



How Do Elementary Education Majors Prior Conceptions About Teaching, Formed During Their Own Experiences as Children in K-12 Classrooms, Impact Their Acceptance of the Pre-Block Teacher Education Curriculum at Montana State University

by JOHN M ANSELM

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education in Education

Montana State University

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Abstract:

The purpose of this study was to develop for teacher educators a grounded theory of how elementary education majors' prior conceptions about teaching, formed during their own experiences as children in K-12 classrooms, impact their acceptance of the teacher education curriculum at Montana State University.

The research method was a qualitative, grounded theory design. The researcher interviewed 40 pre-service teachers at Montana State University. This group consisted of 20 freshmen level and 20 junior level students who had declared education as their major.

Findings supported prior research and reinforced existing themes in the literature regarding the impact of pre-service teachers' preconceptions on teacher education. Analysis of the data supported the contention that pre-service teachers arrive at Montana State University with well-developed conceptions of teaching and being a teacher. They develop these conceptions early in their lives, while they are in K-12 grade classrooms. These conceptions influence and at times limit what these students are willing to accept from the curriculum at Montana State University.

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UNIVERSITY?

By

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of

Doctor of Education

in

Education

MONTANA STATE UNIVERSITY-BOZEMAN
Bozeman, Montana

November 2002

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APPROVAL

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This dissertation has been read by each member of the dissertation committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

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November 18, 2002

ACKNOWLEDGMENTS

First, I would like to thank my family members for helping and encouraging me. My wife, Christy, and my children gave of their own needs many times so that I could complete my dream. Thanks to my brother, Robert, who helped me see the enjoyment in learning.

A special thank you to my chair, Dr. Ann deOnis, for her patience and guidance. She made me a more careful writer as well as a more competent educator. I would like to thank the members of my committee: Dr. Robert Carson, Dr. Elisabeth Swanson, Dr. Robert Clemens, Dr. Rick Johnson, and Dr. Richard Block. Finally, thank you to all the individuals who participated in this study.

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ABSTRACT

The purpose of this study was to develop for teacher educators a grounded theory of how elementary education majors' prior conceptions about teaching, formed during their own experiences as children in K-12 classrooms, impact their acceptance of the teacher education curriculum at Montana State University.

The research method was a qualitative, grounded theory design. The researcher interviewed 40 pre-service teachers at Montana State University. This group consisted of 20 freshmen level and 20 junior level students who had declared education as their major.

Findings supported prior research and reinforced existing themes in the literature regarding the impact of pre-service teachers' preconceptions on teacher education. Analysis of the data supported the contention that pre-service teachers arrive at Montana State University with well-developed conceptions of teaching and being a teacher. They develop these conceptions early in their lives, while they are in K-12 grade classrooms. These conceptions influence and at times limit what these students are willing to accept from the curriculum at Montana State University.

CHAPTER ONE

INTRODUCTION TO THE STUDY

Statement of the Problem and Background

Tim was upset. As he walked distractedly down the hall to the library in Anderson School, his thoughts spilled from his mouth as soon as they entered his head. "Oh man, what...what am I going to do? That was terrible...I don't know..." he babbled as he entered the library and slumped onto a chair designed for a first grader. Tim had just completed the first lesson of his teaching career; he was unsure if it would be his last. "They just wouldn't listen...I couldn't get them under control. Maybe this isn't for me. It wasn't like this when I went to school." He looked at me and asked, "Is it always like this?" I was unsure of how to respond because I understood what Tim was experiencing. The same thoughts had gone through my head during my first year of teaching.

Tim was no different from other paraprofessional students I was charged to observe. He was inspired to teach when "around eighth grade," people close to him encouraged him to "try teaching because [he] was so good with kids." Tim used the terms "caring, patient, respectful, and fair" when describing an effective teacher, and he was "pretty sure" he knew what it was like to teach. In contrast to his affective ideas of teaching, Tim felt that he could "manipulate" children to behave and that "using a good manner" would make them "want to be good." Tim seemed to feel that his personality, good intentions, and fun activities would be enough to ensure an orderly classroom.

Tim is still training to be a teacher, and he disregards the doubts expressed to me earlier. He has said that he can't wait to get into the classroom so he can "learn how to teach." He seems to have forgotten the complexities of the classroom he witnessed during his first lesson.

Why do students like Tim have such an unrealistic view of teaching? Doesn't their college coursework prepare them for the realities they will face as educators? The students say no. They claim that the only beneficial part of any teacher preparatory program is the practical teaching experience. Education majors see class instruction as irrelevant and often unnecessary. Are they correct, or could their learning be clouded by conceptions about teaching formed during their own experiences as children in K-12 classrooms? We might expect conceptions of teaching developed from the perspective of a younger student to be more simplistic. How might these conceptions affect an education major's acquisition of knowledge? Perhaps the courses are more relevant than students believe but need to address the prior conceptions students hold. Classes would then become an avenue for education majors to develop more appropriate views of teaching. Thus the coursework might help prevent the entry shock some new teachers experience. Armed with a more appropriate theory of how elementary education majors' prior conceptions impact their professional development, teacher educators might better understand their students and ultimately improve instruction.

Studies have shown that many elementary education majors choose their profession at an early age (Kronus, 1969; Wright & Tuska, 1968). They come to college with conceptions that have been influenced by their own personal histories (Calderhead

& Robson, 1991; Furlong & Maynard, 1995) and by their experiences as children in K-12 classrooms – what Lortie (1975) calls the “apprenticeship of observation.” These prior conceptions interfere with education majors’ ability to learn from instruction (Bird, 1993; Calderhead & Robson, 1991; Weinstein 1990). In response to these findings this study was designed to investigate the conceptions students have of learning to teach and how these influence the knowledge they acquire. Research to date has not provided teacher educators with a complete explanation of the effects the “apprenticeship of observation” has on pre-service teacher learning. The results of this study might help teacher educators provide students like Tim with a clearer appreciation of the teaching profession.

Problem Statement

The problem is that teacher educators need a grounded theory of how elementary education majors’ prior conceptions about teaching, formed during their own experiences as children in K-12 classrooms, impact acceptance of the pre-block teacher education curriculum at Montana State University.

