

**REFLECTION IN TEACHER EDUCATION: EXPLORING PRE-SERVICE TEACHERS' MEANINGS OF
REFLECTIVE PRACTICE**

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*For my Children
Roger, Lisa, Melanie, and Lauren,
And my grandchildren
Chelsea and Lechelle
"Everything is within your grasp. Just reach out,
The world is yours"*

Joan Pedro

**REFLECTION IN TEACHER EDUCATION: EXPLORING THE CONCEPTUAL ORIENTATION OF
REFLECTIVE PRACTICE THROUGH THE VIEWS OF FIVE PRE-SERVICE TEACHERS**

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ABSTRACT

This qualitative interpretive study explored how five pre-service teachers constructed meanings of reflection, and how these meanings informed their practice. The purpose of this research was to better understand reflective practice in teacher preparation. The theories on reflective practice by Dewey (1933), Schon (1983, 1987), and van Manen (1977) guided this study. This research incorporated the historical and institutional contexts of the study, and applied a symbolic interaction theoretical and analytical framework (Denzin, 1978, Prus, 1996).

The interpretations of the pre-service teachers' conceptions and understandings of reflective practice were captured through the transcriptions and analysis of interviews, and through the examination of the pre-service teachers' reflection journals. Participant-observations were recorded in field notes and served to inform the social context of the study, as well as to provide portraits of the pre-service teachers and to verify their responses.

Themes were pulled out from the data and categorized within the symbolic interaction social processes of acquiring perspectives, achieving individuality, experiencing relationships, situating the act, and the act of reflection (Prus, 1996). The research questions were answered as I interpreted the meanings that these pre-service teachers attached to reflection, as well as the

process, context and content of their reflective practice (Calderhead, 1989). I derived thirteen themes from the data that highlighted how the pre-service teachers interpreted and practiced reflection in this teacher preparation program. The themes were: (1) defining reflection; (2) questioning as reflection; (3) gaining opportunities for reflection; (4) Defining reflection from self and significant others; (5) looking back on action; (6) reflection is based on personal beliefs, and educational theory; (7) encountering professors; (8) encountering mentors; (9) encountering cooperating teachers; (10) self-reflections; (11) verbal reflection; (12) written reflection; and (13) content of reflection.

The study resulted in an interpretation of the pre-service teachers' views of reflective practice as they experienced it in the teacher preparation program that they felt gave them many opportunities for reflection. The findings indicated that the pre-service teachers had a general understanding of reflection. They practiced technical and interpretive levels of reflection in different contexts.

The findings of the study implied that pre-service teachers understood and learned to reflect through reflective activities. The findings also raised questions about innovative writing practice in reflection. This study has implications for the ways in which pre-service teachers learn about reflection, and may be useful for teacher educators who prepare reflective practitioners.

TABLE OF CONTENTS

CHAPTER ONE	11
INTRODUCTION	11
Rationale	11
Theoretical Perspectives	12
Symbolic Interaction	12
<u>General Propositions of Symbolic Interactionism</u>	13
<u>Generic social processes</u>	15
Reflective Practice	16
Declaring my Site.....	20
<u>Interest and Background of Researcher</u>	20
<u>Subjectivity of the Researcher</u>	22
Focus of the Study.....	25
Significance of the Study	26
Summary	26
CHAPTER TWO	28
REVIEW OF THE LITERATURE.....	28
Introduction.....	28
Theoretical Perspectives	28
The Social Efficiency Tradition.....	28
Reflective Practice in Teacher Education	30
<u>Definitions of reflection</u>	31
<u>Reflective practice frameworks</u>	33
<u>Emergence of Reflection in Teacher Education: Constructivism</u>	35
<u>Reflective Practice in Contemporary Teacher Education</u>	38
<u>Research Findings on Reflective Practice</u>	39
<u>Conditions that promote reflection</u>	39
<u>Growth in reflective thinking</u>	40
<u>Collegial reflection</u>	41
<u>Benefits of Reflective Practice</u>	42
Summary	45
CHAPTER THREE	46
METHOD	46
Introduction.....	46
Research Design.....	48
<u>Site Selection</u>	55
<u>Participant Selection</u>	55
Role of the Researcher	57
Data Collection	59
Data sources	62
<u>Interviews</u>	62
<u>Journals</u>	65
<u>Observation and Note Taking</u>	65
<u>Official Documents</u>	69
Data Analysis Procedures	69
<u>First Phase of Analysis</u>	70
<u>Second Phase of the Analysis</u>	72
<u>Third Phase of Analysis</u>	76
<u>Fourth Phase of Analysis</u>	77
<u>Writing as Analysis</u>	79
Trusting the Data.....	80

<u>Trustworthiness</u>	80
<u>Ethical Issues</u>	81
CHAPTER FOUR.....	83
HISTORICAL AND INSTITUTIONAL CONTEXTS	83
Introduction.....	83
Historical Context.....	83
<u>A Historical Overview of the Teacher Education Milieu in United States</u>	83
<u>The Reform Movement in Teacher Education</u>	85
<u>An Alternate Route to Licensure in Teaching in Virginia</u>	86
Institutional Context.....	87
<u>The Post Baccalaureate Program</u>	87
<u>Program organization</u>	89
<u>The university courses</u>	90
<u>Teaching Practice Sites</u>	91
<u>Supervision</u>	92
Portraits of the Participants.....	93
<u>Barbara - Grade Two</u>	93
<u>Lisa- Grade Two</u>	95
<u>Jason-Grade Five</u>	97
<u>Maria- Grade Seven</u>	98
<u>Paulette- Grade Eight</u>	98
Summary.....	100
CHAPTER FIVE.....	101
INTERPRETATION.....	101
Introduction.....	101
Emerging Themes.....	101
Interpretations.....	104
<u>Acquiring Perspectives</u>	104
<u>Defining reflection</u>	104
<u>Questioning as reflection</u>	106
<u>Having opportunities to reflect</u>	107
<u>The Researcher's Stance on Acquiring Perspectives</u>	109
<u>Achieving Individuality</u>	110
<u>Reflection is learned from self/significant others</u>	110
<u>Reflection on action, and for action</u>	113
<u>Reflection is based on personal beliefs and educational theories</u>	114
<u>Experiencing Relationships</u>	117
<u>Encountering professors</u>	117
<u>Encountering mentors</u>	119
<u>Encountering cooperating teachers</u>	122
<u>The Researcher's Stance on Achieving Individuality</u>	125
<u>Situating the Act of Reflection</u>	126
<u>Self-reflections</u>	126
<u>Verbal reflections</u>	127
<u>Written reflections and journals</u>	129
<u>Researcher's Stance on Situating the Act of Reflection</u>	131
<u>The Act of Reflection</u>	132
<u>Content of Reflections</u>	132
<u>Curriculum matters</u>	133
<u>Assessment</u>	135
<u>Diversity of abilities</u>	136
<u>Multicultural issues</u>	138
<u>The Researcher's stance on The Act of Reflection</u>	141
CHAPTER SIX.....	142
DISCUSSIONS, IMPLICATIONS AND CONCLUSIONS	142
Summary of the Study.....	142

Discussion	143
<u>Acquiring perspectives</u>	143
<u>Achieving Individuality</u>	146
<u>Experiencing Relationships</u>	149
<u>Situating the Contexts of Reflection</u>	153
<u>The Act of Reflection</u>	155
Implications of the Study	158
Conclusions	161
References	166
Appendix A	184
Appendix B	187
Appendix C	189
Appendix D	190
Appendix E	191
Appendix F	192
Curriculum Vita	192

LIST OF TABLES

Table 1: Selection of Pre-Service Teachers Based on Select Criteria.....	56
Table 2: Characteristics of the Pre-Service Teachers.....	58
Table 3: Timeline of the Study.....	61
Table 4: Interview Schedule and Types of Questions.....	64
Table 5: Number, Duration, and Content Areas of Lessons for One Pre-Service Teacher....	66
Table 6: The Research Questions Applied to the Social Processes.....	72
Table 7: An example of Thematic Analysis.....	76
Table 8: Research Questions linked to the Social Processes and Corresponding Themes.....	103
Table 9: Matrix of the Content of Reflection by the Pre-Service Teachers.....	133

TABLE OF FIGURES

Figure 1:	A Conceptual Framework for the Method.....	49
Figure 2:	A Symbolic Interaction Analytical Framework.....	54
Figure 3:	Written feedback.....	68
Figure 4	Identifying patterns in an interview transcript.....	71
Figure 5:	Extracting themes from the interview.....	73
Figure 6:	Flowchart showing data categorized under two social processes.....	75

CHAPTER ONE

INTRODUCTION

"Those who know, do, and those who understand, teach"

Aristotle

Rationale

As teacher educators and others strive to develop new ways to prepare teachers, various reforms have been instituted. The reflective practice paradigm in teacher education is one such reform effort that has taken hold in the education community (Dewey, 1933; Schon, 1983; Zeichner & Liston, 1987). During the 1980s and 1990s reflective practice became a popular concept in the U.S. (Posner, 1985; Tabachnick & Zeichner, 1991; Valli, 1992), and it continues today as a noteworthy reform effort. Work in reflective practice is also evident in the United Kingdom (e.g. Ashcroft & Griffiths, 1989; Lucas, 1989) Canada, (e.g. Clandinin & Connelly, 1986; Mackinnon & Erickson, 1988), and other parts of the world. The idea of introducing reflective practice into teacher education has been touted as a step forward in preparing teachers for the new millennium (Valli, 1992). In the early nineteenth hundreds, Dewey (1910) called for the development of future teachers who would be empowered to improve upon the conditions of schools through the use of critical reflection.

In the name of reflection, many teacher education programs have incorporated strategies to encourage pre-service teachers to think critically about their practice. Valli (1992) and others critiqued seven case studies of teacher preparation programs in seven universities across the

United States that instituted reflective practice as an integral part of their teacher preparation programs. Their analysis of the programs indicated that reflection is approached in teacher education in distinctly different ways.

Similarly, this study examines the conceptual orientation of reflective practice in a teacher preparation program in a university in the southeastern United States. This program is described as encouraging reflective approaches and encouraging critical reflection, as a means to promote social justice and facilitate school reform. This study however, examines how pre-service teachers in this teacher preparation program perceive and experience reflection.

As a teacher educator who is interested in educational reform, I undertook this study to better understand reflection in teacher education. I wanted to learn more about reflective practice. I also believed that as a teacher educator I could gain insight on reflection in teacher education from the perspectives of the pre-service teachers. In framing the research questions I focused on the pre-service teachers' definitions of reflection, and on the process, context, and content of their reflective practice (Calderhead 1989). I use an interpretive orientation because I wish to focus on meanings these pre-service teachers ascribe to reflection in teaching.

Theoretical Perspectives

Symbolic Interaction

I have been influenced particularly by symbolic interaction, a theoretical and methodological framework that is favored for studying lived experiences (Blumer, 1969; Denzin, 1987; Prus, 1996). Symbolic interaction is said to be the study of the ways in which people make sense of their life-situations and the ways in which they go about their activities, in conjunction with others, on a day to day basis. In order to understand and explain their conduct we must get

at their meanings (Manis & Meltzer, 1978). Prus (1996) extends this argument by stating that by inquiring into the experiences of others, researchers may learn a great deal of the life-worlds of the people they study.

George Herbert Mead (1934) laid the foundation for the symbolic interactionist perspective. For four decades he formulated and taught this theory. He called his approach social behaviorism, and referred to the description of behavior at the distinctly human level. One of his major works, *Mind, Self and Society* (1934) served to concretize his perspectives that were generally philosophical. One of the major shortcomings of symbolic interactionism is the diversity of viewpoints within this perspective. However, Herbert Blumer (1925) became a foremost spokesman, who elaborated a strong view of human and group activity (Meltzer, 1978). Blumer established himself as the spokesman for Mead's symbolic interactionism (Meltzer, Petra & Reynolds, 1978).

General Propositions of Symbolic Interactionism.

My interest in viewing the participants' construction of meaning led me to symbolic interaction. This theory deals directly with issues such as language, communication, and the interrelationships (Merriam, 1988). Symbolic interaction also perpetuates the notion of being able to put oneself in the place of others. I believe that the symbolic interaction theoretical framework well suits the interpretive nature of this study that is centrally concerned with meanings pre-service teachers constructed. Nash (2000) contends that history and meaning is specific to a community and must be considered in studying a particular context. Manis and Meltzer (1978) posit four propositions that summarize the fundamental features of symbolic interactionism that can serve as a guide to the present study.

The first basic proposition of symbolic interaction is that human behavior and interaction are carried on through the medium of symbols and their meanings. This implies that humans assign meanings to stimuli, and they act on the basis of those meanings. Individuals bring meaning to their behavior and these meanings are socially derived through interaction with others. Symbolic interactionists recognize that individuals act and interact within larger networks of individuals and groups that have impact on them.

Another proposition is that human beings are active in shaping their own behavior. Symbolic interactionists allow humans some degree of choice in their behavior. They can select and interpret stimuli and have the ability to interact within themselves (to engage in thought). Humans are capable of forming new meanings and new lines of action. This does not mean that human beings are not affected by difference influences, but they can modify these influences by creating and changing their own behavior. Individuals are not seen as passive, but they can engage in interactions that may result in behavior that is different from the group.

The next proposition of symbolic interaction is that human beings can construct their behavior in the course of execution. An individual engages in the process of interpreting, choosing and rejecting possible lines of action, in the course of behavior. Therefore, individuals can engage in thought and change their behavior as they interact with others.

The final proposition has major methodological implications, and implies that to understand human conduct requires study of the actors' covert behavior. If human beings act on the basis of their interpretation or meanings, it is essential to get at the actors' meanings in order to understand and explain their conduct (Manis & Meltzer, 1978). George Herbert Mead, a proponent of symbolic interaction agreed that the study of unobservable human behavior was necessary to understand the distinctive character of human conduct. He argued that simple

observation of behavior will not provide an understanding of the actors' view of their social worlds and hence an understanding of their conduct. The use of procedures allowing sympathetic introspection is a part of the methodology of most symbolic interactionists (Manis & Meltzer, 1978).

This study actively applies these propositions as a conceptual framework for understanding the meanings that the pre-service teachers attached to their perceptions and conduct, as they made sense of the reflective practice approach. In this study the pre-service teachers' voices is the main vehicle through which their meanings are interpreted. By considering the propositions, I explore how the pre-service teachers learn to become reflective practitioners. A symbolic interaction framework gives a clearer understanding of how the pre-service teachers interpreted what they have learned about reflective practice, and how they used it to inform their practice.

Generic social processes.

Within the symbolic interaction framework I utilize generic social processes to highlight the emergent, interpretive themes of the pre-service teachers association of reflective practice. These processes can be traced to Simmel (1955, 1978) who directed attention to dimensions of association. Using these processes helps one to achieve a theory of action that is grounded in the experiences of those under study. Blumer (1969) contends that the generic social processes incorporate the perspectives of the participants, as well as their capacities for reflectivity. This feature is extremely important in its application to this study. Blumer (1969) notes that these processes encompass the interpreting, planning, anticipating, doing, experiencing, assessing, and readjusting features of actions. It also locates the study within the historical and institutional linkages to action.

Prus (1996) suggests the use of generic social processes as a heuristic device for envisioning the process of lived experiences in a more concerted manner. The generic social processes incorporate the contextual features in which actions are embedded (Prus, 1996). I believe then, that these social processes can convey the experiences of reflection of the five pre-service teachers, in this particular context of teacher preparation. The generic social processes that are used in the analytical framework for this study consider the historical as well as the organizational linkages to the pre-service teachers' action. Prus (1996) contends that these processes incorporate the perspectives of the participants, as well as their capacities to reflect, and their abilities to influence one another as well as their relations with others. The generic social processes include (a) acquiring perspectives, (b) achieving individuality, (c) experiencing relationships, (d) situating the act, and (e) the act (Prus, 1996).

Reflective Practice

As I started to do my research with interest in knowing how the pre-service teachers understood and practiced reflection, I was drawn to the theoretical perspectives of Dewey (1933), Schon (1983, 1987), and van Manen (1977). I explored the pre-service teachers' understanding and experiences against the backdrop of these theoretical underpinnings. Many written works and studies on reflective practice hinge on these seminal works on reflective practice.

Dewey (1933) introduced the concept of reflection; he considered it to be an active and deliberative cognitive process that involves sequences of interconnected ideas that take into account underlying beliefs and knowledge (Hatton & Smith, 1995). Dewey introduced the premise that teachers should be encouraged to become thoughtful and alert students of education,

and argued that teachers should continue to grow in reflection (Dewey, 1910). He advocated learning by doing.

Recognition of the natural course of development...always sets out with situations which involve learning by doing. Arts and occupations form the initial stage of the curriculum, corresponding as they do to knowing how to go about the accomplishment of ends.

(Dewey, 1974, p. 364).

Dewey (1933) advocated the cultivation of three attitudes, openmindedness, whole-heartedness, and responsibility. He referred to openmindedness as a willingness to consider multiple or novel ideas. Such openmindedness is accompanied by a sense of convergent attention or whole-heartedness (Dewey, 1933). Intellectual responsibility insists that the reflective thinker consider the consequences of any proposed plan (Norton, 1997).

Schon (1983, 1987) expanded Dewey's notion of reflection. He suggested that professionals should frame and reframe the complex problems that they face, and modify their actions accordingly. Schon (1983, 1987) argued that the truly reflective practitioner must augment technical expertise with personal insights and artistry. He referred to professional artistry as " the kinds of competence that practitioners sometimes display in unique, uncertain, and conflicted situations of practice" (Schon, 1987, p. 22).

Schon introduced the concepts of reflection-on-action, and reflection-in-action. Reflection-on-action implies looking back upon action some time after it has taken place. Reflection-in-action involves simultaneously reflecting and doing, this implies that the professional has reached a level of competence, where he or she is able to think consciously about what is taking place, and modify actions instantaneously (Hatton & Smith, 1995).

van Manen (1977) offered three levels of reflection in teaching, the technical, practical, and critical levels of reflection. The technical level of reflection takes into consideration the efficiency, and effectiveness of means to achieve certain ends, which are not open to criticisms or modification (Hatton & Smith, 1995). van Manen calls the second level, practical reflection, some others have termed it interpretive reflection, where the practitioner examines the means, and also the goals, the assumptions upon which these goals are based, and the actual outcomes.

The third level, critical reflection encompasses the first two levels but more importantly, considers moral and ethical criteria (Gore & Zeichner, 1991). Professionals are called upon to make ethical judgements that are based on justice, and respect for persons (Hatton & Smith, 1995). When a professional operates at the critical level, he or she analyzes personal action within a wider socio-historical and politico-cultural context (Hatton & Smith, 1995, Zeichner & Liston, 1987).

The use of reflection in teacher preparation programs seems to hold promise for challenging the traditional technical/ behaviorist views of teacher preparation that some believe have continually obstructed attempts at educational reform (Bryan, 2000). These writers are often critical of the social efficiency tradition within teacher education. This tradition perpetuated the idea that to build a teacher education curriculum requires reduction of teachers' work into skill and other small units (Zeichner, 1993). The applications of behavioristic psychology are used to discern the specific and observable skills of teaching and measure competence in terms of observable performance. Within this framework, instructional management and evaluation systems are used to monitor the mastery of competence (Zeichner, 1993). It has been argued that behaviorism encourages a reductive approach to educating

teachers often focusing on sets of indicators, while ignoring the artistic and moral dimensions that are essential to teaching (Noddings, 1988, Tom, 1987).

Many in the teacher education community believe that the reflective practice framework for teacher education considers the cognitive, social, and moral implications of teaching (Valli, 1993). Some writers have proposed that there is a dramatic shift in attention in teacher education programs that use the reflective practice approach. Smyth (1989) contended that whereas from the perspective of social efficiency, scientific knowledge held a superior position, within reflective practice artistic and intuitive knowledge also are important.

Proponents cite many benefits of reflective approaches to teacher education. Some see it as the vehicle for getting the new cadre of teachers involved as active partners in school renewal (Valli, 1992, Zeichner & Liston, 1987). Reflection, they say, helps teachers understand and control their own teaching and learning (Zeichner & Liston, 1987), and it constructs the teacher as a decision-maker, who can help to define the direction of schooling (Valli, 1992).

There has been a great deal of research devoted to the conceptual analyses of this popular slogan "reflective teaching" in teacher education (Zeichner 1999). Various researchers have addressed different concepts of reflective practice. Studies have so far focused on the conditions that promote reflective practice (Cady et al, 1998; Dinkleman, 1997; Golubich, 1997; Powers 1999; Sax 1999), and the use of reflection journals (Caillouet 1998; Cates Draper 1998; Grumet 1999; Schell, 1998) as a principal way to promote reflection. Other researchers have looked at the context of reflection (Scully, 1997; Wang Li 1998) and collegial reflection (Gonzales, 1998; Meyer 1999). Research also has focused on aspects of reflective practice that are relevant to its technical as well as the social aspects (Valli, 1993).

Very little research has been conducted about how education students perceive the process of reflection, and how they come to understand themselves as reflective practitioners in the classroom. Rather, most researchers have focused on the actions of the pre-service teachers (Caillouet, 1998; Cates-Draper, 1998; Gonzales, 1998; Grumet, 1999; Meyer, 1999), often overlooking their views and considerations. Another understanding of reflection remains insufficient if it fails to explain the lived experiences of central players who in this case are the pre-service teachers.

As a teacher educator who is deeply committed to teacher education, I take into account Zeichner's (1994) suggestion that research should look at the kinds of reflection that take place in teacher preparation. Zeichner (1999) further suggests that it is imperative to look inside teacher preparation programs to uncover complexities and provide details from the perspectives of faculty and students. He argues eloquently that this type of research is relevant to teacher educators in any cultural context. I agree with the view that teacher education should be aimed at developing teachers who can clearly identify and articulate their purposes, and who can be counted on to give good reasons for their actions (Liston and Zeichner, 1987).

Declaring my Site

Interest and Background of Researcher

My interest and understanding of reflective practice was heightened because of my involvement in a teacher preparation program that encourages a reflection approach. Two years ago I moved from my role as a lecturer in a behavioristic program of teacher education to continue my professional development in a doctoral program. As part of my assistantship, I worked as a university mentor in a Post Baccalaureate Graduate Initial Teacher Preparation Program. This program was one of several models of elementary teacher preparation at the

university where I worked. The schools in the surrounding areas served as the internship sites for the pre-service teachers in this program.

In this program I found myself in a different role from that with which I had become accustomed as a teacher educator. I participated as a mentor in the program rather than as a "lecturer," dispensing knowledge and supervising beginning teachers. I was now a collaborator and a facilitator for pre-service teachers. I was expected to be a reflective practitioner who prepared reflective pre-service teachers. I discovered that I had to make a transition to a different way of thinking and acting. As a mentor in this teacher preparation program, I continually encouraged pre-service teachers to reflect on their practice during their field experiences and internships. When I observed the pre-service teachers in the classroom, I asked them questions that encouraged them to reflect on their actions. I also provided written feedback that highlighted their strengths and also questions for them to think about.

I was a part of the triadic relationship that included university mentor, cooperating teacher, and the pre-service teacher. This relationship helped the pre-service teachers. They received feedback from more than one person that encouraged them to continually think about their practice. The cooperating teachers were always giving verbal feedback to the pre-service teachers. Some cooperating teachers even wrote notes or kept a journal with the pre-service teacher.

My interest in the reflective practice approach in teacher education was also spurred on by my growing skepticism of the social efficiency tradition of teaching and learning that I had embraced for most of my career in teaching and teacher education. The social efficiency tradition had been my mainstay for many years, because this was the way I had been taught how to teach and later how to prepare teachers. I did not expect pre-service teachers to be decision-makers.

Rather, I wanted them to develop specific and observable skills of teaching that have been found to be related to pupil learning (Zeichner, 1983). Although I believed that this approach has served the purpose of producing effective teachers who are efficient in basic teaching skills and classroom management, I acknowledged the reflective practice approach as another way to help teachers learn how to accommodate the diverse needs of students.

I began to view reflective practice as a vital component of any contemporary teacher preparation program. I wondered whether teachers would stand a better chance of reaching the students that are in the schools, if they reflected not only on the technical aspects of teaching but also on the broader social issues that are part of the educational environment (Valli, 1992). As I became more involved with these pre-service teachers in the teacher preparation program, I found myself asking many questions. How did these pre-service teachers understand reflective practice? How did they learn to become reflective practitioners? How did they interpret their reflective practice? I believed that if I looked at reflective practice through the eyes of these pre-service teachers, it would greatly add to my understanding of reflective practice. I felt that the insights I might gain from such a process would allow me to more ably assist pre-service teachers in getting a strong start on their practice.

Subjectivity of the Researcher

The main goal of this study is to share the perceptions and experiences of five pre-service teachers on their understanding and experiences in a teacher preparation program that emphasizes critical reflection. The issue of subjectivity permeates this study. Subjectivity is often roughly equated with all that is normative and emotive, dealing with feelings, in contrast to all that is empirical and therefore objective, for example, observations and facts (Schwandt, 1996). The facets of the subjective-objective dimensions explore beliefs about reality. As a researcher, I

believe that we construct understandings of reality through our perceptions and interpretive faculties (Rossman & Rallis, 1998), as such we are subjective in our interpretation of human experiences. The use of subjectivity in studying human experience rests on the notion that "truth" is problematic, and that there are multiple perspectives about the world (Rossman & Rallis, 1998). When a researcher adopts a subjective stance it can mean sharing the personal views of individuals through their personal subjective experience and understandings (Rossman & Rallis, 1998).

Many sociological approaches have been constructed to deal with the subjective nature of human studies. Three main approaches are phenomenology, ethnomethodology, and symbolic interaction. This study adopts a symbolic interaction framework to analyze the data collected from the participants of their lived experiences, as such subjectivity is an integral part, and a related determinant of this sociological research. One objective of this study is to shrink the distance between the experiencing of the subjects and their accounts of lived experience. Denzin (1991) argues that writing about the experience is removed from the actual 'raw' experience, and aspects of subjectivity are included in the way the lived experiences are represented by the researcher.

Eisner (1998) states that subjectivity has been found to be a troublesome notion in the educational research community, that we often try to reduce its presence by the language we use. He asserted that " we formalize our language as much as possible to depersonalize our presence in the works we create " (Eisner, 1998, p. 45). He argued that until recently we often referred to ourselves as "the researcher" in a study rather than use the first person singular "I." In this study the use of "I" is prominent because I chose an interpretive approach.

This is an interpretive study in which lived experiences were interpreted by the researcher. Geertz (1973) suggests the goal of interpretive studies is the search for meaning. It involves the researcher "tracing a path through a dense thicket of interpretations" (Lawrence-Lightfoot, 1997, p.91). The goal is to generate "thick descriptions" of the actors' worldview (Geertz, 1983), from the perspectives of individual experience (Rossman & Rallis, 1998).

For the purpose of this work, subjectivity encompasses the affective experiences that I encountered in my dual role as researcher and mentor of the participants of this study. I experienced different types of emotions that are voiced throughout the study. It also involves the way I reconstructed the experiences of the participants who constituted this study. My role as mentor in this teacher preparation program had an impact on the way I conceived of this study. It also impacted on the conduct of this study and has been addressed as an integral part of the evolution of the researcher as a reflective practitioner and researcher trying to learn more about reflection in teacher preparation. In the researcher's stance, I shared my subjective participation in the study (Rossman & Rallis, 1998). I also addressed the issue of subjectivity in this study by citing the literature, and by my personal accounts of the pre-service teachers.

Ellis and Flaherty (1992) suggest that subjectivity is situated such that the voices in our heads and the feelings in our bodies are linked to the political, cultural and historical contexts and so is unavoidable. We focus on how we talk about the world and try to deal with it. In acknowledging and capturing subjectivity, we evoke a conversation through which we come to know others and ourselves and the position from which they speak (Ellis & Flaherty, 1991).

Focus of the Study

This study was designed to examine the conceptual orientation of reflection through the eyes of pre-service teachers who participated in a teacher preparation program. This qualitative interpretive study was concerned with how five pre-service teachers constructed meanings of reflection and how they believed these meanings inform their practice. Through analysis, and interpretation of the data gathered, pre-service teachers' views will be highlighted, informing the reader of what they know, what they have learned and how they experienced reflective practice in their professional journeys to become teachers.

The main purpose of this study was to discover how five pre-service teachers understand and interpret reflective practice. I uncovered the meanings that these pre-service teachers attached to their learning and practice of reflection in teaching. My goal was to share the perceptions and experiences of these participants through presentation of their verbal comments, and their journal writings. I was a participant observer in this study because I shared the journey of the pre-service teachers in this program for one year, and recorded my observations of their final student teaching practice and other events. I acted as a mentor, and I also participated in the evaluation process and attended seminars. This issue of studying those whom I evaluated was one that I considered seriously. I tried to eliminate any problems by discussing the study with the participants. I conducted the interviews after they had completed the program. Their evaluations had been completed and submitted to the program leader. This study was guided by four main research questions.

