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[Signatures and dates]

Final approval and acceptance of this dissertation is contingent upon the candidate's submission of the final copy of the dissertation to the Graduate College.

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ABSTRACT

The following study addresses the present theories on reflection in teaching, and attempts to locate this reflection in practice. Through analysis of "bumpy moments" in teaching, the study describes teacher reflection as it actually occurs in the classroom context. The following research questions were designed to examine practicing and preservice teachers' perceptions and reflections on "bumpy moments" in teaching and determine the similarities and differences between the two: 1) What do teachers and preservice teachers consider to be "bumpy moments" in their teaching or observation of teaching?; 2) What do teachers and preservice teachers think about when faced with a "bumpy moment" in teaching?; 3) What kinds of knowledge or beliefs do teachers and preservice teachers bring to the "bumpy moments," and where did they come from?; 4) How does the teacher resolve the difficult task of making decisions instantaneously within the classroom context; and what did the preservice teacher observe the teacher doing?; and 5) What are the implications of each "bumpy moment" on a teacher's or preservice teacher's thinking about future decisions and teaching practice? These research questions were addressed through the identification of "bumpy moments" during a specific period of teaching, and a comparison of the moments identified by both the practicing teacher and the preservice teacher. Interviews were conducted to gain insight into the factors, thoughts, understandings, knowledge, actions, and possible impact of each "bumpy moment" identified.

Through an analysis of the "bumpy moments" identified by both the practicing and preservice teachers, several important findings emerged about the similarities and differences in the types of "bumpy moments" shared by
the two groups of participants. Further, differences in the practicing and preservice teachers' thoughts, knowledge and beliefs brought to each moment give further insight into how teachers at varying stages of their development might experience these classroom events. Increased understanding of how preservice teachers interpret these moments may provide Teacher Educators with insights for developing programs that encourage teacher reflection.
INTRODUCTION

Teaching is a highly complex activity, in which many things happen at once. Amidst the continuous activity, there are moments in teaching that require teachers to make immediate decisions about how to respond to a particular problem in practice. When faced with such a decision, the teacher must engage in reflection to consider all the factors, develop possible solutions, weigh the consequences, and make a decision based on this reflection. However, many decisions and reactions are made instantaneously because teaching rarely “freezes” so that we may carefully reflect and choose our next course of action. As Eby and Kujawa (1994) suggest, “Teachers face a continual stream of questions that need immediate responses, decisions that affect the well-being of their students, value judgments that my conflict with others’ points of view, and complex problems that need elegant solutions” (p.2). However, teaching requires an immediate response, and the consequent events of the classroom are contingent upon that response. The following is a qualitative study of four practicing teachers and four preservice teachers and their identification and reflections on these types of moments in teaching.

Background and Rationale

During the first day of my second year of teaching, I was faced with a moment that required me to deeply reflect on several issues and carefully choose an appropriate course of action while my first grade students sat there and waited for my response. This led me to define a term called “bumpy moments” in teaching. To best illustrate a “bumpy moment,” I will now
present the story of this moment:

In my second year of teaching, I was offered a position at the school where I had student taught. The position was unique because the school year had already begun when I was hired. The first grade classrooms were overcrowded, and approximately six students were moved from each existing classroom to my classroom. The arrangement was made to allow the students to be in smaller classrooms and receive individual attention. Because the students had already been in their first classroom for three weeks, the parents were called and asked to give permission for their child's transfer.

Although some parents were accepting, many had reservations about their child switching classrooms. Some parents worried that their child was already too attached to their current classroom or teacher. Others were concerned about their child being able to adjust to a new room, finding new friends, and learning new rules and procedures. Most importantly, some parents were worried about me. They wanted to know who I was, how I would treat their children, if I would teach the same curriculum, and if I was a good teacher. Quite frankly, many parents did not trust me. They felt that I did not have enough experience, and that I would not be as effective as the other teachers who had been at this school for many more years.

The calls were successful in gaining eighteen students for my new classroom, but I could feel the pressure already. After all, these parents had agreed to let their child transfer to my classroom and I knew that I had expectations to fulfill. Along with parent expectations, I knew that I had an obligation to create a classroom environment for my new students that would make them glad that they had transferred
to my classroom. I felt it was essential for my students to like me. If I could build a strong rapport with my students, it would lead to an easier transition and a secure learning environment.

With these intentions in mind, I very carefully planned a first day that would hopefully make my students feel welcome, feel at home, and feel that my classroom was a great place to be. I wanted to alleviate their potential fears of a new classroom and teacher, and just have fun on their first day. As one of the very first activities, I planned to read them a story. Most first graders enjoy story reading, and I chose what I considered to be a humorous story with an implicit meaning. The story I chose was *The Teacher from the Black Lagoon*. In this story, a young boy hears a rumor that his new teacher is a real monster. While he is waiting for his new teacher to arrive, he imagines that a monstrous teacher slithers in and scratches her name in the blackboard with her claws. She’s mean, unreasonable, gives too much homework, and turns one kid into a frog. When the school bell rings, the boy wakes from his daydream. He looks up to find his new teacher, who is a pretty woman, writing her name on the blackboard. He is so excited to find his new teacher is not a monster that he jumps out of his chair, runs up, and hugs her.

I read the story to my new class and hoped to engage them in discussion about the meaning. We talked about how I was the new teacher, and how it may be scary because they didn’t know me yet. I told them I wasn’t a monster and hoped they would be happy like the boy in the story was. I wanted to give them a chance to talk, so I asked them other questions about the story. One of the questions I asked was, "If you came in this classroom and found the Teacher from the Black
Lagoon, what would you do?" I entertained some clever ideas and asked for more. I called on one boy who had raised his hand to answer. He said, with confidence, "I would kick him in the _______." Many students laughed, but most of them turned their attention directly to me to see how I would handle this situation.

I believe that teachers face such dilemmas on a daily basis. These moments may not be as dramatic as the one mentioned above because there were several factors that were unique to this moment. However, when I share that story with teachers or professors that I have worked with, almost every one of them has at least one similar story to share with me. Very rarely do teachers get a chance to share such stories and the process of reflection that takes place when such a moment arises during teaching. The moment, along with the reflections, are lost in the on-going activities in the classroom.

Identification of this notion of a "bumpy moment" in teaching led me to conduct a self-study of the "bumpy moments" in my teaching practice (see Romano, 1995). During the first semester of the 1994-1995 school year, I continuously tape-recorded the events and sounds in my classroom for twenty-five days. I used the tape recording to recall moments that I might consider to be "bumpy" during each day. A "bumpy moment" was described as: A moment in teaching that requires a teacher to engage in reflection to make an immediate decision about how to respond to a particular problem in practice. The problem is not easily solved for any number of reasons, has importance to the teacher, and is perceived to have future implications or possibly have an effect on the students in the classroom.

Every night, I reviewed and analyzed the tapes for "bumpy moments" and wrote stories (see Carter, 1993) about these moments. As I wrote the
stories, I attempted to recall and record all the details of my unseen reflection and decision-making processes. I also attempted to recall my thoughts and feelings as the event was occurring, unique factors that gave the event importance, a description of previous events that led to this event, and an attempt to explain my personal beliefs and philosophies that led me to a certain action. Finally, I added whether the "bumpy moment" was ever resolved, as well as things I had learned or discovered from the event. The stories were then analyzed for content and themes that might address the questions proposed: a) What do teachers think about when making such a decision during a "bumpy moment" in teaching?; and b) How does the teacher resolve the difficult task of making important decisions spontaneously?

In the twenty-five days of data collection, I found twenty-eight "bumpy moments" in my teaching. The number of "bumpy moments" on each day varied, from three in one day to five days without any "bumpy moments" identified. On seven days I recorded more than one moment. Analysis of these "bumpy moments" indicated that I had categories of "bumpy moments" determined by the central issue in each story. The twenty-eight "bumpy moments" fell into the following categories: Management, Parents, Not Prepared, Line Up, Special Events, Disruptions, and Recess. I conducted further analysis on the amount of each type of "bumpy moment," days without "bumpy moments," and what days of the week these moments tended to occur.

Careful analysis of each category allowed me to take a closer look at my reflective practices and begin to determine the nature of my reflections. I was able to determine different types of thoughts that I typically had while being faced with a "bumpy moment." I also found that I took various measures to remedy the situation, and my actions ranged from doing nothing
to taking ten actions to resolve one "bumpy moment." I then examined
whether these moments were ever resolved. Although I was satisfied with the
outcome of several moments, I was usually left with opportunities for further
reflection and analysis of the issues involved.

Although this study only described one teacher's look into her own
teaching and reflections on "bumpy moments," it did provide insights into
how we might capture the details of a teachers' unseen reflections. Through
the recording and analysis of the "bumpy moments" in my teaching, several
important findings emerged about the nature of reflection and how reflection
actually occurs in the classroom context. The amount of "bumpy moments"
found supports the notion that teachers face days with such problematic
moments more often than not, and that these moments occur on a continual
basis.

Broad overview of Research Issues on Teacher Reflection

The large body of research on Teacher Reflection supports the notion
that reflection is essential in teaching practice. Recent discussion about
reflective practice began with Schon's notion of The Reflective Practitioner
(1983). Schon asserts that reflection begins with a problem that the
professional encounters in practice and attempts to solve. Although many
researchers such as Schon maintain that reflection is inherent in the
practice of teaching (Russell & Munby, 1991; La Boskey, 1993), they are less
certain about how it can be located and documented in practice. Many studies
observed teachers immediately following an observed lesson (Russell &
Johnson, 1988; Borko, Bellamy & Sanders, 1992: Baird, 1992). These studies
concluded that reflection is not easily detected and challenging to document.

Several studies have attempted to capture the reflective processes, yet
few have been able to identify how reflection looks during actual teaching episodes. It can only be suggested what this reflection looks like. For example, Copeland, Birmingham, De La Cruz, and Lewin (1993) propose that the reflection process begins once an anomaly occurs in the teaching practice. Such an anomaly would constitute the beginning of what I have described as a "bumpy moment." They suggest that the teacher engages in a reflective process to assess the situation based on past experiences and analysis of the present conditions. Through careful reflection, a decision is made about how to respond to the particular problem in practice.

Although there continues to be much uncertainty about what reflection is and how it can be located in practice, many researchers have proposed models for reflective teacher education (Bernstein-Colton & Sparks-Langer, 1993; Richert, 1990; Zeichner & Liston, 1987; Korthagen, 1988; Pugach, 1990; Baird, 1992). Although reflection is an essential goal in these programs, it takes for granted that every person is willing or able to engage in meaningful reflection. Reflection can only occur if the individual is willing to take an active part in self-evaluating and recognizing possible weaknesses in his or her teaching. Furthermore, Connelly and Clandinin (1990) assert that teacher education should not be viewed separately from the on-going lives of teachers. Thus, understanding how a preservice teacher or teacher reflects must include a person's past and present experiences, as well as how it might affect his or her decisions in the future.

Contribution of this study

The following study addresses the present theories on reflection in teaching, and attempts to locate this reflection in practice. Through analysis of "bumpy moments" in teaching, the study describes teacher reflection as it
actualy occurs in the classroom context. Identification of the many “bumpy moments” in teaching would support the notion that teaching is not prescribed practice. Rather, teaching is a reaction to the unique and on-going events of a classroom. For every situation, there are several ways it may be handled, depending on the teacher, the factors, and the complexity of the situation.

"Bumpy Moments" of Other Teachers

In this study, I moved from the self-study to elicit the “bumpy moments” of other teachers. I examined a range of teachers from first to sixth grade teaching placements to see what types of moments they are faced with during their teaching experiences. Furthermore, I sought to gain an understanding of their reflections, decision-making processes, and interpretations of such events and how it impacts their future practice. Through identification of “bumpy moments” in their own teaching, and participation in an interview geared at understanding these moments more deeply, it was my hope that we might be able to gain further insight into the “bumpy moments” that teachers face and their reflections in a complex classroom setting.

It was presumed that the teachers who choose to participate in this study might also learn a great deal by analyzing the issues and occurrences during their teaching. When I was conducting my self-study, I was allowed the opportunity for further reflection on reoccurring issues in my classroom. I also gained a deeper understanding of how my personal beliefs and philosophies impacted my teaching. Closer examination and more thorough reflection on “bumpy moments” in teaching may provide the teacher with the necessary time to consider alternatives that may lead to changes in his or
her teaching practice. This may add a component to research base on teacher reflection as it addresses how teachers might describe their personal reflection in practice and learn from their experiences.

Comparison of Practicing Teachers and Preservice Teachers

An additional component of the study includes having preservice teachers share their reflections about the “bumpy moments” that they see during a period of classroom observation. One preservice teacher was paired with each practicing teacher and the “bumpy moments” that each participant identified within a specific period of time were compared. The preservice teachers were completing the first required course since admission to the College of Education, called Teaching and Teacher Education 300 (TTE 300): Classroom Processes and Instruction. This is their first required observation in schools, although some of them had previously spent time volunteering prior to the study. Thus, it was presumed that preservice teachers' previous experiences with teaching would vary.

I chose to examine the reflections of these preservice teachers to offer a comparison between how practicing teachers and preservice teachers make sense of “bumpy moments.” As Lortie (1975) suggests, preservice teachers bring with them a wide set of beliefs and preconceptions about teaching based on their ‘Apprenticeship of Observation’ during their schooling experience. Carter (1994) found that basic knowledge and beliefs are accumulated early and that these preconceptions are shaped and refined during and throughout a teacher's career. Several studies have attempted to examine and compare expert and novices and their knowledge about classroom events (Borko & Livingston, 1989; Carter, Sabers, Cushing, Pinnegar & Berliner, 1987; Carter, Cushing, Sabers, Stein & Berliner, 1988; Copeland, Birmingham, DeMuelle, D'Emidio-Caston & Natal, 1994). Although
these studies were all different in the task or assignment that the participants were engaged in, they offer some insight into the different ways that novices and experts experience and understand classroom events.

More recent studies have sought to examine novice teachers' interpretations of teaching events as they embark on the teaching profession. Using Well-Remembered Events (for a complete description see Carter, 1994) as a vehicle for discussion about classroom events, diversity has been found among novice teachers. Additionally, Carter and Gonzalez (1993) compared two student teachers who formed different understandings of their experiences and followed very different conceptual paths in learning to teach. This indicates that learning to teach is not a unitary or homogeneous process. This study may lead to further insights about the diversity of preservice teachers and how they come to understand classroom processes. It can also offer a comparison between preservice teachers and practicing teachers through their identification and interpretations of the "bumpy moments" in teaching.

**Implications for Teacher Education**

Stories about the "bumpy moments" in teaching might be used as vehicles for novices to understand how reflective practice is essential to teaching. Novices might be introduced to the many factors that are taken into consideration during actual teaching episodes, and begin to see how a teacher resolves these dilemmas and makes decisions during teaching. As Brophy and Good (1986) assert, effective teaching involves selecting and orchestrating teaching behaviors appropriate to context and teacher's goals, rather than mastering a set of prescribed skills. Carter (1988) agrees that how teachers understand classroom events is a valuable resource for teacher education.
Importance lies in understanding what teachers know and how their knowledge is organized for use in solving classroom dilemmas or problems.

Increased understanding of how preservice teachers interpret these moments may provide Teacher Educators with insights for developing programs that encourage teacher reflection. Through the descriptions of "bumpy moments," seen both through the eyes of practicing teachers and preservice teachers, novices may begin to see teaching as complex activity. This may help them better prepare for the practice of teaching, realizing that it is not prescribed practice. They too may begin to reflect on the complex issues that are presented in each teaching episode.

Research Questions

The following research questions were designed to examine teacher and preservice teachers' perceptions and reflections on "bumpy moments" in teaching and determine the similarities and differences between the two:

1) What do teachers and preservice teachers consider to be "bumpy moments" in their teaching or observation of teaching; how do they differ and how are they similar?

2) What do teachers and preservice teachers think about when faced with a "bumpy moment" in teaching; how do they differ and how are they similar?

3) What kinds of knowledge or beliefs do teachers and preservice teachers bring to the "bumpy moments," and where did they come from; how do they differ and how are they similar?

4) How does the teacher resolve the difficult task of making decisions instantaneously within the classroom context; what did the preservice teacher observe the teacher doing?
5) What are the implications of each “bumpy moment” on a teacher's or preservice teacher's thinking about future decisions and teaching practice; how do they differ and how are they similar?

These research questions were addressed through the identification of “bumpy moments” during a specific period of teaching, and a comparison of the moments identified by both the practicing teacher and the preservice teacher. Interviews were conducted to gain insight into the factors, thoughts, understandings, knowledge, actions, and possible impact of each “bumpy moment” identified. Further description and projections for analysis can be found in the methodology chapter.
LITERATURE REVIEW

Little is known about how teachers assess classroom activities and tasks. One might presume that the recent research on "Reflective teaching" would shed some light on a greater understanding of teacher self-assessment. However, the term of "Reflection" in education is widely used, and difficult to define. There is a multitude of ideas regarding what reflection is, how it can be located in practice, and how it might be taught or encouraged. The abundance of literature on reflection creates the assumption that it plays an essential part in education, yet it is important to gain insight into what part it plays, and what importance it may have to the education of future teachers.

I begin by addressing the proposed definitions of reflection. Next, I present research concerning how reflection can be located in practice, or what reflection might look like. The third, and most extensive body of research, addresses how reflection might be taught or encouraged in experienced and student teachers. The second part of this paper presents conclusions to the research, along with questions that were raised by the articles. The importance of motivation and personal reflective nature, in both practicing and preservice teachers is also discussed.

What is Reflection?

The research on reflection presents several different views about the definition of this term, yet many argue that it is an inherent part of professional practice. Recent interest in reflection as a part of professional practice was inspired by Donald A. Schon's notion of The Reflective Practitioner (1983). According to Schon, there is a professional knowledge which guides our actions. He proposes that, "Often we cannot say what it is we
know...our knowing is in our action” (p. 49). Thus, a professional knows more that he or she can say; and makes numerous judgments that guide his or her actions.

Schon suggests that professionals not only think about doing something, but they can also think about doing something while they are doing it. This process, ‘Reflecting on Action,’ “tends to focus interactively on the outcomes of action, the action itself, and the intuitive knowing implicit in the action” (p. 56). In this process, a repertoire of expectations, images, and techniques is developed as the professional “learns what to look for and how to respond to what he finds” (p. 60). The reflection that Schon describes begins with a problem that the professional encounters and attempts to solve. The professional imposes a frame on the problematic situation and “draws on familiar repertoire which he treats as exemplar or as generative metaphor for the new phenomena” (p. 269). Once the problem has been framed, he or she formulates and tests the new hypothesis.

In his later work, Donald Schon (1991) provides examples of reflection in a book of fourteen case studies. The cases were presented by different authors in diverse practice settings. The contributors attempted to find sense and understanding in someone else's practice by observing, describing and exploring the actions of each practitioner. Many authors maintain Schon's idea that reflection is inherent in the practice, and thus, reflection is difficult for a researcher to detect or capture. Bamberger (1991) shares her findings on reflection by posing a question: “Reflecting is at best an on-the-spot action, a knowing response to an immediate situation; but more often than not, the knowing along with the moment of reflecting disappear, transparent to and absorbed into their effective result. How, then, do we learn to recognize, even to see, ‘reflective practice’?” (p. 37).
Similarly, Partlett (1991) found that professionals are reluctant, if not unable, to share how they reflect. For example, he asked teachers how certain students were identified for special education needs and the typical responses were: "I can't give you a list- you look at a child and see his needs," or "Based on 25 years of experience, I know what these kids are like" (p. 213). He asserts that with experience and time, these skills and judgments have been integrated into the professional's repertoire. Furthermore, Russell and Munby (1991) agree that many professionals learn to teach through experience. They suggest, "Ask any teacher or professor, 'How did you learn to teach?' as likely as not, the response will be 'by teaching' or 'by experience,' and little more will follow as though the answer were obvious and unproblematic" (p. 164).