Purpose of the Study

The purpose of this study is to develop for teacher educators a grounded theory of how elementary education majors’ prior conceptions about teaching, formed during their

own experiences as children in K-12 classrooms, impact acceptance of the pre-block teacher education curriculum at Montana State University.

Question

Major Question: How do elementary education majors' prior conceptions about teaching, formed during their own experiences as children in K-12 classrooms, impact their acceptance of the pre-block teacher education curriculum at Montana State University?

Answers to the following questions will provide further information to answer the transcendent question:

Q1: When do elementary education majors first develop their conceptions of teaching?

Q2: What are education majors' prior conceptions of teaching?

Q3: How accurately do elementary education majors believe their prior conceptions represent the realities of teaching?

Q4: What effect do the prior conceptions of elementary education majors have on the acquisition of knowledge in a teacher preparatory program?

Q5: How resistant are elementary education majors to new information presented to them in their classes?

Theoretical Framework

Research by Furlong and Maynard (1995) provided the framework for this study. From their research, they were able to identify five stages in student teacher development. The first stage, which they label "early idealism," manifests itself just prior to the student teaching experience. This stage creates a basis that can be used to study education majors early in their teacher training. During this stage education majors have common concerns and clear conceptualizations of teaching. They know the type of relationship they will establish with their students, the physical appearance of their classroom, and the atmosphere they hope to create. They seem to be influenced by their own history as students, and they begin their training with the belief that they already know a lot about teaching. Education majors at this stage feel that the process of learning and their role in this process just *happens* without a great deal of effort on their part.

Other researchers have found evidence of idealistic conceptions in elementary education majors and teachers just beginning their professional experience. Fuller and Bown's (1975) findings, considered the seminal work in the attempt to describe commonality of concerns in pre-service and in-service teachers, provide evidence of education majors identifying realistically with pupils but only in fantasy with the teaching role. In other words, education majors see the classroom through the eyes of a student and not through the eyes of a teacher. Education courses that deal with the teacher's realities are perceived as "irrelevant," and teachers are viewed negatively. One education major described the process of becoming a teacher as having "gone over to the enemy"

(Fuller & Bown, 1975, p. 91). Later findings by Adams (1982), Sitter and Lanier (1982), and Guillaume and Rudney (1993) support Fuller and Bown's findings and provide the framework for Furlong and Maynard's (1995) study.

The formation of such common conceptions has not been extensively studied, although teachers seem to be able to identify that they at one time had idealistic views of teaching. In his work, Burden (1979/1980a, 1980b) describes situations in which teachers reported "finding themselves conforming to their preconceived image of teacher" (p. 76). Lortie (1975) holds that early models of teaching are internalized and utilized later. This view can be supported by Schema theory (Schallert, 1982). Schemata are abstract structures that represent what one holds to be true about the world. They are expressed as a specific configuration of variables and provide a framework for further knowledge comprehension. Schemata are comprised of variables that can be identified by all those who share the same cultural experience (Graesser, Gordon, & Sawyer, 1979). Developed schema can bias and constrain the interpretation and acquisition of input information (Schallert, 1982). Education majors may have developed schemata as children in K-12 classrooms that later inhibit knowledge acquisition from their college coursework.

Significance of the Study

People who want to become educators have spent at least a dozen years watching teachers from the perspective of a student. What effect this has on their professional development is largely unknown. This study seeks to add to that knowledge base.

Understanding the previously constructed ideas of elementary education majors has ramifications for improving the practice of teacher education. Furlong and Maynard (1995) found that:

Certain beliefs and expectations held by individual students either enhanced or mitigated against the development of "acceptable" or "useful" practical knowledge and skills. Particularly significant were students' existing understandings about the nature of teaching, and their vision of what the role of a teacher should be. If students hold simplistic or what are seen as "inappropriate" views of these issues, then students will need significant help if they are to fully appreciate the complexities and demands of becoming a professional educator. (p. 72)

Other researchers call for further study of student preconceptions about teaching.

Calderhead and Robson (1991) state:

There is considerable scope for the further investigation of the conceptions students have of learning to teach and how these influence the knowledge they acquire and its use in the analysis and practice of teaching. (p. 7)

A better understanding of the conceptions of education majors when they begin college could help teacher educators provide courses geared to confronting naive ideas of teaching. The ultimate result would be graduating an elementary education teacher who is better able to deal with the complexities of the profession.

Definition of Terms

Beginning Elementary Education Major: Individuals who have made a decision to be a teacher and are enrolled in their first semester of courses at Montana State University.

Children: Students in kindergarten through twelfth grade.

Conceptions: Mentally constructed concepts or ideas that allow students to frame what is happening around them, as defined by Furlong and Maynard (1995).

Concerns: The body of concerns that have been identified by Furlong and Maynard (1995) and Fuller and Bown (1975) at Fuller and Bown's self stage of teacher development.

Culture: A group of people who regularly associate with each other and have shared attitudes, beliefs, and concerns.

Curriculum: An all-inclusive course of study that includes what is presented through coursework, and what the individual accepts from the instruction.

Freshman: A person in his or her first year of college.

Grounded Theory Study: A method of qualitative research that generates or discovers a theory that relates to a particular situation.

In-service teacher: an individual who is working as a teacher.

Junior: A person in his or her third year of college and taking the professional phase of the teacher education program at Montana State University.

Paraprofessional experience: An in-school experience that occurs between core course completion and student teaching. Paraprofessionals are placed in K-5 or K-8 schools while simultaneously enrolled in elementary methods classes.

Pre-service teacher: an individual who is enrolled in upper-division methods courses in a teacher preparation program.

Professional Development: the process of becoming a teacher.

Assumptions, Limitations, and Delimitations

Certain assumptions were made about the participants in this study. First, the investigator assumed that all of the participants want to be elementary education teachers and that they have given at least cursory thought to what it will be like to teach. Data on elementary education majors in two stages of training were collected. These two stages were (a) freshman who have declared elementary education as their major, and (b) juniors in EDCI 301 (Paraprofessional Experience). It was assumed that all of the participants obtained a grade school education and have graduated from high school. Finally, it was assumed that the participants have not previously taught as a certified teacher.