1. How do the pre-service teachers perceive and understand the concept of reflection?
2. How do these pre-service teachers describe how they learn to reflect on their

practice?

3. In what contexts do the pre-service teachers engage in reflective practice?
4. What do the pre-service teachers reflect upon in their practice?
5. How has the researcher's subjectivity evolved over the course of doing this study?

Significance of the Study

The findings of this study will be significant from two standpoints. The study can add to research findings concerning reflective practice and contribute to the discussion on the usefulness of reflective practice as a reform effort in teacher education. The findings of this study can also offer insights about improvements in teacher preparation at this university, and it can suggest ways that other educators and I may support the development of beginning teachers.

Summary

Reflective practice is one reform that has taken hold in teacher education, and it continues to attract attention in research and teacher preparation. This study adopts a qualitative approach to provide an in-depth view of how five pre-service teachers understand and use reflection in a teacher preparation program. The results of this study will illuminate some important elements of reflective practice of pre-service teachers in a post baccalaureate program for initial teacher preparation. The theoretical framework originates in the works of Dewey (1933), and Schon (1983, 1987) who is considered to be the modern day father of reflective practice, having examined the definitions, process, context and content of how the pre-service teachers learn to reflect. The analysis is further informed by van Manen's (1977) stages of reflection. This research applies a symbolic interaction theoretical and analytical framework to give voice to the pre-service teachers within the historical and institutional contexts of the teacher preparation program (Blumer, 1969, Denzin , 1978, Prus, 1996). This research can serve

as a source of discussion for teacher preparation programs that adopt the reflective practice approach.

In Chapter One I have outlined the choice of topic, my reasons for engaging in this study, the theoretical frameworks for the research, and the focus and significance of the study. In Chapter Two, I explain the major theoretical perspectives that I deem important to this study and my personal beliefs. The review of the literature will not only be confined to this chapter, instead, it will be found in the analysis as well as the discussion of the data. Wolcott (1990) states that in our descriptive and analytical accounts, the literature should be in consort with the new data; therefore, as the analysis is ongoing so too the relevant literature must be woven into the entire text. In Chapter Three, I develop a detailed account of the methods and data analysis procedures. In Chapter Four, I present the historical and institutional context of the teacher education program and portraits of the participants as part of the institutional context. In Chapter Five, I present the interpretations with the relevant evidence from the literature. In Chapter Six, I present the discussion of the meanings and implications of this study.

CHAPTER TWO

REVIEW OF THE LITERATURE

Introduction

In this chapter, I explore the major theoretical perspectives that concern this study. In the first part of this review, I look at the social efficiency tradition of teacher education from which I, the researcher, emerged as a teacher educator. It is important to link this part of my work as a teacher educator to look at what knowledge base I emerged from, to take my place in a teacher preparation program that encourages critical reflection. I then explore the reflective practice approach and all its diverse parts that form the basis for the study.

Theoretical Perspectives

The Social Efficiency Tradition

The social efficiency tradition (Good, 1990) emphasizes technical efficiency and behaviorally oriented approaches (Zeichner & Liston, 1990). It is the background from which I emerged as a teacher educator. This technical approach to teaching and teacher education is characterized by faith in the power of the scientific study of teaching to provide a basis for building a teacher education curriculum (Zeichner & Liston, 1990). This approach has dominated the field of teacher education and curriculum since the 1920s, and perpetuated the idea that to build a teacher education curriculum requires careful analysis of teachers' work (Zeichner, 1993). It is believed that teacher preparation programs that adopt the social efficiency approach have focused on the process/product approach that fragment knowledge into small discrete elements, and treat knowledge as independent of goals. This has strongly hampered the process/product researchers from even roughly approximating the real work of teachers (Valli, 1992).

The emphasis of the technical efficiency orientation is measurable performance, and the teacher's ability is measured through prescribed skills and behaviors conceived and designed by others (Borko et al., 1984). In my role as lecturer in a teachers' college, I prepared hundreds of teachers in this way, assuming that these teachers would thus be prepared in effective teaching and classroom management skills. In this scenario, the teacher's role is limited to piloting students through a learning process. The technical teacher is not particularly encouraged to become a decision-maker and often does not consider alternative courses of action or consequences of teaching. Teachers trained by this method often have a repertoire of behaviors that are used similarly across contexts and time.

The search for effective teaching methods has been spurned by many critics of this movement as being narrowly focused, and unproductive because it overlooks the contextual features of teaching, such as the subject matter being taught, the classroom situation and pupil characteristics (Noddings, 1988; Shulman, 1987; Tom, 1987). These critiques have caused the social efficiency movement to evolve towards a more cognitive orientation that encourages reflective teaching. As social efficiency moves away from being a technical to a more deliberative orientation, teachers use research-based skills and make practical decisions. As a committed teacher educator, I engaged in teaching my students to be reflective only in their teaching strategies. Valli (1993) suggests that teachers in the technical orientation can be reflective and make practical decisions. However, Zeichner (1993) contends that these behavioral approaches continue to flourish under the guise of research-based teacher education. He further contends that although teachers engage in technical reflection, the social efficiency model should not be mistaken for the reflective practice paradigm. Teachers who operate within a reflective practice paradigm are involved not only in practical decision-making in the

classroom, but they also consider the social and political implications of teaching and learning. Liston and Zeichner (1990) argue that a reflective orientation of teaching should stress the giving of good reasons for educational action.

The social efficiency approach to teaching often has been contrasted to reflective practice. Whereas the social efficiency approach emphasizes the development of specific and observable skills, reflective practice requires teachers to think about the behavior and the context in which learning occurs (Valli, 1993). Many in teacher education consider technical reflection to be an essential aspect of initial teacher development that may be a precursor to other kinds of reflection (Hall, 1985; Gore & Zeichner, 1991). Moreover, the particular context of teacher education often determines the kind of reflection that takes place (Calderhead, 1989). Being situated in an inquiry-oriented teacher education program that encourages critical reflection, I was urged to examine the conceptual orientation of reflective practice.

Reflective Practice in Teacher Education

Reflection has been proposed as an important concept with sound theoretical foundation in education (Dewey, 1933; Schon, 1987; Van Manen, 1977). Reflection is said to begin when one inquires into his or her own experiences and relevant knowledge to find meaning in his or her own beliefs (Dewey, 1933). Many researchers have studied reflective practice in teacher education from varying viewpoints that range from the nature of reflection to the kinds of reflective practice in teacher education. A preponderance of reflective practice efforts has led to some confusion in the field about the definition of reflection and its accompanying terms.

Definitions and Conceptions of Reflective Practice.

Definitions of reflection.

The considerable body of research into reflective practice has led me not only to an educational puzzlement but also a dilemma of what is reflection in teacher education. The term reflection has been interpreted in a number of ways and takes on different meanings and conceptions. The terms of reflection, critical reflection, reflective practice and reflective inquiry have all been used interchangeably to describe the same concept. Nevertheless, there is a general agreement in the literature that reflection in teacher education is a special form of thought (McNamara, 1990; Sparks-Langer & Colton, 1991). Dewey (1933) reasoned that reflection precedes intelligent action.

Reflective thought is valuable for it emancipates us from merely impulsive and merely routine activity. It enables us to direct our activities with foresight and to plan according to ends in view, or purposes of which we are aware...it converts action that is merely appetitive, blind and impulsive to intelligent action.

(Dewey, 1933, p. 17)

Historically, Dewey (1933) referred to reflective practice as intelligent action and called it reflective teaching. He defined reflection as the act of active, persistent and careful consideration of any belief or supposed forms of knowledge in light of the grounds that support it and the consequence to which it leads. He added that it involved open-mindedness, wholeheartedness, and responsibility (Dewey, 1933).

Dewey (1916) proposed that reflection was important in the change processes of teaching through the reconstruction or the reorganization of experiences. He maintained that teachers should investigate their practice through inquiry. Dewey alluded to the fact that that all human

experience is ultimately social and it involves contact and communication. He encouraged teachers to work together to enhance this process of inquiry, and to actively explore the nature of the problem. In speaking about reflection, Dewey (1933) encouraged implementation of solutions after the problem had been thought over. Other researchers also agree with the cycle of thinking and doing and thinking again and then modified action (Gore & Zeichner, 1984; Noffet & Brennan, 1988).

Dewey advocated that teachers must be thoughtful students of their own practice, rather than followers of prescription or routines (LaBoskey, 1994). As early as 1904, Dewey warned of placing pre-service teachers into the schools before they developed the habit of reflection. He felt they could be overly influenced by existing practices, diminishing the potential for reflection, inquiry and experimentation, and encouraging mindless imitation. Dewey called this 'miseducative experiences' (Dewey, 1933).

Schon (1987), another proponent of reflective practice expanded Dewey's concept of reflection. Like Dewey, he clearly linked reflection to action and suggested that the reflective perspective values the teacher's knowledge, which is situational and is considered knowledge in action (Schon, 1991). He suggested that reflection is a purposeful, systematic inquiry into practice. Schon (1983) described reflection as central to growth and development within all professions. He argued that professional problems are complex and are often devoid of easy answers, and unique to each situation. Schon (1983) concluded the teacher's own knowledge is critical to the problem solving process. He emphasized making reasoned judgements from a rational and moral perspective (Hatton & Smith, 1995).

Schon (1983, 1987) emphasized the context and time in which reflection takes place. His concepts of reflection-on-action and reflection-in-action clearly indicated the time frames within

which both occur. These are the responses that skillful practitioners bring to their practice, when they frame situations encountered in their day to day experiences. Schon's reflection-in-action indicates reflection while action is taking place and modifying this action instantaneously, and consists of strategies of action. It has also been argued that there is reflection on action then modified action is contemplated for the future (Gore & Zeichner, 1991; Smith & Lovat, 1991).

Just as there are varying definitions of reflection in teacher education, so too there are different conceptions of reflective practice adding to confusion in the field. Many theorists have expanded upon the concept of reflection and put forward different theoretical frameworks in teacher learning (Calderhead, 1989,1993, Valli, 1990; van Manen, 1977).

Reflective practice frameworks.

van Manen (1977) divided reflection into a hierarchy of three levels based on Habermas' (1973) work. He suggested, first the technical level that is concerned with the efficiency and effectiveness of means to achieve certain ends that cannot be modified. The next level, practical reflection examines the means, as well as the goals, the assumptions and the outcomes. This second level is in contrast to technical reflection and recognizes that meanings are not absolute and can be negotiated through language. The third level, critical reflection emphasizes aspects of the first two levels but also considers moral and ethical criteria (Gore & Zeichner, 1991), so that judgements are based on equity, justice and respect for persons (Hatton & Smith, 1995). Valli (1990) also distinguished between technical and moral approaches to reflective practice and identified three approaches to reflective teacher education that emphasized the moral foundation of teaching, (a) the deliberative approach, (b) the rational approach, and (c) the critical approach.

Calderhead (1989) provided an analysis of the various theoretical influences on the different visions of reflective teacher education. He discussed Dewey's (1933) conception of reflection, Schon's (1983, 1987) ideas about the reflective practitioner, Schwab's (1973) concept of teaching as a deliberative practice, and Habermas's (1974) notion of reflection as an element of emancipatory action. Calderhead concluded that concepts of reflective teaching employed in teacher education varied along five dimensions, (a) the process of reflection, (b) the content of reflection, (c) the preconditions of reflection, (d) the tutorial context in which reflection occurs, and (e) the products of reflection. Grimmet, Mackinnon, Erikson and Riecken (1990) proposed a similar theoretical framework of reflection and presented three major conceptual orientations to reflective practice based on differences in the content of reflection, the reflective process, and the purpose of reflection. These theories suggest that reflective practice may be approached differently; it is a concept that can be learned, and that teachers can acquire reflective practice skills over time.

To add more controversy to the whole of the reflective practice orientation, there has been much discussion in the literature as to whether the reflective practice approach is a separate paradigm (Doyle, 1990; Kennedy, 1989; Zeichner, 1983). Zeichner (1983) proposed the inquiry-oriented paradigm as the basis for reflective practice. He proposed that the teachers who work within a social reconstructionist paradigm (Carr & Kemmis, 1986) skillfully and reflectively act upon ethical and political as well as pedagogical issues involved in their everyday practice. The conceptual orientation of the Post Baccalaureate Initial Program for Teacher Preparation is one of social reconstructionism. The pre-service teachers in this study were encouraged to engage in inquiry and reflective thinking (NCATE Folio, 1998).

Kennedy (1989) contributed the reflective practitioners' model as one of her two conceptions of good teaching and teacher education. She believed that reflective practitioners have a thoughtful sense of teaching within their contexts and must ultimately make choices about preferred goals and practices. Teachers who are reflective practitioners construct working knowledge out of frames of reference and alternative viewpoints. She further states that teachers use their working experiences, that includes a combination of personal experience, theory, research, values and beliefs, to critically analyze and continually improve teaching.

Doyle (1990) also proposed the reflective professional as his contribution to the reflective practice paradigm. He argued that the knowledge bases for reflective professionals included (a) personal knowledge that the teachers bring with them to the classroom, (b) craft knowledge of skilled practitioners and, (c) proportional knowledge from the classroom, based on their knowledge , skills, and attitudes. Although, there are variations in the ways they launch the orientations, these researchers all view reflection or inquiry as a distinct model of teacher education, one essentially different from technocratic/ behavioristic models.

Emergence of Reflection in Teacher Education: Constructivism

The reflective practice approach is said to have emerged out of the developmentalist tradition of teacher education of the 1960s and 1970s (Piaget, 1967). This tradition assumes that the natural order of the development of the learner provides the basis for determining what should be taught to students and their teachers (Zeichner, 1993). As this tradition evolved to a more child-centered movement, it became grounded in a constructivist approach to teaching and learning. Constructivism is a descriptive theory of learning that points to the individual's active construction of knowledge and meaning, or the mental structures that the individual develops in, or derives from his or her learning environment (Bussis et al., 1985). According to Vygotsky

(1978), the development of cognitive forms occurs by means of a dialectical relationship between the individual and the social context. Constructivism provides a compelling explanatory framework for understanding the way human beings acquire knowledge, and it implies that people create knowledge from the interaction between their existing knowledge, the new ideas, and situations they encounter.

The reflective practice approach also has some bearing on the social reconstructionist tradition of teacher education. Zeichner and Liston (1987) argue that the social reconstructionist tradition is a movement in education that view schooling and teaching as crucial elements in a wider social movement toward a just and humane society. In this tradition, teachers are expected to think critically about the social order and use reflection to address moral and social aspects of teaching along with technical aspects. They are expected to think about the social and political implications of their actions and the contexts in which they work. They are expected to change the world by first changing their own practice.

The resurgence of the reflective practice approach came about with the break down in consensus in the field of education that the technical-rational model of teacher preparation was the most adequate approach to teacher preparation. Many educators and researchers argued that this approach failed to generate a substantial and significant set of findings to guide the preparation of teachers (Richardson, 1991; Shulman, 1987; Tom, 1990; Valli, 1992). Researchers also challenged the process/product research approach that fueled teacher education. They disagreed with the way knowledge was broken down into small discrete elements independent of goals and context within much of the preparation of teachers. Critics claim that the technical-rational model of teacher preparation is an inadequate way to explain and guide teaching.

Continued research in teacher education indicates that there is a steady move towards teacher education programs that encourage reflection and reflective practice.

Another influence in the resurgence of reflective practice is the increased dominance of cognitive over behavioral psychology. Cognitive psychology has provided fertile ground for explorations into teachers thinking, problem solving and reflexivity. Valli (1992) explored the increased interest in cognitive aspects of teachers' planning and decision making. She also emphasized the interest in the moral bases of education, a move to teacher empowerment, and a greater acceptance of ethnographic inquiry and action research.

Zeichner and Liston (1987) contend that all the traditions of teacher education exhibit a variation of the concept of reflective practice from different perspectives ranging from the technical to social aspects of teaching. Zeichner and Tabachnick (1991) extended this framework and proposed different versions of reflective practice in the different traditions. These versions of reflective practice include (a) the academic version that stresses reflection on subject matter and the representation and translation of subject matter knowledge to promote student understanding; (b) the social efficiency version that emphasizes either the mechanical or thoughtful application of particular teaching strategies that have been suggest by research; (c) the developmentalist version that prioritizes teaching that is sensitive to students interests, thinking, and patterns of developmental growth and; (d) the social reconstructionist version that stresses reflection about the institutional, social and political contexts of schooling and the assessment of classroom action for their ability to contribute towards greater equality, justice, and humane conditions in schooling and society. Zeichner (1992) also identified a fifth version of reflective practice, a generic version of reflection in which there is not much specificity about the desired purpose and content of reflection.

Reflective Practice in Contemporary Teacher Education.

A surge of interest on reflective practice developed in the late 1980s. The literature is replete with examples of reflective practice as a reform effort (Doyle, 1990; Kennedy 1989; Tom, 1992; Valli, 1992; Zeichner, 1983). Tom (1992) attributed this interest in reflective practice to three interpretations. He reasoned that many observers of the current scene believed that reflective practice was a fad that was becoming popular in teacher education. According to this view, teacher educators were superficially attracted to reflective teacher education either because it was popular or to external pressures put on by the requirements of the accreditation agencies (Tom, 1992)

Another interpretation he forwarded that added to the lack of consensus in reflective practice was that teachers failed to identify educational and political commitments that stood behind proposals regarding reflective teaching (Zeichner & Tabachnick, 1991). Teachers were reluctant to specify their educational beliefs (Tom, 1992).

Tom's final interpretation had to do with the fact that teacher education was in the midst of change of perspectives of how teaching was actually viewed. He believed that teachers were in the midst of a revolution in the way they perceived the nature of teaching and teacher education (Valli, 1992).

Many teacher education programs have embedded inquiry into their approach to reflective practice. These programs differ because of the varying definitions of reflection, methods of implementation, time involved, and faculty autonomy and responsibility (Tom, 1992). There is agreement in teacher education that the overall goal of reflection is the broadening and deepening of pre-service teachers' thinking about teaching and learning (Posner, 1996). It can be said that teacher educators have responded to the call for reform by identifying a goal of preparing reflective teachers, as " there is not a single teacher educator who would say

that he or she is not concerned about preparing teachers who are reflective." (Zeichner and Tabachnick, 1991, p.1).

Research Findings on Reflective Practice

Conditions that promote reflection.

Research has focused on the nature and impact of teacher preparation programs that utilize reflective practice. A study by Richert (1990) looked at the conditions that influence the reflective capabilities of teachers through journal writing, portfolio-inspired reflection essays, conversation with peers, and conversation with teachers and peers. This study looked systematically at these four different teacher education structures designed to promote reflective practice, in order to understand the relationship between program structure and teacher reflection. The researcher analyzed teachers' perceptions about the four structures, and how their ability to think about their work was affected by these structures. The results of this study pointed to the conditions that promoted or fostered reflection for the teachers. A structured opportunity to reflect, time, and safety, all emerged as important elements, reflecting with their colleagues, variety in the types of structured opportunities for and assistance in remembering more fully and more accurately were particularly helpful to the pre-service teachers (Richert, 1990).

Dinkleman (1998) investigated an attempt to promote critically reflective teaching in Secondary Social Studies with three pre-service teachers as they progressed through a program's final two semesters. The study's purpose was to discover if the pre-service teachers deliberated on ethical and moral dimensions of teaching and if their practices were informed by these deliberations He looked for evidence of critical reflection and critical reflective teaching through data collected over two semesters. He examined participants' deliberation about ethical and

moral dimensions of teaching, teaching practices informed by this deliberation and their influential factors. The results of the study suggested that the participants evidenced critical reflection throughout the two semesters. Instances of critical reflective teaching also were apparent, though limited. The researcher suggested that educators influence pre-service teachers to become more critically reflective. He concluded that it appears to be a great challenge to influence the quality and content of reflection (Dinkleman, 1997).

Golubich (1997) proposed a conceptual model of a reflective landscape in his study. He examined existing aspects of teaching that deterred or constricted reflective practice. He contended that teaching must be expanded beyond pedagogical practice to include the broader context of schooling and education in a democratic society.

Sax (1999) looked at the reflective practice in a teacher education program. The study identified students' experiences of reflective practice. The researcher investigated how student teachers chose reflective practice as one of four choices that included diversity, collaboration, reflective practice and technology. She also looked at how these choices changed over time. The research findings indicate that infusing strategic choices into the coursework of a professional education program helped to encourage students challenge their own beliefs, and clarify their own values. The researcher also found that the use of a cohort structure and seminar class facilitated the creation and maintenance of a learning community, and coordinating the goals and activities of the coursework and internship experiences helped to reinforce effective models for teaching and learning (Sax, 1999).

Growth in reflective thinking.

There is research that focuses on growth in reflection. A study by Cates Draper (1998) investigated perceived reflections of six elementary pre-service teachers during a final internship

that included a weekly seminar. The researcher studied the participants' growth over time and their perceptions of that growth. She examined their preference for strategies to promote reflection and the mode of reflection. The strategies used in this particular study were journal writing, responses to videotaped lessons, reflective engagement in focus groups, and participation in hands-on and seminar activities. This study determined that teachers do reflect, and reflections are based on classroom dilemmas and experiences. The strategies employed in this study promoted reflection by the pre-service teachers, who preferred to reflect through talking and doing rather than writing.

Callouet (1998) conducted a study that focused on growth in reflective practice and used the voices of pre-service teachers. The study looked the professional and personal experiences of three pre-service teachers and two first-year teachers. The researcher uncovered four assertions through these novice teachers' voices. These assertions were, (a) reflection requires initiation at the pre-service stage to ensure integration into the classroom, (b) effectiveness is defined by approved practices of respected supervisors, (c) reflection in practice is a difficult concept to internalize, and it requires the experience and confidence of purposeful continuous practice, and (d) professionalization is dependent on school placement and influenced by the culture of that school. The researcher concluded that the voices of these teachers could provide insight into tools for success and impact on pre-service training and in-service teaching.

Collegial reflection.

Some recent studies have examined collegial reflection that promotes reflective collaboration in the teaching community. Gonzales (1998) investigated the discourse between pre-service reading teachers and their supervisors in post teaching conferences. The researcher examined the factors that encouraged or obstructed collegial reflections among these

participants. She also looked at how the pre-service reading teachers used collegial reflections in their instructional practices. The findings of this study indicate that the nature of collegial reflection consists of individuals rousing one another's thinking by posing questions, generating possible solutions, and deliberating on the consequences of solutions offered in order to determine the best possible course of action for transforming problematic situations (Gonzales, 1998).

Schell (1998) looked at the impact of electronic journaling as a means of sharing ideas. The study suggested that electronic journaling can be a means to promote reflection, if there is immediate feedback and encouraged response to the feedback.

Meyer (1999) looked at conversational learning. This study offered an analytical framework for making sense of teachers' conversations. The researcher analyzed selected teacher conversations and learning. The study documented novice teachers discussing generative content in light of emergent dilemmas of practice and often in response to pushing of capable facilitators and peers. The findings indicated that these conversations supported the teachers in developing professional dispositions that included experimenting, sharing and appropriating practices, embracing ambiguities, and taking both an interrogatory and reflective stance towards teaching. The research supported the idea of encouraging teachers to be part of a community of learners.

Benefits of Reflective Practice

Reflection has been put forth as an important concept in teacher preparation with sound theoretical foundation in education. There is a great deal of consensus by researchers as to the value of practicing reflection. Shulman (1987) and Richardson (1990) contend that reflective models are in keeping with the holistic way in which teachers actually think and act in

classroom. Thus, they have more intuitive credibility suggesting that integrating reflective practice models in teacher education is one way to develop better teachers.

Calderhead (1993) and others explored the nature of reflective practice. They found that reflective teaching encourages teachers to analyze, discuss, and evaluate practice, all of which are part of professional development. Teachers, through reflection, can become aware of their intuitive knowledge and engage in problem solving that helps to strengthen teaching ability (Vacca, Vacca & Bruneau, 1997), and promotes professional growth. Valli (1993) supports the view that teachers could be reflective, while being technically prepared. This can result in practical decision making. She further states that the teacher can adapt and modify their skills in response to students' needs and curriculum goals and exercise professional judgement (Valli, 1993).

Reflective practice can positively affect professional growth and development by leading to a sense of greater self-awareness. New insights are developed with constant reflective practice, which may further enhance a greater understanding of challenges encountered by professionals (Osterman, 1993). Exposure to reflective approaches in teacher preparation can lead teachers to liberating educational experiences in the journey to self-reflection and reflection on their teaching practices. Current research suggests that reflective practice is enhanced when teachers participate within a supportive community. Smyth (1992) explored the environment where teachers come together to engage in conversations about practice.

Zeichner (1999) suggests that there is need to present current reform efforts in teacher preparation that demonstrate the use of reflective practice in preparing beginning or novice teachers. Research suggests that novice teachers can reflect and can be helped to learn the value of reflection in teaching and learning (Rudney & Guillaume, 1990; Pultorack, 1993, 1996; &

Wildman & Niles, 1987). It has been suggested that, if pre-service teachers are to be taught reflection, the theme of teacher as reflective practitioners should be pursued vigorously in teacher preparation programs, additional resources, and much patience and trust are required to get started (Wildman & Niles, 1987).

Liston and Zeichner (1990) encourage teacher educators to look at more complex issues related to the particular kinds of reflections we want to encourage in teacher education programs. They believe that if teacher educators are to enable future teachers to act wisely and to reflect on what constitutes good reason for their actions in teaching " then reflection over and inspection of personal beliefs, passions, values, images, and prejudices must occur." (Liston & Zeichner, 1987, p. 240). They further state that it is appropriate to ask questions about the students, the curriculum, the institutional setting, and the larger social role of schools (Liston & Zeichner, 1990).

The present study is an effort at finding out how pre-service teachers' understand and practice reflection in a teacher preparation program. I believe that the more that teacher educators can find out about how pre-service teachers view reflective practice through their interpretations, the better we may be able to find out the types of teacher reflection that are useful toward particular aims. Dewey (1933) emphasized that reflective thought is initiated by uncertainty and guided by one's conception of a goal or end point. He suggested that the development of reflection involved acquiring certain attitudes like open-mindedness, and skills of thinking (Calderhead, 1989). The context for such qualities to be cultivated is important, and existing research on teachers' professional learning holds promise for informing teacher educators' concept of reflective practice (Calderhead, 1989, Clandinin, 1986).

Summary

The review of the literature explained the major theoretical perspectives that underpin this study. It is important to shed light on the of the social efficiency tradition of teacher education, as the background from which the researcher came into this research. This tradition has been found to be very limiting in its view of preparing pre-service teachers to become critical reflective practitioners. The reflective practice orientation is the focus of this study, and the literature in this area was discussed fully to give a broad picture of the theoretical assumptions and relevant research findings.

CHAPTER THREE

METHOD

No one is detached or 'neutral'
Nespor & Barber, 1995

Introduction

The literature indicates that there is need for studies in educational reform (Tom, 1990; Zeichner, 1987). Reflective practice is a current educational reform that has been instituted in many teacher education programs. This qualitative study is interpretive in nature, and looks at the conceptual orientation of reflective practice from the pre-service teachers' perspectives. An interpretive study takes into account lived experience that is rooted in meanings, interpretations and activities of individuals. As discussed in chapter 1 and 2, there are very few studies that emphasize the views and experiences of pre-service teachers, to bring out their understanding and perceptions of reflection in teaching. In this chapter I describe my choice of a qualitative, interpretive study, and the philosophical assumptions underlying such a research, the research design I used in this study, including the role of the researcher and the methods used for data collection and analysis.

This study falls under the broad umbrella concept of qualitative research. The major philosophical assumption for all qualitative work is that "reality is constructed by individuals interacting with their social worlds" (Merriam, 1998 p. 6). Qualitative researchers are interested in understanding the meanings of people's experiences. Delamont (1992) spoke of qualitative

research as that which values the views, perspectives, opinions, prejudice and beliefs of the informant, actors or respondents that are being studied. Qualitative research also takes into account the role of the researcher as being "the researcher's constructions of other people's constructions of what they are up to" (Geertz, 1973, p. 9). It is important that the researcher clearly represent her personal constructions in doing a qualitative research. As a broad approach to study social phenomena, the qualitative design is said to be naturalistic, interpretive, and draws on multiple methods of inquiry (Denzin, 1994).

There are many variations of inquiry to help us to understand the meaning of social phenomena. Tesch (1990) called these variations "orientations," and lists forty-five approaches to qualitative research. She however, places these approaches into three main orientations, language-oriented, descriptive-interpretive and, theory building (Tesch, 1990).