Russell and Munby (1992) address questions concerning teaching and reflection in their book, *Teachers and Teaching: From Classroom to Reflection*. The authors recognize that there are many different meanings of reflection, yet find the overall term productive as "It encourages us to think deliberately about our work and search for productive frames" (p. 8). In this book, Barnes contends that teaching requires constant thought, judgment, and reflection. He maintains that intuitive judgment plays an important role in the act of teaching, yet reflection on these intuitions can help sharpen and improve teaching skills. Although experienced teachers have developed strategies for dealing with the signs and signals of the classroom, Barnes believes that teaching is a balance between these strategies and reflection following the teaching act. He suggests that, "Teachers' work in its very nature leaves little time for thought, for success depends upon a rapid choice from a well-practiced repertoire" (p. 25). However, Barnes suggests that during a lesson the teacher is also engaging in reflective thought. "The
teacher is necessarily establishing priorities, unconsciously balancing possible successes and costs" (p. 9).

Furthermore, Barnes, Britton and Torbe (1990) recognize the importance of reflection in teaching with the following statement:

Teaching is a highly skilled activity which requires of the teacher an immediate response to events as they develop. He or she must attend not only to long-term goals but also to the urgent details of individual pupil's participation in the lesson. The teacher must judge instantly whether the moment requires a suggestion, an invitation to explain, a discouraging glance, an anecdote, a joke, a reprimand, or the setting of a new task. These immediate decisions depend necessarily upon intuitive judgment (p. 8).

Thus, many maintain that reflection does play an essential role in teaching. However, there is little agreement regarding how reflection can be located in teaching, and what reflection looks like.

One of the closest descriptions of reflective practice in teaching comes from Copeland, Birmingham, De La Cruz, & Lewin (1993) who undertook a project to develop a description of what reflective practice in teaching might look like. They present the following twelve critical attributes of reflective practice in teaching:

1. A problem (a situation in which there is doubt, uncertainty, hesitation or challenge) is identified.
2. The problem derives from a concrete situation in practice.
3. The problem, by whomever it is identified, has meaning for the practitioner.
4. The problem can be said to be one of import for successful
teaching or learning in the context in which it is identified.

5. Possible solutions to the problem are generated—"Solutions may come to mind quickly and almost automatically, or they may be the result of more deliberate seeking" (p. 352)

6. Solutions are generated from or are grounded in theories, assumptions, or research findings which are explicitly held and understood by the practitioner.

7. The generation of solutions engages the teacher in a critical examination of his or her own professional actions and its link to target actions in others.

8. The solutions sought are expected to have positive consequences in terms of student learning.

9. A solution to the problem is selected.

10. The chosen situation is implemented.

11. The solution is weighted as to its effects on the target actions and the consequences of these effects in terms of student outcomes.

12. The reflective process leads to an enhancement of the teacher's understanding used to give meaning to the professional context in which the problem is identified.

Although these steps seem accurate in terms of how I found that I personally engaged in reflection during my self-study, their work is not grounded in research. These attributes are presented as suggestions, and they realize that further research is needed to see if and how these critical attributes are indeed indicators of what reflective practice looks like during the act of teaching.
Locating Reflection in Practice

Many researchers have contributed studies in an attempt to identify and understand reflection in professional practice. In 1988, Russell and Johnson conducted a study to propose how teachers may learn from the actions of teaching. Fifteen teachers were interviewed following a period of classroom observation. One teacher in the study, who is in her second year of teaching, might serve as an example of how experimentation and reflection may lead to a new perspective on teaching. She illustrates how her experiences have led her to an awareness of problems and how she might address the situation. She also exhibits a type of continuous reflection in which she is questioning herself and her actions.

A few years later, Russell and Munby (1991) once again discuss the results of the interviews with beginning, preservice and experienced teachers (see Russell and Johnson, 1988). Russell and Munby selected two teachers and presented insights into their reflective teaching. The first teacher was Diane, who had been teaching for twelve years in the elementary grades. Observations of Diane showed that she reflected on how her teaching methods were functioning to help her students learn. She showed flexibility in her teaching strategies and perceptions. The second subject selected for study was Roger, who had six years of experience with junior high and gifted students. Russell and Munby suggest that Roger is an example of someone who was “reluctant to alter his belief... but, by being open to the events of his classroom and the views of others, he has a new, broader frame for his teaching strategy” (p. 178). Interviews with Roger show that he steps back during a lesson and evaluates how both the students and the teacher are performing. Although Russell and Munby found examples of reflection in both of these teachers, they concluded that “reflection-in action is difficult to
detect and challenging to document (p. 185).

Many researchers are interested in the reflection of student teachers, especially in comparison to experienced teacher reflections. For example, Borko, Bellamy, and Sanders (1992) conducted a study of the patterns in expert and novice teachers' thinking and actions. In the study, they provided case descriptions of secondary science teachers and the student teachers assigned to them. Following a week of observations and interviews, the researchers searched for patterns in the experts' thinking. Both experts exhibited a high awareness of reflection with respect to evaluating a lesson in progress. Next, the authors searched for patterns in the novices' teaching. One student teacher recognized her inability to plan effectively, yet realizes that this skill must come with experience. During the lesson, she demonstrated flexibility when something unexpected occurred, and used the incident as an additional teaching opportunity. When discussing what she might change for the next day, she offered classroom management ideas. On the other hand, the second novice teacher demonstrated less awareness and flexibility, even though his students were having difficulty with the lesson. Although Borko, Bellamy and Sanders conclude that there is still much to learn about the differences between expert and novice teachers, the study does provide some insight into teacher thinking.

How might reflection be taught and encouraged?

As Calderhead (1989) states, "The term 'reflective teaching' "has been interpreted and defined in numerous ways, with contrasting implications for the design of teacher education program" (p. 43). In order to gain insight into reflective practices and what role reflection might play in teacher education, several teacher educators met for a working conference in October
1987. As a result of the conference, which was sponsored by the University of Houston, the United States Department of Education, and the Office of Educational Research and Improvement, participants produced written work about reflection in education. The end product was a book entitled Encouraging Reflective Practice in Education: An Analysis of Issues and Programs (Clift, Houston & Pugach, 1990). In this book, Richardson asserts that reflection in education is gaining popularity, yet remains relatively undefined. She asks, “Schon’s is a descriptive concept, quite empty of content... On what are teachers to reflect?” (p. 14). Grimmett, MacKinnon, Erickson, and Riecken also question the surge of interest in reflection. Their concern is that reflection presents a diversity of meanings and assumptions, most of which continue to be unclear, yet “teacher educators seem to be persuaded that reflection (however they understand and operationalize the term) is a worthy aim in teacher education” (p. 22)

Existing Programs

Much of the research concerning how reflection might be taught or encouraged assesses existing teacher training programs which are oriented toward the goal of producing reflective teachers. Zeichner and Liston (1987) offer a description and assessment of the teacher education program at the University of Wisconsin, Madison. The program, which is oriented toward the goals of reflective teaching, serves to educate elementary student teachers. The goal of this program is to “develop in student teachers those orientations (toward open-mindedness, responsibility, and wholeheartedness) and skills (of keen observation and reasoned analysis) which lead to reflective action” (p. 24). The program also addresses the development of technical skill in teaching, yet it is also emphasized within the context of reflective action.
There are five curricular components that comprise the University of Madison's student teaching program (p. 30). The first component is the teaching component. The teaching component ensures exposure to all aspects of the teacher's role in and out of the classroom. Inquiry is the second component, in which outside observations and studies help student teachers understand the culture of their classroom and school. Third, seminars taught by the university supervisors encourage broader perspectives on teaching by considering rationales for pedagogy. Journals are kept by the student teacher to record their reflective development over the semester. Finally, student teachers and the university supervisors engage in conferences following formal classroom observations. Zeichner and Liston claim that the critical difference between this program and other teacher education programs is that this program has a broad definition of the teaching role, and an emphasis on curriculum development. Furthermore, the program encourages student teachers to "reflect systematically about their development as teachers, their actions in the classrooms, and the contexts in which their classroom actions are embedded" (p. 34).

However, Zeichner and Liston conceded that the program achieves only some of its goals. They believe that the difficulty lies in establishing legitimacy of inquiry and reflection along with the development of knowledge and skills. The authors feel that "a great deal of inconsistency exists between the role of teacher as professional decision maker, a role our program encourages students to assume, and the dominant role of teacher as technician, one our society and its institutions seek to maintain" (p. 43). For a program to be truly inquiry-oriented, Zeichner and Liston maintain that the staff, curriculum and institutional environment must also possess reflective qualities, and work towards continual improvement.
Korthagen (1988) believes that "preservice education should promote the ability of prospective teachers to reflect on their teaching as a means of directing their own growth and development in the teaching profession. When teachers ask themselves how to respond to a given classroom situation, it "must be related to questions about the why of the situation... why do I react in a particular way, etc." (p. 35). In his article, Korthagen describes a teacher education programme based on the reflective teaching principle. The programme takes place in a teacher's college in The Netherlands called the Stichting Opleiding Leraren (SOL). The reflective teaching principle is introduced in a 5-stage cycle (p. 37). The students are taught to trace their progress through the stages which include: 1) the action; 2) looking back on the action; 3) awareness of essential aspects; 4) creating alternative methods of action; and 5) trial of a new action. The fifth stage indicates the start of a new cycle. Students use reports or logbooks to describe and reflect upon their experiences using this cycle. Results of the study indicate that the program is successful for students who "prefer to learn in an active and reflective way, while the existence of other learning orientations is barely acknowledged" (p. 48).

Baird (1992) discusses results of two research projects to illustrate how collaborative reflection and systematic enquiry will lead to improvement in the quality of teaching. The first project is the Project for Enhancing Effective Learning (PEEL) in which 70 teachers and 1000 junior high and high school students researched together. Teaching and Learning Science in Schools (TLSS) incorporated 20 science teachers with the same amount of students. Although the PEEL project began in 1985 and continues today, the TLSS project lasted only from 1987 to 1989. The two projects concentrate on the Reflective process, which Baird describes as: 1) asking evaluative
questions; 2) selecting procedures to answer these questions; 3) evaluating results; and 4) making appropriate decisions (p. 39). Baird was interested in teacher improvement that derived from "increased attention to conscious, purposeful reflection before, during or after the teaching event" (p. 40).

Baird shares the results of one TLSS episode to illustrate how reflection can contribute to improved teaching and learning outcomes. The episode, entitled: "Initial trialling of reflection on practice using teacher-consultant collaboration" (p. 41), consists of three teaching and discussing steps. First, the teacher taught a lesson while the consultant observed. They met following the lesson and discussed several questions such as: What was the topic?; Why were you doing it?; How did you teach it?; How did the lesson go?; Was it successful?; Did the students understand the work?; and Was it enjoyable to them? Following the discussion, the teacher taught a second observed lesson. This time, the students were also asked to answer similar questions. The teacher and consultant met and discussed the significance of the combined teacher, consultant and student answers. Finally, the teacher predicted lesson outcomes by writing answers to the same questions before he/she taught the third lesson. The results proved to be unsettling for the teachers in this study. In general, they found that the students had very little idea of why the lessons were taught, and rated a lower success level than the teachers. Thus, this teaching cycle often encouraged reflection as teachers looked back on the lesson. The program also allows teachers to look more closely at what they consider a successful lesson, as opposed to what students might consider successful, and to increase communication about expectations with their students.
Proposed Programs

There is another body of research on teaching reflection that includes proposed models for teacher education. Bernstein-Colton and Sparks-Langer (1993) offer a conceptual framework that they believe will produce empowered, reflective decision makers. The authors maintain that this framework will prepare teachers to be "thoughtful persons intrinsically motivated to analyze the situation, set goals, plan and monitor actions, evaluate results, and reflect on their own professional thinking" (p. 45). The first component of the framework is the professional knowledge base, which consists of seven categories of knowledge. The categories are: content, students, pedagogy, context, prior experience, personal views and values, and scripts. Scripts allow the teacher to react to situations automatically while maintaining a focus on more critical issues. The scripts guide the thinking process and include the reflective questions teachers ask themselves when analyzing and planning a course of action. The second component is feelings. Feelings have a tremendous impact on a teacher's ability to reflect and may influence how we interpret a situation. The next component is the action, includes the planning before teaching, implementation of instruction, and evaluation made after teaching. Action requires great mental processing in all three stages. The construction of knowledge and meaning is the fourth component.

According to Bernstein-Colton and Sparks-Langer, "Teaching decisions are made through an interaction between the professional knowledge stored in long term memory and the information perceived in the environment" (p. 49). Automatic metacognitive scripts play an important role in every stage of the process. The authors suggest, "One might picture a little person in the head of the teacher asking questions, suggesting new steps, and assessing
previous thoughts and actions" (p. 49). Once the teachers gain an understanding of the framework, they can begin training to be reflective educators. The training consists of being paired with a mentor who models and describes their own thinking and guides the novice teacher through decision making. As part of the process, student teachers write reflections on why they feel certain aspects of the lesson were successful or unsuccessful. They further analyze what conditions and factors may have influenced the outcomes. The authors assert that, "At the end of the process, the new teachers have acquired the necessary mental representations and automatic scripts to interpret information, set goals, assess their actions and think independently" (p. 51).

Another proposed program includes presenting teachers with conditions which might encourage reflective practice. Richert (1990) recognizes that the goal of many teacher education programs is to prepare reflective teachers. These teachers would "have the capability and orientation to make informed and intelligent decisions about what to do, when to do it, and why it should be done" (p. 509). Richert's study suggested four structures that might enhance reflection in novice teachers. Condition I asked student teachers to reflect on one week of teaching without other aides. Condition II introduced a teaching portfolio and asked the student teacher to compose a reflection essay about any aspect of their teaching. In Condition III, the student teachers were paired with another teacher who observed and met with them for a reflective conversation. Finally, Condition IV offered both a portfolio and a partner. In both conditions with a partner, the teachers met once a week. Twelve novice teachers participated in the study, and each reflected under two of the four conditions.

Richert analyzed the data to determine what differences occurred in
each reflection condition and how the teachers perceived each opportunity. Data collected in the study consisted of journal entries, free-write essays, portfolios, questionnaires and self-report interviews. Richert found that reflection with a partner was significant to the student teachers. The teachers valued having adequate time to reflect and share their experiences with others. For some, the meetings with their partner provided a safe, non-evaluative opportunity to verbalize and work through their feelings: "You feel bad like you had a bad day but you just say, 'I had a bad day' to yourself and sometimes in your mind you don't go through the whole process... When I say to my partner, 'Boy, was that class horrible', she'll say, 'Why was it horrible?'" (p. 511). The teachers also felt that the observation component of the partnership provided a common framework for discussion with their partner. One participant noted, "I may have made a comment to someone else about that, but it would have been so hard for them to have understood exactly what went on" (p. 513). Often, the observer was also able to see the class from the student's viewpoint which added to the discussion. In general, the teachers felt more comfortable talking with a partner because they had a legitimate opportunity to share experiences and feelings.

The teachers who participated in the structure of a portfolio were instructed to collect anything they wished to represent a week of their teaching. Of the nine student teachers who constructed the portfolio, eight referred to it, and only five used it extensively. All teachers felt that the portfolio served as an aide to enhance their memory of the week's events. Although the contents of each portfolio was different, none of the teachers recorded their own reflections or kept examples of student work. Richert concludes that the four conditions may be helpful to enhance reflection in student teachers because she believes, "Novices often don't know how to
think about their work in productive ways... It is imperative, then, that we provide resources and support for new teachers to learn to be reflective about their work in classrooms" (p. 526).

**Suggestions for teaching reflection**

There are several other authors who offer suggestions for teaching reflection. They present ideas that may be incorporated into existing teacher education programs, or can be used to enhance experienced teachers' reflections. When educating beginning or student teachers, Pugach (1990) suggests that more well-defined strategies are necessary to encourage reflection in novices. Her paper explores a study designed to promote reflection in student teachers by having them identify a problem, monitor changes, and note effects on students. The emphasis was placed on student teachers choosing their own dilemma so that it was a current concern to them. The project was required of all elementary education teachers, and there was a total of eighteen self-study projects. The student teachers defined a range of problems which they intended to address including: teacher verbalizations and responses, classroom management, and meeting students' needs.

Results of the study showed some insight into student teacher reflection. For example, only some student teachers focused on the students in the classroom or used student cues to make teaching decisions. Many found that it took time to make the change automatically: "I still have to think about doing it. It doesn't come automatically yet, but I'm trying. I hope for it to become second nature to me in time" (p. 18). For this reason, Pugach suggests that novices may first have to acquire mastery of the basic routines before they are expected to be reflective on more comprehensive teaching actions or
goals. However, studies such as this may help the student teacher to become familiar with identifying problems and self-monitoring, which may later lead to effective reflective teaching. Baird (1992) agrees that initial reflection about the particulars of practice may encourage a more pedagogical reflection in the future. He explains that the smaller classroom issues or problems can serve as learning situations which may provide information and guidance for further practice. Thus, student teachers can be introduced to the process of reflection by focusing first on immediate dilemmas in the classroom.

Eby and Kujawa (1994) have developed a textbook for beginning teachers which emphasizes reflective thinking as an integral part of the teacher education process. The text, entitled *Reflective Planning, Teaching, and Evaluation: K-12*, presents the reader with dilemmas and ambiguous situations for practice in using thinking processes. The book also includes a Model of Reflective Teaching (p. 14) which contains a “series of skills that teachers can learn to improve their own reflection-in-action” (p. 13). Opportunities for reflective teaching are also presented to the education student. For example, they are asked to prepare and teach a brief lesson to fellow students. They are then asked to complete the following: 1) a reflective essay (discussing the lesson, observations, questions they ask themselves, and what they would improve); 2) an alternative reflective essay (considering teachers from their own school experience and ways in which they were reflective); and 3) a classroom observation (involving reflective thoughts about what they noticed).

Borko, Bellamy and Sanders (1992) believe there is value in reflections after teaching. They assert that lesson observations should be followed by a post-interview. The interview would include reflection questions that discuss
prominent features of the lesson (or what stands out), unexpected occurrences, changes from the lesson plan, and the reasons for those changes. The participants would also be encouraged to discuss their opinions about the entire cycle and changes in their knowledge or thinking as a result of their teaching (p. 53). Roth (1989) asserts that programs that emphasize reflection should provide opportunities to test hypotheses and strategies in simulated, clinical, and field settings, such as internships. The experience must be interactive with the university, and promote schools as places for professionals to learn and practice. Additionally, student teachers should be given opportunities to reflect on their experiences and discuss them with other practicing students.

Although there are many opinions and ideas about how reflection might be taught or encouraged, Schon (1983) warns that a professional cannot describe his or her intuitive knowing and the many judgments that have impacted his or her actions. Schon maintains that "since he cannot describe his reflection-in-action, he cannot teach others to do it" (p. 243). If Schon's theory is true, then the teacher educators themselves will need to exhibit reflective practices and incorporate them into their programs. As Zeichner and Liston (1987) stated above, the entire educational environment, including staff and curriculum as well, must possess reflective qualities. Thus, changes need not only occur with the teachers themselves, but also in every aspect of the educational program.

Conclusions and Questions Raised by the Research

Research shows that the term "Reflection" is widely used, yet it does not have a set definition. There is even less agreement about what reflection looks like, and how it can be located in practice. The diverse implications of
reflection have created an impossible task for teacher educators. How can teacher educators develop programs to produce reflective teachers when there is little agreement about what a reflective teacher is? In this section, I will address several questions regarding the research presented on reflection. It is my belief that such questions must be addressed in order to gain a better understanding of what reflection is, and its importance to the teaching profession.

The recent surge of interest in reflection was inspired by Schon (1983), yet Schon presents a paradox for reflection in education. Schon asserts that teachers have a specific kind of professional expertise, yet they cannot describe or teach this expertise to others. How, then, will it be possible to 'educate' reflective thinkers? The inability to describe reflection or intuitive knowledge will create communication problems between teacher educators and student teachers, student teachers and cooperating teachers, and among teachers themselves. If we can't communicate what we do, then we will never get to the heart of reflection and how it is used by teachers.