The interviews were conducted in various locations around campus. These areas varied from quiet to very hectic locations. At times, questions needed to be clarified and restated. While the researcher tried to accommodate the participants, it is unknown how personal schedules and time constraints affected the information provided. The participants were given a survey, the Stages of Concern Questionnaire, and the Teaching Goals Inventory. Interviews were then scheduled based upon theoretical sampling from these instruments. These instruments were validated through focus group interviews with other pre-service teachers. Because of scheduling constraints, no freshmen were included in the focus group interviews. Twenty participants from each subgroup were studied. The impact of studying students in the fall as opposed to other times of the year is unclear. The fall was chosen for convenience. Due to time constraints, the emerging grounded theory was not applied to more heterogeneous groups after the initial two groups were

studied. Future studies may want to apply the results to first-year teachers, pre-service teachers in other stages of their education, or even grade school children in order to see where the theory holds true.

Summary and Organization Outline

Past research has examined the conceptions teachers have of their profession. This research is focused on identifying and grouping these conceptions within a developmental model. Little research has been done which examines the possible origins of the conceptions or how they may impact learning and, therefore, the curriculum. Understanding these conceptions is important because it is apparent that certain beliefs held by pre-service teachers hinder their ability to develop appropriate understandings of what it is like to teach. The purpose of this study was to develop for teacher educators a grounded theory of how elementary education majors' prior conceptions about teaching, formed during their own experiences as children in K-12 classrooms, impact their acceptance of the pre-block teacher education curriculum at Montana State University. In order to answer the major question this study was organized in the following way:

Chapter 1

Introduction to the Study

Statement of the Problem and Background

Problem Statement

Purpose Statement

Question

Theoretical Framework

Significance of the Study

Definition of Terms

Assumptions, Limitations, and Delimitations

Chapter 2

Literature Review

Chapter Introduction

Synthesis of the Literature

Criteria for Selecting the Literature

Themes

Context of the Problem

Current Understanding of the Problem

Review of Previous Research, Findings, and Opinions

Other Themes

Review of Methodologies

Evaluation of the Literature

Summary of the Review

Overall Weaknesses and Strengths

Gaps and Saturation Points

Avenues for Further Inquiry

Chapter Summary

Chapter 3

Research Methodology

Chapter Introduction

Participants

Population

Method of Sample Selection

Size, Demographics, Variables

Apparatus, Instruments, Materials

Function

Validity and Reliability

Development

Research Design

Rationale

Invalidity and Minimization

Procedure

Analysis Strategy

Assumptions, Limitations, Delimitations

Timeframe

Chapter Summary

Chapter 4

Results

Chapter Introduction

Results of Data Analysis

Discussion of the Meaning

Relationship to Prior Research

Negative and Positive Findings

Uncontrolled Factors Influencing Outcomes

Weaknesses in the Data

Resolutions of Contradictions in Findings

Summary of Results

Chapter Summary

Chapter 5

Conclusions

Chapter Introduction

Discussion of the Broader Implications

Answer to the Question/Developed Grounded Theory

Recommendations

Further Research

Procedural Adjustments

Replication

New Question

Implementation of Findings and Summary

CHAPTER TWO

LITERATURE REVIEW

Introduction

The purpose of this literature review was to establish the context and current understanding of how elementary education majors' prior conceptions about teaching, formed during their own experiences as children in K-12 classrooms, impact their acceptance of the pre-block teacher education curriculum at Montana State University. The question was examined as a subset within the broad topic of teacher development. Existing models of teacher development have been constructed by (a) adapting theories of general cognitive development to teaching, (b) attempting to justify classroom practices in developmental terms, (c) inferring a theory from empirical research (Burden, 1990).

This literature review will develop the context by: (1) examining adult development in general; (2) reviewing an attempt to adapt developmental theories to teaching; (3) studying the empirically derived developmental models of Fuller (1969), Fuller and Bown, (1975), and Berliner (1988); (4) identifying attempts to qualify certain teacher training practices in developmental terms.

After developing the context of the problem, this literature review examined the current understanding of how elementary education majors' prior conceptions of the classroom, formed as students during their K-12 experience, impact learning. Three main

themes were explored: (1) Education majors develop concepts of the classroom early as students. (2) Education majors come to college with idealistic conceptions of the classroom. (3) Education majors' prior conceptions can form obstacles to instruction. Finally, this literature review examined previous research and methodologies and evaluated the literature.

Criteria for Selecting the Literature

Literature was selected on the basis of three requirements. The first was the literature's relationship to either pre-service or in-service teacher development. The researcher was interested in literature that focused on teachers' prior conceptions, schemas, beliefs, or perceptions -- the ways teachers "see" teaching or the classroom. Empirical studies were preferred, but hypotheses from experts in the field were included.

The second requirement was the saturation and depth of research in the particular area. The researcher chose literature that was most often cited when the topic in question was well explored. In the case of adult development, the researcher chose theorists who typified a given body of knowledge. When the literature on the topic was sparse, all findings were included.

The third requirement was the reputability of the source. Only findings that were reported in professional journals or those from accredited institutions were included.

Context of the Problem - Teacher Development Models

Adult Development Theory

People who come to college to learn how to teach find themselves in the same general situation as other university students. Therefore, they should be examined through the perspective of adult student change theories. There are two broad categories of theories on the change college students experience. The first group of theories addresses the nature, structure, and processes of individual human growth. They can be classified as developmental theories. This class of theories includes psychological "stage" theories, which describe levels individuals pass through in a hierarchical sequence. The second group of theories, known as "college impact" models, focus more on variables that presume to exert an influence on one or more aspects of student change (Pascarella & Terenzini, 1991). The difference between the two categories of theories is related to the definitions of change and development. Change implies any alteration in a person's cognitive or affective characteristics. It does not need to be linear or follow any orderly process. Development implies a process of cognitive evolution through successive changes.

The framework for this study is based on the research of Furlong and Maynard (1995). Their work is located within the developmental paradigm; consequently, this review of literature will focus more on developmental theories than on college impact models.

Developmental theorists generally subscribe to the notion that development is a movement toward greater differentiation and complexity in the way people think and behave. Chickering (1974) divides adult development theorists into two groups: (a) psychosocial theorists, who examine sections of the age span; and (b) cognitive-structural theorists, who examine various psychological processes related to age (Burden, 1990). Oja (1990) further differentiates psychosocial theory into (a) life-age theory and (b) life cycle theory. Even though later researchers have identified further differentiation of development (typological and person-environment interaction models), the theories that will be examined more closely in this literature review are those described as psychosocial and cognitive-structural.