Merriam (1998) outlines many terms that are used interchangeably to describe the types of qualitative research in the field. Some terms that are used to describe different studies include naturalistic inquiry, interpretive research, inductive research, case study, and ethnography. I chose an interpretive approach to this study because of the nature of my inquiry. An approach within the interpretive paradigm typically tries to understand the social world as it is from the perspective of individual experience, and the focus shifts from the positivist notion to an interest in subjective worldviews (Rossman & Rallis, 1998).

When I began this research I thought about doing a case study to look at what happens in a teacher preparation program (Zeichner, 1999). As I formulated my research topic, I gravitated towards understanding the meanings that the pre-service teachers in the teacher preparation program attached to the concept of reflective practice. I moved towards studying a conceptual orientation, and as such I took an interpretive approach, a form of inquiry that includes

descriptions, interpretation, and understanding (Merriam, 1998). I set out to understand the interpretations that the pre-service teachers constructed of the concept of reflective practice as it related to their experiences in the teacher preparation program.

Symbolic interaction is one of the interpretive traditions in which qualitative research has been grounded because of the basic propositions that this theory offers to the study of lived experience. Many writers have traced the philosophical roots of qualitative research to phenomenology, and symbolic interaction (Merriam, 1998). Symbolic interaction which was developed explicitly by George Herbert Mead (1934) and Herbert Blumer (1969) is envisioned as " the study of the ways in which people make sense of their life-situations and the ways in which they go about their activities, in conjunction with others." (Prus, 1996).

Symbolic interaction takes into account human lived experiences as interpreted by the individuals who interact with others in their social world. These individuals continually make meaning of their interactions with others. I embraced the theoretical and methodological principles of symbolic interaction to examine the views and experiences of the participants in this study. Figure 1 depicts the conceptual framework I used to situate the research that I undertook to study the pre-service teachers' understanding and experiences of reflective practice.

Research Design

This research was designed to shed light on how pre-service teachers understand and practice reflection in a graduate teacher preparation program. The use of qualitative research well served to uncover the process and meanings of the participants in this study. The job of the qualitative researcher is to find out how the people being studied understand their world (Delamont, 1992). In using an interpretive design, I examined the perception and experiences of

pre-service teachers to determine how the elements of reflective practice work in their experience.

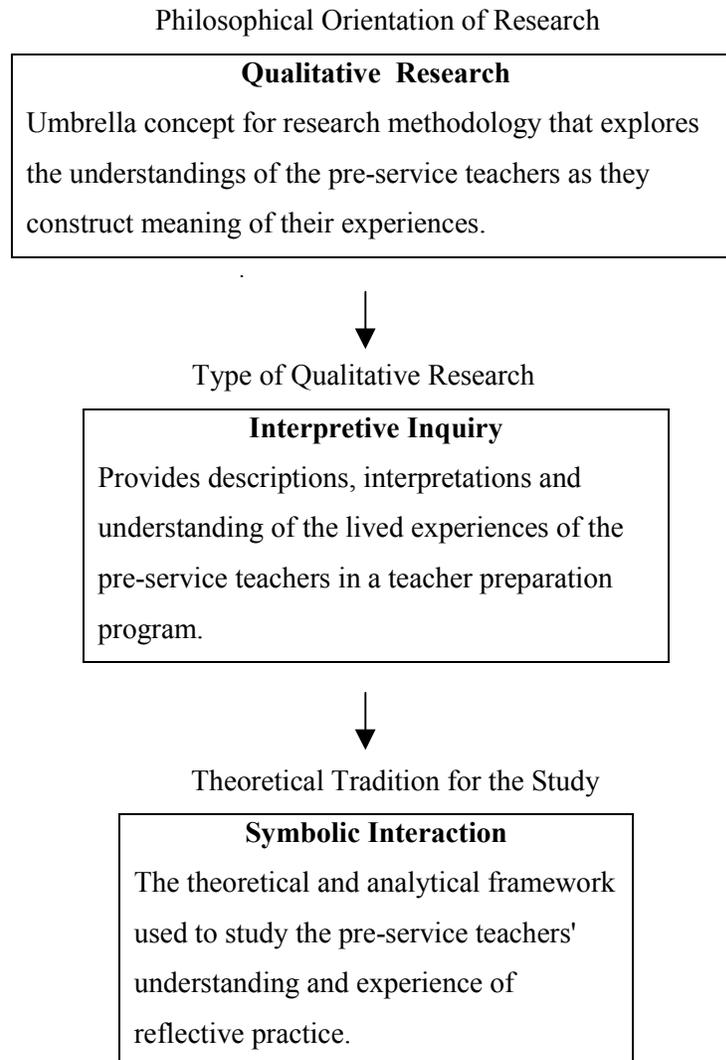


Figure1. A Conceptual Framework for the Method

Though other aspects of reflective practice are important to study, the concept cannot be fully understood without understanding how it is experienced by the pre-service teachers to whom it is "taught." Merriam (1988) states that it is important to bring together the parts in order to understand the whole. The understanding of how the participants in this study make meaning of reflection is an important end in itself (Merriam, 1988). In this study I strive to portray the close-up reality through "thick descriptions" (Geertz, 1973) of participants lived experiences of, their thoughts about and feelings for a situation. In using an interpretive approach, the evidence presented in this study is supported by theoretical statements as far as possible (Cohen, Manion & Morrison, 2000).

The researcher in this study was the main instrument for data collection and analysis. Guba and Lincoln (1981) states that the human instrument can process data immediately, can clarify and summarize as the study evolves and can explore anomalous responses. The researcher can also maximize the opportunities for collecting and producing meaningful information as they respond to situations that may arise (Merriam, 1998).

My goal was to provide an in-depth picture of the five pre-service teachers' understandings of reflection, and what took place in a teacher education program to encourage them as reflective practitioners. By choosing a symbolic interaction theoretical and methodological approach to present, analyze, and interpret the data, I wish to bring out the

essence and details of the topic being studied. The focus is on the participants' meanings. I want to present the best possible, the most compelling interpretation (Bromley, 1986).

A symbolic interaction analytical framework allows rich and vivid descriptions of the events relevant to the individuals being studied. It blends description of events with the analysis of them, it focuses on the group of pre-service teachers, and seeks to understand their perceptions of events, it highlights specific events that are relevant to reflective practice, and the researcher is integrally involved in the study (Hitchcock & Hughes, 1995).

Symbolic Interaction Analytical framework

I have chosen symbolic interaction theoretical viewpoints of Blumer, (1969), Denzin, (1978), and Prus, (1996) to inform the analytical framework that I used to discover the meanings that the pre-service teachers attach to reflection and reflective practice. Blumer (1969) acknowledged that if a researcher wants to understand the actions of others, it is necessary to see the objects as they see them. He contended that people act towards things on the basis of the meaning these things have for them. Blumer (1969) presented four central conceptions that have implications for the way in which social action is studied

- (1) people individually and collectively, are prepared to act on the basis of the meanings of the objects that comprise their world;
- (2) the association of people is necessarily in the form of a process in which they are making indications to one another and interpreting each other's indication;
- (3) Social acts, whether individual or collective, are constructed through a process in which the actors note, interpret and assess the situations confronting them, and;
- (4) The complex inter-linkages of acts that comprise organization, institutions, divisions of labor, and networks of interdependency are moving and not static affairs.

Blumer, (1969) suggests an exploratory framework to develop and fill out as comprehensive and accurate a picture of the area of study as conditions allow. It is a means of developing and sharpening the inquiry that the researcher is engaged in (Blumer, 1969). The picture provides the researcher with a secure bearing so that the questions asked are meaningful and relevant to that which is under study, that the problem posed is not artificial, that the kinds of data collected will be significant in terms of the empirical world. Symbolic interaction theory also suggests that it is important to listen to the views of the individuals under study.

Denzin (1978) puts forward a symbolic interaction approach that includes the historical and organizational contexts that I have adopted in this study.

- (1) I sought to capture the reflective nature of the participant as reflected in their on going patterns of behavior.
- (2) I simultaneously linked the participants' symbols and conceptions of self with the social circles and relationships that furnished them with those symbols and conceptions. It is important to examine the social structure of the group.
- (3) I asked questions in terms of situations that the participants normally engaged in the behaviors under study. I symbolically placed the participants within the contexts and permitted a designation and description of relevant activities.

The methodological tools provided by Denzin (1978), and the social processes outlined by Prus (1996) were used to construct an analytical framework in which to organize the data that I collected (Figure 2). I felt that this framework would help me to look at the historical as well as the social structures that are relevant to the study, while presenting the views of the participants as they shared their lived experiences within each social process.

For the purposes of this study, I utilized the social processes in the following manner to answer the research questions. Acquiring perspectives highlighted the participants' understanding of reflective practice. Achieving identity and experiencing relationships indicated how the participants learned to reflect on their practice through different processes, and relationships that encouraged reflection. Situating the act considered the contexts in which the participants reflected, and the act demonstrated the content of the participants' reflection.

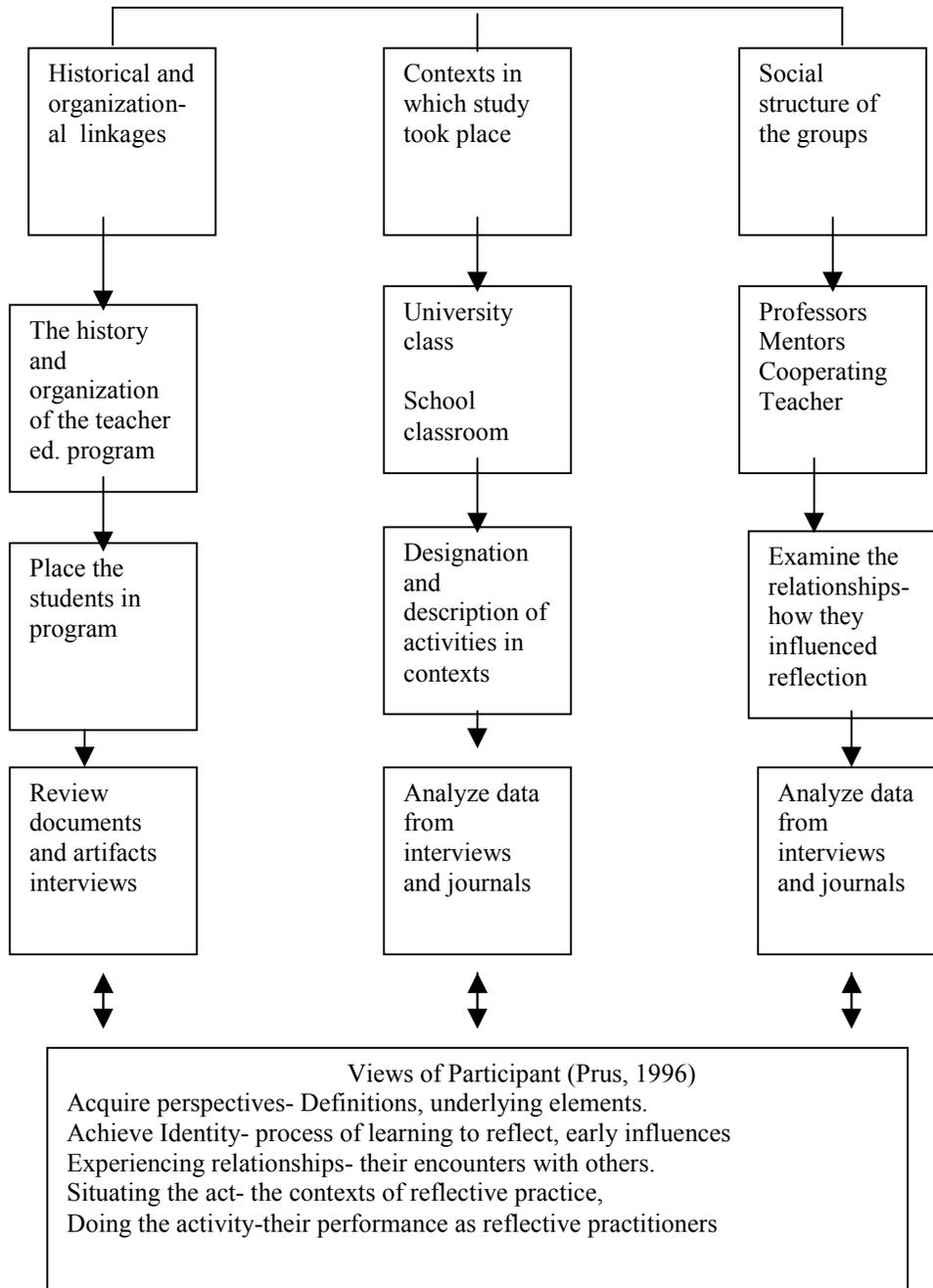


Figure 2. A symbolic interaction analytical framework using the methodological principles (Denzin, 1978) and Social processes (Prus, 1996)

Site Selection

In qualitative research, the choosing of a site for investigation is important. Qualitative research involves the selection of the research site, time, people, and events (Burgess, 1982). Two vital ingredients that can help the researcher determine if an investigation is possible are knowledge of the setting (Jorgenson, 1989), and gaining accessibility to the site. I chose the context for this research in the fall of 1999, in the second year of my graduate work. At that time, I was working in a teacher preparation program and had easy access to the pre-service teachers in this program. Although there are limitations to accessibility, the experience of the researcher being a member of the organization where the research is taking place can prove to be helpful (Cohen, Manion, & Morrison, 2000). As a graduate assistant assigned to the Graduate Teacher Preparation Program since the fall of 1998. I mentored students in 1998-1999 cohort. I developed an excellent relationship with the program leader who was also my advisor. I had many conversations with her about my research interests. She was very supportive when I indicated an interest in doing a research on the teacher preparation program. I continued in the program for period of August 1999 to May 2000 and worked with and developed a rapport with the participants of the study. I felt that being in the program on a continuous basis assisted me in the gathering of information, insofar as participants frequently sought me out to provide assistance and consultation.

Participant Selection

The five participants chosen for this study came from a population of sixteen pre-service teachers who were completing their final student teaching practice. Purposeful selection of participants is a key decision in qualitative research (Creswell, 1995). These five teachers were purposely selected to reflect differences in grade level, student teaching placement schools, gender and ethnicity as shown in table 1.

TABLE 1. Selection of Pre-Service Teachers based on the Selected Criteria

Pre-service teachers	Grade	Schools	Gender	Ethnicity
Barbara	One	Elementary	Female	White
Lisa	Two	Elementary	Female	African American
Jason	Five	Elementary	Male	White
Maria	Seven	Middle	Female	Hispanic
Paulette	Eight	Middle	Female	White

I conducted a purposeful (Patton, 1990) sampling strategy to choose the participants for this study. Purposeful sampling assumes that the researcher wants to discover and gain insight, and so chooses a sample where the most can be learned (Merriam, 1998). By also using the "maximum variation" strategy (Miles & Huberman, 1994), participants can be selected who represent diverse or multiple perspectives, but also identifies common patterns. I selected the participants because I believed they represented a range of views on the subject of reflective practice.

When I first started the data collection at the end of the final teaching practice in April 2000, I interviewed ten graduates of the teacher education program to get their views, perceptions and experiences of reflective practice. I subsequently narrowed my study, and I chose five of these pre-service teachers. Seidman (1998) gives two criteria for selecting the number of participants, sufficiency and saturation. I chose five participants to reflect the range of

participants in the program. I also chose pre-service teachers who elaborated in response to questions asked. This was important because I wished to provide in-depth insight from each pre-service teacher's perspective in the study. In conducting the study I considered the participants' verbal and written responses, and the meanings that were attached to their patterns of interaction as suggested by Denzin (1987) and Prus (1996). Each participant being studied became the primary unit of analysis (Yin, 1994). I conducted two more interviews with each of these five pre-service teachers using refined questioning techniques and other questions that would further provide data relevant to the research questions I posed in the study.

The participants' ages ranged from 22 to 42 years. They each came from different academic backgrounds. Lisa was the only pre-service teacher with education as one area of her interdisciplinary education degree. Barbara studied international studies, and Maria's areas were geography and anthropology. Paulette studied geology and geography, and Jason had completed a marketing degree. The main characteristics of the pre-service teachers are outlined in Table 2.

Role of the Researcher

When I considered doing my research on the conceptual orientation of reflective practice, I did not stop to think of the implication of conducting research with the pre-service teachers whom I supervised in a program. I thought only of what I wanted to find out and who could best provide me with relevant information. I was convinced that those whom we teach are among our best informants. I spent one year serving as a mentor of four participants in this study and one semester with one participant. I observed the five pre-service teachers as the university mentor and in my role as researcher (in the final semester).

TABLE 2. Characteristics of the Pre-Service Teachers

Pre-service Teachers	Educational Background	Age	Marital Status	Previous Experience in Education
Barbara	International studies	42	Married	Substitute teacher in elementary school
Lisa	Interdisciplinary studies	22	Unmarried	None
Jason	Marketing	23	Unmarried	Internship in a school in undergraduate degree
Maria	Geography and anthropology	40	Married	Volunteer in enrichment camp activities for students in elementary school
Paulette	Geology and geography	22	Unmarried	Teacher of geology in an inner city school

I empathized with them through their journey. I established a rapport with all of them. I asked them many questions, and I listened intently to each one of them on many teaching occasions. I believe that the participants of this study viewed me as a warm, empathic mentor and researcher. This made it extremely easy to conduct the interviews with them. Even when I contacted them to get additional data they seemed happy to accommodate me.

When I conducted the interviews with the participants, I felt very connected to them. I had worked with them for a year and had observed them for the study in the final semester. They appeared eager to share their views with me at the end of the program and to submit their journals as part of the study. It seemed to me that they were happy to share information now that

their experiences in the program were concluded. They seemed to feel 'safe' perhaps because all evaluations had been completed and sent to the program leader. When I returned to the participants for subsequent interviews, I was able to get further in-depth responses. I probed for information until I felt that the participants were giving similar responses as in the previous interviews. When they did so, I knew I had saturated the questions and there was no more to tell.

I have wondered how my position affected this research. I can only ensure readers that I report the responses of the participants as truthfully as I can. I offered the pre-service teachers confidentiality and assigned them pseudonyms, but I told them of the possibility that readers may identify them in the study threatens their anonymity. The five pre-service teachers expressed lack of concern and remained eager to participate in the study.

Data Collection

Symbolic interaction theory suggests that a researcher can obtain an intimate knowledge of the participant's perspective through the methods of open-ended interviews and participant observation. The use of interviews, writings and observations are all "ethical allowable procedures that offers a likely possibility of getting a clearer picture of what is going on in that area of social life" (Blumer, 1969). Blumer placed methodology as embracing all the important parts of the act of inquiry. He furnished the rationale that,

Reality exists in the empirical world and not in the methods used to study that world; it is to be discovered in the examination of that world and not in the analysis or elaboration of the methods used to study that world. Methods are mere instruments designed to identify and analyze the obdurate character of the empirical world and as such their value exists only in their suitability in enabling this task to be done.

(Blumer, 1969).

I was able to capture the covert interpretations of the pre-service teachers' understanding of reflective practice through the transcription and analysis of interviews, and the examination of their reflection journals. Participant observations gave me an "insider perspective" of the phenomena under study. The reading of official documents enabled me to situate the study within the historical and institutional contexts.

Data collection was conducted over the period of three semesters to enable me to collect data from the five pre-service teachers in the program, analyze and write the narrative. Table 3 depicts the timeline of the study. Prior to collecting the data, I had the research proposal reviewed and approved by my dissertation committee and the Institutional Review Board for Research Involving Human Subjects.

Table 3. Timeline of the Study

2000	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Choice of Topic	/											
Reading official documents		/	/									
Permission			/									
Observation and Note-taking	/	/	/									
Interviews				/	/							
Transcription								/	/	/	/	

2001	Jan	Feb	Mar	Apr	May	Jun
Data Analysis	/	/	/	/	/	
Follow-up Interviews		/				
Write up Study	/	/	/	/	/	

Data sources

The sources of data included:

1. Two in-depth interviews with five pre-service teachers using an interview guide. One additional interview during the analysis of data.
2. Reflection journals of the five pre-service teachers.
3. Official University documents describing the Graduate Initial Teacher Preparation Program.
4. Observational notes taken during the semester of teaching practice.

Interviews

Interviews are the main source of my data collection for the study. The interviews provide the explanations and interpretations through the voices of the specific interviewees who can provide important insights into this particular situation (Yin, 1995). Essentially, in-depth interviewing provides the researcher with an understanding of other people's experiences, and the meaning they make of those experience (Seidman, 1998). I explained fully the nature of my study to each pre-service teacher, and they agreed to do at least two interviews with me. I asked the pre-service teachers to sign a consent form and gave each one a copy for their records (Appendix A). I set a time with each of them to conduct these interviews. Each interview was one hour long, although some of the pre-service teachers took more time.

The interviews were qualitative in nature and took on a conversational aspect where the pre-service teacher and I participated in a conversation that covered open-ended questions. Here, I asked key questions for facts as well as the opinions of the participants, and insights into certain occurrences (Yin, 1994). These interviews were focused because I used a set of questions that were guided by my research questions (Appendix B). I was careful not to change the wording, context and emphases of the interview questions for each student (Oppenheim, 1992). Silverman

(1993) suggests that each interviewee should understand the question in the same way. However in these interviews I wanted to evoke spontaneous representations of the participants to help me to analyze how they represented themselves as well as their experiences (Bakhtin, 1986). I therefore included open-ended questions so that the participants demonstrated their unique way of looking at the world and their definitions of the situations (Silverman, 1993). I also used follow up questions for clarification and to capture the unfolding of the perspectives of the participants' as they viewed the phenomenon of interest, and not how the researcher views it (Rossman & Rallis). I transcribed the interviews of the ten pre-service teachers, I realized that in order to present an in-depth analysis of pre-service teachers' views and understanding of reflective practice, I could not include all the participants in the study. I therefore made a selection of five of the ten pre-service teachers and I conducted a second interview that allowed me to collect additional information from the pre-service teachers (Appendix C).

I transcribed the interviews and read all the materials I collected in the fall of 2000. My next step was the analysis of data that is the most complex part of the inquiry process (Yin, 1995) and the building of the interpretive study. As I analyzed the data I realized that I would need further clarification and some additional information from three of the participants. Two participants had already adequately answered the research questions and had given me additional information on their reflections on the meaning of their experiences. By the time I interviewed these two participants, I asked them additional questions that I had not asked the first three participants. I considered these additional question my third interview. Seidman (1998) recommends three separate interviews. He used Dolbeare and Schuman (1982) design of a series of three interviews. The first interview establishes the context of the participants' experience. The second interview allows the participants to reconstruct the details of their experience within the

context, and the third interview encourages the participants to reflect on the meaning of their experiences (Seidman, 1998). Barbara who was employed as a substitute teacher at the school where I was mentoring a new set of pre-service teachers spoke with me again to answer the follow-up questions. I contacted Lisa and Jason by phone to ask them the follow-up questions (Appendix D). In Table 4, I present the interview schedule and types of question asked in each interview.

Table 4. Interview Schedule and Types of Questions

Dates of Interview	Participants	Examples of Questions from the Interview Guides	Type of Question
April 5 2000 5 5 6 6	Barbara Lisa Jason Maria Paulette	What was your undergraduate degree? What do you understand by the term reflection? When was the first time you heard the term reflection? Give me an example of a time you engaged in reflection?	Initial and intake questions Semi-structured Open-ended
May 4 3 2 3 5	Barbara Lisa Jason Maria Paulette	Tell me a bit more about yourself? Can you share with me some examples of classes you participated in that incorporated reflective activities? Explain how you did those activities? How did the cooperating teacher help you to reflect?	Follow-up Questions Semi-structured Open-ended
May 3 5 February, 12, 2001 February 15, 2001	Maria Paulette Barbara (personal contact) Lisa and Jason (by telephone).	When you think back on your teaching practice, is there anything you wanted to change? Were there any limitations that you can recall that did not help you to be reflective? Can you share some of those experiences? Do you think the program helped you to be reflective? How?	Follow-up questions Semi-structured Open-ended

Journals

At the beginning of the final teaching practice the pre-service teachers were required to write a weekly reflection journal as part of their practice. In the teaching practice booklet the pre-service teachers were given a directive to write a reflective journal in which they would keep a log of all their accomplishments by naming each and describing each briefly. In these journals they recorded their reflections on curriculum matters, class activities, social and personal matters that were significant to them on their teaching practice. I requested the reflection journals at the end of the semester as part of the data collection for this study. During the semester I reminded the pre-service teachers to keep writing in their reflection journals. As the pre-service teachers became more involved with their teaching practice as the semester wore on, some of them neglected to write some journal entries. At the end of the semester I collected these weekly reflection journals from the five pre-service teachers. These reflection journals formed part of the data, and were used to extend the views of the pre-service teachers on reflective practice.

Observation and Note Taking

I was a participant-observer during the year that I worked with the pre-service teachers in the Graduate Teacher Preparation Program. As a participant observer in the program I fulfilled the role of researcher in the spring of 2000. However, I knew all along that my role as mentor in the program could not be jeopardized. I reconciled that in writing notes on the activities that I was engaged in with the pre-service teachers could not hamper my role as university mentor since I was not merely a passive observer. I was participating in the events I was studying (Yin, 1995). Participant-observations made it possible to check description against fact and note discrepancies (Stake, 1995).

I visited the pre-service teachers every week for twelve weeks in the final teaching practice. I spent two days in the elementary school and one day in the middle school every week

because there were more student teachers in the elementary school. I listened to fifty lessons from these five pre-service teachers during this period. Each pre-service teacher did ten lessons over the ten weeks. In the elementary school the lessons they taught lessons in math, language arts, social studies, science and creative arts. In the middle school the pre-service teachers taught mainly language and social studies. In table 5, I present an example of the number, duration, and content of lessons I observed for one pre-service teacher over ten weeks.

Table 5. Number, Duration and Content Areas of Lessons for One Pre-Service Teacher

Week	Duration of Lesson	Content Area and Title of Lesson
Week 1	60 minutes	Math- Using rulers to estimate and measure in inches.
Week 2	45 minutes	Social Studies station- Globes
Week 3	45 minutes	Literature- Introduction to fairy tales
Week 4	45 minutes	Social Studies, Art- Valentine Basket
Week 5	45 minutes	Math- Volume using cubes
Week 6	45 minutes	Social Studies - Class Community
Week 7	60 minutes	Literature- Author study of Jan Brett
Week 8	45 minutes	Science-Experiment on liquid and volume
Week 9	60 minutes	Literature Group- The little House
Week 10	45 minutes	English- legend of the Blueberry

I gave the pre-service teachers both verbal and written feedback. I asked many questions through my informal conferences with the students after they taught a lesson. I kept a record of the feedback and questions as part of the data collection on the final internship of these students.

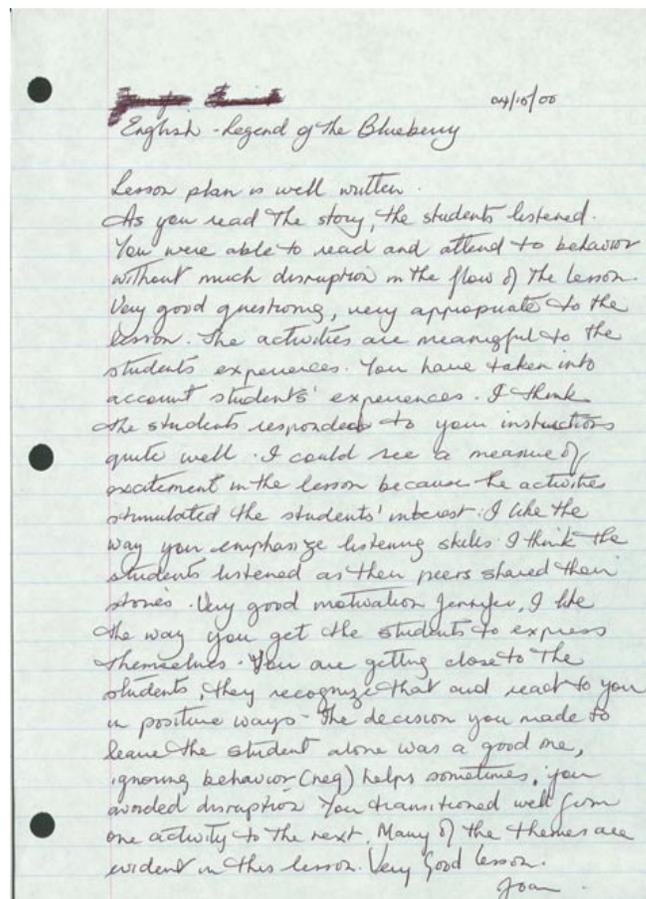
There were times that both the cooperating teacher and I looked at the lesson and gave feedback to the pre-service teachers. In my informal talks with the pre-service teachers I inquired about their lesson plans. For most of the lessons I observed the pre-service teachers gave me lesson plans. On the occasion I got no lesson plan, I requested that the pre-service teacher write the plan after the lesson was completed.