A student teacher in the Russell and Johnson study (1988) shares her frustration about the lack of communication at her school: “Nobody there ever discusses with me why they do things, what's behind what they do... She might say, 'This is how I do it, and this is the way I think it should be done.' But nobody every says, 'I wonder why I do it this way?’” (p. 6). Perhaps the communication gap is created because teachers do not have the common language to speak about reflection. It is also possible, however, that teachers are insecure about talking about their decisions for fear of judgment by other teachers. In their case, reflection might force them to make some major changes and deal with issues that they may not want to face. Regardless of the reason for this lack of communication, teachers must begin to
communicate their knowledge to others, so that we may gain a full understanding of how reflection is used in the teaching profession.

Many studies (such as Pugach, 1990) attempt to show the result of a change that takes place when a teacher learns to be more reflective. However, the progress through reflection is not shown, such as: 1) what occurred to make the teacher see a need to change; 2) what attempts were made to make the change; 3) what were the results of these attempts; and 4) what further attempts were made after the first attempts? I believe the studies would be more effective if we could see some of the thoughts and perceptions as the teacher is actually moving through the steps to create a change. Such a study would show reflections of why and how a change occurred, instead of seeing only what was changed.

Russell and Johnson (1988) interviewed a teacher who was unwilling to make a change because she did not want to make gradual attempts, but expected a major change to occur at once. The teacher, who felt that teaching should be the transmission of knowledge, was struggling with letting students be more involved with their own learning. She says, “In the back of our minds, that’s what we’re working for, but somebody tell me how to do it!... I’m going to leave it out ‘here’ for now until I’m capable of understanding what I have to do in order to do it” (p. 4). Russell and Johnson suggest that such a change will require time and thought. However, I suggest that this teacher may make decisions based on her reflections during teaching that will move her closer to this goal. For example, she may be completing a worksheet with her students in a teacher-directed lesson, and suddenly realize that the students could work in groups because they no longer need her direction. Allowing her students to work in groups is a gradual step toward her change to student-directed learning, and this idea came through experience in the
classroom. Thus, this teacher made a discovery that may not have occurred if someone else had told her how to do it.

In the previous example, Russell and Munby suggested that a major teaching change, such as attempting a new teaching style, required time and thought. This coincides with the common perception that teachers need more time for thinking about teaching. For example, Russell (1993) interviewed a first year teacher who felt, “You don’t have time to reflect! It’s really too bad, because it’s something you should do. For some people, things come back really easily. For me, I really have to sit and take time to think about what’s gone on, and make something of it” (p. 57). Some suggest that reflection can only come after the experience. As a teacher in Russell and Johnson’s (1988) study related, “When I have the opportunity to sit down and talk about things then things click and I can see the light bulbs bursting in my head! Most of the time I don’t think about what I’ve been doing. I’ve been thinking on a very superficial level and there’s not many times I get to think” (p. 5).

In fact, most of the research on teacher reflection is concerned with reflection after the experience. Many studies interview teachers immediately following an observed lesson (Russell & Munby, 1991; Borko, et al., 1992; Baird, 1992). Thus the reflections take place after the lesson has transpired, and teachers are being asked to reflect on the lesson. Unfortunately, some thoughts may be lost between the time the lesson occurred, and the time the person sits down to engage in reflective thinking. It would seem virtually impossible to remember all events that transpired during the lesson, and what guided the teacher’s thought process and decision-making. Therefore, teachers may have more time to reflect after the lesson, yet the reflections would be based on his or her recollection of past experiences.

Though reflection following a lesson may be an important part of the
reflection process, some would argue that reflection is an on-going, spontaneous occurrence which guides teacher's actions and decisions in the classroom (Bamberger, 1991; Partlett, 1991). Barne's (1992) statement, "The teacher is necessarily establishing priorities, unconsciously balancing possible successes and costs" (p. 9), assumes that thinking and reflection is inherent during the teaching process. Thus, reflection does not only occur after the lesson, it occurs within the lesson as well. During a teaching episode, teachers are presented with instances that might spark such spontaneous reflection and simultaneously present them with issues that might require further reflections about their teaching practice. Stengel and Tom (1996) recognize that teaching begins with a view of teaching as a complex intellectual activity: "It is at once a craft requiring the ability to make and carry out a seemingly infinite number of 'on-the-spot' decisions and a practice demanding 'from-a-distance' reflection, the ability to consider the realities of classroom life thoughtfully and critically in order to generate alternate ways of acting" (pp. 612-613.)

A final and imperative question raised by the research on reflection is: Can reflection be taught? Even in programs that claim to produce reflective thinkers (Zeichner & Liston, 1987; Korthagen, 1988; Baird, 1992; Bernstein-Colton & Sparks-Langer, 1993; Richert, 1990; Eby & Kujawa, 1994), one must ask if it is a realistic expectation that all student teachers leave the program with the ability to employ reflective practices in their teaching. As Korthagen (1988) found, many of these programs are successful for students who already think in a reflective manner. There are also underlying presumptions in these programs that student teachers have the capability to gain an understanding of reflection, and complete training to become reflective educators. For instance, one program says that reflective training
begins after the student teachers understand the reflective framework (Bernstein- Colton & Sparks-Langer, 1993). However, they offer no indication of how long it takes to gain such understanding, or how they can tell what the student teachers have gained in the process. At best, reflection may be introduced in such programs, but it is debatable whether all students will become reflective teachers.

Motivation for Reflective Practice

Much of the research on reflective teaching proposes how reflection might be taught or encouraged. Yet, little is known about what truly motivates teachers to be reflective. There is a possibility that motivation for reflective practice is increased by teacher education programs that encourage reflective teaching. However, Oberg and Artz (1992) assert that the most meaningful reflections are those that originate with the individual, rather than from an outside influence. They claim, "We find the knowledge we evolve from our own experiences settles much deeper and lasts much longer than the knowledge we borrow from others" (p. 153). Therefore, reflection may be a personal characteristic, and it can be presumed that some teachers are more naturally reflective than others.

Personal Reflective Nature

As Calderhead (1988) recognizes, "Reflective teaching seems to take for granted the ability of teachers to stand back from their teaching and look upon their actions objectively." (p. 9). Thus, reflection can only occur if the individual is willing to take an active part in self-evaluating and recognizing possible weaknesses in his or her teaching. Some teachers are more open about discussing their classroom problems than others (see Russell and
Johnson, 1988). Studies of reflection depend greatly on the personalities of the teachers they study. In some cases, there is a great range of reflection among the different teachers studied.

Russell and Johnson (1988) discovered one teacher who naturally exhibits spontaneous self-evaluation that often leads to an immediate change in his teaching style. The teacher, Roger, reflects on and evaluates his teaching performance during his lessons. "I spend a lot of time, often as things are happening, saying, 'Gee, I wonder what the difference is between what I did this time, or what happened last time and this time that caused the difference?'" (p. 12). He is constantly learning and changing his style. "I end up learning so much, working this way, about how the kids learn, and it helps me enormously. I end up going back and changing all my things immediately" (p. 12). Roger's reflections have led him to a greater understanding of his teaching, and how the students will respond. "I'm also able to predict fairly well the kinds of things that will come up and to get a sense of the kinds of things that kids will understand" (p. 13). In comparison to the other teachers in this study, Roger stood out as exhibiting an exceptional amount of reflection in his teaching.

An interesting study might derive from closer examination of reflection as a personal characteristic. Is Roger inclined to reflect on and evaluate other aspects of his life? For example, Borko, et al. (1992) present the reflections of two student teachers who are in the same stage of teacher education. Yet, one student teacher demonstrated reflective qualities, while the other did not. Closer examination of teachers' personality, background, and experiences might provide insight into their personal reflective nature.

Connelly and Clandinin (1990) agree that teacher education should not be viewed separately from the ongoing lives of teachers. Thus, the study must
include a person's past and present experiences, as well as how it might affect his or her decisions in the future. Connelly and Clandinin propose Narrative Inquiry as a promising educative process that facilitates change and growth through reflective storying and restorying. Carter (1992) proposes the Case Method to convey the high complexity of teachers' cognitive processes. The Case Method lends itself to reflective inquiry as teacher's can take another look at the classroom situation and ask questions about the lesson and their teaching. Both research methods might provide deeper insights into a teacher's personal reflective nature.

**Personal Reflective Nature in Preservice Teachers**

Research indicates that basic knowledge and beliefs about teaching are accumulated early in a teacher's development (Lortie, 1975; Carter, 1994) and it is suggested that these preconceptions fail to change or be challenged during their experiences in teacher education (Bramald, Illardman & Leat, 1995; Anderson & Bird, 1995). Teaching portfolios and action research have recently received attention for their potential to be used as tools to promote reflection among preservice teachers. In teacher education programs that incorporate portfolios as a requirement, a little over half of the preservice teachers felt that the portfolios allowed them the opportunity to reflect about students and learning (Borko, Michalec, Timmons & Siddle, 1997; Wade & Yarbrough, 1996). Portfolios allowed them the opportunity to clarify and refine ideas about the practice of teaching. On the other hand, many preservice teachers expressed that the portfolio assignment took time and energy from their student teaching experience.

Action research has been suggested as a tool for the promotion of thinking about a broader range of moral and ethical concerns in making
decisions about practice, rather than the tendency to focus on technical and practical issues of the teaching profession (Dinkelman, 1997; Johnson & Ochoa, 1993). Yet, it is argued that beginning teachers are almost always encountering problems that they have never seen before (Ducharme & Ducharme, 1996) and concerns for self survival as teachers will only decrease as teachers experience success in their teaching efforts (Pigge & Marso, 1997). Fuller (1969) proposes that teachers concerns can be presented in phases. The Pre-teaching phase is a time of thinking of teaching in terms of their own experiences as pupils and as college students. The Early teaching phase consists of concerns with self and issues of managing a classroom. The concern for students does not come until the Late Phase, we she found did not occur until the end of the student teaching experience. Thus, teacher reflectivity is a developmental process (Pultorak, 1996) in which preconceptions and notions about teaching must be addressed. Kagan (1992) suggests that teacher education should guide novices through their biological histories, rather than expecting novices to reflect on the moral implications of classroom practices.
METHODS FOR DATA COLLECTION AND ANALYSIS

The following study addresses the present theories on reflection in teaching, and attempts to locate and describe this reflection in practice. A qualitative study was conducted employing the phenomenological approach in an attempt to understand the meaning of events and interactions to ordinary people in particular situations (Bogdan & Biklen, 1992). Teachers in their own classroom were asked to identify "bumpy moments" during a specified period of time. As Bogdan and Biklen assert, "Action can best be observed in the setting in which it occurs" (page 30). Further, the classroom environment serves as the landscape for understanding the complexities of the teaching practice (Connelly, Clandinin & He, 1997). Thus, the classroom will be the main setting for identification of "bumpy moments" in teaching. Preservice teacher observers, who were assigned to each classroom, were also asked to identify any "bumpy moments" that they perceived during this time. Through analysis of these "bumpy moments" in teaching, the study describes teacher reflection as it actually occurs in the classroom context. A comparison of the perceptions, thoughts, and knowledge of practicing and preservice teachers may lead to a greater understanding of how they make sense of such moments in teaching.

Research Questions

The following research questions were designed to examine teacher and preservice teachers' perceptions and reflections on "bumpy moments," and determine the similarities and differences between the two:

1) What do teachers and preservice teachers consider to be "bumpy moments" in their teaching or observation of teaching; how do
they differ and how are they similar?

2) What do teachers and preservice teachers think about when faced with a “bumpy moment” in teaching; how do they differ and how are they similar?

3) What kinds of knowledge or beliefs do teachers and preservice teachers bring to the “bumpy moments,” and where did they come from; how do they differ and how are they similar?

4) How does the teacher resolve the difficult task of making decisions instantaneously within the classroom context; what did the preservice teacher observe the teacher doing?

5) What are the implications of each “bumpy moment” on a teacher’s or preservice teacher's thinking about future decisions and teaching practice; how do they differ and how are they similar?

Research Context

This study took place in a Kindergarten through Sixth grade elementary school in the Northwest area of Tucson, Arizona. This particular site was chosen because I have access to the teachers and staff while I am a teacher at the school. Further I had the support of my principal and administration in the School District. My school also promised the support of my fellow teachers, based on past experience and projects, who were likely to be willing to participate in my research.

Description of Methodology

Before I began a study on “bumpy moments” in teaching, it was essential that all participants in the study understand the term and what it means. Thus, the first step in my study was an effort to create a common
language about "bumpy moments." Once that was accomplished, I began to obtain participants for my study. The third step included having the preservice teachers observe in their assigned teacher's classroom. Finally, open-ended interviews were conducted with the practicing and preservice teachers individually about the "bumpy moments" they perceived during this time period. I will now describe each step of this process in greater detail.

Creating a common language about "bumpy moments"

In my self-study, I defined a "bumpy moment" as: A moment in teaching that requires a teacher to engage in reflection to make an immediate decision about how to respond to a particular problem in practice. The problem is not easily solved for any number of reasons, has importance to the teacher, and is perceived to have future implications or possibly have an effect on the students in the classroom. In order to elicit the "bumpy moments" of other teachers, I felt it was necessary to establish a common language about the meaning of "bumpy moments." I developed a series of "bumpy moment" stories from my own teaching to share with other teachers and preservice teachers (see Appendix A). These stories were carefully selected to illustrate different types of "bumpy moments," and they reflect the kinds of moments I found in my self-study (i.e. management, parent helper problems, not prepared, disruptions, and instructional moments). I planned to use these stories as examples of "bumpy moments" when introducing the term to both the teachers and preservice teachers before beginning the study.

I hoped that the range of "bumpy moment" stories would give the study participants several examples, rather than limiting them to only one type of moment. For example, the moment that led me to the examination of "bumpy
moments" stemmed from a management issue. In the self-study that followed, I tended to identify management "bumpy moments" more than any other type. This may be due to any number of factors, but beginning the study with identification of only one kind of moment may have had a large influence on my thinking about future "bumpy moments." I also was aware that sharing too many specific "bumpy moments" in my teaching might lead participants in the study to identify only those types of moments. Despite this risk, I chose to give several examples of my real classroom experiences because I felt that the participants would be much more articulate in describing their "bumpy moment" experiences if they understood that there was a wide range of such moments.

When it came time to define and explain "bumpy moments" in teaching however, I found that both the teachers and preservice teachers did not need all the examples in Appendix A. Because I was explaining the "bumpy moment" term to the entire class of Teaching and Teacher Education 300 in hopes of gaining only four volunteers for my study, I chose to give shorter and fewer examples of these moments. Instead of reading the examples in the Appendix, I described in my own words the first example about the assignment on the first day and my management moment that led me to the study of "bumpy moments." I also gave a third example, which I gained from talking to one of the teachers at my school. This example describes a "bumpy moment" in which the teacher had been carefully teaching the same concept over several days only to find that the entire class failed to get the concept correct on a test. I explained that identification of "bumpy moments" would differ from day to day and from person to person. When I introduced the "bumpy moment" term to the practicing teachers, I used the same three examples.
Both groups responded to my "bumpy moment" stories in a similar manner. When the preservice teachers introduced themselves to their classmates on the first day, four of them told stories of a different kind of "bumpy moment" gained from their experiences working with children. The practicing teachers responded by coming up to me at various times in the next week and sharing stories of their own "bumpy moments." Because there seemed to be a willingness to share such stories, and an understanding of what the term meant, I felt that it wasn't necessary to share the other examples from my experiences. Instead, I found that fewer and shorter examples were sufficient for explaining the meaning of "bumpy moments," and that we had successfully begun the process of sharing these moments with each other.

Selecting Participants

It was presumed that different teachers would experience different kinds of "bumpy moments" and would go about handling the situation in their own way. Each teacher has a unique set of beliefs or convictions that will guide his or her practice. Thus, it was important that I gain a range of teacher participants for this study. Similarly, preservice teachers also bring with them a set of beliefs and convictions which will presumably impact their experiences in schools. Even though the preservice teachers were at a similar point in their teaching career as they were beginning their first course in Teacher Education, it is presumed that their thoughts and ideas about teaching will also vary. The following describes the process of gaining practicing and preservice teacher participation and how each teacher was paired with a Teaching and Teacher Education 300 student who was willing to participate in the study and was also interested in that particular teacher's
grade level or placement.

**Gaining teacher participation**

I had originally planned to select participating teachers from a list of volunteers gathered at one of the first staff meetings in the school year. This plan was altered when the first two faculty meetings were canceled, and I had to meet the deadline for when the Teaching and Teacher Education 300 students began their observations in the school. Because placing TTE 300 students in the school on time was a priority, I went to teachers individually to see if they would like a preservice teacher placed in their classroom for observation. I began by asking the teachers who had a student placed with them the previous year, and added a few others because I wanted to obtain at least one teacher for each grade level. At this time, I did not know exactly how many TTE 300 students we were going to have at our school, but I had successfully gained ten teachers who were willing to take a preservice teacher as an observer in their classroom for one day each week.

I then gathered these ten teachers and presented my study and the notion of "bumpy moments" in teaching, using my definition and the three examples discussed previously. Following this brief description, I asked for volunteers to participate in my study. Seven of the ten teachers volunteered to participate in my study. The teachers willing were: 1) A kindergarten teacher in her second year of teaching; 2) A first grade teacher with a total of nineteen years of teaching experience and was in her second year of teaching First grade; 3) A second grade teacher in her second year of teaching; 4) A third grade teacher with ten years of experience; 5) A third grade teacher with fourteen years of experience; 6) A fifth grade teacher in her second year of teaching; and 7) A sixth grade teacher in her twenty-
eighth year of teaching and Administrative experiences combined. All the teachers who volunteered were female.

At this point, I used the following criteria for selecting four teachers from the six who volunteered. First of all, I wanted to represent a range in grade level placement. I thought that it might be interesting and insightful to see what teachers of different grade levels consider to be "bumpy moments" in their teaching. The second determining factor was each person's teaching experience and/or inservice and graduate class experience. I decided that I wanted to have teachers with five or more years of teaching experience participate in the study because it was presumed that teachers' thought processes and how they handle these "bumpy moments" may differ given their varied knowledge or years of experience. Thus, I chose the four teachers with five or more years of teaching experience and asked them to participate in my study. Selection using this criteria also allowed me to gain a range of grade levels as the four chosen were from first grade, two of them were third grade teachers, and the fourth was a sixth grade teacher. Once I obtained four teachers who volunteered to participate in the study, I met with them individually to further explain "bumpy moments" and what I would be asking of them throughout the duration of the study. I also began to identify a time that we might meet for each interview.

Gaining preservice teacher participation

With the permission of Dr. Kathy Carter, professor of TTE 300 in the fall of 1998, I asked for four volunteers to participate in my study. Participation in my study was offered in lieu of another assignment for the course. The way the course is designed, students may choose to either complete a field book of their observations during the semester, or complete a community
service project. My study was given as a third alternative for meeting this requirement. I presented my study and the definition and examples of "bumpy moments" to the entire class of TTE 300 students on the first day of their class. I described what would be asked of each volunteer and sent around a list asking for volunteers. From this list I gained eight volunteers. Dr. Carter and I decided that all eight volunteers would be placed at my school for their weekly observations. One student later dropped the class, so there remained seven students who were placed at my school and considered to be possible participants for my study.

In the lab component of the course later that day, we asked each TTE 300 student to select a grade level in which they would like to observe. I used this information to determine which students I might be able to pair with the teachers that had already volunteered and had been chosen to participate in my study. From this information, I selected four students to participate in the study because they desired to be in the first, third, and sixth grade classrooms. As a result, all four TTE 300 volunteers were female. The two males who had volunteered for the study desired a different grade level or placement than the teachers who had volunteered for the study. A few weeks later, I met with the TTE 300 students and explained how selections for participation in the study were made. I also met with each preservice teacher individually to identify a time that we could meet every other week for an interview.

Seeking an Alternate Pair after one preservice teacher dropped the class

After the study began, and I had already collected interviews from two of my practicing and preservice teacher pairs, I was notified that one of the preservice teachers was no longer coming to her scheduled observation days. I talked with the Teaching Assistant and Professor for TTE 300. They told me
that this particular student had not been admitted to the College of Education, and could thus not take the course or work in the schools this semester. Because this student had already been chosen for the study, I had to make a decision about how she would be replaced. I considered moving another TTE 300 preservice teacher into the third grade teacher's classroom, but the observations had already taken place and I decided it would be unfair to ask the preservice teachers to change placements.