Psychosocial Theory

Life-age theory seeks to identify an underlying order in the progression of people's lives over the adult years by examining discreet stages in detail. Levinson (1978) conducted seminal research in this area. He studied men in three phases of their lives: the novice phase of early adulthood, the settling down period, and middle adulthood. Levinson described the early adulthood period (ages 17-45) as the most dramatic of all ages. During this time young men are at or near their physical and intellectual peak. At the age of twenty, men are at their full height and strength. They are also at a pinnacle in memory, abstract thought, ability to learn specific skills, and ability to solve well-defined problems. These characteristics remain relatively stable until the age of forty. The transition into early adulthood occurs between the ages of 17 to 22, the

age of a majority of those in undergraduate teacher education programs. During this stage, the growing male is a boy-man; he is terminating his pre-adult self and at the same time starting to form his first adult self and to make the choices through which he establishes his initial membership in the adult world (Levinson, 1978). At the age of 20, men are trying to develop a personal and an occupational identity. They struggle to get others to regard them as equals and as "men" rather than "kids." The Early Adult Transition presents two tasks for the young man. The first is to end his past connections to the adolescent world. Existing relationships must be modified, and he must separate from some segments of his past. This includes a separation from the family into which he was born. It may include moving out of the house and becoming more independent. The second task requires that the young man make a commitment to entering the adult world. This includes making choices and defining options for the future. According to Levinson, men must accomplish these two tasks in order to progress to the next stage – the settling down period. It can be expected that men in Early Adult Transition have certain occupational misconceptions. Levinson found that "as this period begins, a young man's knowledge, values and aspirations for a particular kind of adult life are rather ambiguous and colored by private fantasies"(p. 75).

Levinson (1996) examined the lives of women separately from those of men. He categorized women into two groups: either homemakers or career women. He defined six discreet stages for each group: adolescent life, early adult transition, entry life structure for early adulthood, age 30 transition, culminating life structure for early adulthood, and mid-life transition. Women in the early adult transition period are between the ages of 18-

23. They, like men, must end past connections to the adolescent world and make a commitment to entering the adult world. This transition coincides with the move from high school to college. Some women, who had strongly dependent ties with their families, did not enter the transitional period until midway through their freshman year. Others entered the transitional period while in the last year of high school.

Levinson (1996) found that conceptions of gender played a key part in each young woman's early adult transition. The traditional homemaker wanted to be a good student, but not too good of a student. She sought to impress men with her attractiveness and intelligence, but not to compete with men. She made strong distinctions between the sexes and maintained a traditionally feminine stance. She hoped to be engaged or married by the end of college to a man of similar social class. She was not interested in high occupational achievement or a demanding career.

The career woman, in contrast, wanted to develop her own independence. She was appalled at the thought of being controlled or taken for granted by a man. She wanted to free herself from traditional gender roles. It was important to be feminine but not too feminine. She wanted to marry and have children but not within traditional boundaries. She wanted a career that was not limited by gender and one that provided personal satisfaction. It was easier for her to describe what she did not want rather than what she wanted.

Levinson (1996) also described the impact of college on a young woman's life. His findings indicate that women entered college having been successful students in high school. They then found themselves to be "small fish in a big pond" (p. 233). For the first

time they were forced to make major choices like deciding on a field of study and a career path. Choosing the major was difficult because it required self-exploration and clarifying their abilities. The choice of a major was strongly influenced by each young woman's attitudes towards gender. The career woman avoided "feminine" fields such as education.

The picture life-age theorists like Levinson paint of college students is contained within his description of the early adult transition. This is a time when both sexes are shrugging off adolescence and making commitments to adult life. They are defining options for the future and making difficult choices about their careers. Men may be choosing to teach based on earlier fantasies. Women may be choosing education because of their beliefs about gender.

Whereas life-age theorists focus on an individual's age to define stages of development, life-cycle theorists focus on major crises that a person faces in life. Two life-cycle theorists who have exerted the strongest influence on most psychosocial theories of college student development are Chickering and Erikson (Pascarella & Terenzini, 1991). Erikson (1963) proposed an eight-stage model to describe the physical, emotional, and psychological stages of development. Each stage is a task or challenge that people face in their lives. These stages are (1) trust vs. mistrust, (2) autonomy vs. doubt, (3) resolving guilt, (4) self-worth, (5) identity vs. role confusion, (6) intimacy vs. isolation, (7) productivity vs. stagnation, and (8) knowing oneself. Erikson felt that each of these stages presents the person with a dilemma requiring a decision. The choice the individual makes at this point determines if that person progresses to the next stage,

regresses to the previous stage, or stays at the present stage of development. These stages can occur at any time in life and are influenced by the environment. Identity vs. role confusion (stage 5) is the dominant task college-aged people must confront. This is the point at which people are attempting to integrate many roles (child, sibling, student, athlete, worker) into a self-image.

Chickering (1969) proposed seven vectors of student development. His model is more structured than Erikson's in that it describes a "magnitude and direction" and an increase in complexity of thinking by the individual. Development occurs within each vector. The seven vectors are (1) achieving competence – specifically in intellectual, physical, and social skills; (2) managing emotions; (3) developing autonomy – disengaging from traditional parental relationships; and (4) establishing identity. Establishing identity is central to Chickering's theory. It is the point where young men and women are clarifying their conceptions of "self." Development along this vector affects development along the following three vectors: (5) freeing interpersonal relationships – increased ability to interact with others; (6) developing purpose – "Where is my life going?"; and (7) developing integrity – following one's own beliefs.

Cognitive-Structural Theory

While psychosocial theorists focus on the content of development (i.e., vectors, identity, phases), cognitive-structural theorists seek to describe the process of change, concentrating on the cognitive structures individuals create in order to give meaning to their worlds (Pascarella & Terenzini, 1991). Jean Piaget (1964) is generally credited with

originating this body of theories. Other important cognitive-structural theorists are Kohlberg, who defined a model of moral development; Perry, who explained intellectual and ethical development; and Gilligan, who focused specifically on the development of women. These models were chosen for this study because they address education majors' creation of themselves as teachers - specifically the aspects of intellectual, ethical, and moral development.