I wrote copious notes of the various activities that I was engaged in with the pre-service teachers. I recorded as much of my observations of the pre-service teachers as they taught lessons, and my questions to them about these lessons. Each week I made a schedule of the times of each lesson for each pre-service teacher. On the day, I went into the classroom minutes before the lesson started and requested the lesson plan from the pre-service teacher. I looked over the lesson plan to check the format and to note the objectives of the lesson and the materials used.

As the pre-service teacher taught the lesson, I wrote notes on observations I made on the introduction of the lesson, and the progression of the lesson. I also looked for the assessment themes that the pre-service teachers were evaluated on. These themes included, actively engaging learners, modifying instruction, involving learners in the inquiry process, involving learners in social action, using technology, addressing multiculturalism, and assessing student learning.

At a convenient time after I observed the lesson, I usually had some time to discuss the lesson with the pre-service teacher as the cooperating teacher supervised the class. I asked questions related to what I observed during the lesson, for example, How do you think the lesson went? Why did you ignore that behavior? What do you think you could have done? The pre-service teacher read my observational notes and we discussed any suggestions I made for future lessons. The pre-service teachers generally accepted my feedback. I asked them to explain their

reasons for doing particular things as they taught a lesson, in this way they were able to reflect on their practice.



English - Legend of the Blueberry 04/10/08

Lesson plan is well written.

As you read the story, the students listened. You were able to read and attend to behavior without much disruption in the flow of the lesson. Very good questions, very appropriate to the lesson. The activities are meaningful to the students' experiences. You have taken into account students' experiences. I think the students responded to your instructions quite well. I could see a measure of excitement in the lesson because the activities stimulated the students' interest. I like the way you emphasize listening skills. I think the students listened as their peers shared their stories. Very good motivation Jennifer, I like the way you get the students to express themselves. You are getting close to the students, they recognize that and react to you in positive ways. The decision you made to leave the student alone was a good one, ignoring behavior (Creg) helps sometimes, you avoided disruption. You transitioned well from one activity to the next. Many of the themes are evident in this lesson. Very good lesson.

Joan

Figure 3. Written feedback from the mentor

I also wrote notes on the conferences I held with the pre-service teachers to discuss the students and involvement in the school activities and other problems that they were experiencing in the teaching practice. Yin (1995) states that observational evidence is often useful in providing

additional information about the topic being studied. The notes that I wrote as I observed the pre-services teachers during their final teaching practice were used to verify the responses of the participants as they related incidences that I was privy to. I was able to situate myself in a variety of settings that confirmed my interpretations of what the pre-service teacher told me in the interviews.

I have used these notes as additional information in constructing the portraits of the pre-service teachers. The notes were also used as a means of clarifying information given to me by these participants in the interviews and the reflection journals. These notes have proved helpful because I checked for clarification of many of the pre-service teachers' responses against the notes that I took about particular lessons and incidences that they reported to me in the interviews.

Official Documents

In the first phase of this study I read the official documents of the program. Very early in my graduate studies I discussed with my advisor my research interest in looking at reflective practice in the graduate teacher preparation program. She presented me with the official documents that enabled me to study the philosophy and organizational structure of the program. The NCATE Folio (1998) prepared by the program providers, delineated the historical, social, and institutional context for the study. I was able to glean information on the historical and philosophical framework of the teacher preparation program, the entry and course requirements, the content of the courses, and the completion requirement.

Data Analysis Procedures

As Cresswell (1994) states there is no consensus for the way analysis is conducted on the different forms of qualitative data. Data analysis is a process of bringing order, structure, and

meaning to the data (Rossman & Rallis, 1998). Each phase of analysis entails the reduction of data collected into manageable chunks so that meaning and insight is brought to the words and actions of the participants in the study (Rossman & Rallis, 1998). Wolcott (1998) suggests organization and filing of data as an important process. I filed the interviews and organized the narratives of each student teacher. I numbered the field notes and transcriptions for each participant. I subsequently assigned a number to each participant based on the lowest to highest Grade level. Barbara became number 1, Lisa 2, Jason 3, Maria 4, and Paulette 5.

First Phase of Analysis

Cresswell (1994) along with other qualitative authors (Bogdan & Biklen, 1992; Huberman & Miles, 1994; Wolcott, 1994) suggests a general review of information collected by reading the data and jotting notes in the margins of the text (Figure 4). I spent time reading and rereading the interviews and notes that I collected (Tesch, 1990) to become familiar with the participants' views. I read the interview transcripts and wrote the ideas that the participant was conveying. I then re-read the transcripts to see if there were other ideas I missed in the first reading of the text. I searched for patterns in the data, noting any unexpected features (Hammersly and Atkinson, 1983). I first used the materials for one participant as a prototype to search for patterns that answered the research questions, and I made notes in the margin of the pages. I subsequently read the weekly journals and coded them to match the initial patterns I identified in the interviews.

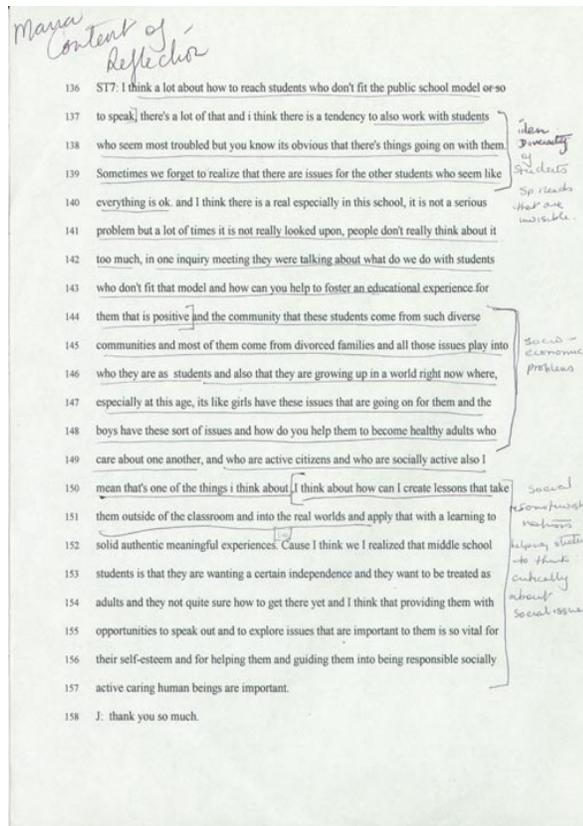


Figure 4. Identifying patterns in interview transcript

The symbolic interaction generic social processes were appropriate categories to use in this study because I am interested in listening to the views of pre-service teachers we teach in teacher preparation. These social processes provided the framework for the views of the pre-service teachers to be heard. Each social process pinpointed a particular element of the pre-service teachers' experiences, such as their understanding of reflection, the process, context, and the content of their reflection. Calderhead (1989) identified these as elements of reflective practice. As I explored the generic social processes (Prus, 1996), I realized that each one provided the structure through which each research question could be addressed. Table 6 displays how I mapped each social process to the appropriate research question.

Table 6. The Research Questions as They Applied to the Social Processes

Research Questions based on the elements of reflective inquiry (Calderhead, 1989)	Social Processes (Prus, 1996)
1. How do the pre-service teachers perceive and understand the concept of reflection?	Acquiring perspectives
2. How do these pre-service teachers describe how they learn to reflect?	Achieving individuality Experiencing relationships
3. In what contexts do they engage in reflective practice?	Situating the activity
4. What do the pre-service teachers reflect upon in their practice?	Doing the activity
5. How does my subjectivity evolve throughout the study?	All the social processes

The main goal of this study was to discover how the pre-service teachers understood the conceptual orientation of reflection in teaching and how they experienced reflective practice. The themes that emerged answered the research questions that illustrated the process, content, and context (Calderhead, 1989) through which the pre-service teachers developed their understanding and practice of reflection in teaching.

Second Phase of the Analysis

In the thematic analysis of data I developed themes using words and phrases that served as a label for the pre-service teachers' actions. For example, in the data the pre-service teachers defined the concept of reflective practice. I used the phrase "Defining reflection" as a theme for discussing the pre-service teachers' definitions to demonstrate their understandings through the defining process. I also used the participants' words to develop other themes. For example, the pre-service teachers told me that they questioned themselves about their actions; they also talked about how they wrote reflections. I used the phrases, "questioning as reflection," and "written

reflections" as themes to highlight the processes they had identified. I used the constant comparison method to read and reread the data to determine that the themes were reflected within and across the responses of the participants (Lalik & Potts, 2001).

In the second phase of the analysis I looked closely at the words used by the participants in order to pick out themes that answered the research questions and to discard themes where there was not enough evidence in the data. I color coded the themes and wrote the lines from each participant that represented the particular theme. In coding the data, I used a simple coding, such as "written reflection," and " verbal reflections."

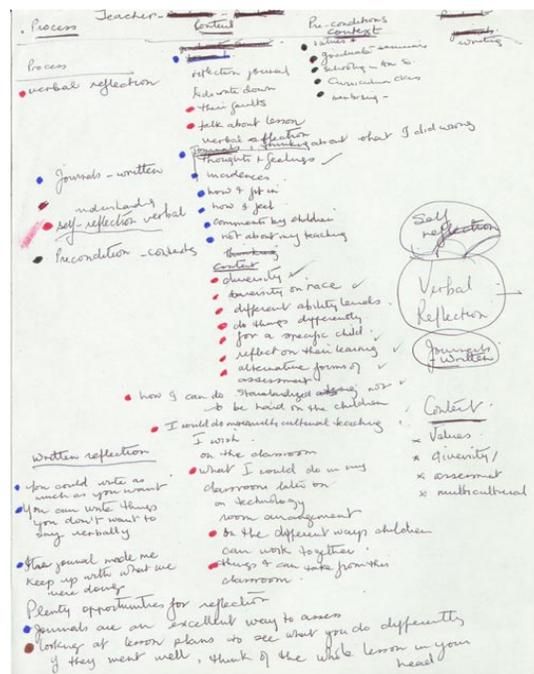


Figure 5. Extracting themes from the interviews

I searched through the data using a variable oriented strategy (Miles & Huberman, 1994) to find themes that cut across the cases. In a carefully inductive manner, I looked across the data of the five participants and found recurring themes such as, "verbal reflections," and "content of reflection." I was cognizant of Maykutt and Morehouse (1994) suggestions that I begin to categorically code and look for simultaneous comparison of meanings across the units of analysis. I explored these themes for thematic and cross-categorical relationships and patterns and I sought to integrate the data in such a way as to exemplify an understanding of the participants and context in the study. For example, under the theme of "written reflections", I saw that four of the pre-service teachers favored writing reflections. One pre-service teacher did not like to write reflections.

I read and re-read the data line-by-line to determine that the themes were reflected prominently in the responses of the participants. These themes were then categorized under the relevant social processes. I displayed the data under the initial themes to verify what was there. The excerpts of the pre-service teachers were extracted verbatim from the transcripts, and put into a flow chart, so that I could see the data clearly (Yin 1994). Figure 6 depicts how I placed the data under two of the social processes, acquiring perspectives and achieving individuality.

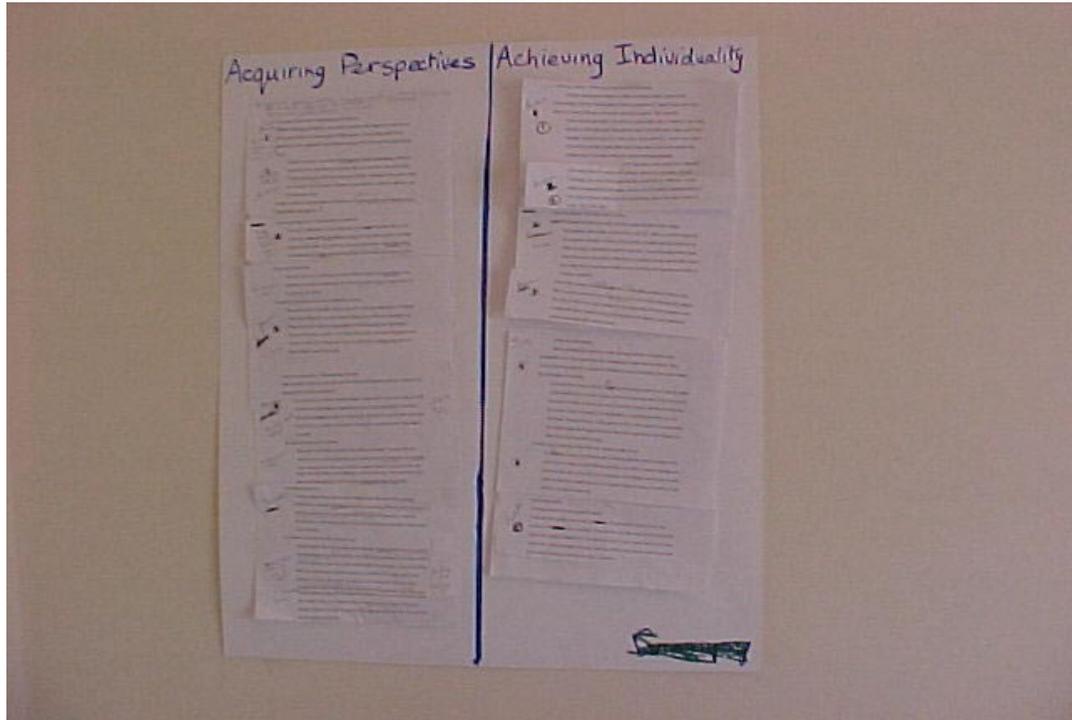


Figure 6. Flow chart showing data under two social processes

It is possible to display the data through matrices with text rather than numbers in the cells (Miles & Huberman, 1994). I also created matrices for some recurrent themes in which to identify the data relevant to that theme. In Table 7, I present one example of the matrices that I developed to record recurrent themes.

Table 7. An Example of Thematic Analysis

Pre-service teachers	Theme- Content of reflection- Diversity of needs
Barbara	Needs of students, students' attention, types of children, challenges, learning needs, accommodations, how to deal with children, class management, children with behavior problems
Lisa	Different ability level, doing things differently for a specific child, room management, alternative forms of assessment , how can I do standardized testing not to be hard on the students,
Jason	Not meeting students' needs, diversity of students, adaptations, students' behavior, some of them need visuals, I had to slow down so those students could keep up.
Maria	Children who don't fit the public school model, children who come from divorced families, children who seem o.k. but there's things going on with them, children who have issues, building trust with students
Paulette	All kids have special needs, a lot of time school values and tests a certain set of things and for some kids, those are their weaknesses, they feel bad and they become inclusion students, special education kids in my class, take interest in their strengths. I had this kid with a multi IEP for emotional and learning problems, attention problems, I will redirect his bad behavior, give him an important place in the class, build a path for them to be a part of society

Third Phase of Analysis

In this phase of the analysis I reviewed my database next, knowing that I may not use all the information that I collected for the study. I reduced the codes as I sifted out the main themes to write the narrative. For example, I first developed the theme "levels of reflection," but changed it to "content of reflection." I also found myself changing themes if there were not enough exemplars for a particular theme. For example, only one pre-service teacher exemplified the theme "reflection-in-action." I varied the themes to allow for the individuality and uniqueness of each participant. I pulled out and used vignettes of experiences from each interview. An

example of a vignette used for the theme "encountering cooperating teachers" is taken from a pre-service teacher's response about her cooperating teacher.

She has provided me with different books to read. When I have discussed things that I am interested in, most lessons that I would be interested in, she has told me of the different situations that she had been in. I think the main thing though is we have a really good rapport and we think alike in a lot of ways, so it has been easy to kind of sit and chat about stuff. Then also the books like when I was doing the stuff on first amendment she gave me this book about structuring inquiring type of lessons and how to use that in my unit, and I write some of the stuff, I really liked it. She had given me a lot of personal information like her experiences and also avenues for searching out other ways of teaching.

Fourth Phase of Analysis

In this phase of analysis I incorporated the written responses of the participants from their reflection journals under the themes where applicable to elaborate or emphasize a thematic response of the participant. For example, I used a vignette from a pre-service teacher's reflection journal described her relationship with a student. This vignette exemplified the theme "content of reflection."

I feel honored that Katie sees me as one of the adults in her life that she can trust. She asks for my advice and help on projects. She completes her assignments and while they are not completed like her other classmates, they are at the level that Katie is comfortable with. Small steps...for a child realizing she can walk. I have learned two things from Katie, never underestimate the power of kindness and never judge a book by its cover.

Finally, I reviewed the data for other important findings that were not addressed directly by the research questions but related to the study. For example, although the research questions did not deal specifically with racial issues, the pre-service teachers spoke about race as it related to their personal and professional practice. I included these findings in the themes "experiencing relationships," and "content of reflection." Visualization of information through charts is another way to give a representation of themes or cases (Creswell, 1998). I constructed a matrix to record all the themes and exemplars that I discerned under each social process (Appendix F).

In trying to make sense of the data, I made assertions by providing interpretations "of lessons learned"(Lincoln & Guba, 1985; Stake, 1995) couched in my personal views or in terms of the theories or constructs that I have used from the literature (Stake, 1995). I linked much of what the pre-service teachers shared in the interviews and in their journals to the literature on reflective practice. I also shared my perspectives in the analysis of data on the five themes, in the discussion of the findings, and implications of the research based on my knowledge of the pre-service teachers and their actions.

The researcher being the instrument of data collection may pose a potential limitation, "human instruments are fallible as any other instrument" (Merriam, 1998, p.20), because mistakes can be made, opportunities can be missed and personal biases may interfere in the conduct of the research (Merriam, 1998). However, it was with great care that I transcribed and represented the participants' words in the study. The use of a symbolic interaction analytical framework affords me some objectivity. Denzin (1978) advises that researchers are restrained from substituting their perspectives for that of the people they study when they "take the role of the other in concrete situations." In taking the role of the other, I recorded how the pre-service teachers wished to or acted in certain circumstances.

Writing as Analysis

"Language is how social organization and power are defined and contested and the place where our sense of selves, our subjectivity, is constructed" (Richardson, 1994, p. 518). Often, how we are expected to write affects the way we write (Richardson, 1994). The format I chose to present the research is a descriptive and interpretive design. In writing up this study, it became apparent to me that writing cannot be separated from the analytic process, it becomes central to this process, because as data is analyzed the researcher engages in an interpretive act (Rossman & Rallis, 1998). In the interpretive act multiple meanings of events, objects, activities, experiences and words are illuminated (Rossman & Rallis, 1998). In the choice of words to summarize and reflect the complexity of data, I shaped and formed the meanings to a large data set.

In sharing what I learned from the pre-service teachers I wanted to be " systematic, analytical, rigorous, disciplined, and critical in perspective " (Patton, 1990, p. 433). I also wanted to engage my audience by being insightful and creative (Patton, 1990). This task involved the writing process and entailed a series of drafts to find the right balance of voice.

My voice resonates throughout this study because of my subjectivity as researcher. I revealed my biases within the study. Rossman and Rallis (1998) states that when you establish who you are, it frees you to tell the story of others. I was careful to balance the various voices of the pre-service teachers with my voice, because they were the focal point of the study. This is clearly indicated in my writing of the portraits of the participants and in the findings where their views are articulated using their words extensively. A narrative devise I have used is that of a layered participant profile for representing the multiple views of the pre-service teachers with my views. My contributions are italicized to distinguish my views from those of the pre-service teachers (Alverman, 1998).

Trusting the Data

Trustworthiness

In qualitative research the issues of credibility, trustworthiness, and offering a correct interpretation are paramount (Ely, 1991; Rubin & Rubin, 1995). In order to ensure credibility the researcher must use procedures that minimize investigator bias. The procedures used in this study included member-checks where the participants read the interview transcripts to verify the information they had given. The views of the pre-service teachers were extracted from the interviews and the weekly journals without alteration except in changing of grammatical structures to reflect as far as possible what the participant wanted to say (Nespor & Barber, 1995). Information from the interviews and the weekly journals provided the convergence of at least two pieces of data (Ely, 1991). As I sifted through the data, I was able to check my notes when a participant related an instance that I was privy to. For example, in one case, the pre-service teacher gave an account in her journal of the way the cooperating teacher treated her in the classroom. I was able to recall an incident where the pre-service teacher had spoken to me about the cooperating teacher's behavior towards her. In this way I was able to verify many of the instances shared by the participants in the interviews.

Since the major aim of this study is to give voice to participants in order to understand the concept of reflection in teaching, looking at contradictory pieces of data from participants in the study is another way to provide well elaborated descriptions of the pre-service teachers' views. To hide this side of the data would be to impose my own sense of order to the data (Scheurich, 1995). One method offered by Scheurich (1995) to move away from being

ambiguous and indeterminate is to share the researcher's training, and social position. As the researcher who was also an active participant in the program from which these participants are drawn, it is important to highlight my subjectivity in the inquiry process. The role of the researcher has been dealt with extensively in this study.

Other strategies that help to establish the truth claims of qualitative research include using a colleague or peer as a critical friend. I called on a friend who had just completed her doctoral dissertation to read and edit my paper from draft to the final product. She suggested many ideas that strengthened the value of my conclusions (Rossman & Rallis, 1998).

Ethical Issues

Ethics play an important role in qualitative research. Stake (1994) observes that, "qualitative researchers are guests in the private spaces of the world. Their manner should be good and their code of ethics strict." (p. 44). There are ethical dilemmas presented when one collects, analyze data and disseminate findings (Merriam, 1998). As I interviewed the participants, I was aware that some information they gave could have long-term effects. As a participant observer who was also the mentor of the teacher preparation program from which these participants are drawn, I was aware that the pre-service teachers became accustomed to my presence, and revealed to me many situations during the student teaching practice. The analysis of data has been filtered through my particular theoretical position and biases (Merriam, 1998).

Fictitious names have been assigned to the research participants and the individuals they refer to in their views to protect confidentiality. I promised the participants not to use their real names and suggested an alias that they agreed to. Nevertheless, there may be some difficulty to maintain absolute anonymity because some of the data and descriptions may uniquely identify the individual participant. I wish to keep faith with the participants who helped me in this

research and have tried to explain to the pre-service teachers the extent to which I would protect their confidentiality. I would protect their privacy by changing their names, and hold in confidence what they shared with me by not using their names (Rossman & Rallis, 1998).

This was not an evaluative study, however, I believe the insight is welcomed, in light of the evolving nature of the teacher preparation program and the support and freedom I was given in conducting the research. Further this research is one of several data collection efforts that inform the continued development of the program. This program is based in the interest of making itself better, and this research is consistent with the view of the program providers. Whatever is learned through the responses of the students may tell us things that we want to know about as the program continues to be developed. Systematic research is one of the ways that will benefit this dynamic and changing program.

CHAPTER FOUR

HISTORICAL AND INSTITUTIONAL CONTEXTS

Introduction

In this chapter I consider the historical and institutional contexts that provide the background for this study. The pre-service teachers in this study were affected by the historical and institutional contexts of the program in which they participated. Symbolic interaction demands the consideration of historical and institutional linkages to action (Blumer, 1969). I trace the historical context of the teacher education milieu in the United States to the present. I then look at the reform movement in teacher education, and the need for the alternative route to certification of teachers. Here, I highlight specifically teacher education in Virginia and the Post Baccalaureate Teacher Education Program that forms the setting for this study. I present descriptive data of the program gathered from summarizing official documents that outlined the program's history and administrative structure and from my own experiences as the university mentor in the program across three years. Finally, I present portraits of the five pre-service teachers because they formed an integral part of the institutional contexts in which they were prepared as teachers. These portraits were developed from the demographic data I collected in the interviews and journals. My interpretations are also embedded in these portraits because of the time I spent with the pre-service teachers for the duration of the program.

Historical Context

A Historical Overview of the Teacher Education Milieu in United States

The National Center for Research on Teacher Education (1988) defines teacher education programs as " a deliberate educational intervention designed to foster (teachers') learning. This

has always been the goal of teacher education since normal schools were established to prepare teachers in the late 1800s. At that time normal school responded to the political and social changes in the United States, and teachers were prepared to meet the growing demands of the society. However, since then teacher education has gone through various stages of development and it has reflected changing emphases in teacher preparation. By 1942 normal schools became four-year teachers' colleges. These colleges went on to become part of the comprehensive university systems that offered bachelors, masters, and doctoral degrees. This trend continues today (Schwartz, 1996).

Along with the changes in the nature of the teacher education movement came the development of different teacher education traditions. Zeichner (1993) traced the development of these traditions. Initially, in teacher education the academic tradition emphasized the teacher's role as a scholar and subject matter specialist. The social efficiency tradition followed and was characterized by faith in the power of the scientific study of teaching to provide the basis for building a teacher education curriculum (Zeichner & Liston, 1990). The developmentalist tradition led the way in the 1960s and 1970s to student-centered pedagogy and open education, and the evolution of the teacher as a reflective practitioner. The social reconstructionist movement has emerged as the contemporary collaborative model of teacher preparation that incorporates reflective practice. The fundamental task of teacher education from the social reconstructionist point of view is to develop prospective teachers' capacities for reflection and to help them examine the moral, ethical, and political issues, as well as the instrumental issues, that are embedded in their everyday thinking and inquiry (Dewey, 1933).

The Reform Movement in Teacher Education

The reform movement embarked upon in the last decade has provided the shift from the preoccupation with behavior and skills to a concern for the complex cognitive processes that underlie successful performance in the classroom (Doyle, 1990). This shift has prompted teacher education programs to lean on social reconstructionism as a base to consider teachers' thinking, problem solving, and reflectivity. Some states however, cling to the behaviorist tradition in their skills based assessment practices. Virginia is one example of this practice because of the state's heavy emphasis on the Standards of Learning, a state mandated curriculum and testing system.

Along with the education movement to reform the curriculum of teacher education, there have been many attempts by the state to regulate and reform teacher preparation programs. The actions by the state demonstrate that it has a powerful voice in teacher preparation programs, where universities have to provide a match between the state mandates and teacher education programs. State and local education agencies often determine the size and quality of teacher preparation programs. In an effort to meet market demands, the state exerts influence on the salaries, working conditions and career opportunities. When there is a shortage of teachers there is emergency credentialing to fill teachers positions quickly. There is the accreditation and licensure standards, which follow so there is less of a localization of preparation of teachers.

Many states in their credentialing process are outlining standards to be accomplished by the Universities and Schools of Education. This was not previously a direct concern of these state agencies, but they have begun to define the credentials for teachers, administrators as well as defining a university's course of study (Popkewitz, 1991). University based models of teacher preparation are often torn between the demands of the academy and the practitioners community.

Teacher education programs struggle to please the varying market demands. It is felt within the education community that there is the notion that education is being regulated from the outside.

The literature is replete with evidence that there is an increase in the demand for new teachers (Darling-Hammond, 1990; Smith, 1989). To meet this demand, the post baccalaureate program of teacher preparation has been advocated as one of the alternate programs in which pre-service teachers may be prepared to enter the field of teaching in many states. In looking at the post baccalaureate model, John Goodlad (1994) identifies it as an authorized route to license teachers for the public schools in the United States. He however, describes it as fuzzy around the edges because of the varying requirements for licensure.

During the 1980s and 1990s there have been many calls for reform in Teacher education. The Holmes group, a national consortium of major research universities issued a profound call for reform (Holmes, 1986). In 1986 the Carnegie Foundation also gave its report on the future of teacher education. In 1985, NCATE engaged in major redesign of their accreditation process. This brought about the revamping of teacher education programs in many states in the United States. In Virginia, the universities were called upon to restructure their teacher education programs in keeping with the state mandates. Several, including the one that forms the content for this study also elected to comply with NCATE standards.

An Alternate Route to Licensure in Teaching in Virginia

It can be said that historical and political influences on teacher education reforms in Virginia impacted on the initiation and formation of the present models of teacher preparation in the universities in the area. The forced restructuring in teacher education that took place in Virginia was significant of broader changes taking place in the education reform movement. Cooper and Tate (1991) explain that in 1986, the commission on Excellence in Education

presented to the governor of Virginia thirty-six recommendations, nine were related to teacher education. As Cooper and Tate (1991) acknowledged it was not business as usual in the teacher education policy arena, teacher education had become a political target.