I examined the other practicing and preservice teacher pairs already established at our school. I knew that all of the TTE 300 students were willing to participate in the study, but lacked a practicing teacher who had the experience I desired for my study. I also wanted to maintain the range of teachers across the grade levels. With this criteria in mind, the only possibility seemed to be a fourth grade teacher who had not originally volunteered for the study. She was in her third year of teaching, which was a year more than any of the other teachers who had volunteered. I was also excited by the fact that her TTE 300 student was a male, and the potential for bringing this perspective to my study.

I went to the fourth grade teacher and asked if it would be possible for her to participate in my study. She said that she had not volunteered because she had a class on Tuesday afternoons and would not be able to sit down for an interview on those days. We struck a compromise and decided that she would participate, but the interviews would be conducted on the following school day. In my opinion this was the best option, despite the fact that this teacher had less experience and the interviews needed to be conducted on a different day rather than immediately following the observation period.
Preservice teachers observations in the teacher's classroom

Dr. Carter's TTE 300 course requires that the preservice teachers report every Tuesday morning to their assigned school for observations. The observations began in the second week of September and continued every Tuesday until December 1. This gave the preservice teachers a total of twelve observation days in the school. Although the preservice teacher observed in the teacher's classroom for all of the twelve scheduled days, I only asked the teacher and preservice teacher to identify the "bumpy moments" that occurred on every other observation day.

I chose to analyze six days of observations rather than all twelve for the following reasons. First of all, each day that I asked the preservice and practicing teachers to identify "bumpy moments," I needed to do an interview asking them to describe in detail each of these moments. I strongly felt that I should interview them on the same day that the moments were observed so that I could preserve as much of their reflections and thoughts during these moments as possible. I feared that if I waited until the following day, other things may happen that could change their thinking and I would not be able to truly report how they were feeling at the time. When I was conducting my self-study, I had to force myself to identify "bumpy moments" every night following my teaching day because too much was lost if I let more time expire. Given the nature of my interview and the length of time that I projected this would take, I would not have been physically able to interview all four pairs (a total of eight people) in one day.

Since I would not be able to interview all eight people in one day, I had to decide how many I thought I could possibly interview each day. I decided the easiest thing to do was to divide the group of eight into two groups of four. Thus, I would interview two preservice and practicing teacher pairs each day.
This allowed me to conduct only four interviews a day, which seemed much more manageable. Because I was not going to interview each pair on each observation, I next had to decide how I might keep my analysis consistent. I also wanted to examine "bumpy moments" across time, so I had to decide how to interview the pairs throughout the twelve observation days. I decided to have each teacher and preservice teacher pair identify "bumpy moments" every other week, and I would interview them that week as well. Thus, the interviews were scheduled as follows:

- **September 15:** Pair 1 and 2 identify "bumpy moments" and I conduct separate interviews with each of these people (4 in all)
- **September 22:** Pair 3 and 4 identify "bumpy moments" and I conduct separate interviews with each of these people (4 in all)
- **September 29:** Pair 1 and 2 identify "bumpy moments" and interview
- **October 6:** Pair 3 and 4 identify "bumpy moments" and interview
- **October 13:** Pair 1 and 2 identify "bumpy moments" and interview
- **October 20:** Pair 3 and 4 identify "bumpy moments" and interview
- **October 27:** Pair 1 and 2 identify "bumpy moments" and interview
- **November 3:** Pair 3 and 4 identify "bumpy moments" and interview
- **November 10:** Pair 1 and 2 identify "bumpy moments" and interview
- **November 17:** Pair 3 and 4 identify "bumpy moments" and interview
- **November 24:** Pair 1 and 2 identify "bumpy moments" and interview
- **December 1:** Pair 3 and 4 identify "bumpy moments" and interview

This schedule allowed me to interview four people instead of eight each day, while at the same time gave me the opportunity to observe "bumpy moments" across the twelve-week span. It also allowed the practicing and preservice teacher a break between interviews. I felt better about asking a
teacher to conduct an interview every other week rather than asking them to
give up a significant amount of their planning time every week. Also, the TTE
300 student had other assignments for this class and other courses he or she
was taking that I felt may suffer if I was taking a majority of their time for
my study. The amount of interviews I planned to gather using this schedule
allowed me to do the in-depth analysis that I had planned for and will describe
later in this chapter.

During the course of the study, the observation and interview schedule
changed only slightly. Because one of my preservice and practicing teacher
pairs had to drop out of the study, I naturally put their replacements in their
day slots. Thus, the fourth grade pair began the study one observation and
interview behind the others. This was made up for by adding an additional
interview on the final week of observation. This meant that two of their
observation and interview days were back-to-back, instead of the normal two
weeks apart. Also, one of the teachers was absent on one of her scheduled
observation and interview days. That pair made up for this loss during the
following week, again causing a smaller time between two of their
observation and interview days. The actual study dates follow, along with who
was interviewed on what day:

<table>
<thead>
<tr>
<th>Date</th>
<th>Grade Pair</th>
<th>Grade Pair</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 15-</td>
<td>3rd grade pair (#1)</td>
<td>--------------</td>
</tr>
<tr>
<td>September 22-</td>
<td>6th grade pair (#1)</td>
<td>1st grade pair (#1)</td>
</tr>
<tr>
<td>September 29-</td>
<td>3rd grade pair (#2)</td>
<td>4th grade pair (#1)</td>
</tr>
<tr>
<td>October 6-</td>
<td>6th grade pair (#2)</td>
<td>1st grade pair (#2)</td>
</tr>
<tr>
<td>October 13-</td>
<td>3rd grade pair (#2)</td>
<td>4th grade pair (#2)</td>
</tr>
<tr>
<td>October 20-</td>
<td>6th grade pair (#3)</td>
<td>1st grade pair (#3)</td>
</tr>
<tr>
<td>October 27-</td>
<td>3rd grade pair (#4)</td>
<td>4th grade pair (#3)</td>
</tr>
</tbody>
</table>
November 3-  6th grade teacher ill  1st grade pair (=4)
November 10- 6th grade pair (=4)  4th grade pair (=4)
            3rd grade pair (=5)
November 17- 6th grade pair (=5)  1st grade pair (=5)
November 24- 3rd grade pair (=6)  4th grade pair (=5)
December 1- 6th grade pair (=6)  1st grade pair (=6)
            4th grade pair (=6)

The observations took place for a two and a half hour period between the hours of 8:00 to 11:00 AM. This was the time period in which I asked the preservice teachers to observe and record any "bumpy moments" that they noticed during their observation. I also asked the teachers to be aware of any "bumpy moments" that they were experiencing while the preservice teacher was in the classroom. The teacher and preservice teacher were asked not to share their observations of "bumpy moments" with each other, rather I was interested in discovering what they each saw through their own eyes. The short morning time period allowed both the teacher and the preservice teacher an opportunity to focus on a smaller segment of teaching, rather than on a day or two at a time.

I conducted the interviews about the "bumpy moments" identified as shortly after the observation as possible, so that each participant's reflections would not be lost in the activities of the rest of the day or week. I was able to conduct interviews with three of the four preservice teachers immediately following their observations. The fourth had another class to attend at the University and would come back to school that same day, usually at about 5:00 that evening. Three of the four teachers were interviewed after school on
their scheduled day. The fourth was interviewed on the following day after school, as was arranged to allow her to participate in the study. From time to time, I was not able to meet with the teacher after school. This usually occurred because the teachers had meetings or other obligations after school. These instances are noted in the individual analysis section.

Open-ended Interviews with Teachers and Preservice teachers

Following each classroom period in which both the preservice teacher and practicing teacher had recorded "bumpy moments," interviews were conducted with each participant individually. In this interview, I asked each participant to identify and describe all the "bumpy moments" observed during the classroom observation. Interviews were chosen as the primary data source for this study because I felt it would be the only way to get their interpretations about what was happening during teaching without interrupting the normal classroom activity. If there were some way that we could talk to teachers while they were faced with "bumpy moments" during teaching, it would be preferable. But since we cannot be in each participant's head to examine what they are thinking, every attempt was made to conduct an interview with them as soon after the teaching segment as possible.

Why Interview?

The interviews allowed me to gain in-depth insights and understandings of the processes involved during "bumpy moments" in teaching. As Bogdan and Biklen (1992) describe, "The interview is used to gather descriptive data in the subject's own words so that the researcher can develop insights on how subjects interpret some piece of the world" (page 96). Seidman (1991) agrees, "At the root of in-depth interviewing is an interest in
understanding the experience of other people and the meaning they make of that experience" (page 3). If we were to only observe behaviors associated with "bumpy moments" through our own eyes, we could not possibly understand what the teacher was thinking or what motivated his or her actions. As Seidman describes, interviewing allows us to put those observed behaviors in context and provides us access to understanding their actions. Thus, we are allowed the opportunity to gain details of the experience that only the participant can truly describe.

In the process, the participant must reflect on their experiences to fully tell their story of the event. Sitting down with me and looking back on their "bumpy moments" allowed each participant to think more thoroughly about the event and determine what sense they make of it. I believe that teachers are so consumed with the day-to-day maintenance of teaching students and all the events that comprise this responsibility that they hardly have the time to simply sit and reflect. The immediacy nature of the classroom environment leaves little time to reflect (Doyle, 1986). Further, Calderhead (1989) asserts that reflective teaching takes for granted that teachers will indeed stand back from their teaching and look at their actions objectively. Thus, teachers must not only be willing to reflect on their teaching practices, but also be allowed the time and opportunity to do so. These interviews were conducted not only encourage reflective thinking, but to provide the time to think through these events and create meaning from them.

Having each participant tell me their interpretations and feelings about each "bumpy moment" provided the opportunity to examine these thought processes and develop a story of their experience. As Seidman describes, telling stories is essentially a meaning making process for both the
participant and the researcher. Further, teaching is best known through story, and to neglect the story frame might lead to a distortion of the teaching process itself (Doyle, 1997). Thus, the interview began by asking the participant to tell a narrative describing the “bumpy moment.” In some cases, the participant would tell a very detailed story of the factors, thought processes, actions and outcome of each “bumpy moment.” I then continued to ask additional questions to highlight these aspects as well as encourage the participant to further reflect on what implications this moment may have on their future teaching practice. The participant’s narrative, along with the answers to the further questions helped me to make sense of the event and compose a story of their experience using their own words and thoughts. This process will be discussed in a latter section.

Interview Description and Questions

The interview began by asking the practicing or preservice teacher to identify one “bumpy moment” (if there was any) during the two and a half hour period of time. For the purpose of this study, a “bumpy moment” was defined as: A moment in teaching that requires a teacher to engage in reflection to make an immediate decision about how to respond to a particular problem in practice. The problem is not easily solved for any number of reasons, has importance to the teacher, and is perceived to have future implications or possibly have an effect on the students in the classroom. The “bumpy moment” that they chose to discuss first was completely their choice. Some opted to discuss the “bumpy moments” in chronological order, while others mentioned the moments in order of importance.

In my earlier self-study analysis, I discovered four features of the “bumpy moments”: 1) Factors- the special circumstances that constituted
each “bumpy moment,” providing the rationale for why the issue is a problem in practice; 2) **Thoughts**- what the teacher is thinking about during the “bumpy moment,” including categories of these teacher thoughts; 3) **Actions**- what the teacher does in an attempt to resolve the “bumpy moment,” including the amount and types of actions; and 4) **Results**- whether the “bumpy moment” was resolved, or whether the situation improved. The following questions were derived from this work and will be asked of each “bumpy moment” identified:

**Questions for Teacher:**

- **Describe the Bumpy Moment**
- What were the factors?
- How or why did this come to be?
- What were your thoughts during this “bumpy moment?”
- What knowledge or beliefs did you bring to this “bumpy moment” and where did it come from?
- What did you do in an attempt to resolve the “bumpy moment?”
- Was the moment resolved?
- Would you do anything differently if faced with such a moment again?

**Questions for Preservice Teacher:**

- **Describe the Bumpy Moment**
- What were the factors?
- How or why did this come to be?
- What were your thoughts during this “bumpy moment?”
- What knowledge or beliefs did you bring to this “bumpy moment” and where did it come from?
- What did the teacher do in an attempt to resolve the “bumpy moment?”
- Was the moment resolved?
- Would you have done anything differently if you were faced with such a moment?
How will this “bumpy moment” affect your future teaching practice?

These nine questions served as the basis for my interview. The only other questions I asked were clarification questions if I felt that something he or she described was unclear. Provided that I was given enough substance to understand their thoughts and perceptions about each moment, I asked no further questions of that moment.

Once all nine interview questions were answered for one “bumpy moment” observed, I asked if they observed any others. If they identified another moment, I repeated the process and asked all nine questions for that particular “bumpy moment.” In my earlier study, I observed zero to three “bumpy moments” during an entire school day. I began this study with the presumption that the number of “bumpy moments” identified might depend on each person and may change over time or depending on the day. The entire interview was audiotaped and transcribed for further analysis.

If a participant told me that there were no “bumpy moments” observed during the class time, I asked questions about the factors that may have led to a “non-bumpy” period of time. I also encouraged this participant to recall the day for me and share ideas about their teaching or observation so that I might gain an understanding of what they believe constitutes a “bumpy moment,” even if they didn’t experience one on this particular day. This was a less formal interview, but I also audiotaped the discussion for further analysis.

Analysis

After observation and interview data was collected from all six
participants, I attempted to create stories to describe and explain the details of each "bumpy moment" identified. The "bumpy moment" stories and interview questions were then analyzed for content and themes that might address the research questions proposed. This analysis was conducted on several levels. First, I compared the "bumpy moments" identified in each classroom. Next I conducted an analysis of the "bumpy moments" perceived by each person in the study and how they compared to the other participants. I also examined the "bumpy moments" each participant perceived over time to determine if the kinds of moments changed during the duration of the study. Following the individual and classroom analyses, I began to make assumptions about the kinds of "bumpy moments" experienced by the group of teachers and how they compared to the group of preservice teachers. In this analysis, I addressed the five research questions about the similarities and differences among the two groups using the responses of each individual interview question.

**Story Method**

Borrowed from Carter (1993) the story method was used to relay the details of the "bumpy moments" to a particular audience. As Carter explains, "Stories capture the richness and indeterminacy of our experience as teachers and the complexity of what teaching is and how others can be prepared to engage in this profession" (page 5). These stories will be created so that others may learn about the "bumpy moments" in teaching through the words and descriptions of the people who experienced them. This method was chosen so that I might create a written version of their oral story to be discussed with others for this study and in the future. The audience will be assumed to have little or no classroom experience, so that anyone who may
read the story will be given sufficient detail to understand the event described. Concern was also given to explaining the events in such a manner that the language of teaching may be unpacked and easily understood by the reader. In this way, the events of the classroom were described by the teacher or preservice teacher observer, as if they were telling a story about what happened during the teaching segment.

It was my hope that these stories might be used in teacher education in the future to give prospective teachers insight into the many moments that teachers are facing on a daily basis during teaching. With this thought in mind, I decided that it would be most beneficial to describe the event as the practicing or preservice teacher had, and include the possible factors for why the moment occurred. Because each participant's understanding of the event differs, as it would most likely for anyone would might be reading about the event, I did not include the participant's thoughts, actions or reflections other than the ones that were woven into the telling of the story itself. Thus, the stories were of the "bumpy moment" themselves, not the results or implications of experiencing such a moment. For the complete stories, see Appendix B.

When both the practicing and preservice teacher identified the same "bumpy moment," I combined the similarities between their two descriptions to create an agreement of what happened during this moment. I did not mention any factors, for example, that one participant mentioned but the other did not. These stories are my understanding of the particular moment after listening to both participants tell their story. Because there was often disagreement about the events in the classroom, or one participant might have failed to mention details that the other did, these stories seem incomplete and lack the depth of the individual stories. When these stories are presented
in teacher education, the reader might not have sufficient detail to reflect deeply on these moments. Thus, the differences in understanding these moments are presented in greater detail in the individual analysis section including a comparison between how the two people who experienced the particular moment.

Following the stories identified by both participants in the pair, the individual stories of the “bumpy moments” experienced by the teachers are then presented. Each story was written in a similar manner, again to provide consistency between the stories. The story typically began with a brief description of the moment, providing a sequential order of events. It also included the participants and setting for the particular moment. Additional information was included when necessary, to provide the background information and descriptions of preceding events which may have led to the incident. Again, I did not add details of how the teacher chose to handle the moment so that these stories might be used in teacher education.

In my written version of each participant’s oral story, I made every attempt to use the language of the participants and use direct interview quotes so that he or she is telling their own personal story. Cochran-Smith and Lytle (1990) assert that what is missing from the knowledge base for teaching is the voices of teachers themselves. Furthermore, Elbaz (1981) agrees that although teacher’s knowledge may be largely unarticulated, teachers do have a broad range of knowledge which guides their work. Thus, the stories are communicated as if the teacher herself were telling the story of their experience.

Stories were then written describing the “bumpy moments” that the preservice teachers experienced. These stories were created using the same method and form as the teacher stories. One of the preservice teachers also
had two personal "bumpy moments" that she experienced while working in the classroom. Her stories are presented following the preservice teachers' stories. The preservice teacher stories offer great insight into what these teachers in general might be considering as they gradually assume the responsibilities of teaching. Not only do all of these stories describe the complexities of teaching practice, they may also be used as a vehicle for teacher education students to reflect on problematic issues that arise during classroom activities.

Comparison of "Bumpy Moments" identified in each classroom

Interviews were conducted with the practicing teacher and the preservice teacher separately so that they could not be influenced by each other's perceptions of the "bumpy moments" they witnessed. Because I conducted the interviews individually, it was presumed that both participants may discuss some of the same "bumpy moments" as each other, and chances were that there would be some differences in the moments identified. If the teacher and preservice observer identified any of the same "bumpy moments," I conducted a step-by-step analysis of the moment considering each of the nine interview questions. If the "bumpy moments" described were different, I attempted to determine how or why the two people identified different moments.

Analysis of Same "Bumpy Moments"

If the teacher and the preservice observer identified the same "bumpy moment," I was able to compare their responses to each of the interview questions about this moment. For starters, I compared each person's
description of the "bumpy moment," and the factors identified. This was done to determine if the preservice teacher felt that the same things contributed to the "bumpy moment" as the teacher did. In their explanation of how or why this moment came to be, I was able to compare each person's causal explanations. It was presumed that a teacher is considering more factors and explanations than the preservice teacher, however the preservice teacher often would pick up on different cues that the teacher may or may not have seen or taken into consideration.

Next, I compared and contrasted each person's thoughts during the "bumpy moment." The teacher was asked share what they were thinking, and often these thoughts were recalled because they were embedded in how the teacher chose to handle the particular moment. The preservice teacher often expressed different thoughts, which depended on a variety of factors, interpretations, and possibly their stance. Closely tied to these thoughts were the knowledge and beliefs that each person brought to the "bumpy moment." An analysis was conducted to determine how these beliefs and knowledge impact a practicing or preservice teacher's thought processes.

Analysis of what the teacher did to resolve the "bumpy moment," and whether there was any resolution added an additional component to determining the overall feeling about the moment. This was determined by examining each person's response to the last two interview questions about whether each person would do anything differently if faced with such a moment again or if the preservice teacher were to face this moment in their own teaching. This marked the first time that the preservice teacher was asked directly what they would have done in this situation. Also, the teacher was allowed the opportunity to engage in reflection after the moment occurred and often discussed some new insights as well. Finally, responses to
the final reflection on how this "bumpy moment" will or will not affect their future teaching practice was also compared.

**Analysis of Different "Bumpy Moments"**

If the teacher and the preservice observer identified different "bumpy moments" during the same two and a half hour period, further investigation into why they felt different moments were "bumpy" produced some intriguing insights. Since both participants were asked all nine questions of each "bumpy moment," I was able to look closely at the different moments and begin to suggest why particular moments might have had significance to one person and not the other. Often the teacher saw or was concerned about something that the observer did not see, or vice-versa. By comparing and contrasting these different "bumpy moments," we may be able to gain some insight into which kinds of moments are important to each person, and why some moments are more important or salient to one person more than another. This lead into the second type of analysis.