Piaget, a cognitive psychologist, started his career by studying biological structures; however, his greatest contribution was his research into the structures of the human mind. Piaget believed that humans develop not only in a physical sense, but also in a cognitive sense (Fosnot, 1996). Piaget was able to demonstrate that the same force that promotes biological change also promotes cognitive change. He described this force as *equilibration*. As the human mind is provided information of the outside world through the body's five senses, it processes the data by either *assimilating* it into previously constructed cognitive structures (schema), or by adapting the schema to the incoming information through *accommodation*. Equilibration is a dynamic process in which the mind constantly seeks balance between an actual change of the self (accommodation) and a reaffirmation of the world (assimilation). Piaget also stated in his theory of formal operational reasoning that cognitive development progresses through a series of four stages: (1) sensorimotor (birth to 2 years), (2) preoperational (2-7 years), (3) concrete (7-11 years), (4) formal operational (11 years and older), (Piaget & Inhelder, 1967). During the sensorimotor period, the child's cognitive system is limited to motor reflexes. Children build on these reflexes to develop more sophisticated procedures, and they learn

to generalize their activities to a wider range of situations. When children reach the preoperational thought stage, they acquire skills in the areas of mental imagery and language. They are very self-oriented and view the world from only a personal perspective. When children reach the concrete operations stage, they are more able to understand other points of view and take into account more than one perspective. Children at this age still do not possess the ability to perform abstract problems and do not consider all logical outcomes. The final stage in Piaget's model is formal operations. At this stage, children are able to think logically and abstractly. They are also able to grasp theoretical knowledge. Piaget felt that this was the ultimate stage of development, and that this was as powerful as thinking would get. Other cognitive-structural theorists have advanced several postformal stages. They feel that the reasoning of adults is more complex than the formal operations stage. Arlin (1975) used the idea of creative reflection to explain her belief that the whole formal operations structure changes. Arlin felt that during this change, problem-solving operations disappear and problem-finding operations appear. To find a problem requires reflection, and its form is partially determined by the possibility of a solution.

As a subset of the cognitive-structural theory, Perry's model tries to provide insight into *how* people think. Perry, along with other cognitive-structuralists, focuses on the process of change and concentrates on structures individuals build in their minds that help them give meaning to their world. Perry referred to these structures as "forms." Perry's model is comprised of nine "positions" which each individual progresses through in order. Development does not occur within each stage but during the transitions

between them (Perry, 1970). The use of the word "position" was important to Perry since he felt that positions accurately reflected each person's personal view and did not assume a fixed time at each phase of development.

Position 1 is characterized by the individual's focus upon "dualistic" thinking. This is when the individual sees the world in terms of right vs. wrong and black vs. white. The individual will seek "truth" through authority figures, and commitment to personal ideals is absolute. Development occurs when these absolutes are challenged, such as when ideals conflict or when a respected authority can't find a solution.

During positions 2-3, while still influenced by dualistic thought, the individual begins to respect diversity of views and to think more independently. Peers come to have more influence as critical thinking develops. Contrary views are no longer "wrong" (Pascarella & Terenzini, 1991). Instead, all competing views are seen as equally valid. Perry terms this period "multiplicity."

During positions 4-6, the individual builds to what Perry defines as the pivotal point at position 5. Up to this time, the individual has seen the world in varying degrees of duality. Now the individual sees knowledge and values as relative to the context where those values would be used. All opinions are not equally valid. Answers emerge based upon evidence and supporting arguments (Evans, Forney, & Guido-DiBrito, 1998). In position 6, individuals begin to see certain alternatives as having more value. They begin to be able to choose between competing views while still seeing need for debate.

Individuals moving through positions 7-9 have defined their identities and their responsibilities (Pascarella & Terenzini, 1991). They are able to commit to behaviors and

values, yet unlike in earlier periods they are also able to critically appraise opposing points of view. Commitments may be made but they are changeable based on new evidence that the individual may uncover. Perry termed this period as "commitments in relativism developed." He believed this period continues throughout a person's life.

Perry did not see development as a linear process. Instead, he viewed it in the form of a helix where the individual at a higher state of development confronts issues that recur. As individuals face a situation that they resolve, they then use that experience the next time the situation appears. Perry also believed that an individual's time in each "form" varies and that people go through "time-out" periods called "temporizing." He also saw two situations in which development regresses. One situation, called "escape," occurs when the person abandons responsibility; the other occurs when the individual retreats into dualism. After position 5, Perry's model seems to focus more on identity formation and less on cognitive growth.

Kohlberg began defining his theory of moral development while he was engaged in dissertation research at Chicago University. He discovered that children went through distinct stages of moral reasoning. From his initial research, Kohlberg broadened his theory to include other cultures and tried to use it to develop moral education programs in schools. Kohlberg's theory is that moral reasoning develops through a six-stage sequence grouped into three levels (Kohlberg as reported in Evans, et. al.,1998).

The first level, defined as preconventional, is where the individual responds to physical actions such as punishment/rewards, or in terms of the physical power of whoever enforces the rules. This level is comprised of two stages. At stage one, the

individual obeys in order to avoid punishment. For example, a student would not cheat due only to the fact that he or she may get caught (Peterson, 1986). At stage two, the individual obeys rules if they benefit him or her in some way. He or she is attempting to resolve moral situations while attaining some benefit and minimizing punishment. Elements of fairness are present, but they are interpreted in a "you scratch my back and I'll scratch yours" sort of way (Kohlberg & Hersh, 1977).

The second level in Kohlberg's theory is the conventional level. Maintaining family expectations or the expectations of another group is seen as beneficial regardless of rewards or consequences. There are feelings of loyalty and conformity to social order as well as identification with the group. Stages three and four are associated with this level. The third stage is a "good boy/girl" orientation (Pascarella & Terenzini, 1991). The individual judges morality based on the interpretations of others. There is conformity to the behavior of the majority, as well as a need for approval. The fourth stage is an orientation toward authority, rules, and social order. The individual's approach to morality during this stage is like a soldier's creed, where personal values are aligned with the duty values of society. Showing respect for authority, doing one's duty, and maintaining order are seen as important. This stage differs from stage one in that an underlying social order is the motivation in stage four, not simply a fear of what the authority might do.

