personal growth. Although this would be interesting research, it is important to remember that part of the student's resistance towards reflection exists due to the revealing nature involved. Therefore, before commencing this type of introspective research it would be important for the researchers to establish a good rapport with the students and create a safe reflective environment before commencing the research. In turn, self-expression and self-actualization would be given the room to flourish through reflective activities.

Although different types of reflection were discussed in this study it would also be interesting to implement different types of reflection with two or more classes at the undergraduate and graduate level. A comparative analysis could be done between focus groups using different kinds of reflective activities. The analysis of these focus groups could be done using multiple methods such as electronic survey questionnaires first and then follow-up focus groups. The purpose of this analysis would be to compare issues with reflection such as the safety of the environment, opportunities for critical thinking, and development of student-teacher relationships through reflection. In turn the research community would be given a more critical look at various types of reflection for the undergraduate and graduate classroom.

The Use of Reflection at the Undergraduate and Graduate Level:

A Personal Account

Since this study began with a personal account of reflection at the undergraduate and graduate level, it seems only appropriate to end with one. Before I began this study, I wanted to know why I had to wait until the final year of my undergraduate degree to experience reflective activities, and furthermore why my fellow classmates did not enjoy the reflective process as much as I did. Through the interviews I was able to discover that there is a certain level of emotional maturity and developmental readiness that must exist in order for meaningful reflection to transpire. In turn, I have come to realize that perhaps some professors do not feel that the true benefits of reflection can be obtained at the early years of university due to the lack of emotional maturity, and therefore they do not use it in the classroom. Another conclusion I came to, through the help of T.H., was that I did perhaps experience implicit reflective activity in my third year of university and I was not developmentally ready to recognize it.

Finally, even though it was important for me to explore the use of reflection at the undergraduate and graduate level in response to an interest in filling an identified gap in the existing research and provide suggestions for future use, it was also important for me as a person. I plan to teach in higher education in the future and would like to use reflection as an instructional tool within my classroom. Hence, it was important for me to research this topic for future use of reflection in higher learning and to implement it as effectively and efficiently as possible. Through this study, I have learned that a key aspect in a meaningful and positive reflective environment is safety. In order for reflection to be positive for students they need to feel as though they have a safe environment in which they can reflect openly and honestly. As a future educator, this means that I will have to make the environment safe for my students by

giving them choices in their reflective assignments and by making myself available to them through an open-door policy. However, this will be a difficult task as I will need to find a happy medium between making myself available to the students and having my time taken for granted. As T.H. stated, giving too much time to your students could sometimes make the professor feel resentful, which is something I do not want to become. However, Adams (2000) states that he allows his students to call him any time they are in need. So, then, where do I draw the line? I feel that this is a question that I will be able to answer only with experience, as I will have to learn what I can handle and in turn what I personally can provide for my students.

I would like to thank T.H., C.D., C.K., U.C., G.A., and D.B. for sharing their experiences with me so that one day I will be able to make reflection a meaningful experience for others.

References

Adams, L. (2000). *Learning from student profiles*. Paper presented at the Society for Teaching and Learning in Higher Education. St. Catharines, ON.

Argyris, C. (1982). *Reasoning, Learning, and Action: Individual and Organizational*. San Francisco,CA: Jossey-Bass.

Betts, J. (2000). *What is important about writing?* Paper presented at the American Research in Education Association (AERA). New Orleans, LA.

Brookfield, S. (1990). *The Skillful Teacher: On Technique, Trust and Responsiveness in the Classroom*. San Francisco, CA: Jossey-Bass.

Cranton, P. (1998). *No One Way: Teaching and Learning in Higher Education.* Toronto,ON: Wall and Emerson,Inc.

Courtney, A.M. and Abodeeb T.L. (1999). Diagnostic-reflective Portfolios. *The Reading Teacher,* 52, (7), 708-714.

Hannon, J. (1999). Teaching Reading, Talking Back: Kindergarten Dialogue Journals**.** *The Reading Teacher,53* (3), 200-203.

Hauserman, C. (1993). Peer Support and Professional Development Through Collaborative Autobiography: A Case Study with Vice-principals. *Education Canada,*17-23.

Hennings, D.G. (1992). Students' Perceptions of Dialogue Journals Used in College Methods Courses in Language Arts and Reading. *Reading Research and Instruction, 31*, (3), 15-31.

hooks, b. (1994). *Teaching to Transgress: Education as the Practice of Freedom.*

New York, NY: Routledge.

Hoover, L.A. (1994). Reflective Writing As A Window On Preservice Teachers' Thought Processes. *Teaching and Teacher Education*, *10* (1), 83-93.

Kottkamp, R.B. (1990). Means for Facilitating Reflection. *Education and Urban Society, 22,* (2), 182-203.

Lather, P. (1991). *Getting Smart: Feminist Research and Pedagogy with/in the Postmodern.* New York, NY: Routledge.

Marshall C. and Rossman, G. (1990). *Designing Qualitative Research.* Newbury Park, CA: Sage Publications.

Merriam, S.B. (1988). *Case Study Research in Education: A Qualitative Approach.* San Francisco, CA: Jossey-Bass.

Parsons, L. (1990). Response Journals. Markham, ON: Pembroke Publishers.

Schön, D.A. (1983). *The Reflective Practitioner: How Professionals Think in Action.* New York, NY: Basic Books.

Tryssenaar, J. (1994). Interactive Journals: An Educational Strategy to Promote Reflection. *The American Journal of Occupational Therapy, 95,* 695-702.