**Analysis by person**

It is presumed that each individual participant brought to this study different beliefs, knowledge, opinions, fears, and dispositions toward teaching and how they personally engage in reflective activity. For this reason, it became interesting to look at each individual and compare what they considered to be "bumpy" with the other participants. For instance, one person might be primarily concerned with management issues while another is highly sensitive to moments that revolve around instructional issues. In order to compare the "bumpy moments," I first categorized the types of moments that each individual experienced as a means of sorting the
descriptive data collection (Bogdan and Biklen, 1992).

In order to develop coding categories, I first referred back to my earlier study to see if any of these categories apply. In that study, I could categorize all my “bumpy moments” into seven different groups. These groups were: Management, Parents, Not Prepared, Line up, Special Events, Disruptions, and Recess. I attempted to fit the “bumpy moments” of each participant into those categories and developed new categories for the moments that failed to fit into any of these groups. I continued to test and re-test the definitions of each categories across all the “bumpy moments” for each participant. The similarities and differences that arose in the types of “bumpy moments” identified, led me into an analysis of these “bumpy moments” over time.

**Analysis of “Bumpy Moments” over time**

Once the “bumpy moments” of each individual were categorized, I attempted to determine if the kinds of “bumpy moments” changed over time. For example, was a participant concerned with a majority of management issues during the beginning of the year and then shift this focus to instruction as time goes on? I also examined whether familiarity with a certain teacher, classroom, or gaining a set of experiences in this context changed the “bumpy moments” perceived over the weeks. It became interesting to see if the preservice teacher’s perceptions of what is happening every week changed as the study continued. After all, the teacher is working with these students every day, and the preservice teacher only got a weekly shot at understanding the classroom context. Comparison of the moments and how they follow each other added to the further analysis of the differences and similarities between the teachers and preservice teachers in
Differences and Similarities among and between Teachers and Preservice Teachers

Once I determined the categories of “bumpy moments” for each participant and how they occurred or changed over time, I compared the categories across teachers, across preservice teachers, and conducted a further comparison of the two groups. First of all, I examined the four practicing teachers in this study and began to make generalizations about how these four people experience and understand “bumpy moments” in teaching. This included an analysis of the similarities in categories of moments they identified, and how these moments tended to occur. Once the preservice teachers were compared to each other, I completed a similar analysis for the four preservice teachers.

Finally, I conducted an analysis of the differences and similarities between the group of practicing teachers and the group of preservice teachers. The five overall research questions were created to determine how teachers and preservice teachers differ or are similar in their responses to “bumpy moments” in teaching. Insights into answering these questions can be found by looking at each the responses to the nine interview questions and the written stories. The first research question is: What do teachers and preservice teachers consider to be “bumpy moments” in their teaching or observation of teaching; how do they differ and how are they similar? Analysis included looking at each “bumpy moment” that the teacher or preservice teacher described and pulling out the description and categories of “bumpy moments” identified. The categories and kinds of moments experienced by teachers were then be compared to those of the group of
preservice teachers.

The second question, What do teachers and preservice teachers think about when faced with a "bumpy moment" in teaching; how do they differ and how are they similar?, was addressed by examining the thoughts recalled by each participant. Again, I began by looking to see if each participant’s thoughts fit into categories as mine did in my self-study. In my study, I found seven different types of thoughts during a "bumpy moment" in my teaching. They were: Previous experience and the ability to anticipate a problem in practice; Thoughts of frustration; Asking myself, "What should I do?;" Thoughts about my teaching; My attitude; Consideration of students; and Modifying the plan. Some of the thoughts of the teachers or preservice teachers fit into these categories, and additional categories were developed. Once I categorized the types of thoughts, I again conducted a comparison between the teachers' and preservice teachers' thoughts when faced with a "bumpy moment."

The third question, What kinds of knowledge or beliefs do teachers and preservice teachers bring to the "bumpy moments," and where did they come from; how do they differ and how are they similar?, was addressed in the similar manner by using the data collected directly from that interview question. In my study, I found that I often referred to my knowledge or beliefs, yet I never developed categories or further looked into where they came from. It was presumed that their knowledge may come from different places, depending on their experiences. Further, people gather beliefs from many aspects of their life and it was interesting to see how they were enacted in a teaching situation.

To answer the fourth question, How does the teacher resolve the difficult task of making decisions instantaneously within the classroom
context: and what did the preservice teacher observe the teacher doing?, I examined the actions and whether the “bumpy moment” was resolved. A comparison of what the teacher recalled doing and what the preservice teacher observed was then conducted. In my study I chose to attempt as many as ten actions to resolve one “bumpy moment,” but on other occasions chose to do nothing. A person observing in my classroom might perceive that I was ignoring or did not notice a particular situation when instead I was delaying my reaction or choosing to handle it in an unobservable manner. It was presumed that the teacher may be handling the situation in an intentional way and that the preservice teacher might not have realized what was happening. It was also interesting to compare whether each person thought that the “bumpy moment” was resolved.

The last question, What are the implications of each “bumpy moment” on a teacher’s or preservice teacher’s thinking about future decisions and teaching practice; how do they differ and how are they similar? was addressed by examining the final two interview questions about whether the teacher or preservice teacher would do anything differently the next time or if faced with the moment in practice, and how the “bumpy moment” in general will affect their future teaching practice. A teacher may be able to say what they would do differently tomorrow, but a preservice teacher would have to make predictions for the unknown future. At any rate, it was hoped that this analysis might provide some insight into how “bumpy moments” might possibly have an impact on a teacher or preservice teacher’s future experiences, thoughts, and beliefs.
ANALYSIS OF "BUMPY MOMENTS" BY CLASSROOM AND PERSON

The following chapter is an analysis of the “bumpy moments” that occurred in each classroom during the six observation days in the study. The classrooms are presented in order by grade level, beginning with the first grade and ending with the sixth. The dates of the study are listed, along with whether Early Release days figured into the data collection. The moments that occurred in each classroom are presented in the form of a Table. The teacher in that particular classroom is then introduced, and I attempted to share her background as well as any personality traits or tendencies I noticed while completing the interviews. Next, the types of moments this teacher experienced is discussed, followed by how these moments occurred over time. The teacher’s thoughts, knowledge and beliefs, actions and possible future implications are then analyzed further. Following the teacher’s analysis, the preservice teacher in that same classroom is then presented, and his or her analysis follows in a similar manner. The final section in each classroom analysis is a comparison of how the “bumpy moments” identified by the teacher compared to the moments identified by the preservice teacher.
"Bumpy Moments" in Ms. Porter’s First Grade Classroom

Ms. Porter, a first grade teacher, was paired with Jeanne, a TTE 300 preservice teacher. Of the six observation days for “bumpy moments,” four of these days were Early Release Days for the school. This meant that the students were dismissed from school at 12:20, and their afternoon specialist was held in the morning instead. The Early Release schedule impacted Ms. Porter’s class in that she normally had centers in the morning on any given school day. On the Early Release days however, she altered her schedule to complete whole-group type of activities during the morning. This change was considered effective on the first of the four Early Release days, as neither participant reported a “bumpy moment.” As time went on, the amount of “bumpy moments” on Early Release days varied. In one respect, Ms. Porter seemed to think there were less “bumpy moments” during some of the Early Release days because she did not encounter the persistent problems related to conducting dual segments with her first graders. Jeanne, however, began to note several “bumpy moments” related to the change of schedule on Early Release days. Thus, it is difficult to assess whether having Early Release days greatly impacted the “bumpy moments” for this classroom.

The six data collection dates for the study are now listed and the Early Release days are noted: September 22; October 6 (Early Release); October 20 (Early Release); November 3 (Early Release); November 17; December 1 (Early Release). On these six days, Ms. Porter and Jeanne identified the “bumpy moments” illustrated in Table 1. An arrow indicates that there was a match between the “bumpy moments” or days without “bumpy moments” that both Ms. Porter and Jeanne identified.
Table 1.
"Bumpy Moments" in Ms. Porter's First grade

<table>
<thead>
<tr>
<th>Day</th>
<th>Ms. Porter</th>
<th>Jeanne</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Student interrupted directions to ask off-topic question</td>
<td>Students being disruptive during Pledge of Allegiance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 Two students called out during directions</td>
</tr>
<tr>
<td>2</td>
<td>Problems with tape recorder</td>
<td>Problems at a center interrupted students at reading</td>
</tr>
<tr>
<td></td>
<td>disrupted students at reading</td>
<td>3 Student called out after a game/activity had ended</td>
</tr>
<tr>
<td>3</td>
<td>Problems at a center interrupted students at reading</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Day 2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Day 3</td>
<td>1 Students entered late due to parent conference-set tone for day</td>
<td>1 Student not following directions during Pledge of Allegiance</td>
</tr>
<tr>
<td></td>
<td>2 Interruptions during directions and reading</td>
<td></td>
</tr>
<tr>
<td>Day 4</td>
<td>1 Students rambunctious and asked lots of questions</td>
<td>1 Students rambunctious and asked lots of questions</td>
</tr>
<tr>
<td>Day 5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Day 6</td>
<td>0</td>
<td>1 Overall &quot;bumpy&quot; morning</td>
</tr>
</tbody>
</table>
Ms. Porter

At the time of the study, Ms. Porter was completing her nineteenth year of teaching. She was a Lower Quartile teacher for ten years, helping students with remedial work, and then taught Kindergarten for seven years. She was now completing her second year since she moved to first grade. Ms. Porter is a friend of mine, and was overly helpful during the study. She admitted to her TTE 300 student that she would tell me everything that was possibly "bumpy" in a day and allow me to sort through what was "bumpy" or not. Because this was not part of the study, and because she never talked to me about this directly, I chose to include every one of the moments she told me as a "bumpy moment." Possibly again because of our relationship, Ms. Porter was the only teacher in the study who did not attempt to define or redefine the "bumpy moment" term so that I may better understand what was "bumpy" to her. Again, this was not asked of her, and she simply did what was asked of her.

Ms. Porter was easy-going during the interview, again most likely because I was a friend and colleague, and often joked about what she was experiencing in the classroom. Comments like, when asked how the moment would affect her future teaching practice, "I'm not coming in to school tomorrow" (October 20) were fairly typical. She also talked about certain moments as 'par for the course' or 'to be expected' yet she labeled them as "bumpy" for the purposes of the study. Perhaps she knew that I too, as a first grade teacher, was experiencing similar moments. All through the study, and in analysis of the types of "bumpy moments" she was experiencing, I was beginning to realize that her types of moments might be strongly managerial, as mine had been in my self-study of first grade teaching. In general, Ms. Porter didn't seem to talk much about how the moments were
going to affect her future teaching practice. Instead of talking about changes that she might make tomorrow to improve the situation, as other teachers did, she tended to find the question amusing and made jokes about whether she could continue teaching tomorrow.

Ms. Porter identified a total of six “Bumpy Moments” with half of these moments occurring on the first day of the study. Day two, the first Early Release day of the study, had no “bumpy moments.” This was followed by the second highest amount of moments on the second Early Release Day of the study, Day 3. The amount of moments decreased from there, eventually becoming zero for the last two days of the study.

Ms. Porter's Types of Moments

On the first day of data collection, Ms. Porter identified three “bumpy moments.” The first moment occurred when a student interrupted directions to ask an off-task question. This student asked if she could get something out of her backpack in the middle of Ms. Porter's explanation of a seatwork page. This moment was classified as a Management problem which was defined as a problem with a student or students who interrupt or threaten to interrupt instruction. This interruption occurred during whole group directions. The second moment on day 1 occurred when students had persistent problems with a tape recorder during center time. This was a problem because they interrupted students during their reading time with Ms. Porter. This moment was classified as a Spontaneous Problem or interruption, in this case during the management of dual segments in the classroom. Another group of students, this time at a math center, also interrupted students at reading because they were loud and off-task. This third “bumpy moment” was also considered to be a management problem because the students' behavior was
disrupting instruction, yet this occurred during the management of dual segments rather than whole group instruction.

The second day of data collection was the first Early Release day of the study. On this day, Ms. Porter explained that there were no "bumpy moments," most likely due to the fact that her students enjoyed the change in their normal routine. The third day of data collection was also an Early Release, but it differed in that Ms. Porter held centers during that morning because it was Parent Conference week. Her first moment was a Time Management problem that occurred during unusual circumstances. This was due to the fact that one of her morning parent conferences ran late and the students became rambunctious as they waited outside. Ms. Porter believed this set the tone for the morning. The second "bumpy moment" on this day was a Management Problem during dual segments. On this day, there were several interruptions which disrupted Ms. Porter's directions for center work and reading groups. The fourth day of data collection yielded one "bumpy moment" for Ms. Porter, again a Management problem with particular students who interrupted the activity during whole-group activities. In general, Ms. Porter said that many of her students were rambunctious, and asked a lot of questions after explicit instructions had been given.

Ms. Porter felt that there were no "bumpy moments" on both the fifth and sixth days of data collection. The fifth day was a normal center day that was affected by having a new student in the room. The students responded positively, and the day went smoothly. Day six was an Early Release day in which Ms. Porter reported there was some student chatter, but it wasn't interfering with their work. This was the only day of the study that I interviewed Ms. Porter on the day following the actual day in which she was to watch for "bumpy moments." It was also the only day that she did not
record the "bumpy moments" that were occurring during the act of teaching. It is difficult, if not impossible, to determine if this impacted her feeling about the "bumpy moments" on that final day. However, there remains a possibility that it may have.

In total, Ms. Porter experienced four Management moments, two during whole group activities or instruction and the other two during the management of dual segments. She also reported one Time Management problem during unusual circumstances. Finally, there was one Spontaneous Problem that interrupted the dual segments in her classroom. An analysis of how these moments occurred over time now follows.

**Ms. Porter over time**

Many of Ms. Porter's "bumpy moments" were caused by student interruptions. The first moment she spoke of involved a student who asked an off-task question during whole group directions time. We see a similar type of moment occurring on day 3, although the students' interruptions were less off-task. Instead they were continuing to call out their questions and interrupt the teacher as she explained the work for the day. Student interruptions took a different form during the management of dual segments, when her students at reading were interrupted by problems with a tape recorder at another center (on day 1), problems with a group that was loud and disruptive (also on day 1) and many questions on the work for the day (on day 3). These types of problems seemed to persist during first three of the six data collection days, which spanned six weeks of actual teaching.

The absence of such moments in the later days is unexplained however. Ms. Porter did not discuss any changes in her teaching and/or management techniques as a result of these moments, yet she failed to mention these types
of moments in the latter days of the study. Some possible explanations would be that: 1) She tired of discussing such moments and they continued to be “bumpy” but not worth discussing again and again; 2) Such moments persisted but Ms. Porter changed her expectations and began to accept this student behavior as more acceptable than she had originally thought; 3) A different set of circumstances (overall student rambunctiousness and management problems on day 4, having a new student on day 5 and completing the day 6 interview a day late without any notes from the day before) overshadowed these types of moments.

Ms. Porter’s thoughts

When Ms. Porter was asked to share what she was thinking during the “bumpy moments,” she shared eleven different thoughts. Four of these included thoughts about particular students or groups of students in her classroom. On these occasions, Ms. Porter sought to make predictions for her students’ future behavior and anticipate what they might need during a particular lesson. Three thoughts concerned developing a plan of action for handling the “bumpy moment” in her teaching. These thoughts consisted of deciding what she might have to do to get things back on track (on day 1) and trying to decide if and when she should step in and handle the situation.

Two of Ms. Porter’s thoughts dealt with her concerns about time constraints and how she was going to accomplish what needed to be done in a certain time period. These occasions presented themselves frequently when she was conducting reading groups that were being interrupted by students outside of the group. Finally, Ms. Porter discussed two thoughts in which she was considering how she might balance her priorities. For example on days three and four, she felt it was important to accommodate the parents of her
students, but felt it was interfering with the students in her classroom because they needed her too. In these cases, she had to decide which was more important at the moment, and make a decision about how she might handle the situation accordingly.

Ms. Porter's knowledge or beliefs

In the discussion of her "bumpy moments" in teaching, Ms. Porter expressed that she tends to rely on her knowledge of students based on her previous experiences. In the discussion of four out of six of her "bumpy moments," she explained that these experiences help her to determine how students might react in the present situation. For example on day three, she shared that when she opens the door late after the school bell has rung, she tends to have more behavior problems than when she lets the students in promptly. Thus, she always try to open the door on time and prevent any further problems. She also explained how her previous experience with students who ask off-topic questions, and students who ask to go to the nurse helped her determine how to handle these situations during the "bumpy moments."

Ms. Porter also expressed three beliefs about teaching, two of which fit into the category that some things in teaching just happen, and are out of a teacher's control. Although a situation or "bumpy moment" may not be ideal, it does not necessarily mean that it is all that unusual because of the many factors involved in teaching. She also discussed a separate belief concerning her expectations for adults who are working with students in her classroom. During this "bumpy moment," she had to interrupt her reading group twice to take care of a problem that she felt the adult in the room should have handled. Thus, Ms. Porter believes that the adults should take responsibility
for dealing with students so that the other students can also get their work done.

Ms. Porter's actions

Ms. Porter identified seven actions that she took in an attempt to resolve her six "bumpy moments" during the study. Two of these actions fell into the same category, which was giving verbal redirections to individual students or the whole group of students. In the first incident, Ms. Porter had to remind a student, who had asked to get something from her backpack during directions, that this was an inappropriate time to take care of such matters. In the second situation, she chose to give a verbal reminder to students misbehaving at another center, rather than leave her reading group to take care of the problem. Yet on another day when the center with the tape recorder wasn't working, Ms. Porter was forced to take a different action. In this case she had to leave her reading group to help the students with the recorder. She discussed that she was forced to take this action because the students could not solve the problem themselves.

Another action that Ms. Porter took during a "bumpy moment" included continuing a lesson despite an interruption. On this day a student called out and asked an off-topic question. After this interruption, Ms. Porter says that she had to take about five seconds to get her train of thought back, and then persisted with her lesson. During a "bumpy moment" in which the entire class seemed to be having difficulty settling into their routine, Ms. Porter reinforced some students' positive behavior to shape the entire group's behavior. During the compound moment on day four in which the students were rambunctious and were asking many questions during directions for a phonics page, Ms. Porter dealt with some students individually
and then refused to answer further questions that acted as an interruption to her directions. In this case she said, "I'm only going to give directions once, so if you're not listening you're going to have to ask someone else" (November 3).

Ms. Porter's future implications

After every "bumpy moment" discussion, Ms. Porter was asked to share if there would be any future implications, or if the "bumpy moment" help her to reflect on issues or take further action. Her six responses fell into three different categories. First of all, three times she told me that there were no future implications for this moment, mostly because the events were typical problems that arise during teaching. She adds that a teacher just needs to be flexible, saying "These things occur and you just roll with it" (September 22). The other two times that she said there were no "bumpy moments," she either offered a sarcastic remark or said that she found that question amusing.

During two other discussions of "bumpy moments," Ms. Porter shared that she may change a procedure or reexplain something if it becomes necessary in the future. She considered going over how to work the tape recorder if this problem persists. On the other day, she said that she may have to change which children go to a certain center if there continues to be a problem with their behavior together. The final moment led Ms. Porter to take immediate action. When we were discussing how some of her students frequently ask to go to the nurse, she suggested that it was an inconvenience to have the nurse's pass so far away from her reading group. When I asked what she might do in the future, she got up from our interview and moved the pass closer to her reading center.
Jeanne

At the time of the study, Jeanne was a senior at the University after transferring to the college in her junior year. She had just been accepted into the College of Education prior to this semester. Before her experiences at this school, she worked in a day care for four years with children who were six months to twelve years old. She also volunteered in classrooms at many grade levels. During the study, Jeanne always wrote notes to herself so that she might be able to recall the “bumpy moments” and talk to me about them. We always completed the interview immediately following her observation, so it is presumed that she had a very fresh memory of the events.