Kohlberg defined the third level of moral development as the postconventional level. At this point there is a real effort by the individual to define personal moral values apart from any group. This level also has two stages. Stage five is where the individual

embraces the sense of right and wrong that has been agreed upon by the whole society. This has been described as the "official" morality of the American government (Kohlberg & Hersh, 1977). Agreements and contracts are seen as moral documents. The final stage (stage six) is where the individual forms truly personal morals. Equality, human rights, and respect for human dignity take precedence, and conscience guides actions. It has been hard to prove the existence of this stage, however, since no one (with the notable exception of Martin Luther King) seemed able to attain it in Kohlberg's studies (Kohlberg & Hersh, 1977).

There are several characteristics of Kohlberg's theory, which have been identified by others, that are worthy of note. The first is the fact that Kohlberg's theory constitutes a structured hierarchy which assumes that every individual at the same stage of development will exhibit consistent thinking (Walker, 1988). Another is the idea that all of the stages are "fixed." Individuals may spend varying amounts of time at different stages or may not attain all stages, but no one will skip a stage or stages on the way to moral development (Evans, et. al., 1998).

Gilligan's theory of development is a response to Kohlberg's model. In it she concludes that development theory has not taken into account the concerns and experiences of women. In the past, when women were analyzed using instruments fitting Kohlberg's theory, women scored at lower stages of development than men (Pascarella & Terenzini, 1991). Gilligan argues that women's concepts of self and morality are underrepresented in the major development theories. She feels the discrepancies in

development between the sexes are due to conceptually biased models, not to any actual disparity. Gilligan (1977) claims that

The men whose theories have largely informed the understanding of development have all been plagued by the same problem, the problem of women, whose sexuality remains more diffuse, whose perception of self is so much more tenaciously embedded in relationships with others and whose moral dilemmas hold them in a mode of judgment that is insistently contextual...The solution has been to consider women as either deviant or deficient in their development. (p. 34)

There is support for Gilligan's assertions from Freud and Piaget. Freud found that women's experience is influenced by feelings and emotions and that their ethics are different from men. Piaget uncovered differences in the sexes in childhood play (Evans, et. al., 1998). He found that girls were less structured than boys when establishing rules. Gilligan asserts that women are less structured in the sense that they emphasize relationships and care-giving in their moral decisions and not necessarily universal justice. This is the crux of the difference between Gilligan's model and Kohlberg's model, which is based on a goal of universal justice (Evans, et. al., 1998).

Gilligan's model of development in women includes three levels, each of which is separated by a transition period. The first level is an "orientation of survival," where the individual is unable to see a difference between personal decision and a moral alternative. The decision is the moral choice, and selfishness is the rule. At this point growth can occur if a problem forces the woman to seek another moral choice. The first transition occurs when the woman moves from a selfish perspective to a more responsibility-based perspective. Gilligan offered as an example of this transition a woman contemplating abortion who sees the child as a large responsibility and not just an object of personal

gratification. The second level of Gilligan's model is characterized by the individual placing connection with the group and consensus above personal moral judgments. Social acceptance and a desire to avoid hurting others is the motivation. The second transition occurs when the woman begins to see her own needs as more than just selfishness. She begins to question if she can include her own needs within her moral framework of care and concern for others. She debates the issue of selfishness vs. responsibility to self. According to Gilligan, a woman at this time can face the dilemma of choosing between morality and survival since at this point she begins to examine the logic of self-sacrifice as compared to the morality of giving care (Gilligan, 1977). The third and final level is attained when the woman embraces a moral obligation to avoid violence. At this stage, the individual has gained respect for herself. The internal debate between selfishness and responsibility disappears, and the woman now sees a moral equality between herself and others.

Gilligan argued that this theory more accurately represents women due to the differences in gender development. She called for further research in the field of human development to take into account the specific constructs in which women find themselves.

Perry's model of intellectual and ethical development, Kohlberg's model of moral development, and Gilligan's "different voice" model have elements in common. They all seek to explain the underlying structures in the mind that people use to make moral decisions and develop meaning. All three models are based upon Piaget's original work, which sought to understand intellectual development. All three theories seek to identify

how people think. Also, the theories are alike in that they do not see development occurring in a linear fashion. They postulate that there is a hierarchy to the stages but that the time between stages varies. Further analysis of these theories reveals more complex, underlying similarities. Each of them can be broken down into three major phases of development. In Perry's model these are dualism, multiplicity, and relativism. In Kohlberg's model they are preconvention, conventional, and post-conventional. In Gilligan's they are survival, goodness, and nonviolence.

Synthesizing the ideas of Perry, Kohlberg, and Gilligan provides a more comprehensive view of human development: (1) Dualism (Perry), Preconventional (Kohlberg), and Survival (Gilligan) - The individuals' moral construct at this point is not complex. It is an egocentric view requiring little contemplation. Decisions are made which do not account for multiple views. Individuals seem unable to "see" more than just a narrow perspective. An example of this is the woman in Gilligan's study of adolescents contemplating abortion. When asked if she had made the right decision, one woman answered that "there was no right decision because I didn't want the baby" (Gilligan, 1977). In Kohlberg's theory, the individual's moral construct is equipped to deal only with punishment and rewards. In Perry's model, the person can think only in terms of right/wrong, black/white. (2) Multiplicity, Conventional, and Goodness - At this point the individual's mental construct is able to take others' views into account. However, individuals at this stage have not developed to the point where they can *choose* a view. They seem content to adopt group expectations (Kohlberg), group consensus (Gilligan), and others' viewpoints (Perry). (3) Relativism, Post-Conventional, and Nonviolence - It

is at this point where the individual's moral construct has developed complexity. The person now has a construct capable of "seeing" multiple points of view and using them to make personal decisions. The individual is more flexible and less rigid in moral dilemmas and is able to adapt decisions according to context.