The state's teacher education programs are approved and monitored by NCATE in the different universities. Virginia recognizes the post baccalaureate program as an alternative route to licensure in teaching. The requirements for certification are clear for persons wishing to acquire licensure through this alternate route. Individuals are required to have an undergraduate degree in the Arts and Sciences from an accredited institution. Those with undergraduate degrees other than Arts and Sciences wishing to teach in NK-8 must meet the equivalent requirements for courses in the Arts and Sciences prior to employment. They must also complete course work in general studies, and must meet the endorsement requirement for subject areas. They have to complete the professional teacher's assessment, take fifteen hours of professional studies, and complete one year of successful full time experience in the appropriate teaching area (Tryneski, 1998). The pre-service teachers in this study fulfill the requirements of the Post Baccalaureate Teacher Preparation Program.

Institutional Context

The Post Baccalaureate Program

As a route to initial teacher preparation, this university has followed the state mandates. This program is framed within the university's framework of teacher preparation models and is one of thirty-three existing models, which operates from within the College of Human Resources and Education, and more specifically by the Center for Teacher education. The program leader is a faculty member, who recruits graduate students on assistantships to act as university mentors

for the field experience and the internship of the program. The program is in keeping with the NCATE Standards (1998), and also follows the state directives with regards to standardization of the curriculum. The NCATE Standards document states that:

The unit keeps abreast of emerging evaluation techniques and regularly monitors, both internally and externally, its operation, scope, quality of its offering, and effectiveness of its graduates. (NCATE Folio, 1998, p. 8 No.4)

Program philosophy.

The NCATE Folio (1998) describes the conceptual framework of this program of teacher preparation as one of social constructivism and inquiry. It adopts as its main focus the teacher as a learner and engaged inquirer who explores the environment in collaboration with others.

Interns are expected to act on their growing knowledge and insight. The conceptual framework the underlying principles.

As teachers we must see ourselves as inquirers and learners who study children, teaching, schooling and society. Inquiry as a fundamental aspect of both learning and teaching must be evident in all the interns' experiences, including coursework, field activities, and artifacts of fieldwork. We also want to highlight the connection between inquiry and active engagement. Teacher inquiry then becomes a recursive process in which action and reflection critically combine each informing the other.

(NCATE Folio, 1998, p.8.)

This model has a socio-cultural approach to teaching and encourages the active learner (Noddings, 1990). It is strongly felt by constructivists that the peer or adult can play an important role in the social context of learning. They stress the importance of social interaction, that of student-teacher and student-student interactions, and learning through active learning

experiences (Holt-Reynolds, 1994; Shuell, 1996). Alongside this theme, the program takes on the perspective of social reconstructionism, that hinges on the beliefs espoused by Dewey and Friere and adopts a critical educational perspective (NCATE Folio, 1998). Reflective practice is a strong supporting conceptual orientation of this teacher preparation program, one that points to the acquisition of knowledge, skills and the moral courage to create a better world, that is coined in the term "social justice." (NCATE Folio, 1998). A strength of the social reconstructionist theory is that it calls for efforts in which " both schooling and teacher education are seen as crucial elements in the movement towards a more just society." (Liston & Zeichner, 1991, p.26).

The many activities embedded in the model represent the program's contribution to the goals of social constructivism and social reconstructionism. These include technology and its uses, diversity and multicultural education, inquiry processes, communicative processes, and educational assessment. The program also seeks ways to address the diverse needs of learners in the regular school context (NCATE Folio, 1998, p.13).

Program organization.

The organization of the teacher preparation program includes a set of graduate courses, field experiences and a professional teaching internship in schools within the community. From July 1, 1998, licensure in Virginia was limited to Pre-K, K-6, 6-8, and 6-12. This brought about changes for the Post Baccalaureate Program in this university and the licensure range was changed to K-6 for all candidates. The faculty involved in this program felt that this change helps to emphasize elementary teacher preparation and address concerns about the existing program. (NCATE Folio, 1998, p.13).

To be eligible to begin the student teaching internship, a teacher candidate should complete a field experience and maintained an average of 3.0 or better in at least 21 hours of

course work. The teaching faculty comprises sixteen faculty members, the delivery faculty, the model leader and three university-mentors. The school mentors and student teachers also form an important part of the model. (NCATE Folio, 1998)

The university courses

Pre-service teachers are required to take graduate course, field experiences, a professional student teaching internship at nearby schools, and attend professional seminars. All teacher candidates must complete eleven courses for the Masters degree. They must complete seven compulsory courses and courses from which students choose four courses.

Required courses are:

1. Seminar in Education: Teacher as Researcher
2. Foundations of Reading/ Language Development and instruction
3. Linguistic Theory and Instruction in Reading and Written Expression;
4. Advanced Curriculum and instruction in Elementary and Middle School Mathematics
5. Advanced Curriculum and Instruction in Elementary and Middle School Mathematics;
6. Advanced Curriculum and Instruction in Elementary and Middle School Science
6. Comprehending Processes and Reading in the Content Area.

Other Courses are:

Teaching Composition

Literature for Adolescents

Theoretical Foundations for Child Development

Educating Exceptional Learners across the Life Span

Schooling in American Society

Advanced Educational Psychology

Elementary School Curriculum

Middle School Curriculum

In the light of University's restructuring policies, this program of teacher preparation survived the near closure of the School of Education by the College President in 1995 (NCATE Folio, 1998). This move signaled a lack of confidence by those in authority with regards to the viability and significance of education, within the land grant institution. Nevertheless the School of Education received the support of the business community, the education community, and the state legislature, and the mandate to close the college was amended. The College of Education is now merged with the College of Human Resources to form the college of Human Resources and Education. The teacher education program is evolving out of constant curriculum work by faculty, changing state regulations, and evolving standards of accrediting institutions, and faculty interpretations of student performance, learning and evaluative comments (NCATE Folio, 1998).

This research was conducted when the program was just in its third year, and had been already experiencing changes to its format based on the formal feedback by students. As a mentor I was involved in this change. This study was another research effort in the evolution of the program.

Teaching Practice Sites

The Post Baccalaureate program utilized three schools in the community for the field experiences and the teaching practice, one middle school and two elementary schools. Three participants in this study completed their teaching practice at one of the elementary schools and two in the middle school. The middle school is the only one in the community with classes from six to eight grades. It is a fairly old building, built in 1954 that has outlived its capacity, as the

school now caters to eight hundred and eighty five students, more students than the school was built to hold. There are one hundred and ten staff members who create and maintain a middle school learning environment that attempts to be relevant to and developmentally appropriate for early adolescents. Teachers use an interdisciplinary approach to the teaching of the various subject areas. Pre-service teachers wishing to be certified in K-8 have been allowed to complete one of two teaching practice assignments at this school.

The elementary school where participants practiced is only six years old and is considered a model school in the community. This elementary school is a demonstration site for the Basic School Network (Boyer, 1995) and has adopted the motto "A Basic School Celebrating a Diverse Community" This school enrolls four hundred and seventy two students and has a staff of sixty-nine full and part-time staff members. It is the largest elementary school in the community. The major emphasis of this school is to provide a program that meets the needs of all of its students. This school has adopted inclusion practices where children with special needs are educated alongside their peers with the appropriate support service. Regular education teachers work alongside their special education counterparts providing the necessary educational environment for all students.

Supervision

The pre-service teachers were placed in different grade levels at the schools. The cooperating teachers and one of two university mentors who were usually doctoral students supervised them. The program leader visited the schools. All participants of the program were provided with a copy of the program's handbook that contained the conceptual framework and other policies that are pertinent to the program. The cooperating teachers were asked to

encourage the students to fulfill the themes outlined in the program handbook, and to assist the pre-service teachers in their planning and practice.

The university mentors supervised the students weekly, they listened to lessons, conferenced with the student teacher, and the cooperating teachers and serves as a link between the university and the school community. They meet regularly with the program leader and attend the professional seminars with the students.

The Post Baccalaureate Program for Initial Teacher Preparation was initiated in 1996 at this university. It caters to students with first degrees from different disciplines in the Arts and Sciences. The students who come into this program range from young graduates to mature persons who want to change their professions. The five pre-service teachers in this study reflected the range of ages and diversity in their undergraduate studies. They also reflected gender and ethnicity of the sixteen pre-service teachers who graduated together at the end of spring or summer after completing their practice teaching.

Portraits of the Participants

This section portrays the five pre-service teachers as they embarked on their professional journeys from different routes. These five beginning teachers were equipped with different expectations, skills and knowledge. Each portrait is unique because of the life experiences of each of these pre-service teachers whose lives have been affected by their relationships.

Barbara - Grade Two

Barbara is a white, female who is in her forties. She always referred to herself as an older pre-service teacher. Her undergraduate degree is in International studies with a minor in Spanish. She is married and is a mother of three children. Barbara considered herself to be "a stay at home

mother for several years and was slowly reentering the workforce." She said she returned to school after she had her children. She had contemplated teaching on and off for years, but it was only when she became a substitute teacher at her daughter's pre-school and was helping out in her older children's school that she decided to make teaching her profession.

I had been playing with the idea for years, but it was not until I had my own children that I decided to help out in my son's pre-school. I ended up subbing and this made me think, well, why don't I try this at the elementary school level.

Barbara decided to go back to school and obtain her master's in education in an alternative program. She enrolled into the Post Baccalaureate Program for Initial Teacher Preparation in the summer of 1999.

Barbara is a small woman who was always very busy whenever I visited her in the classroom. She was an enthusiastic teacher from the beginning of the teaching practice paying attention to the organizational and technical aspects of teaching during the practice. She had her lesson plans available to me and engaged in conversations with me after her lessons were completed. Barbara admitted to be nervous when asked to write a unit for the first time in the teaching practice, but as she recalled, " it worked out and the students loved the activities I had planned." She felt her work in the classroom had earned her substitute placements when the teacher had to be away for long periods of time.

Barbara was generally on her feet, either teaching or assisting the teacher with monitoring the students. She was very concerned with planning and organization within her own teaching and in the classroom. She expressed pleasure at being placed with a teacher who also exhibited these tendencies. Barbara was always happy to have me visit the classroom. She had her lesson plans and units completed in a timely fashion. She was constantly seeking feedback for work she

completed, and she was quick to explain why things did not go the way she felt they should have gone. During the interviews she displayed the same confidence that she had during the teaching practice. Barbara felt that reflection is important to teaching,

I believe strongly in reflection and analysis, utilizing my strengths and working on my weak areas, always keeping the students in mind. Some people feel that reflection takes too much time and energy, but for me it is intertwined with what I do. Without it, I would be engaging in a disservice to my students.

Barbara has not been able to secure a full time teaching position because she does not want to relocate for family reasons. She has been recalled many times to work as a substitute teacher in the elementary school where she completed her teaching practice. She is hopeful she will soon secure a full time position.

Lisa- Grade Two

Lisa is the only African-American student in the program. She is twenty-two years old, and unmarried. She comes from a family of teachers. I considered her to have a quiet and non-assertive personality. Her undergraduate degree is in Interdisciplinary Studies, a program that included three areas, education, black studies, and psychology. She said that coming into teaching was a life-long dream, " I always wanted work with students, and I wanted to help them sharpen up their minds and prepare them for the world, I just love children."

Lisa has a quiet personality. She seemed to lack confidence at first in her teaching and classroom management; however, in a quiet way she conducted her lessons and activities in the classroom. Whenever I entered the classroom, her face would change from a serious look to a smile. I shared many ideas with her, and the next time I observed her, I noticed she tried to implement them in her lessons. I took note that she was paying attention to the suggestions I

offered to her. Nearing the end of the teaching practice Lisa was able to teach the class for a week, with the help of a substitute teacher, because the teacher had fallen ill. I saw a growth in Lisa's confidence, and she was able to take the lead role in the class for that period of time.

Lisa was very concerned about her race and race issues in the school community, where there is a predominantly white population. Once I saw a hint of assertiveness surface in Lisa's disposition when she spoke to me about an incident and asked for advice about what to do. She was very upset that a white male teacher in the school used a racial slur to her. She shared her concern that this was inappropriate for a teacher who interacted with children of different races. She felt strongly that he should not use that kind of language in front of the students. Lisa was able to resolve this problem with the help of the principal and her mentor.

Just as Lisa was quiet during the teaching practice, so too she was not very talkative and did not elaborate much in the interviews I conducted with her. Her answers were short, very characteristic of her quiet nature, and she just did not talk a lot. She, however, wrote a great deal in her reflection journal entries, and so I relied upon them to understand her views in this study. She shared this thought with me during one of the interviews.

Sometimes you are most honest when you write. There are some things that you don't want to say verbally, but if you are writing it comes off the top of your head, so you could write as much as you want.

Lisa was also concerned about the way she was treated as an African-American by her classroom teacher. She shared her feelings with me and elaborated in her reflection journal. Lisa completed the teaching practice and the program successfully and is now a teacher in an elementary school in Virginia.

Jason-Grade Five

Jason is a white male student. He is 23 years old, and unmarried. He is one of two males in the program. His undergraduate degree was in marketing. He said his first thoughts of teaching came when he had to do an internship for his undergraduate degree. This internship took him into the school system and he "got hooked on teaching."

During his time in the program Jason had the opportunity to complete his teaching practice in two schools. He did his field experience in the middle school and was placed in the elementary school for his final teaching practice. He came into the final teaching practice with a reputation of being unprepared during the previous semester. Jason acknowledged this and made an extra effort to hand up his lesson plans and weekly journal. He voiced his concern about the negative reputation he had come with to this teaching practice. He assured his cooperating teacher and me that he was going to do his best in the teaching practice.

Jason had some initial concerns about his placement at the elementary school because of his preference for teaching in the middle school, but he said he felt it worked out fine in the end. He expressed confidence in his knowledge and ability teaching math, and so the cooperating teacher capitalized on his knowledge by asking him to teach all the math classes. He was pleased when his cooperating teacher gave him full reign of the math curriculum during his practice. Jason was generally a quiet young man who was always willing to listen to advice with regards to his work in the classroom. Whenever I held a conference with him after a lesson, he would listen and offer an explanation with regards to the lesson or his performance. Jason completed the teaching practice successfully and is now teaching in a middle school in Chicago.

Maria- Grade Seven

Maria is another of the mature students in the program. She is of Hispanic origin. She is married with two children. She completed her teaching practice at the middle school. Maria's undergraduate degree was in Geography and Anthropology. This background led her to become involved in outdoor activities with children. It is during these adventures that she developed her interest in teaching. She talked about her fascination with children.

I volunteered to work with children, and then I led outdoor adventures like cycling, camping trips, and I directed an enrichment camp. I was fascinated by the way that the children learned and working with them through these activities was interesting. I liked working with kids. I liked their questions.

Maria taught at the middle school in seventh grade, mainly in the area of Language Arts. She appeared to me to have a calm disposition, and she was quiet in her approach to the students. From very early in the teaching practice Maria was concerned about the social aspects of the students' lives. She was mainly concerned about how she could influence the lives of the students and how she could enter into dialogue with them. She spent a great deal of time in individual conferencing with the students during this practice. Every time I walked into the classroom, Maria was either teaching a lesson or sitting in a corner of the room talking to a group of students. Maria was very successful in the teaching practice and was offered a teaching position in the same school she conducted her teaching practice. She is now teaching at that school.

Paulette- Grade Eight

Paulette is a white, young and unmarried female. At twenty-two she is one of the younger pre-service teachers in the program. Paulette was involved in teaching before coming into the program. She started out doing geography and geology, she said that she liked earth history, but

soon found out that she did not want to do a technical job. She became involved in teaching through her work in geography.

I joined a student conservation association and I spent a year in California, teaching in the inner city schools. I taught geology and I wrote curriculum for the California standards of learning.

Paulette remembered the relationships she developed with the students and when they took field trips and habitat restoration projects.

Paulette taught at the middle school for her final teaching practice and I visited her once a week. She taught Social Studies and Language Arts to different groups of eighth graders. She was very energetic, and she seemed to be an advocate for the students who were not excelling in the school system. She voiced her concern for students continuously during her teaching practice. Paulette felt the program was tailored to suit her needs, because she considered herself to be a reflective individual.

I am the person this program is built for, there have been points where I have been freaking out trying to get all this together and it seems that exactly at the right time the program gives me a break and allows me to clarify my thinking. It's built on giving the opportunity that I need and I am allowed to grow.

At the beginning of the teaching practice Paulette and I did not get off to a picture perfect start. I was anxious about her reluctance to teach, and she made it clear to me that she needed time to assimilate all that was happening in the classroom. She was willing to teach, but she needed time to place herself in the classroom and to gain the trust of the teacher and the students. We had many conferences in which we discussed the students. Paulette expressed feelings of anxiety, and we talked about way she could contribute in the classroom. Paulette went on in that

teaching practice to successfully teach an equal rights unit and to develop and implement a pen-pal project with the students of that class and elderly members of a convalescent home in the community. She considered these highlights of her practice at that school.

During the interview with Paulette I was given the opportunity to hear the deep thoughts of this young teacher as she reflected about her teaching, and the social issues that concerned the students. My interviews with her were long, and she gave numerous examples of her reflection in the class. She successfully completed the program and now teaches in a private elementary school in Virginia.

Summary

In this chapter I described the historical and institutional contexts of teacher education, and the Post Baccalaureate Initial Program for Teacher Preparation to highlight the background for this study. In pursuance of the goal of sharing the views of the participants, I presented portraits of the five pre-service teachers and their unique experiences as they embarked on this part of their professional journey in the Post Baccalaureate Initial Program for Teacher preparation. Each pre-service teacher came through a different route into the teacher preparation program, however their reasons for entering the teaching profession were all based on their desire to work with children.

CHAPTER FIVE

INTERPRETATION

Introduction

In this chapter I present the views of the pre-service teachers relevant to the research questions. The pre-service teachers' voices convey many messages about how their definitions of reflection, the process and context of reflection, and the content of reflection (Calderhead, 1989) influenced and shaped their understanding and practice of reflection in teaching. In applying a symbolic interaction analytical framework to the study, I use the generic social processes proposed by Prus (1996) to categorize the themes that emanated from the data. These processes allow the teachers' voices to be heard, conveying aspects of the emergence and growth of reflection among these participants in their pre-service journeys towards becoming reflective practitioners (Prus, 1996).

Emerging Themes

Themes are organized under the five main social processes to answer the first four research questions, the ones relating to the participants. The social processes are: (a) acquiring perspectives; (b) achieving individuality; (c) experiencing relationships; (d) situating the act of reflection; and (d) doing the act (Prus, 1996). The fifth research question concerns my journey as a researcher and participant/observer alongside the participants and the subjectivity involved in doing this research.

I found thirteen major themes emanating from the data and categorized them within each of the five social processes. These themes characterized the similarities in the data, while also pointing out the subtle differences because of the individuality of each participant. Table 8 outlines how I linked the research questions to the appropriate social processes, and the themes

that emanated from the data within each social process. After each theme has been explored, I examine my subjectivity and the understandings I gained from the pre-service teachers' interpretations. Here I relate my perceptions of the theme, and my personal view of my influence on the students. My voice is captured as the researcher's stance and is italicized to distinguish my views from that of the pre-service teachers (Alverman, 1998).

Table 8. Research Questions Linked to the Social Processes and the Corresponding Themes

Research Questions	Social Processes (Prus, 1996)	Themes Arising out of Data
How do the pre-service teachers perceive and understand the concept of reflection?	Acquiring Perspectives	1) Defining reflection 2) Questioning in reflection 3) Having opportunities to reflect
How do these pre-service teachers describe how they learn to reflect on their practice?	Achieving Individuality Experiencing relationships	4) Reflection is learned from self and significant others 5) Reflection on action and for action 6) Reflection is based on personal beliefs, and educational theory 7) Encountering professors 8) Encountering mentors 9) Encountering cooperating teachers
In what contexts do the pre-service teachers engage in reflective practice?	Situating the act	10) Self-reflection 11) Verbal reflections 12) Written reflections
What do the pre-service teachers reflect upon in their practice?	Doing the act	13) Content of reflection

Interpretations

Through their interpretations, the pre-service teachers made meaning of the concept of reflective practice. I quote them extensively to reveal convergence and distinctiveness in the understandings of reflection that each constructed. I took illustrative quotes from the interview data and reflection journals. I analyzed the data fully aware of how I slanted and shaped the responses of the pre-service teachers (Lincoln & Guba, 1985). I wanted to make sense of the data, and followed Lincoln and Guba's (1985) suggestion that anything that allows us to deepen our understanding by using multiple data sources is advantageous. Lincoln (1990) however, states that people should never be used solely as a means to another's end, regardless of the context. In this sense, I made decisions with regard to the choice of data to present in this study.

Acquiring Perspectives

The social process acquiring perspective is the umbrella category under which the first research question is answered. This question being how did the students perceive and understand the concept of reflection? The pre-service teachers acquired their perspectives in the following ways: through their definitions of reflection, using questioning in reflection, and through the opportunities for reflection. These three themes revealed ways the five pre-service teachers gained understanding of the concept of reflective practice as participants of the teacher education program.

Defining reflection.

Definitions are the basis on which individuals explain their understanding of a particular concept. The literature indicates that there are many definitions and interpretations of reflective practice in teacher education, making it a problematic and puzzling concept. Sparks-Langer (1992) posits the view that the exact meaning of the term 'teacher reflection' is difficult to pin

down. However, definitions are important to demonstrate how these five pre-service teachers understood reflective practice. The symbolic interaction framework used in this study underscores the importance of definitions of the pre-service teachers. Blumer (1969) states that 'one has to get inside the defining process of the actor to understand his actions.'

Lisa linked reflection to general thinking processes, she said, " I just keep thinking about things, I write about them, think about them, I just think about things that I'm doing and reflect on that." Barbara's definition of reflection was based on her thinking about her actions and what she could have changed. She stated, "Reflective practice to me means thinking about what you are doing, looking at what went well, what didn't go well, and what you could have done differently." For Jason reflection was "Looking back on an experience one has encountered to see what one could change to make better, or to improve one's skills." Maria's definition of reflection was personal and linked to her life experiences.

It is a process, it is where you are acting in certain ways or you are living your life a certain way and things are happening to you, it poses questions to you about how you can change or what you need to do.

Maria extended her definition of reflection to thinking back on what she had done. She explained, "sometimes you have to sit back and relive the moment to think about how to proceed." Paulette's definition of reflective practice was linked to thinking and reevaluation, she felt that "Reflection is constantly thinking about and reevaluating, thinking about the actions that you need to see improvements." She further suggested, "It is thinking about what you do as the teacher, thinking about how the students are responding to you."

The idea that reflecting is thinking about an action to make some change seems to influence the way these five beginning teachers define reflection. This finding is in keeping with

the literature on reflection that says it is a special form of thought. (McNamara, 1990; Sparks-Langer & Colton, 1991). The definitions given by the five pre-service teachers fit with the literature on reflection on action, where Schon (1983) suggested that teachers think back on what they had done in order to determine what improvements could be made in the future. This, he reminds us, is the active consideration of professional practice. This thinking back on action is akin to Dewey's(1933) notion of reflection as problem solving, that it is the ability to look back critically and imaginatively, to do task analysis, and also to look forward and to do anticipatory planning.

The five pre-service teachers forwarded fairly different definitions mirroring the literature on reflective practice that states that definitions and conceptions are varied (Sparks-Langer, 1992; Zeichner and Liston, 1987). Whereas two pre-service teachers viewed reflection as simply looking back on action, the others thought about changes that could be made. The way the pre-service teachers described their perceptions of reflective practice demonstrated their personal perspectives of the concept of reflection and reflective practice. Sparks-Langer, (1992) asserts that reflection has no one definition, it is perceived in the eye of the beholder.

Questioning as reflection.

The five pre-service teachers questioned themselves as they reflected on different issues. They asked themselves a range of questions as a means of learning what were expected of them within the classroom context. Most of their questions were student-related, although some questions were hinged to their actions as teachers. Barbara asked herself questions that related to the students needs and what could be done. She informed the researcher, "It is like looking at a child and saying why isn't this working for this person? What do I need to do?" Lisa asked questions about her work in the classroom, she reminisced, "I can look over a week and see what

happened and reflect on my work. How do I feel about that now? How did I feel about it then? Have my feelings changed?" Jason's questioned his own behavior and his expectations of the students. He shared his thoughts, "If I am not holding up my standards, how do I expect them to hold up to their standards?" Maria asked questions when she contemplated her actions in her teaching.

You may have an objective, but you are seeing that your objectives are not being met, so you think, well, what did I do? How can I do this to make it better? So it is the prize, the snag in the road that I am seeking to remove.

Paulette reflected on how she perceived her students. She pondered on her place in their lives.

Where is my place in their life? Are they fed? Are they clothed? Do they feel like they belong? Do they feel like I am caring for them or not? Do other people care for them? Unlike the other students, Paulette's questions were of a personal nature and not about students' academic performances.

Questioning and problem solving are two ways that individuals can become reflective about their actions in the classroom. The literature on reflective practice encourages pre-service teachers to question how and why they are doing what they are doing (Cruickshank, 1990). Dewey (1933) referred to engagement in objective and rigorous inquiry while exploring alternative possibility as open-mindedness. By questioning their actions, the pre-service teachers were questioning their firmest beliefs that may be characterized as open-mindedness on their parts.

Having opportunities to reflect.

In order for reflection to take place there should be opportunity. The five pre-service

teachers highlighted opportunities for reflection in their classes at the university and in the school where they conducted their teaching practice. These pre-service teachers reported many opportunities for reflection, and the nature of the reflective tasks they had to accomplish.

Barbara felt the program offered many opportunities for reflection. She explained, " There were many opportunities for reflection in the program, although some people may not have been comfortable with it." In her journal Barbara reiterated " I have enjoyed the varied experiences in which I reflected on this program." Lisa felt, "The model was good, I think there were plenty of opportunities for reflections." Jason shared that "There was a lot of opportunity for reflection, but a lot of it had to be written." Maria acknowledged that she reflected in her teaching practice and also in the courses she did in the program, she remembered, " Definitely in my student teaching, but also in the courses. They asked you to reflect on readings." Paulette found many opportunities for reflection in the university classes, but chose to connect to particular classes that appealed to her. She shared her views about the opportunities for reflection.

All the classes had plenty of opportunity for reflection, and it is just a matter of my own brain which ones were meaningful, because I have my own context and my own framework and I really connected with the ones that I wanted to.

She also explained that "All the classes were different. It's like they planned it altogether like they all [were] going to offer different opportunities, and they were valuable things in each one that I did."

The pre-service teachers all agreed that there were many opportunities for them to reflect on their practice. Calderhead (1992) states that the opportunities for pre-service teachers to analyze their practice can differ from one teacher preparation program to the next. In this case,

the pre-service teachers were provided many opportunities to practice reflection and, as such, gain further understanding of reflection. Dewey (1933) suggested that the primary purpose of teacher preparation should be to help pre-service teachers become "reflective practitioners."

The Researcher's Stance on Acquiring Perspectives

As a researcher I am obliged to think of my personal definition of reflection. I have come to believe that reflection is a process of deliberation of one's beliefs and knowledge as a means to gain understanding and to create change. I believe in social reconstructionism that advocates that we deliberate on moral and ethical aspects of teaching. Thus, very early I changed my perspective from being a supervisor who assessed only technical teaching skills to university mentor whose role was to help the pre-service teachers to think about their beliefs and their teaching.

Just as the pre-service teachers questioned themselves, as their mentor I often questioned myself about my role in their learning. I often wondered about the ways I could get the pre-service teachers to think about the broader implications of their practice. I wanted the pre-service teachers to think about the knowledge and skills they used in the classroom, and the consequences of their actions in the classroom. I wanted them to consider the students in the class. Apart from just teaching the content of the different subject areas, I was interested in how the pre-service teachers viewed the students. I asked many questions of the pre-service teachers, however I was never sure if these questions impacted on their practice.

The pre-service teachers' responses provided me with some insight into the ways in which they were introduced to reflective practice, and the many ways in which they engaged in reflection. As I unpack the perspectives of the five pre-service teachers, I find that they linked

reflection to thinking about their work in the classroom, and about changing their actions. It is also evident from their responses that they reflected about the students.

Achieving Individuality

The second research question dealt with how the pre-service teachers described how they learned to reflect. This question explored the process of learning to reflect, and it was captured under the social process achieving individuality. The five pre-service teachers attributed their ability to reflect on their interaction with significant others in the program. Three pre-service teachers indicated that they had reflective personalities. The five pre-service teachers engaged in reflection on actions and for action in their classrooms, and they based their reflections on their personal beliefs, and educational theory.

Reflection is learned from self/significant others.

Barbara attributed her ability to reflect on her personality and reflective nature; however, she acknowledged that her thinking about reflective practice as a special term only came as a result of being in the teacher education program. She also remembered several individuals who first stressed reflective practice on the program.

I know myself personally, I am always a person who looks at whatever I am doing and ask myself afterwards what should I have done differently, what could I have changed. I just never gave it a name. It was always a part of my life but applied to teaching probably in my first courses that I had, actually in Dr.Gingham's classes we heard that, because we talked a lot about the importance of reflection.