Quinn Patton, M. (1990). *Qualitative Evaluation and Research Methods (second edition).* Newbury Park, CA: Sage Publications.

Appendix A

Letter of Information

INFORMATION LETTER

Title of Study: "The Use of Reflection in the Undergraduate and Graduate Classroom"

Researcher: Denise Power, Faculty of Education, Graduate Student
Faculty Supervisor: Dr. Lorne Adams, Faculty of Physical Education, Brock University

Dear Sir or Madam,

As part of the requirements of my Master's Degree in Education, I plan to carry out a study investigating the use of reflection in undergraduate and graduate courses. The purpose of this study is to explore the various types of reflection and to explore reflection in action, as a practice, and as a process. Furthermore, the second purpose of this study is to propose Suggestions and recommendations for the future use of reflection in the classroom.

There will be two groups participating in this study. The first group will include six University professors from Brock University. Three of the professors will be selected from the faculty of the undergraduate physical education program. The other three professors will be selected from the faculty of the Masters of education program. All professors will be selected based on their history of using reflection within their practice and within their classroom.

The second group will include six University students also from Brock University. Three of the students will be currently enrolled in or recently graduated from (June 2000) the undergraduate physical education program. The other three students will be currently enrolled in the Masters of education program. All students will have participated in a class which involved a reflective component such as dialogue journals, reflective portfolios, or response cards.

All participants will be asked to participate in a semi-structured interview. The interview will be comprised of questions pertaining to their reflective experiences. The interview will take approximately 1hour and can be done in a place of your choice at Brock University.

The responses to the interview will be kept confidential and will be destroyed 3 years after the completion of this study. You are under o obligation to participate in this study and can feel free to withdraw at any time. You will also be given the opportunity to check the responses for accuracy before the final completion of the study. An executive summary of the study will also be provided for you upon completion of the study.

If you have any questions upon completion of the interview, please feel free to contact me at (905) 684-7747 or my faculty supervisor Dr. Lorne Adams (905) 688-5550 ext 3382. Please also feel free to address any questions or concerns to the Office of Research Services at (905) 688-5550 ext. 3205/4315 or via e-mail: gelliot@spartan.ac.brocku.ca.

Once again the intent of this study is to explore the use of reflection in the undergraduate and graduate classroom. Your participation is essential to the success of this study and any consideration you give to participating in it, would be greatly appreciated. Thank you,
Denise Power

Appendix B

Consent Form

INFORMED CONSENT FORM

Title of the Study: "The Use of Reflection in the Undergraduate and Graduate
Classroom"

Researcher: Denise Power   Faculty Supervisor: Dr. Lorne J. Adams

Name of Participant: _____

I understand that this, in which I have agreed to participate, will involve completion of a semi-structured interview. I also understand that the purpose of this study is to explore the use of reflection in the undergraduate and graduate classroom.

I understand that my participation in this study is voluntary and that I may withdraw from the study at any time and for any reason without penalty.

I understand that there will be no payment for my participation in this study.

I understand that there is no obligation to answer any question/participate in any aspect of this study that I consider invasive, offensive, or inappropriate.

I understand that all personal data will be kept strictly confidential and that all information will be coded so that my name is not associated with my answers. I understand that only the researchers named above will have access to the data.

Participant Signature_____ **Date**_____

This study has been reviewed and approved by the Brock Research Ethics Board. (File #
_____)

If you have any questions or concerns you can contact Denise Power at 684-7747 or Dr. Lorne J Adams at 688-5550 ext. 3382. Please also feel free to contact the Office of Research Services at Brock University at 688-5550 ext 3205/4315 or via e-mail at gelliot@spartan.ac.brocku.ca, with any questions or concerns.

Feedback about the use of the data collected will be available during the month of April 2002. An executive summary of the study will be provided for you upon request.

Thank you for your cooperation. Please take one copy of this form with you for future reference.I have fully explained the procedures of this study to the above volunteer.

Researcher Signature_____ Date_____

Appendix C

Interview Questions

Possible Professor Interview Questions

- What kind(s) of reflection do you use in the classroom?
- Why did you choose that particular format of reflection?
- Why do you use reflection in the classroom?
- Did you find the use of reflection to give you a better understanding of your students?
- What suggestions do you have for someone contemplating the use of reflection in their classroom?

Possible Student Interview Questions

- What kind(s) of reflection did you complete in the classroom?
- What were some of the benefits of partaking in a reflective course component?
- What were some of the disadvantages of partaking in reflection?
- What could have helped you to have a better reflective experience?
- Do you feel as though you will continue to use reflection in your own practice? Why or why not?

Appendix D

Ethics Approval

Brock University

FROM: David Butz, Chair
           Senate Research Ethics Board (REB)

TO: Lorne Adams, Physical Education
           Denise Power

FILE: 01-033, Power

DATE: October 29, 2001

The Brock University Research Ethics Board has reviewed the research proposal:

The Use of Reflection in the Undergraduate and Graduate Classroom

The Subcommittee finds that your proposal conforms to the Brock University guidelines set out for ethical research.

** Accepted as clarified.

Please note: Changes or Modifications to this approved research must be reviewed and approved by the committee. Please complete form *REB-03(2001) Request for Clearance of a Revision or Modification to an Ongoing Application to Conduct Research with Human Participants* and submit it to the Chair of the Research Ethics Board. You can download this form from the Office of Research Services or visit the web site:
http://www.BrockU.CA/researchservices/mainpage.html

DB/dvo