There are also differences between the three theories. In each theory the focus of the model in regard to development is different. Perry's model tends to focus on identity formation, Kohlberg's on universal justice, and Gilligan's on care-giving/relationships. An example of this difference in focus can be seen if we consider a college student who caught a fellow student cheating on an exam. In Perry's model, the individual would take his or her personal views of the world into account when making a decision. In Kohlberg's model, the individual would make a decision based on a belief that everyone seeks the same good, that cheating is wrong even if there might be mitigating circumstances. In Gilligan's model, the decision would be based on relationships and care, which are central to resolving an issue such as this in a woman's mind. A woman might take more into account how her decision could affect her or others' relationships with the person cheating. She might also be more responsive to any mitigating circumstances.

Finally, the similarities and differences within these three models are representative of all cognitive-structural models. While the motivation for developing moral constructs may vary with the individual, the structure in the mind that results is the central focus.

Attempts to Adapt Development Theories to Teaching

Oja (1990) attempted to adapt developmental stage theory to how teachers acquire knowledge of the profession. She proceeded on the assumption that a developmental theory perspective would provide understanding of how teachers assimilate new information and implement new teaching strategies. She found that teachers operating at higher levels of moral and cognitive development were more flexible and able to see multiple points of view. They were also more effective in supervisory interaction with pre-service interns and in interpersonal interaction and group problem-solving with colleagues in collaborative action research. The developmental stages teachers had reached also affected their interactions in the school setting and their involvement with peers. Oja's findings suggest that developmental theory can be used to understand the organization, principles, strategies, and change in teachers' thinking and attitudes.

Models of Teacher Development Based on Empirical Research

While teacher development can be defined as a subset of adult cognitive development, there have been empirical studies that focus specifically on the development of teachers. These models view teacher development as a progression through certain stages. Fuller viewed these through changes in teachers' concerns. Berliner (1988) viewed development through novice/expert theory.

Frances Fuller (1969) became interested in studying pre-service teacher growth while she was a teacher educator. She listened to students' complaints about the irrelevance of coursework and became interested in how she could make it more relevant. Her focus on the concerns of education majors led her to define three stages of teacher development: the self-stage, where teacher concerns are egocentric; the task stage, where concerns shift to issues such as creating effective lessons and being seen as a good teacher; and the impact stage, where the concerns become oriented towards student achievement.

Fuller and Bown (1975) found four distinct stages of growth. In the first stage, pre-service teachers identify with students rather than teachers. They have few concerns about their abilities to work with children; yet they do not appear to have developed a view of themselves as "teachers." This stage appears to be a time when ignorance is bliss. In the second stage, teachers are concerned about their personal survival as a teacher. They appear to have started contemplating what it is like to be a teacher. Issues such as class control and mastery of content are characteristic of this stage. During the third stage, teachers have concerns about their teaching performance, about limitations and frustrations of the teaching situation, and about the demands being placed on them. In the fourth stage, teachers become concerned with the social, emotional, and learning needs of the pupils.

Further research has supported Fuller's claims for a stage model of teacher development. Sitter and Lanier (1982) reported that there were common concerns among pre-service teachers. Adams (1982) concurred but determined that these concerns were

not necessarily developmental. Similar findings were reported by Fields and Reddick (1979), Katz (1972), and Furlong and Maynard (1995). All reported stages in line with the findings of Fuller and Bown. Furlong and Maynard further support Adams' findings. It appears that education majors' concerns are not hierarchical. Attainment of a previous stage is not necessarily required for progression. Also, not all teacher candidates will reach each stage or spend equal amounts of time at each.

Berliner (1988) viewed the development of teachers through increasing expertise in five stages: (1) Novices – this is a stage for learning commonplace elements of teaching. At this stage novices can use higher-order questioning skills and give praise for correct answers. (2) Advanced beginner – here teachers can recognize similarities across contexts. They can start to apply “strategic knowledge” and know when to break or follow rules. The context begins to drive behavior. (3) Competent – teachers at this stage set priorities and decide on plans. They have rational goals and choose appropriate methods to teach them. (4) Proficient – at this stage teachers start to use intuition to help in decision making. (5) Expert – here teachers have an intuitive grasp of the situations arising in the classroom, and they seem to sense what would be appropriate responses to make. Berliner's theory is not specific to teachers. His empirical data was collected by studying novices and experts in a wide range of fields.

Justifying Teacher Development Practices in Developmental Terms

The stages of teacher development have been applied to staff development programs and the supervision of teachers. In staff development there have been attempts

to match content and delivery of information to the individual's stage of development. Early stage teachers receive highly structured and directive development programs. Teachers at the later stages help to design their own staff development. Often this training is non-directive and collaborative in nature (Burden, 1990).

Glickman (1981) has suggested a model of supervision that parallels the recommendations presented for staff development. The supervisor approaches teachers at the early stages with a directive approach; he or she is explicit and assumes much of the responsibility when setting standards. When approaching teachers at the later stages of development, the supervisor is non-directive. It becomes the teacher's responsibility to analyze and solve his or her own instructional problems.

Current Understanding of the Problem

There are three themes that run through the research on education majors' conceptions about teaching. These are (1) Education majors develop concepts of the classroom early as students, (2) Education majors come to college with idealistic conceptions of the classroom, and (3) Education majors' prior conceptions can form obstacles to instruction. Kagan (1992) reviewed existing literature on the role played by preexisting beliefs and images early in a teacher education program. She reported findings consistent with these three themes.

By the time education majors start the specific training required to be teachers, they have been involved in numerous classroom experiences. Lortie (1975) proposed that

by projecting themselves into the teacher's position, children in classrooms come to imagine what teachers feel and think. This role-taking likely occurs among all students and may contribute to the idea that "anyone can teach." However, the propensity for role-taking may be especially great when the individual has already decided to be a teacher (Lortie, 1975). Calderhead and Robson (1991) studied twelve student teachers in order to better understand the conceptions they held upon entry to teacher training. The interviews he had with these students led him to state, "Students were found to hold particular images of teaching, *mostly derived from their own experiences in schools as pupils*, which were sometimes highly influential in their interpretation of the course and of classroom practice" (p. 1). The students seem to build their conceptions of teaching from episodic memories, relating to events from their personal past experience as children in classrooms. Lasley (1980) also supported the notion that education majors develop conceptions about teaching early in life. He credited schooling, along with other cultural factors, as a major influence on the beliefs of entering education majors. He stated:

Beliefs evolve as individuals are exposed to the ideas and mores of their parents, peers, teachers, neighbors, and various significant others. They are acquired and fostered through schooling, through the informal observation of others, and through the folklore of a culture, and they usually persist, unmodified, unless intentionally or explicitly challenged. (p. 38)

Gliessman (1991) studied education majors' remembrances of early childhood school experiences by having them interpret a hypothetical classroom event -- cheating. Gliessman found that how pre-service teachers viewed cheating as children impacted the way they viewed it as adults. Bird, Anderson, Sullivan, and Swidler (1993) felt that

education majors enter teacher preparatory programs as “experienced actors in the schools that they have attended.” (p. 6).