Barbara's introduction to reflective practice in the teacher preparation program also came from taking the graduate seminar, and hearing it from her mentor during the teaching practice.

It wasn't really until Dr Langley, in taking that class, she always asked us to reflect and think about what we're doing, and, of course, my mentor was emphasizing it more also during our student teaching

Lisa said she learned to reflect through the many activities in the courses she took at the college. She referred specifically to the graduate seminar that students took which she said helped her to reflect on her classroom activities. "The graduate seminar that we've taken with Dr Langley helped us to understand what reflection was because we had to write journals every day, and that helped me to reflect on what I was doing in the classroom."

Jason remembered a course that helped him to reflect on his teaching strategies. He shared his experience. "I took this teaching composition class with Dr Gingham that helped me reflect on my teaching skills and helped me to learn how to teach better, more professional." He remembered that it was in the seminars that "Dr Langley asked us to reflect on what we did in the class."

Maria attributed reflection as something that was part of her life. She explained, "Reflection for me has been just a part of my life, it is a matter of seeing how things have panned out and I think that is necessary." Maria recalled a professor who stressed the importance of reflection, she remembered that it was "Actually in Dr. Gingham's classes I heard about reflective practice, because we talked a lot about the importance of that." Maria also insisted that "the graduate seminar was another class," where she had to do many reflections.

Paulette spoke about the impact that one professor had on her understanding of reflection through an activity.

My first exposure to the term reflective practice was in Dr Bramble's class. Every week she had us thread a bunch of articles that seemed really random. We had to try and do a

reading response, and what she was doing was picking out articles, like she had an agenda, and she made it seem like we were coming to our own conclusions, but they were really her conclusions. That was the first time I actually ever got to see the value of building ideas as you write. I always thought you had your ideas ready, and then you wrote about them. She very indirectly taught me that I could teach myself through writing, because I would write down what I was thinking about as I was pulling these articles together, and then I would arrive at a totally different place at the end from where I started.

The responses of the participants indicate that the process of reflection was socially determined, and it was a product of the utterances to which the participants responded in ongoing dialogue they held with others (Bakhtin, 1986). The five pre-service teachers interpreted the activities they did on the program as integral to their development as reflective practitioners. They clearly linked their understanding of reflection, and learning to reflect to what their professors taught them in the various courses.

Three of the pre-service teachers found that the seminars provided the forum for reflective practice, and that the professor encouraged reflection. Unlike Goodman's (1984) suggestion that the content of many seminars perpetuate unsubstantial dialogue, in these seminars the pre-service teachers were encouraged to reflect through dialogue. This dialogue was done verbally and in writing, and allowed them to share what they had in common with other pre-service teachers as well as share their uniqueness as individuals (Harrington, 1994).

Three pre-service teachers attributed reflection to their personalities. Harris (1997) argues that by focussing on the process of interpretation, it is possible to see how the concept of reflection is not pre-ordained. It may be true that the ability to reflect has become innate to some

individuals, but the meanings have been renewed and renegotiated by the individuals in the relationships. Blumer (1969) suggests that reflection is a social object that is the result of interpretation rather than merely an intrinsic trait within the individual.

Reflection on action, and for action.

Four pre-service teachers discussed reflection as looking back on their action in the classroom, Barbara explained " After I teach a lesson, I would think, this went well, or this didn't go so well. I may ask my cooperating teacher, 'what do you think?' "

To Lisa reflection was a process of thinking back about what she did, and she questioned herself in the process.

I reflect on my lesson plans, I look at those and see what I could have done differently. I go back and think about how I thought of a situation then, how I think about it now, have my thoughts and feelings change. Would I have handled anything differently? So I go back and reflect over my reflections, I just keep thinking about it.

Maria discussed a unit on the first amendment that she had done to demonstrate how she reflected on her actions.

I had to reevaluate all of the lessons, and I would not do them the same way again, if I had to. So it is the experience you have that makes you go back and think about how you can do it differently to make it more solid.

Paulette gave an example of how she reflected on her lessons in a science unit that she implemented; she was able to go back and change her action.

I taught a science unit and after every lesson I wrote a reflection, when it went wrong. I had the opportunity to teach it twice. So the first time it was bad and the second time it was better because I thought about how I was going to fix it. I also videotaped it, so that I

could look at it. I thought about how did I feel then, and I think about the students, how I was reacting to them as someone else from the outside.

Schon (1987) stated that reflection begins with the recognition that a educational dilemma or emotional discomfort exists in response to professional experiences. The pre-service teachers recalled that they thought about action that did not go well in the classroom, and they questioned what could be done to change those actions. Schon (1983, 1987) coined the term "reflection-on-action" to name this type of reflection. These pre-service teachers reflected on their actions in their teaching practice. Three of the pre-service teachers also thought about how they would change their action in the future. Schon (1987) called this reflection for action.

Reflection is based on personal beliefs and educational theories.

Four pre-service teachers incorporated their personal beliefs, as they shared their reflections on their teaching practice. Barbara talked about how she believed in reflecting on her practice, she shared " I believe strongly in reflection and analysis, utilizing my strengths and working on my weak areas, always keeping the student in mind." Barbara was cognizant that she was a learner and that her students were important. Jason reflected on the ways he wanted to engage his students, he stated, "I always think about actively engaging the students in the learning, then they are actively paying attention, they have to keep their hands and their minds moving." Jason valued the student as an active learner. Maria reflected on her role with her students, she shared her perspectives,

Some of my students are growing up in a world where they have issues, and how can I help them to become healthy adults who care about one another, who are active citizens and who are socially active, that's one of the things I think about.

Maria valued the social aspects of the students' development and she wanted them to learn about caring.

Paulette based her reflection on her own values of what she thought was important to do as a teacher.

You have to think about what you are doing as the teacher, thinking about how the students are responding to you. Look at all the ways that they do respond to you and in their actions, what they write anything that you can notice, not just the things that were traditionally formally assessed or whatever. I think that one of the most important parts of teaching is that you really feel like your students can learn.

Paulette internalized the concept that all students can learn. This is an important concept in inclusion practices in education.

The pre-service teachers' reflections were based on educational theory that they had learned in their university courses as they progressed through the teacher preparation program. I highlight one example from each informant. Barbara shared her childhood experience as a math learner in a traditional program where " We sat in quietly in rows, diligently filling out useless worksheets." Barbara adopted the educational theory of constructivism in her practice as a teacher, she stated, "I have tried to develop units that illustrate the connection of mathematics to real life through exploration in a fun, engaging, non-threatening manner." Lisa explored ideas of how to introduce multiculturalism into the classroom, a theory developed in several of her courses "I think that bringing in materials on different races of people is important, and using textbooks that have people of different races."

Jason explained how he adapted the curriculum for students who were not keeping up with the rest of the class. Thus he drew on the idea of differentiated instruction.

I make adaptations for students who are not keeping up. In a measurement project I did with them, I see that they are having difficulty analyzing the work, so I slow down, condense the information so they could actually see what each represented. I know some of the students needed visuals.

Jason was aware of the need to provide differentiated instruction and materials to suit the differing needs of his students.

Maria reflected on opportunities for building self-esteem in her students.

I think students should be provided with opportunities to speak out and explore issues that are important to them, this is so vital for their self-esteem and for helping them to become responsible socially caring human beings.

Maria saw the importance of providing a forum for active learning to take place. She felt that students would grow in confidence, when they are given opportunities to clarify issues that are important to them.

Paulette felt that teachers should base their action on educational theory. She stated, "You really need to pay attention to all the little details of what the kid is telling you, and you need to integrate those things with the sound theory that you know. You need to think about all these things so that you can respond in a good way." Paulette was concerned with teacher-student relationships, and felt strongly that teachers should be good listeners to learn more about their students.

Their personal beliefs and values influenced the pre-service teachers' reflections. They also linked their reflections to educational theory, and wanted to adapt materials, build self-esteem, link mathematics to real life, and introduce multiculturalism in the classroom. These practices were themes in many of the courses they had taken. The pre-service teachers integrated

educational theory in their practice, and although some of them were probably unaware of it, their responses indicated that they did apply much of what they learned in their university courses to their practice.

Experiencing Relationships

The social process 'Experiencing relationships' describes how the relationships the pre-service teachers formed with the various individuals connected to the program did have an influence on the process of learning to reflect. The three themes encountering professors, encountering mentors, and encountering cooperating teachers were instrumental in answering the second research question, how did the pre-service teachers learn to reflect on their practice. In learning to become reflective practitioners, the pre-service teachers interacted with these individuals in different social contexts. However, the pre-service teachers had different views about who influenced them positively to develop their reflective capabilities.

Encountering professors.

All the pre-service teachers were exposed to the same professors in their classes for the seven core subject areas covered in the program. It was interesting to note that they all spoke about particular professors who had influenced their learning and encouraged them to reflect. Barbara, Lisa, and Paulette praised many of the professors they had worked with during the program. They recalled the same professors who had an impact on them. These professors were Dr. Langley who conducted the seminar, Dr Gingham who taught Foundations in Reading, and Dr Bramble who taught Literacy. Barbara was quick to point out those classes that she felt did not teach her to reflect.

Some of them have, I know with the science class definitely, and with the reading class that I am taking definitely. I know Dr Gingham had many times asked us to reflect and

think about what we're doing, and making connections, even some of the books he had us read. I know a lot of students complained about it. Dr Langley's class obviously had us do a lot of reflecting, some of the other classes no, really. They really didn't.

Unlike the other pre-service teachers Lisa did not name the professors, except for the seminar. She recalled "The seminar we did with Dr Langley taught us to constantly reflect all the time. In her journal, Lisa wrote, " I thought that our Thursday seminar with Dr Langley was very helpful. It answered a lot of questions that I had."

Jason remembered one class in particular that taught him how to teach better, he shared his view, "I took this teaching composition class with Dr Gingham and that helped me to learn how to write better, more professional. So I could teach the kids which way to write." He also recalled a class that "opened his eyes" about working with students with special needs.

One of the courses I took was educating exceptional learners and that was a great course, because it opened my eyes to a lot of the behaviors the students have like ADHD. We've seen students in the classroom with Down Syndrome, and it makes me able to interact more professionally with them. So I can understand and accommodate their learning needs.

Maria attributed her engagement in reflection to her relationship with certain course professors. One course shaped her philosophy of teaching.

In a curriculum course with Dr. Berger, the first thing he asked us to do was create a road map of our lives and to write a reflective road map, sort of how we got to this point of where we are in our lives to become teachers. We had to write how the events in our lives helped our philosophies on teaching and that was very beneficial. For me, I really got to

see how I have grown as a person and how those things have happened to me, how those experiences have shaped my ideas about teaching and learning.

It was important for Maria to see how her life and her experiences linked to her teaching, and so to reflect on these aspects proved beneficial to her.

The pre-service teachers indicated that they had mainly positive relationships with their professors. They shared their preferences for particular university courses. The pre-service teachers remembered those professors who made their courses relevant to their teaching. There is much in keeping with the literature that talks about the effects that relationships have on fostering reflective practice of pre-service teachers. Putnam and Grant (1992) espoused that helping students see the relevance of course content by modeling reflective approaches, and linking experiences to professional knowledge facilitate transfer of learning. Schon (1987) stated that students learn, by practicing whatever skills they intend to become adept at, when they get the help of senior practitioners. He believes that students cannot be taught what they need to know but can be coached, the learners choose their own way. Dewey (1933) called it initiating the student into the traditions of practice.

Encountering mentors

The five pre-service teachers talked about the support that they received from the university mentor with whom they worked. In this case I was the mentor for all five pre-service teachers. I told these pre-service teachers that they could be honest because it was a learning experience for me, hence the reason I was conducting the study. Barbara described the role of the mentor as one of support for her as an older student. She also spoke of the mentor asking her to reflect more.

Well I think first of all she was very open. She really made me feel right from the beginning that I could come to her if I had any concerns or problems, and especially for me being an older student coming into a program and going back to school so many years later. You know you are a little hesitant and unsure of wondering what you're doing here, if you made the right choice. She made me feel welcomed right away, and she made me feel very comfortable and so I was able to come to her with any concerns. She came many times to listen to observe and she always gave me a written observation note on what she saw, how I could improve, we talked about it. I thought she was very helpful too, during the evaluation. I know there was a lot of times when she said to me try to slow down, to reflect more, so she was always reminding you and being very supportive of you and what we were doing here.

Barbara's reflection demonstrates the importance of having a supportive mentor, and the ways in which the mentor could help the pre-service teacher to reflect on her practice.

Lisa viewed the mentor as an advisor and confidant. She felt the mentor was the person who visited the most and helped her to reflect on her practice. " I believe the mentor is very honest and I trust her advice and I did think it is helpful, in the sense that she also gave me ways that I can grow, and things that I can still work on and things like that are helpful."

For Lisa, it was important to have trust between herself and the mentor. She also alluded to the amount of time the mentor visited her.

Jason had two mentors in the course of one year. I was his mentor for his final student teaching practice, when this study was conducted. He related his experiences with the two mentors he interacted with on his teaching practice.

I had two totally contrast personalities, and philosophies of teaching and educating children. I listened to all their advice. Some advice I felt was not for me because it did not reflect my needs and I felt some of my first mentor's ideas should have been geared towards my needs when I was going into the classes. So that's where I had discrepancies. This semester, one of the things I enjoyed was after I gave a lesson, my present mentor would provide a detailed description of me, and the lesson that I presented to the kids. She would tell me the strengths and weaknesses, and she would ask me questions, like why would you do this? Why did you do that? Do you think this would have been better? Why didn't you do this? Why did you have the kids go up to the board. I had to provide reflective answers, and I had to validate certain things. It made me understand why I did it at the time. So that's what she made me do; she made me reflect.

Although Jason had two mentors, he was able to discern the advice and feedback that was important to his growth as a beginning teacher.

Maria talked about the mentor as being one who brought an outsider perspective. She felt that the mentor had a different insight on the lessons, and made her think about how she could do things differently. 'You don't have the same day to day experience with me like Claire, my cooperating teacher does, your insight is helpful because you see it from a different perspective.'" Mentoring to Maria meant sharing a different side of the coin. She felt that the mentor saw things in her teaching that may have been missed by those who were in the classroom all the time. Thus she got many perspectives.

Paulette explained that the mentor was as important as the cooperating teacher in the teaching practice. She stated that the mentor provided support for her, but allowed her to think about her teaching by not over guiding her. She called the mentor 'a cheerleader.'

The pre-service teachers indicated that their mentor supported and helped them reflect on their practice, by providing different sources of support to them.

Encountering cooperating teachers

The pre-service teachers generally viewed the cooperating teacher as a source of support in helping them to reflect on their practice. Only one pre-service teacher did not elaborate on the role of her cooperating teacher in fostering reflective practice in the classroom.

Barbara described her cooperating teacher in a way that exemplified the other pre-service teachers' views of their cooperating teachers. Barbara was satisfied that her cooperating teacher was giving her help where it was needed, but she felt that she did not get written feedback.

She has really helped. She has given me very honest feedback, which I think is extremely important. I don't think people should be sugar-coating things, and maybe sometimes it may be a little tough to take some criticism, but it is constructive criticism. It's the only way I can grow as a teacher, and the kind of person I want to become. So I am very glad that she has been so honest. I wished she could have written a few little notes for me that I could have kept and hold on to, and I understand. I mean we did talk about that, she is not one to do that, so there's many times I would go home and I would try to write up a little something of the conversation that we had. She was very open and that we were able to have so many conversations, and she was such a busy person that she took the time to do this, she thought it was important.

Barbara seemed to want written feedback from her cooperating teacher, but she understood that this was not the teacher's style.

Lisa did not have very much to say about the cooperating teacher in the interview. She volunteered that "she hasn't really asked me to reflect on anything." I turned to her journal to get

some ideas from her about how the cooperating teacher had assisted her to reflect in the classroom. In her journal she wrote about her interaction with the cooperating teacher.

I learned a lot of wonderful and useful things from Dianne, and I am grateful for that. I love her classroom and I love all the wonderful things that took place in the classroom. Her classroom is a wonderful place to do a student teaching intern in, but I do not know if I would place an African American student in her classroom. I am used to being treated differently because of growing up in this area. I have been treated like this for the majority of my lifetime. I can get over the fact that people treat me differently and that is why I never said anything about it.

The issue of race was important to Lisa, and she was honest in her views about the way she felt "African Americans are treated by white people." She felt strongly that although the classroom was a great place for student teaching to take place in, that it was not a good placement for an African American pre-service teacher.

Jason used his cooperating teacher as a sounding board for his reflections, and he was happy with the freedom the cooperating teacher gave him in the classroom. " She gives me freedom to do what I need to do, we talk about ideas how I want to teach the class, and she'll either be in the classroom so I can actually experience what I need to do better." Jason felt that collegial reflection was important. "I think it's important to reflect with others because you feed off each other. If one person thinks that something is working the other person may not think it's working, then we could talk about it to make sure it is working." Jason seemed to enjoy talking to his cooperating teacher. An amicable relationship between the cooperating teacher sets the tone for a good teaching practice.

Maria's cooperating teacher was a valuable resource. Maria could verbally reflect with her cooperating teacher about any issue in the classroom.

She has provided me with different books to read. When I have discussed things that I am interested in, most lessons that I would be interested in, she has told me of the different situations that she had been in. I think the main thing though is we have a really good rapport and we think alike in a lot of ways, so it has been easy to kind of sit and chat about stuff.

It seemed important that the cooperating teacher provide resources that helped the pre-service teacher to successfully implement lessons. Just as in Jason's case, Maria could talk to her cooperating teacher about many things.

Paulette's cooperating teacher corrected Paulette in many instances in the classroom, but also provide much advice about teaching.

She tells me straight up what went wrong like, This was stupid, rethink that. She gives me advice, like because I couldn't read until I was much older, so I have a very good memory for exactly what people said, and I can remember the things that she told me very bluntly that I really have problems with. Like when I am giving instructions, she said to me, she said, Don't be so unsure of your instructions. Give them clearly and when they have questions they'll ask you. That is so important because as a teacher you could easily run your mouth and soak up all their time with your instruction and your blabber and they don't get a chance to do the work, to do the thing that you want them to do.

Paulette did not seem to mind the corrections by the cooperating teacher, because she viewed herself as a learner.

The pre-service saw their cooperating teachers as advice givers and experienced educators who helped them perfect their practice in the classroom. Schon (1987) coined the term "reflective practicum" for the teaching practice that is aimed at helping students acquire the kind of artistry essential to competence in their indeterminate zones of practice. In Schon's eyes there is artistry in the craft of teaching, and so he encourages the senior practitioner to pass this artistry to the apprentice.

Data suggested that these pre-service teachers had many important learning experiences. They experienced their professor, mentors, and cooperating teachers as motivators of students to become investigators of thinking and action (Boyd et al., 1998).

The Researcher's Stance on Achieving Individuality

I achieved my individuality as a reflective practitioner alongside the pre-service teachers. Achieving individuality to me meant that I had to learn to become a reflective practitioner before I could guide the pre-service teachers.

In my mentoring role in this program, I attended many of the graduate seminar sessions with the pre-service teachers. At these seminars the pre-service teachers reflected on their teaching practice and the mentors were asked to contribute to the sessions. I remember not saying too much at the beginning because of my own limitations with respect to my role in modeling reflective practice. I was learning quickly, however, because I read many articles and texts on reflective practice in education. The weekly meetings with the program leader were enlightening for me. The program leader practiced reflection, and she encouraged the mentors to reflect on the performances of the student teachers we supervised. As the program continued, so too my reflective capabilities grew, and I was able to reflect and encourage my student teachers to do the same.

The pre-service teachers verified that individuals in the program introduced reflection to them. Although I was learning to become a reflective practitioner, I was able to help them learn about the concept of reflection, by not only urging them to reflect on the lessons they taught, but also through my questions about their actions in the classroom.

Situating the Act of Reflection

The social process situating the act of reflection, points to the different contexts of reflection, in answer to the third research question, "In what context did the pre-service teachers reflect on their practice?" The pre-service teachers were involved in many reflective activities in the university courses and in the school classrooms in which they practiced. They practiced reflecting in different contexts. The pre-service teachers engaged in self-reflections, in which they actively thought about issues and problems. They also engaged in verbal reflections, where they held discussions with their peers and other significant individuals in the program. The pre-service teachers also engaged in written reflections. They produced writing activities in the university classroom and reflection journals in the classroom. The pre-service teachers voiced their preferences for the different contexts of reflection based on their own philosophies and values that they placed on these activities.

Self-reflections.

Three pre-service teachers engaged in self-reflections. This behavior was indicated by the pre-service teachers' thoughts about issues related to their practice as beginning teachers. These pre-service teachers explored many issues and problem through this mode of reflection.

Barbara took her habit of reflection home where she reflected on what had happened in the classroom. "A lot of times, too, especially if something went really great I'd go home and I

think to myself, 'I've got to write this down,' because I want to make sure that I do it again. But there are a lot of times when I go home now and I sit just thinking about school.

Maria engaged in reflection about many aspects of her teaching, she said, " When I am alone, I think about how I can create lessons that take the outside the classroom." Paulette's self-reflections represented her way of unraveling the confusion that she encountered in her practice. She thought, and wrote about things that perplexed her.

I run and I do a lot of deep thinking then. From that I can write things or make time for myself at night before I go to bed to filter through what I have done in the day, and then maybe write something about that so that I can look back on the event. I can look back on my feelings. At a later point, I can, when I have more experience, see that for what it was, because it is very confusing when a thing happens.

There is evidence in the findings that that pre-service teachers used self-reflections as they examined their thoughts. Introspection is a conscious awareness of itself. It is a social process of self-examination involving conversation with oneself. Ellis (1991) states that it is active thinking about one's thoughts and feelings and it emerges out of social interaction. This finding exemplifies Dewey's (1933) notion of active deliberation of their actions and the consequences of those actions.

Verbal reflections.

The five pre-service teachers engaged in verbal reflections with various individuals. These individuals included the professors, cooperating teachers, mentor and peers. The five pre-service teachers primarily engaged in verbal reflections with their cooperating teachers. They explained that it was the easiest way to communicate, and accommodated the busy schedules in the classroom. Barbara indicated that "I talk with somebody on how things go, what they think

went better, would go better, or what they would have done if it didn't go well." In her journal Barbara wrote about her cooperating teacher, " Rather than letters from her as a form of communication, we have several conversations throughout the day."

Lisa confirmed that she reflected orally with her cooperating teacher. She said, "we talk, but I don't write anything down though." She reiterated, "We do more oral reflections about the children and my lessons." Jason was in favor of verbal reflections. He shared some of his experiences with his cooperating teacher, " she let me talk things through, so I can go back and think about why some things did not work." In his journal Jason wrote about his mentor and cooperating teacher, "Joan and Gale gave me some positive comments about my teaching. This is very rewarding for me." He eschewed written reflection as inappropriate for him.

I think you have to reflect through talking about it with someone, but I don't see the need to go home and write three or four pages. To me, I feel I have reflected on it and that's the way I feel. I contribute to it because I am talking about it not because I am forced to talk about it but because I want to talk about it. If you are forcing me to do something that I feel I can communicate through talking, instead of writing, then you are not going to get the best of me.

Maria spoke about her verbal reflections with her cooperating teacher "Everyday I continuously talked with Claire about everything that came up. We were always talking about how to work situations." Maria and her cooperating teacher seemed to have open communication on all aspects of the classroom. Paulette engaged in continuous daily reflections with her cooperating teacher that sometimes other work suffered. She remembered, " We talked all the time in fact we barely got our work done. The planning periods were always used for talking about what's going on with the students." The continuous talk of the pre-service teacher and the

cooperating teacher seemed to have hindered some work, however the pre-service teacher got an insight into the student's problems and so benefited from these conversations.

Written reflections and journals.

The pre-service teachers were required to engage in a number of written reflections during the program. They reflected on readings and completed journals and other written responses in the university classes, and they wrote reflection journals as part of their student teaching practice.

The five pre-service teachers recollected that they had to write many types of written reflections in the university courses. Lisa pointed out " In most of the classes we had to write journals." Lisa, Barbara, and Paulette agreed that writing journals helped them in a number of ways in their courses. Lisa viewed journal writing as "an excellent way of assessing my reflections". She felt that writing the journal in university courses was a good way to keep up. She remembered, "I'm glad we were asked to keep a journal because it made me keep up with what we were doing, I don't know if I would have kept up." Barbara recalled how she wrote reflections even when not required by the professors. "Some of the professors did not require that you reflect but I added reflections anyway, because it helped me and I know they appreciated it, that they were able to see it in practice." Paulette had personal reasons for using journals, she felt writing helped her to unravel her own thoughts.

I could barely read and I could barely write as a younger person and I started writing in Dr Bramble's class on reflecting on what I was thinking and I came to see the value of unraveling my own thinking in writing. I was given the opportunity to interact with literacy in different ways, whether it was reading and pulling out quotes or reflecting on whole stories. I was keeping a journal of quotes, I was keeping a journal of articles,

sometimes I was keeping a journal of reading responses, sometimes I was keeping a journal of what I saw going on around me. Now I keep my own journal of how my life fits into my teaching which is my own that I don't hand in. I have used those to change my own person and my own behavior and I wanted you to think.

Paulette may be said to be an exemplar of writing reflections because of the emphasis she placed on writing journals for different purposes.

Jason gave the impression he did not like writing journals but did them anyway. He said, "I am a person who don't need to write anything down, because I am not going back to look at it. If I write it down it is because it is a requirement that I have to do it. So I do it."

During the student teaching practice in the school, the pre-service teachers were required to write a weekly reflection journal. The five pre-service teachers wrote this journal for ten weeks. The four female pre-service teachers wrote somewhat lengthy weekly reflections, whereas the only male pre-service teacher wrote short entries. Barbara recalled "In my classroom here, I have been keeping a journal along with what I am doing, it makes me think more, and I find the more you write the easier it becomes to write." Lisa kept the weekly reflection journal that she was required to write for the teaching practice, she shared what she wrote about,

I just wrote about my thoughts and feelings about how the week was going, occasionally.

I offered some incidence that happened and how I felt about those incidents, just how I felt from day to day, how I am fitting in, maybe comments one of the children said to me that really brighten my day or things like that. I just wrote more about me and my thoughts and feeling not really about my teaching per se.

Although Lisa felt that she did not write about her teaching there were many journal entries in the journal that reflected her thoughts on classroom matters. Lisa felt writing helped her to

reflect, she said, "especially with the journal I am doing, it is causing me to reflect a lot." Lisa used the journal to the fullest extent to capture her thoughts about her practice, as well as her relationships in the classroom.

Maria noted that the journal helped her to document things to reflect on what should be done in the classroom.

For me the journal helps in terms of writing it down and figuring out what should I do about things in the classroom, but it has also been a practice because things happen and you don't quite realize what to do, and sometimes for me writing helps.

The literature espouses writing as an important way to encourage the pre-service teachers to see the connection between content and practical experience and thereby enhance their reflective abilities (Yost et al., 2000). Writing journals have been seen as one way to promote reflective thinking in pre-service teachers. Smyth (1992) proposed that reflective thinking is promoted by posing questions to be answered in journal writing projects. Hatton and Smith, (1995) encourages the pre-service teacher to write about reflection and problem-solving.

Researcher's Stance on Situating the Act of Reflection

The context in which reflection takes place is important. I believe that pre-service teachers must be given many opportunities to reflect. This can be done through the various contexts of self-reflection, verbal and written reflection. It was important for me to always communicate with the pre-service teachers, whether it was after a lesson, or to discuss a problem with them. Open verbal communication fostered reflection.

Each week as I mentored the pre-service teachers, I engaged them in conversations and asked many questions about their lessons and the students they taught, they always tried to give a thoughtful responses on what they had done, and how they viewed their students. The pre-

service teachers shared many verbal reflections with me. I was aware of the busy schedules that take up teachers' time in the school, however I encouraged the pre-service teachers to write short notes to their cooperating teachers if they were perplexed about any situation or teaching activity in the classroom.

During the period I mentored these students, they talked to me from time to time about their written reflective assignments and there was a general feeling that at times, they were overwhelmed with the amount of written reflections they had to do. Four of the ten pre-service teachers I mentored did not complete the reflection journal. This factor helped in my choice of the five pre-service teachers for the study. They completed their weekly reflection journals.

The Act of Reflection

The pre-service teachers reflected on many issues as they completed their final teaching practice. During the interviews the pre-service teachers shared their reflections as far as they remembered them. They wrote in their weekly reflection journals about their teaching practice in the school.

After thorough examination of the interview and journal data, I recognized that the pre-service teachers' reflections ranged from technical aspects of teaching to more interpretive levels. There was evidence that the five pre-service teachers transferred what they learned in the university classroom to the school classrooms in which they conducted their student teaching. Selected vignettes of the pre-service teachers' reflections were extracted from the interviews and weekly reflection journal to demonstrate the different kinds of reflections they developed.