I noticed over the course of the interviews with Jeanne that she was disenchanted with the program in this classroom, and perhaps with the school in general. She often compared the children in Arizona to the children where she went to school in Illinois. I got the impression she was not satisfied with either the way the teacher handled the students, or with how the students in Arizona behaved in general. She even suggested that Arizona’s warmer climate allowed the teachers and students to dress more casually, thus creating a more ‘laid back’ attitude and environment. Yet, when I asked her what she would do differently, she usually did not have a solution to the problems she posed.

I often wondered if Jeanne might be viewing the classroom through a student’s eyes and was unable to look at it from a teacher’s perspective yet. For example, on day 6, she told me that all the desks were facing forward in her classrooms in Illinois. She then consented that maybe this was changing everywhere, however. She also was very excited when the teacher gave her a “red pen” and asked me to put that in quotes when I was transcribing the interview. She said she felt like the pen gave her teacher privileges.
Jeanne identified a total of six "bumpy moments," the same number as Ms. Porter, yet some of them fell on different days. She began with three moments (the most of any day) on the first day of data collection. The remaining three moments occurred on three separate days: Days three, four, and six of the study. Days two and five had no "bumpy moments" moments according to Jeanne.

Jeanne's Types of Moments

On the first day of data collection, Jeanne identified three "bumpy moments." The first of these moments occurred when a student was being disruptive during the Pledge of Allegiance. This moment, like all of the moments that Jeanne identified during the study, was classified as a Management problem because a particular student was interrupting the activity or instruction. The second moment involved two separate students who called out questions or comments and interrupted directions for center time. Again, this was a management problem during whole group instruction. An additional student yelled out after a clapping game had ended, presenting another whole group management "bumpy moment."

Jeanne reported that there were no "bumpy moments" on the second day of data collection, primarily because the schedule had been changed to compensate for the Early Release. She felt that the students enjoyed the change and there were no problems. Another management problem during the Pledge of Allegiance followed on day three, when more than one student was not following the teacher's directions. This was the only problem she noted during this Early Release day. Although Day four was also an Early Release day, Jeanne discussed that many of the students were rambunctious and there were lots of questions on a Phonics page. This was a different sort
of activity, but still a management type of "bumpy moment." Jeanne felt that there were no "bumpy moments" on day five, but felt that the Early Release day on day six was an overall "bumpy" morning with several management issues.

Jeanne over time

When categorizing Jeanne's "bumpy moments," all of them fell into the category of management moments within a whole group activity or instruction. Jeanne seemed to key in to specific students who continued to be a "problem" on several occasions. When I asked her how she knew these children were "problem students," she said that their desks were spread out in the corners of the room, away from all the other students' desks. The first three days of data collection Jeanne referred to specific students and how they were either interrupting or not following directions. She also seemed to have some recurring themes, like during the Pledge of Allegiance (twice) or situations like calling out (at least two times). The second half of the study she began to more globally describe the students in the class, and in these cases she described many of the students as being rambunctious or disruptive and no longer named individual students. It is possible that on these days more of the other students were participating in the creation of "bumpy moments" for the teacher, or that Jeanne either broadened her scope or began to generalize the behavior of the entire class. At any rate, she seemed to remained preoccupied with issues of whole group management throughout the study.

Jeanne's thoughts

Jeanne discussed a total of eight thoughts during the discussion of the
"bumpy moments" that she observed. Most of these thoughts were different, there were only two thoughts that could be put into the same category. These two thoughts consisted of evaluating the teacher's decisions in the classroom and how Jeanne thought it might be impacting the students. In these instances, she suggested that the teacher's expectation for her students to sit and listen to directions was too high, and on another occasion said that the teacher was unrealistic when she expected her students to sit and wait for others to finish a particular task. The separate thoughts included thinking about a particular student and determining what might motivate his behavior during the Pledge of Allegiance, watching to see if student behavior during a "bumpy moment" was going to improve, and being aware that her behavior might impact the student and thus she was trying not to give them any attention for their negative behavior. She also admitted that on one day she was "totally in my own world" and this affected her ability to concentrate on what was happening in the classroom.

Jeanne also expressed a thought about what she might do herself if she was faced with the same situation in her teaching practice. In this instance, she was discussing a moment in which the students were rambunctious as they began doing a phonics activity. This led Jeanne to contemplate how she might be able to compensate for having students on different levels when she herself is teaching. In our discussion, she discussed how she might create a different activity that would allow the students to go at their own pace and have another task to complete when they were finished. Jeanne was also the only preservice teacher to admit that a particular student's behavior had astonished her. In this situation, the student called out to continue a game that the teacher had ended. It seemed to surprise Jeanne that the student had been so rude.
Jeanne's knowledge or beliefs

Jeanne discussed seven types of knowledge or beliefs for the six "bumpy moments" that she identified. On one day, she expressed that she brought no knowledge or beliefs to the moment. Of the seven times in which she did share her knowledge or beliefs, three fell into knowledge categories, two of them in the same category. The two concerned her previous experiences with students. In one of these instances she explained how she had played a similar game that the teacher was using in the study in another classroom. She suggested that she would have altered the game to make it more effective. On another day, she discussed how she had previous experiences with the students in her observation classroom and had seen how they had behaved before. The other knowledge that she brought to these events consisted of her personal experiences as a student. Several times during the study she proposed that Arizona schools were different from those that she attended in Illinois. When she offered a comparison, she was convinced that Illinois offered a better educational program based on her experiences as a student.

Jeanne also expressed two beliefs about teaching, two of which fit into the same category. On two separate occasions she expressed the belief that students should be expected to behave in certain ways. Although they were on two separate days, both moments involved how students should behave during the Pledge of Allegiance. She said, "There is a very set rule of what you should be doing during the flag" (September 22). Another belief was that directions for work should be presented in smaller portions for first grade students. This belief was expressed when she thought the teacher was trying to hold her students' attention for too long and had set an unrealistic expectation for how much they could handle. The final belief that Jeanne
expressed was that children need structure, and in this case she felt that an Early Release day failed to offer this to students.

Jeanne's perception of the teacher's actions

During the discussion of the six “bumpy moments” that Jeanne witnessed during the study, she identified eleven actions that the teacher took in an attempt to remedy the problematic situation. Three of these actions fell into the same category. On three different occasions during the study, Jeanne observed the teacher using non-verbal cues to remind the students about what they should be doing or what was appropriate. One of these instances was when a child called out after the teacher ended a game and acted as if she was continuing the game with the other students. Jeanne reports that the teacher just gave the student a glance and the student stopped immediately. The other two times that the teacher used non-verbal reminders were during the Pledge of Allegiance. On one day, the teacher simply gave eye contact to a student who was misbehaving. A few weeks later the teacher had to give a hand signal and eye contact to a student who was also being silly during this time. Jeanne presumed that the teacher chose to give non-verbal reminders because she could not stop the Pledge of Allegiance to take care of the problem.

Twice during the “bumpy moments,” Jeanne observed that the teacher would call on individual students to make sure they were paying attention to the teacher. In one instance a student was talking about something while the teacher was discussing a different subject. The teacher simply said the student’s name and incorporated it into what the teacher was discussing. On another day, the students in general were rambunctious, so the teacher would call on some students and ask them a question to make sure they were paying
attention. Jeanne observed that this technique helped keep the students alert and involved with the lesson.

The other actions that Jeanne observed fell into six different categories. One action was to give a verbal redirection to a student who asked an off-topic question while the teacher was giving the morning directions. When the student continued to mumble to herself, the teacher ignored her behavior and continued with giving directions. While one of the students was misbehaving during the Pledge of Allegiance, as discussed above, the teacher stepped closer to the student so that he might stop his behavior. On one day there were so many questions during instruction time that the teacher felt that the students weren't really listening to what she was saying. In this instance, she refused to answer any more questions so that she might minimize the interruptions. When the students had difficulty getting settled into the routine on one occasion, the teacher made sure everyone was in their seats and ready to begin. Finally, on the Early Release day which was filled with whole group activities rather than centers, Jeanne felt that the teacher chose not to deal with the noise level and accepted that it would be that way.

Jeanne's future implications

In the discussion of the six "bumpy moments" that Jeanne witnessed, she discussed that four of the moments had future implications for her own teaching. These moments fell into two categories: 1) thinking about what she would do in that situation, and 2) making her more aware of issues in teaching. According to Jeanne, the other two moments had no implications for her future teaching or thinking about teaching. Ironically, both of these moments concerned students' behavior during the Pledge of Allegiance. Even though she brought this type of moment up twice, she said that she didn't
think it would affect her thinking about teaching. When I probed even further, she said that she could consider doing the flag salute in the afternoon when the students are more calm.

The two moments which helped make Jeanne more aware of certain issues in teaching involved what she called 'reminders' about students. For example, I asked her the implications for the moment in which a student called out a question during directions. She said, “It is just a reminder that students may say anything and you need to be on top of it, and you have to know how to bring them back to activity and realize it is important to listen” (September 22). Jeanne commented that she was also reminded that all students will not be on the same level and you need to accommodate for their individual needs and differences. The two moments that allowed Jeanne to think about what she would do in a similar situation led her to believe that she would have done a different game with the students, and that she should “Look out for those half days. You think you’re getting a break, but you’re probably not” (December 1).

Comparison of the moments identified by Ms. Porter and Jeanne

Ms. Porter and Jeanne more frequently matched up when there were no "bumpy moments," according to both of them. On days two and six, both Ms. Porter and Jeanne said that there were no moments. Both Ms. Porter and Jeanne identified six “bumpy moments” during the course of the study. However, there were only two instances on which they agreed upon the same “bumpy moment.” The first was in one of the three moments they each identified on the first day of the study. On this day, they agreed that the student or students who interrupted directions to ask questions presented a “bumpy moment” for the teacher. On that same day, they each identified two
other moments, neither of which matched the others. The other instance in which the moments matched was on day four. On this day, both teacher and TTE 300 student agreed that the students were rambunctious and that there were lots of questions on one particular phonics page. That was the only moment each of them identified on that day.

**Looking at the “bumpy moments” that matched up**

**Moment: Student interrupted directions to ask an off-topic question**

Although both Ms. Porter and Jeanne thought this to be a “bumpy moment,” they differed on why they thought it was problematic. Jeanne felt that this moment was caused by another student who called out previously. She thought that an example had been set, and now other students thought it was acceptable to do so in the future. Ms. Porter did not consider the two calling out incidents to be related because one of them, in her opinion, was on the topic of what they were discussing at the time. Instead, she discussed that first graders typically share the first thought that crosses their mind, whether it is on the topic or not. Ms. Porter considered it to be a “bumpy moment” because the student who interrupted asked something that was indeed off-topic. Despite the disagreement about why the moment was “bumpy,” both teacher and preservice teacher agree that such a moment illustrates how spontaneous first graders might be, and how a teacher needs to be prepared for such instances.

**Moment: Students rambunctious and lots of questions on phonics page**

Both Ms. Porter and Jeanne agreed on the factors that might have contributed to this moment, including Halloween previously and the Early Release day. However, Jeanne mentioned a factor that the teacher neglected.
She explained that the students are asked to do the phonics pages at the same pace, regardless of their different ability levels. Jeanne thought that trying to keep everybody on the same page may have contributed to the problem. Thus, this moment had a greater impact on Jeanne because she was led to contemplate how she might account for these differences in her own classroom someday, while Ms. Porter said that this moment won't lead her to make any major changes.

Looking at the days without "bumpy moments" that matched up

Both Ms. Porter and Jeanne felt that day two held no "bumpy moments" because the students had a different kind of morning due to the Early Release. They felt that the change of pace and the fact that the two adults in the room could quickly respond to student questions helped the morning go smoothly. Jeanne also mentioned one consideration that Ms. Porter did not. She suggested that the students may have had to be more alert and pay closer attention because they were not yet familiar with the new schedule, and this helped them stay on-task. Day 5 was a normal center day, but both Ms. Porter and Jeanne agreed there were no "bumpy moments." However, they differed on what they thought may have been the cause. Ms. Porter thought the new student in the classroom impacted the other students' behavior, while Jeanne thought that the students enjoyed getting back into the routine of centers.

Looking at the days and "bumpy moments" that didn't match up

What did the teacher see that the preservice teacher didn't, or the preservice teacher didn't think was "bumpy"?

In this classroom, the preservice teacher didn't see or was not aware that the teacher was experiencing problematic moments involving the
management of dual segments. In one moment, the TTE 300 student herself was part of the cause for the center disturbing the teacher’s reading group. In that moment, the preservice teacher was the supervisor of the math center that held the boys who were being disruptive and loud. Although the teacher admits that the group of boys have had previous problems together and should maybe have been moved, she believes that the problem stemmed more from the preservice teacher not being aware of her surroundings and/or the impact of her center on the rest of the classroom. On two other occasions during center time, Jeanne did not notice or mention the problems with the tape recorder or other times when students were interrupting the teacher’s reading groups. Also, the teacher tended to mention things that she believed “set the tone” for the kind of day they would have. She discussed things such as students entering the classroom late, not letting the students in the classroom on time, and having to cut parent conversations shorter that caused a rough start for the morning. For whatever reason, Jeanne failed to mention such problematic issues.

**What did the preservice teacher see that the teacher didn’t, or the teacher didn’t think was “bumpy?”**

Ms. Porter failed to mention, or possibly see the pattern of, the reoccurring student behavior instances during the Pledge of Allegiance. Although it seemed that she did notice the problem as it was occurring and took measures in an attempt to stop it, Ms. Porter never mentioned it to be a “bumpy moment.” Jeanne, however, was very bothered by this problem because she said there were very specific expectations for behavior during this time, and she felt the teacher’s hands were tied because she couldn’t stop the Pledge to take care of the problem. Another moment that the teacher
didn't mention was when the student called out after the clapping game had ended. Jeanne was taken by this moment because she thought the student's behavior was very rude. Ms. Porter perhaps did not consider this moment to be "bumpy" because there is a history of this student calling out in other situations, and because the behavior ended immediately with only a glance from the teacher.

The other day seemed a complete mismatch because Ms. Porter thought there were no "bumpy moments," while Jeanne thought the whole morning was "bumpy." This might be due to the fact that their expectations for student behavior differed and Jeanne thought the Early Release days didn't hold enough structure. Also, this was the only time that I interviewed Ms. Porter on the day following her observation, and she had not taken any notes as she had in the past. Having to recall the previous day's events may have affected how she interpreted the events.

*Bumpy Moments in Mrs. Anderson's Third Grade Classroom

Mrs. Anderson, a third grade teacher, was paired with Beth, a TTE 300 preservice teacher. Of the six observation days for "bumpy moments," none of these were school Early Release days. The only day that stood out as being any different than the others was November 10 (day five) which was the day before the Veteran's Day holiday. The dates for the study were: September 15; September 29; October 13; October 27; November 10; and November 24. On these six days of data collection, Mrs. Anderson and Beth identified the "bumpy moments" illustrated in Table 2. An arrow indicates that there was a match between the "bumpy moments" or days without "bumpy moments" that both Mrs. Anderson and Beth identified.
Table 2.

"Bumpy Moments" in Mrs. Anderson's Third grade

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Mrs. Anderson</th>
<th>Beth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Time Management problem during a lesson and follow-up</td>
<td>1 Student laughed at another student asking a question</td>
</tr>
<tr>
<td>2</td>
<td>Student snickered at another student asking a question</td>
<td>2 Students having difficulty with worksheet directions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Day 2</th>
<th>Mrs. Anderson</th>
<th>Beth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Starting new math groups- student schedules were messed up</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Day 3</th>
<th>Mrs. Anderson</th>
<th>Beth</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>1 Parent couldn't come in to help with centers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Day 4</th>
<th>Mrs. Anderson</th>
<th>Beth</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>1 Students had difficulty with a math worksheet</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Day 5</th>
<th>Mrs. Anderson</th>
<th>Beth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pictures on worksheet caused confusion for students</td>
<td>1 Pictures on worksheet caused confusion for students</td>
</tr>
<tr>
<td>2</td>
<td>Students asked questions about new math procedure</td>
<td>2 Students asked many questions during directions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Day 6</th>
<th>Mrs. Anderson</th>
<th>Beth</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>
Mrs. Anderson

At the time of the study, Mrs. Anderson was completing her fourteenth year of teaching. She has taught third grade for her entire career. From the beginning of the study, Mrs. Anderson was extremely interested in the “bumpy moment” research, and treated her participation in the study as a learning experience. She was constantly reflecting on her “bumpy moments” and sought to redefine the term so that it best described what she was experiencing in the classroom. On a couple of different occasions, Mrs. Anderson would speak to me about what she had been thinking about since our last interview. In those cases, I tried to remember every word she said and recorded it along with her interviews.

Mrs. Anderson seemed very willing to talk about the events in her classroom and was not shy to tell me when she felt she had made a mistake or her teaching was less than perfect. She also explained her philosophy on how handles “bumpy moments” in general:

You rescue it because you have no choice. You’re in this room teaching these kids so you can’t let the whole morning just dissolve because you had this one little ten minute block that got tight or got confused. You just bring everybody back and hopefully you’ve planned well enough and know well enough about what you are doing next so that you can go on (September 15).

She was also very proficient at explaining her thoughts by comparing it to a situation outside of teaching, sometimes in the form of a story. For example, when explaining how teachers have to be ready to deal with a number of possible situations, she offered the following analogy:

It’s all those odd things that happen... like if you’re a policeman and you pull someone over for a red light and you see that they’ve got open
bottles of beer or drugs in their car. You pull someone over for a red light and you expect to give them a ticket for a red light. Now you walk up to the car and you're dealing with a different situation. It's part of the job even though it may not be the routine part of it. So you plan for certain activities to go this way in your room, but because they don't go that way doesn't mean that it's so out of the ordinary. It just happens. It happens with enough regularity that it's just something you better learn to deal with. And you better know your class well enough to know how many changes and what they can expect (October 13).

She was also very interested in the outcome of the study. On several occasions, she would say, "I can't wait to hear what my TTE 300 student thought of this." She knew that I could not tell her what I had talked to her TTE 300 student about, but she told me that she would love to talk about it again after the study ended.

Mrs. Anderson identified a total of five "bumpy moments" during the six days of data collection. On the first day of the study she identified two moments. On the second day she only identified one. On the third day of the study, she identified no "bumpy moments," yet she discussed how two things happened that she considered more 'par for the course.' Using this description, these two events were things that were to be expected, and did not necessarily call for reflection and/or had further analysis. On the fourth day of the study, Mrs. Anderson announced to me that she had redefined "bumpy moments" to be teaching flubs, not managerial or interruptions. She had no "bumpy moments" using her new definition on Day four. On Day five, the day before Veteran's Day, Mrs. Anderson identified two "bumpy moments." On the last day of the study she said there were no "bumpy moments."
Mrs. Anderson's Types of Moments

On the first day of data collection, Mrs. Anderson identified two "bumpy moments." The first moment was a Time Management problem that occurred because her students were expanding their thinking and doing well on the first part of a lesson. She allowed them to continue working in this area, which left little time for the follow-up activity. Additional problems were caused when she couldn't work through recess because she had to supervise the students on the playground. The second issue occurred later that same day when a student snickered at another student who was asking a question during whole group instruction. This was classified as a Sensitive Student Issue because Mrs. Anderson had to consider the feelings of both students when attempting to handle the situation. On the second day of data collection, Mrs. Anderson reported a "bumpy moment" that occurred because she was not prepared for the beginning of new math groups, and some of the student's had problems with their schedules.

On the third day, Mrs. Anderson began discussing problematic issues that she considered more 'par for the course,' rather than "bumpy moments." This marked the beginning of her redefinition of "bumpy moments" that will be discussed in the analysis of her "bumpy moments" over time. According to her new definition, days three and four had no "bumpy moments." Day five held two "bumpy moments" according to Mrs. Anderson. The first occurred when pictures on a Phonics page caused confusion for the students. This was classified as a Not Prepared moment because she admits that she had not taken the time to figure out what the pictures were ahead of time. The second moment was a Management issue during whole group instruction when students repeatedly asked questions about their new math procedure. There were no "bumpy moments" on the final day of data collection.
In total, Mrs. Anderson experienced two moments in which she was not prepared. The other three "bumpy moments" fell into three separate categories. She reported one Management problem during whole group instruction, one Time Management problem, and one Sensitive Student Issue. An analysis of how these moments occurred over time now follows.