Chan (1999) analyzed the beliefs of student teachers in two Hong Kong teacher-training programs. She examined student teachers’ beliefs when they first entered the program. She discovered that pre-service teachers develop their beliefs about teaching and learning before entering their initial teacher training programs. She also found that the content of their beliefs was closely related to their past experiences. This seems to support Calderhead and Robson’s (1991) assertion: “Clearly, students start their teacher training with different ideas about teaching and about their own professional development” (p. 7). It also seems to support Calderhead and Robson’s and Lortie’s belief that conceptions about teaching are developed as children. Lasley (1980) found that pre-service teachers come to college with several idealistic conceptions about teaching. The first is that they see teaching as rewarding and fulfilling only. They do not conceive of how the difficulties of teaching can lead to dissatisfaction with teaching as a career. The second conception they have is that people who like children are effective teachers. They cite their love of children as an important predictor of their classroom success. Buchmann and Schwille (1983) believed that teaching candidates begin with loosely formulated conceptions that explain what teachers do and how children learn in classrooms. Hollingsworth (1989) thought that the conceptions education majors have at the onset of preparation serve as filters influencing how they make sense of coursework content and their roles as teachers.

The last theme to be developed is that elementary education majors' conceptions about teaching can form obstacles to instruction. Bird (1993) attempted in his course to help education majors consider alternate conceptions about teaching. He found that students were highly resistant to replacing existing conceptions with new ones. He noted how teacher education courses involve an encounter of old and new ideas in the student's mind, some derived from their experience in schools and some from their experience in the university. Bird proposes that education majors' prior conceptions provide them with what they perceive as reasonable alternatives to the conceptions presented in their coursework. These conceptions seem to be rigidly set in place, resistant to change, and cogent to the pre-service teacher. Weinstein (1990) discovered that even after a course designed to confront the realities of teaching, education majors retained their affective definitions and conceptions of good teaching. However, Joram and Gabriele (1997) found that specifically targeting prior conceptions in instruction resulted in changing education majors' conceptions about teaching. Carter (1990) discussed the powerful effects of pre-service teachers' preconceptions on their interpretations of teaching events. She presented the case of Donald, a pre-service teacher:

Viewed across the semester, Donald's early focus was clearly on his own personal reactions to teaching, and he returned to this topic regularly. He devoted little attention to topics related to classroom processes and instruction over the course of 13 weeks. (p. 23)

When Donald had a negative experience teaching, he expressed agitation, anger, and bewilderment about why things happened the way they did. He seemed unable to accommodate the new information. Hollingsworth (1989) believed that current practices in teacher education do not force education majors to face the impact of their prior

beliefs. Instead, she felt that teacher education programs are designed to capitalize on the preexisting conceptions that education majors hold, thereby ensuring that pre-service teachers turn out to be very similar to existing teachers. Teacher education courses do this by creating a learning environment that closely resembles pre-service teachers' educational backgrounds. In her dissertation, Pulver (1996) examined the conceptions held by pre-service elementary students about the teaching of mathematics. She found that their conceptions about teaching were linked to past experience. She also stated that elementary education majors "create their own patchwork of practice by working new learning into previously held beliefs rather than altering previously held beliefs" (p. 166). Kagan (1992) concluded from her review that each study documented the central role played by preexisting beliefs/images and prior experience in filtering the content of education course work.

Review of Previous Research, Findings, and Opinions

Teacher development is the context in which elementary education majors' prior conceptions of the classroom, formed as students during their K-12 experience, impact their professional development. Teacher development can be viewed through three different models: (a) adapting theories of general cognitive development to teaching, (b) attempting to justify classroom practices in developmental terms, (c) inferring a theory from empirical research.

It was necessary to identify major theories in adult development in order to: (1) better understand the college education major, and (2) better understand how adult developmental theories impact the area of teacher development. These major theories were psychosocial theory and cognitive–structural theory.

Current understanding of the problem is that: (1) education majors develop concepts of the classroom early as students, (2) education majors come to college with idealistic conceptions of the classroom, and (3) education majors' prior conceptions can form obstacles to instruction.

Other Themes – Framework

Furlong and Maynard (1995) provide the framework for this study. They found that education majors enter teacher preparatory programs with idealistic conceptions influenced by their own histories as students. They also found that education majors begin their training with the belief that they already know most of what they need to be a teacher. The findings in the literature support Furlong and Maynard's contentions that education majors develop concepts of the classroom early in life as students, and that they start college with idealistic conceptions about teaching which have been reinforced through years of watching teachers. These conceptions then form obstacles to learning from coursework.

Review of Methodologies

Most of the studies cited regarding education majors' prior conceptions were based in a qualitative research paradigm. Their purposes were to explain and gain insight into education majors' beliefs, conceptions, attitudes, and 'ways of seeing' the classroom. Hypotheses were tentative and evolved as information was gathered. Many studies were conducted in "naturalistic" settings. They used rich descriptions to explain their findings and acquired an in-depth understanding of a few participants. Most used interviews as a mode of data collection. Furlong and Maynard (1995) used the principles of progressive focusing. Their empirical study was informed by the literature throughout the data collection.

Evaluation of the Literature

Summary of the Review

The previous findings paint a picture of how elementary education majors' prior conceptions of the classroom, formed as students during their K-12 experience, impact their acceptance of teacher education curriculum. The literature on college student development describes a body of individuals who are in the middle of a transition into adulthood. They are undergoing changes in cognitive, ethical, and moral reasoning. Within this set are education majors. While they are experiencing many of the same choices and concerns relative to their college peers, they also face specific fears, training,