Content of Reflections

The pre-service teachers reflected on different kinds of content such as, curriculum matters, assessment, diversity of needs in the classroom, and multicultural issues. Table 9

indicates the content that each pre-service teacher reflected upon in their responses in the interviews and in their reflection journals.

Table 9. Content of Reflection by the Pre-Service Teachers

Pre-Service Teachers	Curriculum	Assessment	Diversity of Needs	Multicultural Issues
Barbara	*	*	*	*
Lisa	*	*	*	*
Jason	*	*	*	
Maria	*	*	*	*
Paulette	*	*	*	*

Curriculum matters.

The five pre-service teachers reflected on some aspects of the curriculum. They looked at the Standards of Learning, lesson planning and specific content for the different subject areas. Barbara thought about the Standards of learning. She stated, "I had to look at what I wanted to cover, what of course would fit the SOLS, what my teacher wanted me to cover, and also what would be engaging for the children." Barbara was cognizant that she had to think not only about what the teacher wanted, but she had to also think about her students' needs. Lisa reflected on lesson planning. "In making lessons plans you can look at those and reflect, I mean even look at those and see what you do different, if they went well, you look at the lesson plan you could think of the whole lesson in your head." Reflecting on the lesson plan seemed to provide Lisa with ideas of how to approach future lessons.

In Jason 's journal reflection he outlined how he taught a math lesson. He also assessed his confidence in the different subject areas.

Today we worked on a measurement project. The students began to measure the rooms within the school. I went around and supervised them as they measured the rooms. It went very well. In science we worked on drawing and labeling rocks. I am better at teaching math and science. My confidence in teaching the language arts is better because I am preparing for each part of the lesson. My comfort level is increasing daily. I feel I have more control over what the students learn and how they learn it.

Jason was able to see his strength and weaknesses as a beginning teacher, and assess ways he could improve his teaching skills.

Maria and Paulette said they reflected on academic assignments and found ways to negotiate with students or improve the assignments. For example, Paulette reflected on adaptation in a curriculum area to suit the needs of her student

Like in that science lesson, I had one student that had multi IEP for emotional problems and learning problems and attention problems and all these problems. I said well where is his strength, his strength was in Art, and it was in using computers technology and I thought well ok for all my assessments, he will be allowed to bring his art to it will give him an important place in the class.

Paulette was able to successfully work with a student with special needs, after reflecting on his particular needs and working out the most suitable form of assessment for him. Reflection brings about a change in perspectives.

Assessment.

In the interviews, four of the pre-service teachers reflected on their assessment practices. However, one pre-service teacher wrote about different assessments in his journal. Jason engaged in a conducting a number of informal assessments during his teaching practice, and he recorded these assessments in his reflection journal, he wrote " we made a puzzle out of a map," "in science we gave a quiz," "we had the students do a civil war project." All these assessments were part of the units that Jason had prepared for the students. They included games as well as academic components. Barbara and Lisa engaged in many alternative forms of assessment. They enjoyed involving the students in hands-on assessment. Barbara remembered an assessment project she conducted in her class. "The children continue to amaze me, when it was time to do the assessment, I saw true mathematicians at work. After I gave the initial instructions, they took off, and did the assessment that involved problem-solving and higher order thinking." Barbara seemed pleased when the students were successful on assessment tasks.

Lisa did not engage in many formal assessments. She said she preferred informal assessment activities." I am not a standard test giver, but I really try to work on alternative forms of assessment and even standardized testing how can I do that where it will not be so hard on the children." Lisa appeared to be an advocate for assessments that were not formal, and test oriented. She shared the same sentiments as many other teachers about the nature of testing in the elementary school.

Maria recalled how she assessed a particular student by negotiating with him about how to grade a paper.

The other day I had a situation with a student where he had to evaluate some work, and he gave himself a hundred. The work to my mind was not worth a hundred, it was late, and it was just the way he had done his work, and so I was trying to get him to reevaluate

it. I had engaged him with conversation and he became very defensive about what I had been saying about what I had been saying and I realized that I shouldn't push it any further and then I had to think about that and how should I approach him. I ended up writing him a letter with his evaluation and talking about that, and basically he found that I was really trying to help him. So I have had to do a lot of thinking about how to negotiate about it.

Maria's reflection demonstrated how she grappled with a problem and the solution she arrived at.

Paulette related her assessment practices to working with all types of students. She shared her thoughts on school expectations and assessments.

A lot of time school values and tests a certain set of things that for a lot of kids those are their weaknesses and they start to feel bad about themselves. So it's really unfair to think that the inclusion students don't have gifts. It's just that they are not in the area that schools see.

Paulette's reflection was instructive of the ways in which school values testing practices to demonstrate students' success. This pre-service teacher was aware of what is required by the school system, yet she grappled with the problems that students with different needs may face in such a context.

Diversity of abilities.

The five pre-service teachers reflected on their students with special needs. This theme was very evident throughout the discourse with the pre-service teachers. They talked about it in the interviews, and some of them wrote about students with special needs in their reflection journals. Barbara, Lisa, and Jason talked about lesson planning to meet the needs of the different

ability levels in their classrooms. Barbara said she had to shift her gaze from what she was doing in the curriculum to the needs of the students.

In teaching the lower ability math students, there was a lot of behavioral, emotional [all kinds of] problems in that classroom with the different children...a lot of challenges. I had to sit back and say, okay, what do these children need. How can I address their needs? Instead of me, I had to look at what they needed. That helped me then and since then, I am always looking at the children and what they needed.

Barbara's explanation suggests that she struggled with the problem of meeting different students' needs in the classroom, but was able to find ways of accommodating those needs.

Maria explained her concern for students with hidden special needs. She felt that these students were often overlooked by the teachers in the school.

I think a lot about how to reach those students who don't fit the public school model, there's lots of that, and I think there is a tendency to work with students who seem most troubled. Sometimes we forget to realize there are issues for other students who seem like everything is okay.

Maria also wrote about a student with special needs in her reflection journal. She looked at the ways in which this student had grown, and the trust this student had placed in her as her teacher.

I feel honored that Katie sees me as one of the adults in her life that she can trust. She asks for my advice and help on projects. She completes her assignments, and, while they are not completed like her other classmates, they are at the level that Katie is comfortable with. Small steps...for a child realizing she can walk. I have learned two things from Katie, never underestimate the power of kindness and never judge a book by its cover.

This acknowledgement by Maria as she reflected on diversity of her students' needs is one that many teachers strive for in their teaching careers, that the students come to trust them.

Paulette demonstrated a missionary like zeal when she advocated for students with special needs throughout the interview. She was especially critical of teachers who are not reflective of their practice.

If you are not a reflective person, you would not see the needs of students. You will distribute your curriculum, and you would collect your assessment and that would be the end of it. You would assign grades on the relative accomplishments of everybody in that class. If you are a reflective person, you can look and see their needs, and you can try to meet those needs. The kids, if nothing else, start to feel like they can do it. If you take the area where they are comfortable, take their interest and take their strength, you take what they do and you use that strength to have them reach the things that they think they can't reach.

Paulette was adamant in her views that reflection is important to discern the needs of students. She felt that reflection is a pre-requisite to accommodation of needs

The five pre-service teachers were all very concerned about students with special needs. They reflected on how they went about making accommodations for these students.

Multicultural issues.

Four pre-service teachers identified multicultural issues as important and linked it to their learning theories and their personal feelings. One pre-service teacher did not consider multicultural issues, and he suggested that it was a "race" issue. Barbara pondered on the differences in the children's racial backgrounds, and felt that she had to consider the growing diversity of races that was found in the classrooms in the elementary school today. She reflected,

"How can I bring in a lot of our children that do come from other countries or have relatives in other countries, I have to try and draw them into the conversations." She then pondered on the activities that she could have done to address multiculturalism in the classroom.

Another thing I should have been more aware of, and I should have done more of was to use some of the textbooks and literature we have here in the classroom. They need to be more reflective of the faces in the classroom, so I should really do more of that. When I was growing up everything had a white face on it, we don't have all white faces today.

Lisa emphasized the importance of multiculturalism and was very concerned about the lack of racial diversity of students in the school community.

I think that diversity is very broad, but especially in this area. I think diversity as far as race is very important. There are not many different races of people in this area, so I think bringing in materials on different races of people is important.

Lisa expressed regret that she did not cover multicultural issues in her teaching.

I regret that I did not do more multicultural teaching while I was here, [like] different books that I could have brought in to read. It is just some things that I wish I could have done differently, because I think they really should have taken place in this class, things on multiculturalism.

Maria and Paulette wrote in their journals about black students and the unique perspectives that their race engendered. Maria wrote about the only African-American boy in one of her classes. She reflected on his status as a minority in the school community.

Tom is loud, purposefully obnoxious, disrespectful, antagonistic and prides himself on disrupting the class...He is the only African-American boy on this team. While there have been attempts to set up conferences with his parents, they have not shown up. They

probably never will. They probably view the school the same way their son does, as a hostile environment. I wonder what would happen if the school went to visit the parents. Might this make a difference instead of having the parents come to the school? I don't know. What I do know is that Tom is a minority in this environment. This environment does not support his needs or learning.

Maria voiced her worry about the fate of this student who seemed to be failing because he did not meet the school's expectation. This reflection is one of many that the pre-service teachers put forward as reflection on multicultural issues.

Multicultural issues have a place in today's classroom because of the diversity of our students. Rogovin, (1998) reminds teachers that the classroom can be a model for the world we would like to create with inquiry based multicultural education as a grounding for curriculum planning. The four pre-service teachers who reflected on multicultural issues in their teaching, demonstrated that they were aware of the issues related to teaching in a culturally diverse setting, and the importance of being prepared. Jason stated that for him diversity meant students with special needs. He stated " When I think of diversity, I do not think race."

The pre-service teachers demonstrated technical as well as interpretive reflections (van Manen, 1977). All the pre-service teachers demonstrated technical aspects of reflections. We see this as they described their reflections. However, the pre-service teachers engaged in reflections at the interpretive level when they moved beyond thinking about their skills and knowledge, to think about the consequences of their actions, and the goals of teaching. These kinds of reflections are in keeping with van Manen (1977) technical and interpretive levels of reflections.

The reflections shared are also in keeping with what Dewey (1933) deemed " active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusion to which it tends"(Dewey 1933).

The Researcher's stance on The Act of Reflection

I have practiced the act of reflecting as I mentored the pre-service teachers in their final teaching practice. However, my reflections continued as I conducted this research, and as I worked through the collection of data to the analysis and writing up of this interpretive study. The reflections of the pre-service teachers mirror what transpired in the school. I was an active recipient of their reflections as they were of mine. The pre-service teachers have caused me to reflect on my own practice, and the way I went about encouraging them to reflect. I am still learning to be more critical in my approach to reflection, but I have learned very quickly during the course of my mentoring of these pre-service teachers. They have caused me to reflect on many critical issues.

The pre-service teachers have caused me to reflect on many critical issues. I have been forced to recognize that race is one determinant of how relationships are viewed in a multicultural setting. The issue of race is one, which I must constantly deal with because of my place as a teacher educator who will facilitate pre-service teachers of all races. As a teacher educator I continue to reflect on the technical, as well as, the moral and ethical criteria of education.

CHAPTER SIX

DISCUSSIONS, IMPLICATIONS AND CONCLUSIONS

Summary of the Study

Reflective practice has been touted as a reform effort (Tom, 1992; Valli, 1992; Zeichner, 1993) and a conceptual orientation in many contemporary teacher education programs (Valli, 1992; Zeichner & Liston, 1987). However, very few studies have been conducted about how pre-service teachers perceive the process of reflection and how they come to understand themselves as beginning reflective practitioners. Research on reflective practice has primarily focused on conditions that promote reflective practice (Dinkleman, 1997; Golubich, 1997; Richert, 1990), growth in reflective thinking (Caillouet, 1998; Cates Draper, 1998), and the context of reflection (Gonzales, 1998; Meyer, 1999). My desire to understand reflection as a conceptual orientation and a reform effort in teacher education motivated me to conduct this study. This study shared the views of five pre-service teachers as they interpreted their understanding of reflection and their experiences in a teacher preparation program that encourages critical reflection.

The participants in this study were all graduates of the 1999-2000 Post Baccalaureate Initial Teacher Preparation Program at a university in southeastern United States. The participants and other significant individuals mentioned in this study have been assigned pseudonyms to protect their confidentiality. This research was designed to offer an in-depth view of pre-service teachers' perception of reflection, and the process, context and content of their reflection (Calderhead, 1989).

The theoretical framework for this study originated in the works of Dewey (1933), Schon (1983, 1987), and van Manen, (1977). A symbolic interaction theoretical and analytical

framework was used to present the views of the participants. I used the symbolic interaction social processes (Prus, 1996) to answer the following research questions.

1. How do the pre-service teachers perceive and understand the concept of reflection?
2. How do these pre-service teachers describe how they learn to reflect on their practice?
3. In what context do the pre-service teachers engage in reflective practice?
4. What do the pre-service teachers reflect upon in their practice?
5. How has the researcher's subjectivity evolved over the course of doing this study?

I gathered the data for this study through in-depth interviews, and the weekly reflection journals of the pre-service teachers. I was a participant-observer in this research and was able to use the notes I wrote about the participants to frame the descriptive data of the participants and to verify their responses in the study. I examined official documents to present the institutional context of the study.

Discussion

In this section I discuss the interpretations of the pre-service teachers as they relate to the research questions. I use the social processes as the categories in which the themes are discussed. For example within the social process acquiring perspectives, I discuss the themes of defining reflection, questioning as reflection, and gaining opportunities for reflections. The other themes are discussed in a similar manner.

Acquiring perspectives

The first social process of acquiring perspectives answered the first research question, and identified the manner in which the pre-service teachers perceived and understood the

concept of reflection. The findings of the study indicate that the pre-service teachers possessed varying notions of reflection in teaching as interpreted in their definitions. Barbara and Lisa stated that they looked back on their actions to think about what they could have changed; however, Jason, Maria, and Paulette said that they wanted to see what they could do to change or improve their performance in the future. This finding is very much in keeping with the literature that suggests that there is no one definition of reflective practice. This statement is true of many broad and complex concepts that we employ in education.

The findings also imply that the five pre-service teachers have a general understanding of the concept of reflection. The five pre-service teachers suggested that reflection was analyzing their own practice and the context in which it occurred. There are different viewpoints on the way pre-service teachers perceive reflection. Cruickshank (1981) suggests that pre-service teachers merely reflect on the success of using specific instructional techniques to meet predetermined objectives, whereas Goodman (1984) and Tom (1984) suggest a broader view. They feel that teacher preparation should help pre-service teachers reflect on the origins, purposes and consequences of their action, as well as on the materials, and ideological constraints and encouragement embedded in the classroom, school, and societal contexts in which they work (Zeichner & Liston, 1987). Generally the findings suggest that the pre-service teachers varied in their definitions, but leaned towards reflection that considered actions, as well as consequences. This is in keeping with Schon's (1987) view that the reflective practitioner is one who is consciously thinking about the practical problems, and the decisions to be made.

Questioning was another way the pre-service teachers used to clarify their concerns, and as such reflected by asking themselves many questions as they carried on their day to day practice. Barbara, Maria and Paulette questioned how they could help those students whose

needs were not being met in the school community. Lisa and Jason questioned their own behavior and feelings as they worked with the students. The questions posed by the pre-service teachers point to Dewey's (1933) proposition that when pre-service teachers participate in the classroom they are exposed to teaching experiences that generate genuine questions to be answered and problems to be solved. Dewey also identified the attribute of responsibility that implies the desire to search for truth and apply information gained in problem situations (Yost et al., 2000). He also referred to the engagement in objective and rigorous inquiry while exploring alternative possibilities as open-mindedness (Dewey, 1933). The findings indicate that the pre-service teachers were demonstrating open-mindedness as they generated many objective questions about their practice. By inquiring into alternative ways to improve their teaching practice, the pre-service teachers were acting in a responsible manner as suggested by Dewey.

The pre-service teachers were given opportunities for reflection both in the university classroom and in the school classrooms. The teacher preparation program's philosophical base is that of social constructivism. In such a program, one should expect that there would be many opportunities for meaningful integrated learning. In this program the pre-service teachers were exposed to a number of clinical reflective approaches, such as the seminars, journal writing, peer and collegial reflection and other reflective experiences related to the pedagogical components of the program. The pre-service teachers engaged in many reflective activities that helped them to question their own beliefs while integrating what they learned in the teacher preparation program.

The ways in which the pre-service teachers defined reflection, the questions that they asked, and the many opportunities that they were given to practice reflection all contributed to the pre-service teachers' understanding of the concept of reflective practice. These three themes

exemplify how the pre-service teachers perceived the concept of reflection, by understanding how they viewed this concept, it can help us to understand their actions as beginning reflective practitioners.

Achieving Individuality

The social process achieving individuality captures the process of learning to reflect and answers the second research question about how the pre-service teachers learned to reflect in this teacher preparation program. The study revealed a picture of five pre-service teachers who brought their experiences to bear on their approach to reflection in teaching in a model of teacher preparation that emphasized inquiry and reflective practice. The way pre-service teachers learned to reflect supports Kagan's (1992) view that institutional and individual perspectives influence how pre-service teachers come into their identities as reflective practitioners. The findings portrayed two of the pre-service teachers who thought of themselves as reflective individuals. Britzman (1991) claims that for beginning teachers, the most powerful self-image is one that captures self as the author of the teacher she is becoming. I agree with Britzman (1991) that teaching is a time when one's past, present and future are set in dynamic tension (Britzman, 1991). Furthermore, the process of becoming a reflective practitioner is heavily contextualized by the students' own history as well as the historical and institutional context in which the teacher education program is situated. The program in turn is affected by the wider socio-political and cultural context (Britzman, 1991).

The other common thread was that the five pre-service teachers attributed their learning to reflect to their associations with significant others in the teacher preparation program. The pre-service teachers all acknowledge that they were first exposed to the concept of reflective practice by certain professors. The pre-service teachers especially remembered the professors, who first

used the term reflective practice, and those professors who encouraged them to experience different forms of reflection before they went into the teaching practice. Three of the pre-service teachers recalled that the teaching practice seminar was as an important forum where they learned to practice reflection. It may be said that the professors were building a high level of awareness before the teaching practice experience by providing the pre-service teachers with activities that encouraged self-monitoring on the parts of the pre-service teachers.

Within the teacher preparation program that adopted a social reconstructionist perspective, there were many opportunities for the beginning teachers to grapple with contradictions within the classroom, to struggle with their own dilemmas and to work through conflicts (Britzman, 1991). This perspective considers the complexity of the classroom and the learning processes of the beginning teacher. The findings exemplify the literature that reflection is social phenomenon, that is interpreted by the pre-service teachers as they interacted with others in the social context of the teacher preparation program (Blumer, 1969). Although, two pre-service teachers saw themselves as reflective individuals, it can be argued that their ability to reflect was socially constructed, and that the pre-service teachers came to identify themselves as reflective individuals because the concept is renewed and renegotiated, and as such becomes "learned " behavior. Vygotsky (1978) believed that social interaction is determinant of the way people perceive and learn to master their environment. He further suggested that significant people in the environment could help guide the individual's thinking.

In the process of learning to become reflective practitioners, the five pre-service teachers reflected on action, and for action (Schon, 1983,1987). All the pre-service teachers recalled that they contemplated on the actions they performed in the classroom, Barbara and Lisa looked back to see if there were things went well, or what they could have done differently. Maria and

Paulette thought about improvements for the future. Only one pre-service teacher alluded to reflection in action (Schon, 1983, 1987). Jason spoke about reflecting while teaching a lesson. He explained how he did reflected in action.

I can reflect instantly, and I can tell by the class atmosphere if students understand things and you can instantly change your mind, your perception on things. If I write up a lesson plan, and it's not going to go according to format all the time, I have to be quick on the draw and make assumptions. I reflect on what I'm doing, and if it's not meeting the students needs, then I have to make it meet those needs.

By reflection-in-action Jason found a way to problem-solve and re-appreciate the situation in a somewhat skillful manner. Schon (1987) described reflection-in-action as becoming surprised, interpreting it as a problem, and inventing procedures to solve the problem. This might be done through the process of trial and error. Such a pattern of inquiry gives rise to on-the-spot experiment.

The five pre-service teachers acted in ways that reflected the traditions of Dewey (1933) and Schon (1983, 1987) who focused on reflection as a method of thinking about experience that leads to inquiry and problem solving. The finding exemplify the literature that states, as professionals, teachers should frame and reframe complex and ambiguous problems that they face, test out various interpretation, then modify their actions as a result (Hatton & Smith, 1995).

In learning to become reflective practitioners, the pre-service teachers incorporated their personal beliefs, and educational theories to ground their reflections about the students and their teaching. The findings indicate that the pre-service teachers reflected on their personal values as teachers. Their reflections indicated a child-centered philosophy. The pre-service teachers all demonstrated that they valued their students. These findings exemplify the literature that

indicates that pre-service teachers construct their own personal knowledge of teaching. This knowledge is constructed using beliefs and ideas held about teaching (Richert, 1992).

The pre-service teachers actively incorporated educational theories into their reflections. In examining the data I discovered that Barbara used constructivist methods in her teaching, because she shared that she did not want to teach the students in the traditional way that she was taught. Lisa shared her interest in multicultural teaching, Jason reflected on the differentiated instructions that he incorporated in his teaching methods. Maria's reflections centered on how to build student esteem. Paulette stated that it is important to incorporate sound educational theory when reflecting on educational matters, in order to respond to students in a positive manner. These findings are in keeping with the literature that pre-service teachers develop theoretical perspectives through courses at the same time they develop practical experience through their fieldwork. Their reflections therefore will lie at the intersection of theory and practice (Putnam & Grant, 1992). The pre-service teachers recalled that apart from hearing the term reflection for the first time from their professors, they also learned many lessons on learning to reflect through these professors, and other individuals who they came into contact with, on a continuous basis in the teacher preparation program.

Experiencing Relationships

The social process 'experiencing relationships' answered the second research question, and further explains how the pre-service teachers learned to become reflective practitioners. The pre-service teachers experienced different relationships with individuals in the teacher preparation program who guided them, as they learned how to reflect on their practice. The pre-service teachers named the professors, the university mentors, and the cooperating teachers as

the individuals who in different ways taught them how to reflect. The pre-service teachers reflected on the impact of their relationships with these significant individuals.

There were particular professors who stirred the pre-service teachers' interest in reflective practice. The pre-service teachers gave many examples of the professors, and the activities they enjoyed in the different content areas. For example, one of the favorite activities was the making of a map of their lives. Another activity was their writings about particular texts. The pre-service teachers' preferences for certain classes seemed to a large extent based on their values and personal philosophy. For example, Jason was concerned about writing and special needs strategies and so he preferred those classes, but he had strong negative views about the philosophy class.

The findings also suggested that the pre-service teachers preferred to be given a choice on the reflective activities. One pre-service teacher said that in one class "I was not forced to do anything thing." Another response was "I was not forced to write reflections." Although one pre-service teacher said she liked writing journal response, she felt that some journal writing were "not fun." These findings have implications for promoting reflective practice in other interesting ways. The literature suggests one interesting way as, writing about one's own beliefs and contrasting them with alternative beliefs as a way to encourage awareness and reflection (Calderhead, 1992).

The university mentor was another individual that the pre-service teacher recalled that helped them in their practice. All the pre-service teachers emphasized the support of the university mentor and the advice that she gave them. Barbara talked about how the mentor always encouraged her to reflect on her practice. Lisa spoke about the trust she had in her mentor. This finding is consistent with theorists, such as McBride and Skau (1995) who

encourage the building of trust between the candidates and the university supervisor in the process of teaching. They feel that it is imperative on the supervisor to foster an intentionally collegial relationship with the student teacher and cooperating teacher.

The pre-service teachers reported that the cooperating teachers who worked with them demonstrated different teaching and mentoring styles. The pre-service teachers recognized the strengths of their cooperating teachers and worked with them accordingly. This is in keeping with the literature that indicates that student teachers value the support mentors provide (Booth, 1993; Odell & Ferraro, 1992; Perlberg & Theodor, 1975). Barbara felt that her cooperating teacher was honest and gave her constructive criticisms. Jason experienced a great working relationship with his cooperating teacher because he saw her as an outstanding educator. He said his cooperating teacher allowed him to do many things in the classroom. Both Maria and Paulette admired their cooperating teachers for the feedback they received, and saw them as experienced and knowledgeable. These findings tend not to agree with the findings in Booth's (1993) study, that mentors seemed to lack the confidence or expertise to tackle critical issues with their student teachers.

One pre-service teacher did not enjoy a good working relationship with her cooperating teacher. Lisa said that she was ignored in the classroom and in planning meetings; however, she pointed out that she and the cooperating teacher engaged in verbal discourse about the students. Lisa suggested that her cooperating teacher ignored her in the classroom because she was an African American. Lisa reasoned that she was used to being treated differently for "the majority of my lifetime." The literature on critical race theory puts forward many arguments about racial tensions within the classroom. Hooks (1994) suggest that racism, sexism, and class elitism shape the structure of classrooms, creating a lived reality of insider versus outsider that is

predetermined, often in place before any discussion begins. However, Lisa did acknowledge that she learned many new things from her cooperating teacher. Lisa concluded that she admired the atmosphere that the teacher created in the classroom.

The research points to a number of reasons that pre-service teachers may not enjoy a comfortable relationship with their mentors. Calderhead (1993) suggests that the mentors bring their own conceptualization of what teaching is to their mentoring of pre-service teachers. He further suggested that cooperating teachers and pre-service teachers bring their own set of beliefs, values, and concerns to the shared enterprise of teaching. Daloz (1986) suggest that amount of support and challenge that a pre-service teacher can receive from a mentoring relationship will affect learning within a mentoring relationship.

The findings exemplifies the research that states that the relationship between the cooperating teacher and the pre-service teacher plays a crucial role in the quality of the teaching practice (Bennett & Carre, 1993; Feimen-Nemser et al. 1993). These pre-service teachers each had a different relationship with their cooperating teachers. Elliot (1995) studied the relationship between pre-service teachers and their cooperating teachers. He found that each pre-service teachers had a different relationships with their mentors, however all the participants indicated the importance of that relationship. His conclusion that the nature of the relationship between the pre-service teachers and their supervising teachers varied from case to case is relevant to the present study's findings.

The pre-service teachers learned to reflect in diverse way. Reflection came through their ability to link the concept to themselves, and to other significant individuals. Thus, they linked their reflections to their personal values and educational theories. The pre-service teachers also learned to reflect through their interaction with professors, the university mentor, and the

cooperating teachers. The findings suggest that these factors were important contributors to helping the pre-service teachers learn to reflect.

Situating the Contexts of Reflection

The social process situating the context of reflection was used to identify the different contexts in which the pre-service teachers practiced reflection. The findings answered the third research question. Three themes pointed to the contexts of the pre-service teachers' reflective practice. These themes were self-reflections, verbal reflection, and written reflections.

The four female pre-service teachers recalled that they engaged in thoughts about what they had done in the classroom. Within the context of self-reflections, the pre-service teachers explored problems and tried to clarify any confusing situations that they encountered in the classroom. Barbara and Paulette wrote many of these self-reflections down, to remind themselves to use these thoughts in the future.

Verbal reflections are the discussions that the pre-service teachers engaged in with the other individuals in the teacher preparation program. The pre-service teachers engaged in many verbal discourses with their professors and peers in the university classroom. They also engaged in discussions about their practice with their mentor and cooperating teacher in the school. This finding lends support to Richert (1991), who suggested that novice teachers must be given numerous and a variety of chances to meet together and listen to one another think aloud. Oral presentation is one example of how this can be accomplished. The pre-service teachers in this program felt that apart from some classes, the seminars provided the forum for verbal reflections. Many of them spoke about reflecting with others. This finding supports Yinger's (1986) idea that verbalizing reflections through collaboration helps to develop the disposition to reflect.

The findings indicate that the five pre-service teachers engaged in many written activities. By providing many written activities the program providers placed importance on written reflections as a way of building the pre-service teachers' reflective abilities. The pre-service teachers reported that they engaged in writing reflective responses on different texts, and journals in different courses. They were also expected to write a weekly reflection journal on their student teaching practice. This finding exemplifies the literature that suggests that journal writing helps to bridge the gap between knowledge and action (Calderhead, 1991; Surbeck et al., 1991). The research literature also suggests that reflective narratives help to prepare teachers to gain the skills of doing and analyzing what they do (Colton & Sparks-Langer, 1993, Zeichner, 1983).