Mrs. Anderson over time

Mrs. Anderson seemed to experience very different moments over time. Her first moment was a Time Management problem, and she never identified another of these type of moments. On the same day, she identified a Sensitive Student Issue. Again, this type of moment did not come up again. On Day two, the moment identified could be classified as a Not Prepared moment, the only type of moment which showed up again (on day five). Also on day five, Mrs. Anderson identified the only Management problem that arose during the course of the study.

Mrs. Anderson's process of redefining "bumpy moments" according to her own understanding seemed to have a very strong impact on how and what she reported "bumpy moments" throughout the study. On the very first day of the study, Mrs. Anderson classified her "bumpy moments" into academic or managerial moments, even though I had not asked her to do so. On the third day of data collection, she began to call some moments in teaching 'par for the course' rather than classify them as "bumpy moments." Two school days after that interview, she met me in the copy room and told me that she had redefined "bumpy moments" to be something that goes wrong with her teaching, rather than a scheduling or management problem, as she had discussed before.

She gave me an example of a worksheet that she gave her third graders
with the phonetic -gh sound that sounds like an 'f.' However, on the worksheet were a few words like 'dough' and 'though' that don't follow that rule. She said that when she realized it again this year, she was looking at her ESL students and remembering how difficult it is for them when the English language doesn't follow the rules. She also remembered that last year when she did this particular worksheet she was frustrated, and meant to change it so that it didn't happen again or get rid of the worksheet altogether. But now she was in the same situation this year. And she knew about it but didn't do anything about it, which could have prevented problems on this day.

Mrs. Anderson went into the fourth day of data collection with that definition in mind, and thus she did not identify any such "bumpy moments." She began the interview on the fifth day of data collection by explaining that she had indeed experienced a 'teaching flub' when she was not adequately prepared to help students with the tricky pictures on a phonics page. She went on to tell me about a second moment on that day, that occurred when she tried a new procedure for some of her math students. This was the only Management issue that she discussed during the whole study. On the final day of the study, Mrs. Anderson explained that there were no "bumpy moments" because she couldn't think of anything that had happened besides what she called "managerial kind of stuff" (November 24).

Mrs. Anderson's thoughts

When asked to describe her thoughts during a "bumpy moment," Mrs. Anderson expressed a total of ten different thoughts. Half of these thoughts concerned individual students or the group of students in general. When she was making a decision during teaching, she explicitly stated that she was considering: "How am I going to fix it and what is the effect on the kids?"
(September 15). She also demonstrated the ability to look beyond what appeared to be happening and consider the underlying reasons for the behavior, such as the dynamic working between the students. At other times, Mrs. Anderson was evaluating whether her students should be able to handle certain tasks in the classroom and making decisions based on what she knew about the particular students.

Three of Mrs. Anderson's thoughts concerned developing a plan of action and considering alternatives for handling the situation. When deciding how to handle a situation, she relied on some of the techniques she had used in the past and often discussed her reasons for why she chose to handle situations in a certain way rather than in an alternate manner. When making these decisions she evaluated the appropriateness of her actions, whether she had time to handle certain situations later, and what was important at that time. The final two thoughts that Mrs. Anderson expressed were feeling "frazzled." On these days she admitted to having too many things happening in a given morning, or said that she simply should have known better or been more adequately prepared for the day's events.

**Mrs. Anderson's knowledge or beliefs**

When discussing Mrs. Anderson's knowledge and beliefs about her "bumpy moments" in teaching, she tended to express more beliefs than knowledge about certain events. The two times she described her knowledge were when she discussed an education experiment about learning and when she commented on how some moments are less problematic as compared to her other experiences. All other times, Mrs. Anderson expressed her beliefs about teaching and students. She described eight beliefs in all, two of them fit into the same category.
The two beliefs that were similar involved how students should behave or what students should be able to do in the classroom. The first time she expressed this belief was when a student was ridiculed by another student for asking a clarification question. Mrs. Anderson suggested that the behavior was rude, and that students should be more tolerant of another student's needs. The belief surfaced again when Mrs. Anderson was talking about trying something new with her math students. In this instance, she felt that her students should have been able to figure out the new procedure because they were in a gifted program and the procedure was not that different from anything they had done before.

There were six other separate beliefs that Mrs. Anderson expressed throughout the study. During the discussion of some of the "bumpy moments," Mrs. Anderson expressed more than one belief. When the first moment on day one occurred, which involved a Time Management issue, Mrs. Anderson described three different beliefs in connection with this moment. First of all, she discussed that a lesson should not be stopped due to time constraints, especially if the students are doing well and expanding their thinking. In this case the worksheet takes secondary importance. Another separate belief also emerged during this discussion. This belief stated that whether she stops a lesson or not depends on the content or concept of the lesson. She explains, "If it is a crucial concept, we stop everything and I might collect the papers but we'll come back to it. This one we're not going to go back because I know they got it." She also discussed her belief that things like this happen instantaneously, and on a regular basis in the classroom.

Mrs. Anderson expressed three other beliefs when discussing the second moment on day one. She explained that students are supposed to ask clarification questions when they don't understand directions for a task. She
also explained that she doesn't believe in getting into power struggles with the students because, "You end up in a no-win situation where all you have done is either by the force of your own authority imposed yourself on them, or lose, which is not a really good thing to do in front of the class." Along those same lines, Mrs. Anderson discussed that she believes in treating the kids with respect, and unless she has tried other things and they didn't work, no student deserves to be humiliated in public. Instead, she tries to deal with most issues privately after the incident occurs.

**Mrs. Anderson's actions**

Mrs. Anderson described seven actions that she took in an attempt to resolve the "bumpy moments" in teaching. Two of these actions included ignoring inappropriate student behavior. The first time she ignored such behavior was when the student was snickering at another student as he asked a clarification question. Mrs. Anderson explained that she ignored the snickering so that she might talk to the student in private and she didn't feel he was deserving of her "full public wrath" (September 15). The other situation included a few students who kept asking the teacher about their special worksheet, even though she had repeatedly asked them not to. She also ignored these students and took care of the issue at a later time.

The five other actions that Mrs. Anderson took fell into separate categories. In one instance she chose to continue her lesson and work through break time because she felt the lesson was important enough to continue. When this action failed because she had to go out to do recess duty, she took a second action and collected their work to finish at another time. In the issue discussed before about the child snickering, Mrs. Anderson followed through by talking to the student in private and encouraging him to be more
understanding of other students’ needs. Another action that Mrs. Anderson took was to make an immediate decision about which alternative was most desirable when her students’ schedules were messed up. In this case, she made an immediate decision and followed through with it despite the consequences. Finally, when her students were confused about how to do a worksheet properly, Mrs. Anderson offered additional assistance until she felt that they all understood.

Mrs. Anderson’s future implications

When discussing the future implications for Mrs. Anderson’s five “bumpy moments,” she suggested that most of them would not lead to any deeper reflection or further action. On these three days, she said that either there was no way to prevent such problems because they were typical of teaching, or said that she didn’t care enough about the problem to take any further action. During the discussion of one of these moments she said that every time you introduce a new concept to a group of children, it is impossible to anticipate how they might handle it. She says,

When you introduce something you don’t know if they’re going to take it and run with it. So you can’t anticipate always, even if you have a good feeling for the class, I don’t know every class, every lesson, every day (September 15).

She also shares her belief that some things in teaching will always happen and cannot be prevented. She explains that a teacher is forced to make a split-second decision and live with it whether it is right or wrong.

The other time that Mrs. Anderson thought that the moment would not affect her future teaching practice was when she was faced with the fact that a particular worksheet had been difficult for her third grade students. When
asked if she would do something differently in the future, she responded that she doesn't care enough about worksheets to put the effort into improving her skill. She admits that when she has the time to go through it herself it makes the process easier on everyone involved but still maintains that it's not that important. Finally, there was one moment in which Mrs. Anderson was happy with the results. In this case, she says that she would probably do the same thing if faced with a similar moment in the future.

Beth

At the time of the study, Beth was a Junior at the University and had just been accepted into the College of Education. Her previous experiences working with children included being employed by three different day cares during the summer time. She also worked with children up to age nine in an after school program. Beth had also volunteered in a Kindergarten and fourth grade classroom prior to coming into this third grade classroom.

Beth was very interested in participating in the study, although the reason for her motivation remains unclear. When I was discussing the study with the TTE 300 class at the University and was passing around a sign-up sheet, she said, "Please pick me." I chose her partly for her eagerness, but also because her grade level preference was very flexible and could accommodate most teachers interested in the study. It occurred to me that possibly Beth was interested in participating so that she could waive the other course assignment, which was keeping a log book or doing a community service project. However, when I met with her for the interviews, I noticed that she was indeed keeping a log of her experiences, including work samples and a written record. It is possible that she just was anxious to have the experience of talking about what she had seen in the classroom. In the final
interview, she said that participating in the study helped her to be more aware when she was observing in the classroom.

When Beth came to the interview she was prepared with notes that she had taken during her observation. Sometimes she had recorded complete quotes from the teacher. It was evident that she had been thinking about how she would explain things to me because she often brought samples of what the students were doing, specifically the worksheets that had been given to them. On several occasions, Beth was confused by the things that had happened in the classroom. She would explain that she knew something was going on, but couldn't tell exactly what it was. She said that she was trying to watch closely, but was often perplexed by what was happening and why. She discussed some "bumpy moments" with me that she was unsure about, and thus could not tell me exactly how she felt about them. It was apparent that she really desired to understand all the classroom events, but seldom talked to the teacher about these events. Instead, she discussed them with me but often left without truly understanding the event or circumstances. She also often talked about things from her own studenting experiences and discussed how she had felt about these particular issues as a student.

Beth identified six moments during the course of the study. She talked about two "bumpy moments" on the first day, followed by zero on the second day. Days three and four each had one "bumpy moment." According to Beth, day five had two "bumpy moments," followed by zero moments on the last day of data collection.

Beth's Types of Moments

On the first day of data collection, Beth identified two "bumpy moments." The first moment occurred when a student laughed at another
student who was asking a question during the whole group instruction. This was considered to be a Sensitive Student Issue because the teacher had to be very careful about how she handled the situation with both students. The second moment Beth identified was a Student Understanding issue, in which students were having difficulty understanding the directions on a worksheet. Beth suggested that there were no “bumpy moments” on the second day of data collection.

The only “bumpy moment” that Beth mentioned on the third day of data collection was when a parent wasn’t able to come in to help with centers. This was a Spontaneous Problem because the teacher did not find out until school had already begun. On day four, Beth identified one “bumpy moment,” again a Student Understanding problem as she felt students were having difficulty completing a math worksheet. The fifth day of data collection held two “bumpy moments,” according to Beth. The first one identified was another Student Understanding issue, this time pictures on a Phonics page caused confusion. The second moment occurred when students were asking many questions during the teacher’s directions. Although Beth did not fully understand what was happening during this moment, she knew that the teacher was having difficulty with whole group management. Beth shared that there were no “bumpy moments” on the final day of data collection.

Of the six moments Beth identified, half of these concerned Student Understanding. The other three “bumpy moments” fell into three separate categories. There was one Sensitive Student Issue, and one Spontaneous Problem or Interruption. The final moment was classified as a Management moment. An analysis of how Beth identified these moments over time now follows.
**Beth over time**

Beth was concerned with issues involving students throughout the duration of the study. On the first day, she mentioned both a Sensitive Student Issue and a moment involving Student Understanding. Issues involving Student Understanding resurfaced on days four and five. The whole group Management moment on day six does not, in my opinion, represent a shift in her thinking from individual students to whole group situations. Instead, the fact that she did not understand what was happening and her comments concerning students such as, "Why is the teacher yelling at them?" indicate that students were her foremost concern in this moment as well. This final moment may have been classified as a Student Understanding moment if she was more aware of what was happening. Mrs. Anderson reported that the students were asking clarification questions about a worksheet that the teacher fully expected they could figure out on their own.

Even the Spontaneous Problem or Interruption moment on day three could also be viewed through Beth's concern for students. In this case, a parent helper called to say that she could not come in to help with centers because she had fallen and possibly broken her arm. Although the fact that she could not help today may have been problematic for the teacher, Beth tended to focus on how tricky and sensitive the situation was because the teacher had to explain to the student that his mother had been injured. Thus, realizing Beth's inclination to put students at the forefront of her thinking sheds a different light on all the other moments.

**Beth's thoughts**

Beth described eight thoughts during the discussion of "bumpy moments." Three of these thoughts consisted of thinking about particular
students or the group of students as a whole and making judgments about what they were feeling or what they needed. When she discussed how a student asked a question during directions, she also added her interpretation that, "[The student] didn't understand anything the teacher was saying. I mean, he was completely lost" (September 15). In some of these thoughts she suggested that the third graders as a whole were confused when directions were too difficult for them to understand. Beth explained that if she herself didn't comprehend what the worksheet was asking them to do, then the students probably didn't understand it either. In one instance, she was concerned that a particular student might be worried when he found out that his mom had an accident and thus couldn't help in the class that day.

The many "bumpy moments" that Beth mentioned concerning the worksheets that the students were given also led to her evaluation of the teacher. In these cases, she felt that Mrs. Anderson had given them work that was either too difficult or confusing. Beth also expressed her frustration when she didn't know how to help the students. This led to a thought about her impact on the students in which she said, "It's embarrassing for me when I can't answer their questions but I don't know what the teacher wants... I don't want to tell them the wrong way or confuse them more." (November 10). Two of the thoughts she discussed consisted of watching the teacher to find out how she would handle a particular situation. Finally, on one occasion she admitted that she had been involved in grading papers and wasn't able to catch what was happening during a "bumpy moment."

**Beth's knowledge or beliefs**

Beth described one knowledge or belief for each of the six "bumpy moments" she observed. Four of these could be classified as a type of
knowledge and put into two different categories. On two separate occasions, Beth discussed how she relied on her personal experiences as a student when thinking about a classroom situation. In one of these instances, she suggested that the teacher was (in her opinion) yelling at the students but she couldn't tell what the students had done. This led her to say,

Sometimes I felt like I was yelled at for nothing. I think sometimes students and teachers just aren't on the same wave-length and they were unclear and she was frustrated with them for not following along (November 10).

Two other times, Beth discussed the knowledge that she had learned from her university class, specifically with readings in the text. She used the text book to explain the difficulty of the task when the students in third grade were having difficulty with a challenging assignment. On another day, Beth discussed how the text encouraged teachers to go through a process of rehearsal to anticipate any problems the students may have with an assignment. She was the only preservice teacher in the study to discuss her university readings in the context of her classroom observations.

Beth also expressed two separate beliefs about the teaching situations. After experiencing several moments in which she thought that worksheets were either too difficult or not explained well before they were given to the third graders, Beth commented that a teacher should read a worksheet carefully and anticipate possible problems before giving it to students. She explains what she might do to avoid this problem in her teaching:

If I were giving a worksheet I would have read it beforehand and make sure they understand what they're going to do. And after at least three students came up to me I would have stopped everyone and explained it so that they all get the same idea” (September 15).
A separate belief was discussed when she was discussing how the parent called to say she couldn’t help in class because she fell and had an accident. When the teacher announced this to the class, Beth proposed that this sort of sensitive situation should have been handled privately with the individual student so that he might not be worried about his mother’s accident.

**Beth's perceptions of the teacher's actions**

When discussing how the teacher handled the six “bumpy moments” that she observed, Beth identified nine actions that the teacher took in an attempt to remedy the problematic situation. Each of these actions fell into a separate category, although Beth thought that the teacher took more than one action for some of the “bumpy moments.” For example, during the moment in which the student was snickering at another student asking a question, the teacher acted in two different ways. First, she ignored the student’s inappropriate behavior. After the lesson transpired, she went up to that student and dealt with the student in private.

When the parent called to say that she couldn’t come in to help with centers, Beth observed that the teacher didn’t decide immediately what she would do. She thought that the teacher was taking some time to balance her alternatives and decide how she might handle the particular situation. The teacher later decided to modify the activity that the students were asked to do during the parent helper center. The other day in which the teacher took two actions in an attempt to resolve the moment was when some students were asking questions during directions about their special math sheet. After the teacher refused to answer any more questions on this subject, she also had to verbally redirect two of the students who had begun a discussion of the worksheet when they should have been listening to the teacher's directions.
For the other three "bumpy moments" she observed, Beth noted only one action that the teacher took to remedy the situation. On one day, the teacher reexplained a problematic worksheet to students and actually worked through the assignment with them. On another day, students were also having difficulty with a particular task. This time, the teacher asked the students who understood how to do it to help the students at their table that did not. Finally, Beth thought that the teacher was inconsistent when the students had yet another problem with their worksheet. The teacher read the directions and admitted that they were terrible. She then crossed out an entire sections and told some students not to do it. According to Beth, the teacher explained the concept to some students and simply told others not to complete entire sections.

**Beth’s future implications**

When discussing the six "bumpy moments" that Beth witnessed during the study, she suggested that four of them held future implications for her teaching or further thinking about teaching. Three of these moments helped Beth to think about what she might possibly do in a similar situation while teaching. The fourth helped her to see how she might organize her classroom, as demonstrated by the teacher. Beth said that two of the "bumpy moments" had no affect on her future teaching practice. These moments had no affect because in one situation a parent had an accident, which Beth maintains that you can’t plan for that kind of occurrence, and she didn’t fully understand what was going on in the other moment.

The three moments that helped Beth think about what she would do in a particular situation all had to do with worksheets. When she first encountered the students having difficulty on a worksheet, she said it made
her realize that a teacher should always be prepared to explain and reexplain a worksheet if students are having difficulty. On day four, another problem with a worksheet occurred and Beth again emphasized that she will examine worksheets carefully, also adding that she will try to anticipate any problems students may have with the assignment. When the problem arose yet a third time, Beth said that this experience helped her to realize that not all worksheets are appropriate for your students. She says:

I probably wouldn't have ever noticed this until I was here. I would have said if this worksheet is in the book it should be adequate for what I'm teaching. But now I see the consequences of it. I'm just going to make sure that when I hand out worksheets that they do make sense. And I'm going to try to anticipate [the students'] behavior and what they will do with the worksheet (November 10).

Comparison of the moments identified by Mrs. Anderson and Beth

Mrs. Anderson and Beth matched up a total of four times, and one of these times was day six, in which they both agreed there were no "bumpy moments." The three "bumpy moments" that matched included the student who snickered at another student on the first day of the study. The moments did not match up again until Day five. On this day, both Mrs. Anderson and Beth identified the same two "bumpy moments."

Looking at the "bumpy moments" that matched up

Moment: Student snickered at another student asking a question

In this moment, Beth and Mrs. Anderson differed on why they thought this moment came to be. Beth thought that the student asking the question was "completely lost," while Mrs. Anderson considered it to only be a
clarification question. Mrs. Anderson was also aware that the student who snickered was a real sharp student who was most likely ready to start the assignment. Also, the teacher knew that the student asking the question often disrupted the class even when it was not necessary, and that there might be a dynamic working between the two students. Beth had no previous experience with these students to understand the motivations because this was her first day with the class.

There was also an interesting difference in the two people's notions of why Mrs. Anderson ignored the behavior and dealt with it privately. Mrs. Anderson says she ignored the snickering at the time because she said she wanted to treat the student who had snickered with respect and not subject him to her public discipline. On the other hand, Beth thought she was ignoring it not to embarrass the student who asked the question any more than he had already been embarrassed.