The pre-service teachers indicated their preferences for different contexts. For example, whereas Barbara, Lisa, and Paulette said they liked responding in written forms, Jason said he did not like to write. He felt it was something he did only because it was "forced" upon him. Although Maria found that keeping a journal was helpful, she did not see herself doing it in the future, she said she was not sure that she would keep a journal in the future. Barbara and Paulette seemed to agree that it was not always fun to write. Paulette found that it was "mandated" and Barbara confided that she was in another class where she had to write, and it was not fun or relevant. She remembered that many people did not like to do written reflection because these reflections were time consuming. These findings suggest that there is a great emphasis on written reflections in this program; however, the pre-service teachers indicated that the written reflections sometimes became burdensome for them as they were concurrently engaged both in classes and their student teaching practice experience.

Research indicates that carefully guided mentoring of the writing process can enhance reflection. Hunter and Hatton's (1998) study of case story writing based on students' experiences revealed that peer and professor collaboration helped pre-service teachers move from initial writing that demonstrated low levels of reflection to higher levels of thinking. I believe that writing helped these pre-service teachers to develop their thoughts that are evident in how they wrote thoughtful and reflective journal entries.

The Act of Reflection

The research question that asked what do the pre-service teachers reflect upon in their practice was answered by the social process the act of reflection. One theme emanated from the data; however, this theme was subdivided to elucidate the content of the pre-service teachers' reflections. They reflected on curriculum, assessment, diversity of students' needs found in their classrooms and multicultural issues.

Curriculum matters seemed to interest four of the pre-service teachers. The pre-service teachers thought about their lesson planning, and how they could adapt the lessons to suit the diverse needs of the students. Barbara was interested in meeting the students' needs as well as meeting the state's Standards of Learning. Jason said that at first he was not comfortable with teaching at the elementary school, but he found himself becoming comfortable after a while. He gauged how he was improving his skills as a teacher at that level. This level of reflection is considered to be an essential aspect of teaching. Valli (1992) reminds us that teachers must reflect at the technical level to make practical decisions about their teaching.

Assessment was another area that interested the pre-service teachers. They reflected on the various forms of assessment they used in their student teaching practice. Lisa and Paulette reported that they preferred informal and alternative forms of assessment. Paulette reflected on

her concern that many formal assessments did not test the strengths of many students with special needs. She shared an example of how she framed her assessment to accommodate different learning styles and needs. These findings are in keeping with the literature that teachers can reflect on issues, and have a thoughtful contextualized sense of teaching, and must ultimately make their own choices about preferred goals and practices (Kennedy, 1989). These pre-service teachers were reflecting on alternative assessments, although they were constrained by the formal assessments required by the school.

The issue of the diversity of students with special needs seemed important to the pre-service teachers. They reflected on their concerns for students with special needs in the classroom. The pre-service teachers demonstrated their knowledge of what was required for their students with diverse learning needs, when they spoke about accommodating these students' needs. These pre-service teachers were all placed in inclusive classrooms, and were faced with the task of making adaptations. They appeared to have taken this responsibility very seriously, as was reflected in their responses in the interviews and the reflection journals. Paulette spoke out as an advocate for the students who did not meet teachers' expectations. Maria reflected about those students with hidden disabilities who were often not recognized, and their needs were not met by the school system. These pre-service teachers were all exposed to a special education course that encouraged inclusion practices. These findings indicate that the pre-service teachers were involved in inclusion practices in the schools, and sought to establish a collaborative, supportive, and nurturing community of learners (Salend, 2001).

Four pre-service teachers reflected on the importance of teaching multiculturalism. While the four female pre-service teachers talked at length about how they dealt with or wished to deal with diversity issues, Jason was the only pre-service teacher who did not consider racial

diversity. He was quick to declare that race was not in his definition of diversity. The pre-service teachers had discussed multicultural issues in some courses in the teacher preparation program, and were provided with the skills to deal with issues of diversity in their classrooms.

In agreement with the literature that pre-service teachers generally reflect on the technical levels. I tend to agree with Hall (1985) and Zeichner (1990) that student teachers are likely to master the technical aspects of teaching that they regard as essential to their training. The findings clearly indicate that the five pre-service teachers reflected on the teaching strategies on their teaching practice that they were taught in their courses. These were the important aspects of teaching and reflections for them. Thus, the nature of their reflections was definitely influenced by the nature of the tasks that were set for them to perform (Calderhead, 1989).

The findings however, indicate that although all the pre-service teachers reflected at the technical levels, they were capable of interpretive reflections about the social and cultural aspects of schooling and their students. Most of the students reflected not only on academic matters, but also on social issues. There were many examples of the pre-service teachers' reflections on the interpretive levels and even leaning towards the critical levels of reflection (van Manen, 1977). Lisa and Maria in particular were very concerned about the social aspects of the students whom they worked with. Maria and Paulette reflected on the social context of the school. They felt that the school was not able to meet the needs of some students.

There were attempts on the parts of the pre-service teachers to move beyond strictly technical levels of reflection on instructional matters and engage in critical reflection that incorporated ethical and moral criteria to judge their performances. This behavior is characteristic of the social reconstructionist tradition of reflection (Zeichner, 1992). These pre-service teachers in this teacher preparation program were exposed to social reconstructionist

principles that advocate social justice, where schooling and teacher education are seen as crucial elements in the movements towards a more just society (NCATE Folio, 1998). These findings refute Zeichner's (1996) claims that little has been done in the practices of many teacher education programs to actually nurture teacher development. His argument is that there is emphasis on technical mastery in these programs, and that reflection is an isolatory process. The pre-service teachers in this study demonstrated their ability to reflect with their peers and others about technical, as well as interpretive, and to some extent critical issues that they dealt with in their practice.

This study tends to agree with Calderhead (1989) that pre-service teachers learn differently in diverse ways and they take different meanings from the experiences offered to them. The pre-service teachers came into the teacher preparation program with their own knowledge and perspectives. They spoke of how they defined reflection and how they learned to reflect. They engaged in collegial reflections with their peers, professors, mentors and cooperating teachers. The five pre-service teachers forwarded the different ways they approached reflection. They also reflected on important classroom issues, and demonstrated different levels of reflection. The reflective activities of these pre-service teachers gave a picture of how they were learning to reflect on their teaching, as well as perpetuating the pedagogical aims of the program.

Implications of the Study

The findings in the study imply that it is a worthwhile effort that teacher educators continue in their efforts to develop reflection in pre-service teachers. According to the study's findings the pre-service teachers understood the concept of reflection. They used reflection as a

conceptual device to help them think about their knowledge, and better their teaching skills. Calderhead (1989) encourages teacher educators to be aware of the attitudes, knowledge and skills they want to encourage, and how they could facilitate this. They must also look at the many routes and ways in which beginning teachers' professional development may progress (Calderhead, 1989). Another important piece of research will be to hear the views of faculty in the program to understand their perspective on how they encourage pre-service teachers to become reflective practitioners.

Another significant implication of this study is the leaning towards writing activities to develop pre-service teachers' ways of instilling critical reflection. The literature points heavily towards developing of portfolio, journals and other writing tasks, however it behooves us to find ways that may not seem burdensome to pre-service teachers, that they write only because they have to. This is certainly not a positive approach to learn to become critical reflective practitioners. Diverse ways of writing to develop critical reflection is another area that could be developed, and research into the various ways of writing reflections can be explored.

I continue to be perplexed by one issue raised by the only African-American pre-service teacher that concerns her relationship with the cooperating teacher. This pre-service teacher used her race as the determinant for the relationship she had with her cooperating teacher. The issue of racism is not easy to deal with. However, I know that to Lisa, racism was a very "real" problem. Collins (1990) talks about racism that is co-constructed within a context of gender, age, class, educational experiences, and other less visible identities that inform and influence how we understand the world. She further suggests that these contexts are imbedded within multiple systems of privileges and oppression, that form an interlocking matrix of relations, all of which function to conceal and illuminate our understandings of our selves and others. As Lisa's mentor

I empathized with her, and I tried to encourage her to succeed, despite this discomforting situation. My goal for her was that she successfully completed her teacher preparation. For me, asking her to leave this placement was not an option. She seemed to appreciate my stance on the matter.

Lisa's written reflections about her relationship with the pre-service teacher served to highlight a serious problem. This finding has implications for placement of African American pre-service teachers in the classrooms of white teachers. I believe that as teacher educators we must be more aware of the comfort zone of the pre-service teachers as they practice in the schools. I also believe that pre-service teachers should be encouraged to continue to write reflective journals as a way of unearthing many of the problems that they face. In Lisa's case writing this reflective journal was an opportunity for her to share her perceptions of her relationship with her cooperating teacher. The literature talks about the tensions that exist in mentor-mentee relationships, where there is a conspiracy of silence (Jacques, 1992). There has to be communication that is meaningful in the relationship between the cooperating teacher and pre-service teacher.

As I pondered over the findings in this study. I thought about the ways in which the pre-service teachers said they learned to reflect. I gleaned from the findings that the pre-service teachers were offered many opportunities to practice reflection. They learned from doing many activities. This is in keeping with social constructivist principles. However, I am left to wonder if the pre-service teachers were taught what the concept of reflection is, and whether they understand the principles of reflective practice. The literature is replete with the seminal works of Dewey (1933), Schon (1983, 1987), and van Manen (1977). Many contemporary writers such as Calderhead (1989, 1991), Tom (1992), Valli (1990, 1991, 1992), Zeichner and Liston (1987),

and Zeichner (1992) have all conducted research, and have written many position papers on reflective practice. I believe that pre-service teachers who participate in teacher education programs that have reflective practice as a conceptual orientation should be exposed to such works. Zeichner (1992) points to this emergence of literature that has sought to clarify the conceptual distinctions among proposals for reflective teacher education. He feels that efforts have been made to identify the major traditions of practice in teacher education, however, there have been very few attempts to clarify the conceptual underpinnings of programs that foster reflective practice.

I am left with many questions that have been raised by this study. First, can reflective practice be taught in a more clearly articulated fashion? As I shared earlier, the pre-service teachers' definitions and interpretations came from activities they engaged in. I wonder if they should be exposed to the works on reflective practice, so that theory and research on reflective practice will further strengthen their definitions and reflections. Secondly, will the pre-service teachers continue to reflect on their practice in the schools? Next, what other forms of writing reflections can teacher educators use to teach pre-service teachers to reflect? Finally, how do race influence how reflection is fostered by classroom relationships.

Conclusions

Through this research, I wanted to determine how much and in what ways pre-service teachers had become reflective practitioners. What I found was that the pre-service teachers understood reflection through the knowledge and skills communicated to them by the program providers, and that they individually received it and incorporated it into their own personal philosophies and perspectives.

I found that reflection on teaching began in the university classroom and ended in the school where the pre-service teachers completed a twelve weeks teaching practice. In all instances, the pre-service teacher did not find it highly problematic to incorporate what they had learned in the university into their "real world" experiences of the classroom (MacKinnon & Erickson, 1992).

Pre-service teachers were extremely positive about their teaching practice experiences when they were encouraged to engage in reflection and inquiry in their own practice (McLean, 1999). Canning (1991) believes that reflection during pre-service teaching experiences allows for discovery and synthesis of understanding into a personal and world-view. We must be mindful that reflection in teaching is a process, and to become a truly reflective teacher involves time, experience and, inevitably, a bit of wear around the edges (Brubacher, Case and Reagen, 1994).

Relationships were significant in the pre-service teachers' engagement in reflection, and although at times they felt that there was too many written reflective exercises, all the pre-service teachers in this study related how they reflected by themselves or in collaboration with others. They shared the reflective experiences that they particularly enjoyed doing in some of their university classes. The pre-service teachers generally viewed their cooperating teachers as role models, and engaged in mostly verbal reflection with them. The pre-service teachers used the mentor as support and listened to her advice and reflected on it.

Barbara, Maria and Paulette have outgoing personalities and were very generous in sharing their meanings and reflective experiences in their interviews. Their journals provided additional insights. Lisa maintained that quiet demeanor that she carried through the teaching practice, as she reflected on her role in the classroom and what she had learned. However she enjoyed writing reflections and this was demonstrated in the weekly journal she submitted for

this study. Jason remained adamant that he was going to continue to reflect, but his style remained one that was verbal. His journal reflects his unwillingness to write lengthy reflections.

As I look back on the year that I spent with the pre-service teachers I am awed at the knowledge I have gained from my interactions with them. I have learned some valuable lessons that I share with those of us who are teacher educators committed to the development of reflective practice as a valuable conceptual orientation in which to ground teacher education programs. I have learned that it is possible to encourage pre-service teachers to reflect, not only on technical aspects, but also on social and moral issues they face in the classroom. I have learned that pre-service teachers depend on their professors, mentors and cooperating teachers to facilitate their growth as beginning teachers. I have also learned that the issue of race is not a simple matter, but that it must be dealt with, although it is often not politically correct to do so.

As a researcher, I struggled with the data and consulted numerous times with my advisor and another colleague to review the themes. I became confused many times and experienced disequilibrium with the abundance of data. However, I persevered, and with time was able to slowly piece together the data to exemplify the themes that have emanated out of the data. The themes changed as the data were clarified. In many instances, I changed the themes to reflect deeper meanings of the data. I was always conscious of wanting to do it "the right way", knowing fully well there was no one right way in qualitative research.

There were numerous inter-relationships among the themes. For example, the theme "reflection is based on self and significant others" definitely interacted with the themes "self-reflections," and "encountering professors, mentors and cooperating teachers." This interaction is an indication that the social processes were not discrete. Rather, they operate in conjunction with each, shaping the understandings and experiences of the pre-service teachers, and their meanings

were socially derived. However, some themes exemplified reflections of the pre-service teachers as an individual process.

My years of leaning towards the positivist way of conducting research made it difficult to write in the narrative form. The "I" in the dissertation slowly replaced "the researcher" as I continued to write and rewrite this study. I also realized that when I was a lecturer, it was so much easier to guide others in their research efforts because of my sense of "objectivity" in viewing other people's work. When I was guiding others in the writing process, it was easy to cite the literature and share ideas with my students.

My combined role as mentor and researcher was a truly new experience, and one that continued to provoke my mind, as I conducted this research. My own subjectivity forced me to continuously evaluate the study. As the pre-service teachers shared their stories I traced my subjectivity in framing these stories into this study. Throughout the study I placed my subjective stance after I presented the pre-service teachers' views.

This study has been an exercise in self-reflectivity, as I tried to understand my "self" in this journey. The participants who ranged from the twenties to older individuals all imparted different levels of wisdom and confidence in their journey. They showered me with words that rang of encouragement for the program to personal accolades. I am not worried that their words may be superficial because this was also my journey. As Pinar (1988) argues "understanding the self is not narcissism, it is a pre-condition and concomitant condition to the understanding of others." (p. 150).

I gained insights from the participants who willingly shared their perspectives and learning with me. As a result of doing this study I was able to strengthen my knowledge about reflective practice in teacher education. My personal philosophy is also strengthened, and I am

able to reflect on my experiences in education. It is now possible to further base my practice on other educational theories that I have come to know in completing this study.

I have sought to put on center stage pre-service teachers, who are often not heard. In so doing I feel that they have been empowered by sharing their histories with others. Empowerment is one goal that we strive for as teachers. In the same way the feminist literature affords women power through voice, so too beginning teachers can share their views in the hope that they will be heard, and teacher educators will continue to provide pre-service teachers with the experiences that would empower them as reflective practitioners.

As a teacher educator who set out to understand how pre-service teachers learned to practice reflection, I was treated to an in-depth insight into many facets of the journeys of these five pre-service teachers. I rediscovered that teaching and learning are collaborative ventures where the learner must want to learn and be comfortable in learning. I acknowledged that pre-service teachers come into preparation programs at different levels of development and from different backgrounds. I learned that different teaching styles match different learning styles. In the end I am richer for having completed this study because I have listened closely to these five individuals and I have learned. It is hoped that the stories of these five pre-service teachers invite other pre-service teachers to pursue their own journey toward reflective practice. It is also hoped that they will inspire professors, cooperating teachers and mentors to consider how they work with newcomers to the profession of teaching

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Appendix A

Sample of Virginia Tech Informed Consent form for participants of research projects

VIRINIA POLYTECHNIC AND STATE UNIVERSITY

Informed Consent for Participants of Investigative project. (For student teachers)

Investigator: Joan Pedro, Ph.D. candidate, EDCI
Dr. Rosary Lalik, Chair

Title of Study: The elements of reflective practice as experienced by the pre-service teachers of a graduate teacher preparation program.

1) PURPOSE OF THE STUDY

Reflective practice is a reform effort in teacher education. It is a method that teachers use. It is based on sound theoretical assumptions. The research suggests that it may be learned and that teachers acquire reflective teaching skills over time. It is important to provide opportunities for reflection in teacher preparation. The purpose of this study is to identify ways in which pre-service teachers in a graduate teacher preparation program understand and experience reflective practice. I would also like to identify and describe the opportunities provided in the program for reflective practice.

The main research questions are

1. How do the pre-service teachers perceive and understand the concept of reflection?
2. How do these pre-service teachers describe how they learn to reflect on their practice?
3. In what contexts do the pre-service teachers engage in reflective practice?
4. What do they reflect upon in their practice?

11) PROCEDURES

If you choose to participate in this research project, I would like to conduct an interview with you, at least one, but there may be another, to clarify issues that come up in the first interview. The interviews will be held in a time convenient to you. These interviews will be about one hour

in length but can be longer if you wish to continue. In these interviews I want to ask you about your perception about reflective inquiry and the ways you go about using reflective practice in your internship, I would also like to ask you about the opportunities which affords you to reflect on your practice with the students. I would also like to find out about the support given to you by the different stakeholders you work with which assist you in building reflective skills. I would like to have an open ended interview, that is although I will have written questions, I will be able to ask any follow up question and it will allow you to address issues that are not covered in the written questions. You are free to stop the interview at anytime or you do not have to answer a question if you do not wish to. The interview will be audiotaped and transcribed, the transcript will be available to you on request. I would also like to request copies of your weekly reflection, which you have been writing for this semester. These reflection journals will help me to look closely on the ways in which you reflect on your practice.

111) BENEFITS

The benefits of this study, I believe will be the usefulness of the results to us involved in teacher education. By studying the process of reflective practice of the pre-service teachers in a teacher preparation program, it can lend to increased awareness of the strengths of reflective inquiry and its place in teacher education program.

1V) RISKS

There are no risks involved in this research project, other than what you may experience I everyday activity. You will determine the extent of your participation in this project, you will not be asked to be involved in any situation that will cause you any physical danger or emotional stress.

V) ANONYMITY & CONFIDENTIALITY

Information gathered in this research project will be treated as confidential. It will be used only for the project by the investigator as stated above. All information collected in the forms of interviews and transcripts, and journals will be destroyed after completion of the research project. I will ascribe to you a pseudonym to allow the greatest degree of anonymity. Because I am only collecting data from this teacher preparation program, persons who are associated with this program may be able to see through the pseudonyms. I will try as far as possible to conduct and write up the study to protect confidentiality.

V1) FREEDOM TO WITHDRAW

You are free to withdraw from this study at any time. You can also refuse to answer any question posed to you in the interview. If you wish to withdraw from the project, or if you have any questions you can do so simply informing me personally or by contacting me at 540-951-5141, or by informing Dr Jan Nesper at 540-231-8327 (or nespor@vt.edu) or getting in touch with Tom Hurd, the chair of Virginia Tech Institutional Review Board, at 540-231-5281.

Your signature below means that you have read this form and agree to its conditions. You will be offered a copy of this form.

Appendix B

Interview Guide

Thank you for taking part in my study, as you are aware I am working on my dissertation, the topic is on reflective practice and I want to get your perspective of reflection and your experiences in this program. I have some questions that I want to ask you, but please feel free to elaborate on your answers, the more you can remember and tell me, the more I will be able to represent your views in the dissertation.

1. What was your undergraduate degree?
2. What led you to teach and come into this program?
3. What do you understand by the term reflection?
3. What do you understand by the term reflective practice applied to teaching?
4. When was the first time you heard the term reflection?
5. Do you consider yourself a reflective person? Why
4. Can you give me an example of a time you engaged in reflection?
5. What were the courses you were doing along with your field experiences?
7. Have these courses helped you to reflect? How, Give me some examples.
8. Where else did you get the opportunity to reflect?
9. How did you reflect on your practice in the courses that you do?

10. Can you give me some specific ways that you reflected in a particular course?
11. How did you reflect on your practice in the school?
12. How did you use these reflections?
13. Who else worked with you in this program?
13. How do they help you to reflect on your practice?
15. Can you tell me if the mentor helped you to reflect on your practice? How did she help you to do so?
16. What are some of the activities you reflect on in the classroom?

Appendix C

Follow Up Interview Guide

Thank you for allowing me to ask you some more questions, this time I want you to elaborate some more on your reflections, and to give me a clearer picture of some of the events you talked about the last time we spoke. I want to find out a little more about you, and your background so that I talk about you in the dissertation, I will present a more accurate picture of you.

1. Tell me a little bit about yourself and your and what you did before coming here.
2. Can you share with me some other examples of activities that you have participated in that incorporated reflections?
3. Last time you said the mentor helped you to reflect. Can you share with me how the mentor helped you ?
4. What about your cooperating teacher? How did she help you to be reflective?
5. Are there other things that you reflected about in your classes or in the school?
6. Can you give me some examples?
7. Do you think that reflection is important to teachers? Why?
8. Can you remember any particular thing about your teaching that you continually think about?

Appendix D

Follow up interview during analysis of data (Phone interview)

1. How are you?
2. What are you doing now?
3. Tell me if you benefited from reflecting on your practice during your student teaching?
4. How have you specifically benefited from your teacher education program? Can you explain to me how this program has benefited you
5. Do you think the program's goal of educating reflective practitioners was realized?
6. How do you think these goals were realized?
7. What were some limitations that you recall did not help you to be reflective?

Appendix E

Themes Appearing in Pre-Service Teachers Interviews

Themes within each Social Process	Barbara	Lisa	Jason	Maria	Paulette
Acquiring Perspective					
Defining Reflection	*	*	*	*	*
Questioning in reflection	*	*	*	*	*
Reflections based on personal values/Educational theory	*	*	*	*	*
Achieving Individuality					
Reflection based on self and significant others	*	*	*	*	*
Reflection on action	*	*	*	*	*
Reflection based on personal Belief/educational theory	*	*	*	*	*
Experiencing Relationships					
Encounters with professor	*	*	*	*	*
Encounters with mentor	*	*	*	*	*
Encounters with cooperating teachers	*	*	*	*	*
Situating the act of reflection					
Self-reflection	*	*	*	*	*
Verbal reflection	*	*	*	*	*
Written reflections	*	*	*	*	*
The act of reflection					
Content of reflection	*	*	*	*	*

Appendix F

Curriculum Vita

Joan Y. Pedro

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EDUCATIONAL PREPARATION

- Virginia Polytechnic Institute and State University, Blacksburg, Virginia
Ph.D. Education July, 2001
Curriculum and Instruction
Advisor: Dr Rosary Lalik
- University of Miami, Coral Gables, Miami, Florida Dec 1990
M.Sc. Ed., major: Special Education
- University of the West Indies, St. Augustine, Trinidad and Tobago Dec 1989
M.Ed. in Curriculum and Supervision
12 credit hours of coursework completed
- University of Manitoba, Winnipeg, Canada April-May, 1988
Leadership Preparation
- University of the West Indies, St. Augustine, Trinidad and Tobago 1981-1986
Bachelor of Arts (Honors)
Social Sciences and History
- Valsayn Teachers College, Trinidad and Tobago 1979-1981
Diploma in Education, Elementary Education

PROFESSIONAL/TEACHING EXPERIENCE

- Virginia Polytechnic Institute 1998 -2001
And State University (Virginia Tech)
University mentor/supervisor
Graduate Teacher Preparation Model
- Virginia Polytechnic Institute and Spring, 2001

State University (Virginia Tech)
Tutor of Graduate Seminar
Teacher as Researcher

Virginia Tech Upward Bound Program
Tutor of students in Grade 10, 11, and 12
English Composition

Summer 2000

Valsayn Teachers College, Valsayn, Trinidad
Lecturer / Guidance Group Counselor.
Foundations of Education, Principles
and Practice of Education, Principles of Effective Teaching,
Overview of Special Education

1994-1998

University of Sheffield, Distance Education Initiative
Lecturer
Overview of Special Education,
Assessment in Special Education, Learning Disabilities

1992-1998

University of Sheffield Distance Education Initiative
Program Director
Administered cross-categorical
Certificate/Diploma program in Special Education
Tutor and Dissertation Advisor
M. Ed in Special Education

1993-1998

University of the West Indies
School of Continuing Studies
Lecturer
Early childhood /Special Education

1995-1998

Wharton-Patrick Center
St. Anns, Trinidad and Tobago
Special Education Teacher
Emotional, Behavioral and Learning Disabilities

1992- 1994

South East Port of Spain Secondary School
Port-of-Spain, Trinidad
Resource Teacher for special needs students

1991-1992
1988-1989

School for the Mentally Handicapped
St Anns Hospital, St Anns, Trinidad
Special Education Teacher

1985-1988

Malabar Government Elementary Malabar, Arima, Trinidad. <i>Teacher / Dept Head, Grade 1,2,3</i>	1981-1984
Eastern Girls' Government Elementary Port of Spain, Trinidad <i>Assistant Teacher</i> Kindergarden, Grade 1, 5	1977-1979
School for Deaf Children Cascade, Trinidad <i>Assistant matron / Assistant Teacher</i>	1971-1976
Ideal Private High School San Fernando, Trinidad <i>Teacher</i> English Language, Literature History	1969-1970

PROFESSIONAL SERVICE

Monitor for speakers at Excellence in Education Conference Virginia Tech	Oct 2000
Member, Interviewing panel for prospective Students for graduate teacher education program Virginia Tech	Nov 2000
Chair, Tertiary Education Committee, Unified Teachers Association of Trinidad and Tobago	1996-1998
President, Association for Special Education of Trinidad and Tobago.	1992-1998
Chair, Board of Studies, University of Sheffield, Distance Learning Program	1993-1998
Member, Program Management Committee University of Sheffield, Distance learning Program	1992-1998
Assessment Specialist, assessment services for public And private schools.	1991-1998
External Examiner, Teachers College Examination Ministry of Education, Trinidad and Tobago	1992-1994

STAFF DEVELOPMENT FOR INSERVICE AND PRESERVICE TEACHERS

Tutor- National Workshops in Continuous Assessment	1998
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for supervisors and principals, Trinidad and Tobago Coordinator and Tutor- Developed and implemented Workshops in Meeting Special Needs for pre-school teachers, Trinidad.	1997-1998
Coordinator and Tutor-Workshop for teachers in regular school Trinidad and Tobago	1996
Tutor- Sensitization of assistant teachers, Elementary Schools, Trinidad.	1995
Co-Leader and Tutor-Conference for Caribbean Educators Kapok Hotel, Trinidad	1993
Tutor- Workshop for Principals and supervisors Victoria division, Trinidad	1992
Tutor and Coordinator - Ministry of Education, CIDA and University of Manitoba Special Education Workshop, Trinidad	1989

PRESENTATIONS

<i>Inclusive Education: A forward thinking approach to educate all children</i> Principals of St George East Educational District, El Dorado Secondary School, Trinidad	1998
<i>The importance of continuous assessment in the Primary Schools</i> Conference of School supervisors and Principals of Elementary Schools Learning Resource Center, Trinidad	1998
<i>Mainstreaming: Concepts and Possibilities</i> Conference for Caribbean Educators, Kapok Hotel Port-of Spain, Trinidad	1996
<i>Support Services for Students with Special Needs</i> Optometrists Association of Trinidad and Tobago	1996

Proposals presented at Conferences

<i>Reflection in teacher education: Exploring the conceptual orientation of reflective practice.</i> 22 nd Annual Ethnography Forum, University of Pennsylvania, March 1-3 rd , 2001.	
<i>Are current trends in educational reform increasing stress and burnout in mid-career teachers in Virginia?</i> (Co-author). Eastern Educational Research Association, 24 th Annual Conference, Hyatt Regency, Hilton Head, South Carolina, February 14-17 th , 2001	

AWARDS

Graduate Assistantship, Virginia Polytechnic Institute and State University	1998
National Certificate of Recognition for Outstanding Work in Education, Government of Trinidad and Tobago	1993
Organization of American States (OAS) Fellowship For foreign studies leading to M.Sc.Ed	1990
Government of Trinidad and Tobago Scholarship for Study leading to M. Ed.	1989

MEMBERSHIP

American Educational Research Association, (AERA)

Black Graduate Association of Virginia Tech.

University of Miami Alumni

The Association for Special Education of Trinidad and Tobago

Trinidad and Tobago Unified Teachers Association