Moment: Pictures on phonics worksheet caused confusion for students

Both Mrs. Anderson and Beth agreed that the confusion was caused not by the students' lack of understanding of the phonics rules, but rather by the pictures on the worksheet themselves. They also agreed that the teacher wasn't prepared to handle the questions that arose, most likely because she hadn't spent time looking over the worksheet before it was handed out. Although Beth was embarrassed when she couldn't help the students and made a commitment to always look at the worksheet ahead of time, Mrs. Anderson admits that this moment held little importance to her because she has no desire to be "the perfect worksheet teacher." Thus, this moment did not lead her to take further action.
Moment: Tried something new with the math kids' worksheet

Although Beth and Mrs. Anderson were describing the same event and thus there was a match, their accounts are very different because Beth wasn't sure what was going on. While Beth's account of the event was mostly trying to make sense of the events, Mrs. Anderson described how she was trying something new with the math students and how she felt they were more than capable of figuring it out on their own. Thus, what looked like unfair treatment of students' questions to Beth, was actually intentionally done by Mrs. Anderson. Beth thought that the students were confused, while Mrs. Anderson thought that they were pointing out to the other students that they were doing different work. Due to Beth's confusion, and the fact that Mrs. Anderson talked about this moment in conjunction with another moment, it is impossible to match up their understandings of this particular event.

Looking at the days without “bumpy moments” that matched up

There was only one day that both Mrs. Anderson and Beth agreed had no “bumpy moments.” On this day, Mrs. Anderson had changed plans because her voice was strained and she was beginning to get sick. Beth was unaware of the reasons, but she also noticed that there was a change from their typical Tuesday routine. Beth felt that this change and the fact that they were doing special activities for Thanksgiving were the main factors contributing to the “non-bumpy” day. Mrs. Anderson maintained that even though today was different, she didn't think the students knew it was different from what she had planned. Instead, she credits having the stuff ready to go, knowing what she wanted to do today, having Beth there to help, and the fact that the students were prepared because they had done similar activities before, as all being factors that contributed to a good day.
Looking at the days and "bumpy moments" that didn't match up
What did the teacher see that the preservice teacher didn't, or the
preservice teacher didn't think was "bumpy"?

On the first day of the study, Mrs. Anderson discussed a time
management moment that Beth did not. In this moment, the whole group
lesson extended beyond the allotted time because the students were doing
really well and expanding on their thinking. This caused Mrs. Anderson to
rush the students through the next task and send the students out to break
before they had finished their worksheets. Beth did not discuss this moment,
although she did talk about a moment that was caused by student confusion
over a worksheet. As much as I tried to determine if these two events are
related, I remain unsure. Instead, it is possible that Beth was simply unaware
that the teacher was rushed through the morning and had mismanaged her
time, mostly because she had never been in the classroom before. On Day two,
Mrs. Anderson discussed that some of the students' schedules were messed up
because they were starting new math groups today. Again, Beth may not have
seen that this was problematic for the teacher because she was either
unaware of the confusion entirely, or was not aware of the problem because
the teacher handled it quickly and effectively.

What did the preservice teacher see that the teacher didn't, or the
teacher didn't think was "bumpy"?

On the first day of the study, Beth discussed a moment that involved
student understanding on a particular worksheet. This moment held personal
significance because she herself did not understand the directions, and thus
could not help the students. In later discussions with Mrs. Anderson, it
became evident that having perfect worksheets was not a priority in her
teaching. Therefore this moment may not have been as problematic for her, especially when she decided to just cross out the section that was causing confusion. A similar moment occurred on day four, when Beth reported that some students were having difficulty with a math worksheet. Again, Mrs. Anderson did not mention this moment. This time, Mrs. Anderson worked with some of them and then had the students help each other. It is possible that this situation was not problematic to Mrs. Anderson because she could use this technique to help students through the assignment.

On day three of the study, Beth discussed a "bumpy moment" created by a parent helper calling at the last minute to say she couldn't come in to help with centers. Mrs. Anderson did in fact mention this moment to me, but explained that she considers this type of moment to be 'par for the course,' or something that teachers must always be prepared for. Therefore, she may have considered the situation less than perfect, but she had the tools to create an alternative arrangement for center time.

"Bumpy Moments in Mrs. Wayne's Fourth Grade Classroom

Mrs. Wayne, a fourth grade teacher, was paired with Steven, a TTE 300 preservice teacher. Mrs. Wayne and Steven were added to the study after one of the preservice teachers left the course altogether. Because they were picked up late, I had to start them when the first pairing was completing their second day of interviews. This also meant that I had to make up the final day in the end, thus two study days were back to back instead of the normal week off in between. There were 6 days in study, one of them (the final one) was an Early Release Day and day four was the day before Veteran's Day. The dates for the study were: September 29; October 13; October 27; November 10;
November 24; and December 1. On these six days of data collection, Mrs. Wayne and Steven identified the "bumpy moments" illustrated in Table 3. An arrow indicates that there was a match between the "bumpy moments" or days without "bumpy moments" that both Mrs. Wayne and Steven identified.

Table 3.
"Bumpy Moments" in Mrs. Wayne’s fourth grade

<table>
<thead>
<tr>
<th></th>
<th>Mrs. Wayne</th>
<th>Steven</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>1 Student told inappropriate story during class discussion</td>
<td>1 Student told teacher she would be absent tomorrow due to family problems</td>
</tr>
<tr>
<td>Day 2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Day 3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Day 4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Day 5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Day 6</td>
<td>1 Whole day was on the verge of any minute &quot;it could blow&quot;</td>
<td>1 Student energy level was high, students were restless</td>
</tr>
</tbody>
</table>
Mrs. Wayne

At the time of the study, Mrs. Wayne was completing her third year of teaching fourth grade. Before she began her elementary teaching career, she owned a Modeling and Talent Agency which held classes for children ages four to adults up to eighty-four years of age. When talking to Mrs. Wayne, one gets a sense of confidence and commitment to her teaching that might be expected of more experienced teachers. She entered the teaching profession at an older age, although she looks young, fit and energetic. In fact, she is a grandmother and attributes some of her expertise as a teacher to her experiences raising children and grandchildren. Mrs. Wayne is currently attending school to receive her Master's degree and thus was reluctant to commit to doing the study. When I came to her in a bind because I had lost one of my participants, we agreed that she would participate in the study if we conducted our interviews on Wednesday, instead of Tuesday when she had class. Thus, we had to wait an entire other day until we could sit down and talk. Despite the time in between, Mrs. Wayne seemed able to recall the Tuesday morning events with accuracy.

During the six days of the study, Mrs. Wayne identified only two “bumpy moments,” one on the first day of data collection and the other on the last day. She was reluctant to label the second incident as a “bumpy moment,” instead she said the whole morning day was “on the verge of any minute it could blow.” I asked her all the questions as if she had identified a “bumpy moment,” and she was willing to talk about the day’s incidents. During the study I became concerned because Mrs. Wayne didn’t seem to be experiencing any “bumpy moments,” and I thought it might be due to her inexperience as a classroom teacher. However, her TTE 330 student agreed that she didn’t seem to be experiencing these types of moments. He explained:
Since I have been here there haven't been really any problems. There are still some things— you know the kids who are always going to be doing something. But for the most part, the teacher knows where to keep her eyes and stuff” (Steven, November 24).

He also suggested that Mrs. Wayne held students accountable for their behavior by using a table point reward system, and he felt that all students knew her expectations.

On the third data collection day, Mrs. Wayne herself told me that she felt bad that she wasn’t having any “bumpy moments” to talk to me about. She said, “I really feel bad because I’m really looking for them.” She explained that she really doesn’t expect to have many “bumpy moments” in her teaching because she teaches fourth grade, and presumes that teachers experience less moments as they go higher in grades. It is also possible that Mrs. Wayne strived to avoid “bumpy moments” in her teaching. She discussed with me how she uses preventative strategies to avoid problematic situations before they even have a chance to occur. Perhaps after the first “bumpy moment” she was more careful and tried to prevent future moments.

Additionally, these moments may have come on different days or at different times. For example, Steven told me on day five that I had missed a “bumpy moment” the week before when we were not scheduled to interview.

Mrs. Wayne herself also brought up a possible other factor which was the TTE 330 student himself: “I think sometimes the other person you have in your room has a lot to do with the activity in the classroom” (Mrs. Wayne, November 24). She went on to say that Steven had earned the students’ respect, and held the same expectations as she did teaching her class. Finally, and perhaps most likely, Mrs. Wayne’s definition of a “bumpy moment” might have had the greatest effect on why she only identified a few moments.
According to her November 24 interview, she feels that a “bumpy moment” must stop all learning. To her a “bumpy moment” is:

Any stop where you go, ‘Whoa!’ It stops you sometimes because you have to rethink and maybe restructure...or it stops learning where they are all off-track because of somebody else and it takes a minute or so to get them back.

Thus, her criterion for identifying “bumpy moments” in her classroom may have restricted her discussing some of the types of moments that the other teachers expressed during the study.

**Mrs. Wayne’s Types of Moments**

Mrs. Wayne only identified two “bumpy moments” across the six days of the study. These moments fell on the first and last days of data collection. On the first day, a student told an inappropriate story during a class discussion. Mrs. Wayne considered this moment to be “bumpy” because she felt it could have been prevented had she not called on this particular student. The event could be classified as a whole group Management problem because a student interrupted the class discussion by offering inappropriate comments. The other “bumpy moment” was also a whole group Management issue in which the students were very excited and rambunctious because they had an Early Release and double Physical Education time. Mrs. Wayne preferred not to call this a “bumpy moment,” rather she said that at “any minute it could blow.”

**Mrs. Wayne over time**

It would be impossible to make generalizations about whether Mrs. Wayne’s thinking or experiences changed over time. I do know that after the first “bumpy moment” there tended to be no others. Finally, on the last day
Mrs. Wayne discussed with me a "bumpy" time, and I classified it as if she had mentioned another "bumpy moment." It is difficult to say if she learned from her first experience and was able to control future moments from happening, or if "bumpy moments" are just a rare occurrence in her classroom.

**Mrs. Wayne's thoughts**

When discussing the two "bumpy moments" in her teaching, Mrs. Wayne expressed four different types of thoughts during these moments. First, she described her thoughts about the particular student (on day one) and how she felt that she gave him too much credit too soon. In this situation, she also shared the feeling that she should have known better, by explaining:

> You almost want to konk yourself in the head going, 'Why did I get skunked on this one? All I had to do was just not call on him. It would have been so simple.'"

She also expressed that she was thinking about a plan of action for handling this situation and what she was going to have to say to the student. During the second "bumpy moment" on the last day of the study, the only thought that she told me was that she was trying to maintain learning in her classroom, and that was her main priority.

**Mrs. Wayne's knowledge or beliefs**

Mrs. Wayne discussed one type of knowledge and one belief when faced with the two "bumpy moments" in this study. In the first moment, she brought her previous experiences with students to the moment, and realized that she could have "made the waters a little smoother" (September 29) if she hadn't called on that particular student. In the second moment, she presented her belief that some things in teaching just happen, and are out of the
teacher's control. She commented that having an Early Release and an hour and a half of P.E. created a day that was going to possibly be very hectic if she didn't take measures to prevent potential problems.

**Mrs. Wayne's actions**

Mrs. Wayne took two different actions to resolve her two "bumpy moments" in teaching. When the student began his story on the first day, Mrs. Wayne stepped in and verbally redirected him to be more appropriate in the stories he would share with the group. On day six, when Mrs. Wayne had an Early Release and an hour and a half of P.E. time, she took preventative measures in anticipation of further problems. These measures included cutting short the getting ready time, sharing her expectations for the day with her students, and minimizing any transition time. She says, "I think letting [the students] know in advance what's going to happen and making sure all of them understood, that helped."

**Mrs. Wayne's future implications**

During the discussion of the two "bumpy moments" that Mrs. Wayne identified, she offered the same response when asked about the future implications of such moments. They both included making plans for this particular type of student or this type of day. When the student told the inappropriate story, Mrs. Wayne said that it reminded her to pay more attention to this type of student in the future and not give him too much credit too soon. On the Early Release Day with extended P.E. time, Mrs. Wayne said that she would love to forget the curriculum on these days and just do fun activities. She said she would wait until towards the end of the year though, so that her students wouldn't miss any essential fourth grade curriculum.
Steven

At the time of the study, Steven had just been admitted to the College of Education. He was twenty-seven years old, which is older than the typical TTE 300 student. He is also married and has a young son. Before returning to school to get his teaching degree, Steven was in the Military. He explained that he has always wanted to be a teacher in some capacity, and ultimately he'd like to be a college Professor. He said that he really enjoyed working with children and had been a coach and volunteered in two Kindergarten classes. When discussing why he wants to become a teacher he said:

Whenever I get a chance to work with the little kids I like to help them learn new things and that's what it is mostly that makes me want to do this, is to help kids learn new knowledge (September 29).

When I asked Steven to participate in the study after I had lost one of my participants, he was very willing and accommodating. It was clear, however, that he felt that he was letting me down when he didn't have any “bumpy moments” to report on most of the days. Like Mrs. Wayne, he only identified “bumpy moments” on the first and last days of the study, although he identified two separate moments on the first day. He also shared Mrs. Wayne's reluctance to call the events of the final day “bumpy,” but I asked him questions as if it was identified as such.

When Steven entered my room for the interview, following his classroom observation, he usually expressed to me that he was tired. He would then sit down and try to recall what had happened during his two and a half hour classroom visit. He did not keep any form of notes to remind him about what had transpired while he was in Mrs. Wayne's room. Often he would get confused about what actually happened on that day because Mrs. Wayne would talk with him things that had taken place on other days. It seemed that they
had several opportunities to talk during his visits, and she often talked about particular students and their backgrounds.

**Steven's Types of Moments**

Steven identified a total of three "bumpy moments" across the six days of the study. Two of these moments occurred on the first day of data collection, and the third moment on the final day of the study. The first "bumpy moment" he discussed was a Sensitive Student Issue in which a student told the teacher that she would not be in school tomorrow due to family problems. Steven realized that the issue was problematic when Mrs. Wayne pulled him aside to explain the child's family situation. The second moment on this first day was a whole group Management issue that occurred when a student told an inappropriate story during a class discussion. Like Mrs. Wayne, Steven was reluctant to call the final moment on day six a "bumpy moment." Instead, he proposed that the student energy level was high and they seemed restless. This was classified as another whole group Management issue.

**Steven over time**

Like Mrs. Wayne, it is difficult to say if there was any change in Steven's thinking over time. On the first day of the study he identified two moments, one of which was a Sensitive Student Issue. It is unclear whether there were no following moments of this nature, or if he simply failed to notice or discuss them. Because his identification matched Mrs. Wayne's on all counts except for the student issue, it might be that there were no other "bumpy moments" during the data collection days.
Steven's thoughts

Although Steven only identified three "bumpy moments" during the study, he described five different thoughts about these moments. Two of these thoughts consisted of thinking about particular students or the group of students in general. In one instance, he was contemplating a student's motivation, and why he chose to act in a certain manner. At the other time, Steven thought about what the students might expect on an Early Release Day, thus was anticipating how they might behave. In two of his other thoughts, he was evaluating whether a particular situation could be considered problematic to the teacher, and also admitted to being preoccupied with all the things happening in the classroom that he couldn't focus on the "bumpy moment" that was occurring. Steven's final thought consisted of watching and wondering what would happen next, although he was more anticipating a problem than watching the aftermath of the event. He had listened to the teacher's story about having to kill her pet to make soup and said:

I was thinking, actually before he raised his hand, that somebody was going to start telling something... It kind of eased me that it's alright to tell more stories, but at the same time, what impact is it going to have on students telling stories?" (September 29).

Steven's knowledge or beliefs

Of the three "bumpy moments" Steven discussed, he expressed only one type of knowledge that he brought to the moment. There were two instances in which he explained that his previous experiences with students helped him think about the classroom event. First of all, he discussed how the teacher had set an example in the classroom about the rules for acceptable storytelling. Steven used his experiences with relatives or other young
children to say that he needs to be aware of his actions and examples because he often sees it mirrored in the children's behavior. This causes him to be more conscious of the examples he is setting. In the other instance, Steven relied on his experiences volunteering in a Kindergarten class as a way of explaining that sometimes teachers need to be more flexible and adjust their expectations because the students are overly excited or have particularly high energy levels. During the discussion of the third moment, Steven said that he had no knowledge or beliefs about the situation. He also did not explicitly express any beliefs when asked this question during the discussion of "bumpy moments."

Steven's perception of the teacher's actions

Steven felt that the teacher took four actions in an attempt to resolve the three "bumpy moments" that he observed during the study. Two of these actions were the same, and the remaining two fell into separate categories. The similar actions involved giving verbal redirections or reminders to individual students or the entire group of students. In the first incident the teacher expressed to one student that the story he told was inappropriate for sharing in the classroom. On another occasion, the teacher offered the whole class several reminders to stop talking and quiet down. On this day she had to remind them about what they should be doing and review her expectations for their behavior. The separate actions included talking to a student in private about her family issue, and moving around the room and making her presence known when students were off-task during instruction time.

Steven's future implications

The three "bumpy moments" that Steven witnessed either helped him
to think about what he might do in a similar situation or made him more aware of certain issues in teaching. In two of these moments, Steven admitted that his eyes were more open to some of the things that can happen when teaching a group of students. He admits that his views on teaching students were more narrow than what he witnessed in this classroom. On September 29, he described this change in his thinking:

> From my background when you come into teaching you think about kids that are pretty much the same. But there's so many different things, there's so much diversity and so many different backgrounds from the children. And [bumpy moments] like this are probably rare, but it opens my eyes to it.

In the discussion of another moment, he expressed that a teacher needs to be aware of the way that he or she sets up discussions because the students may offer certain comments that lead to an undesirable outcome. Finally, Steven discussed how one moment helped him think about what he might do in the Early Release situations with an hour and a half of P.E. He says that he may need to fluctuate what is acceptable and possibly lower his expectations for the students' behavior.

**Comparison of the moments identified by Mrs. Wayne and Steven**

Mrs. Wayne and Steven matched up the most consistently of any other participant pairs in the study. In fact, the only segment that didn't match up was when Steven identified two moments on day one and Mrs. Wayne only discussed one. Thus, two out of three "bumpy moments" matched up exactly. Mrs. Wayne and Steven also were in complete agreement about the four days without "bumpy moments."
Looking at the "bumpy moments" that matched up

Moment: Student told inappropriate story during class discussion

Mrs. Wayne discussed that the student was new to the school and had a little bit of an anger problem. She explained the history of having him in class, which included experiences with him not being cooperative, and offering racial comments from time to time. She says the moment occurred because the student had a good day yesterday and she gave him too much credit too soon. Steven did not mention anything that specific about the particular student, except to say that he liked to be heard and get a lot of attention. Mrs. Wayne faults herself for calling on the student and says that the moment could have been avoided entirely if she had ignored him when he raised his hand.

Instead of focusing on the student, Steven believed that the teacher's story and the type of environment she had created contributed to the event. The teacher had told a story about how she had to kill the chickens on her farm to make soup, and Steven believes this set her expectations for what type of story was acceptable: "I think possibly she might have put herself in that situation." He also explained that the free environment in the classroom may have contributed to this student feeling that he could share such a story. Witnessing this moment helped Steven become more aware of how teachers need to be careful in the way that they begin a discussion or set an example for an activity. Staying with her focus on the student, Mrs. Wayne offered that she will need to be more careful with this particular kind of student. She however, is not be willing to change her lesson or the open forum environment that she created to allow students the opportunity to share their thoughts.
Moment: Overall “bumpy morning”

Both Mrs. Wayne and Steven agree that the Early Release day, P.E. class that was twice as long as usual, and an overall high energy level in the classroom contributed to this “bumpy” morning. Steven mentioned that it was one student’s birthday, and that the students would often gather in the back of the room to look at their plant projects. Mrs. Wayne added additional factors that Steven did not mention. She talked about how the weather was unusual, the students were just returning from Thanksgiving vacation, and the morning schedule was completely different today.

Mrs. Wayne stated that her priorities were to keep control and hold tight reins so that she might encourage a learning environment. She was also well aware with all the various elements this day had the potential to fall apart: “You were mixing a lot of powder here, and it could blow.” Steven himself was overwhelmed, saying that he couldn’t focus on any one thing due to the many different things happening in the classroom. He too drew on his experiences with children and knew that the teacher might have to change her expectations given the high energy level of the students.

During their discussions of what the teacher did to resolve this “bumpy” period of time, Mrs. Wayne discussed what she did in anticipation of the day’s events, such as cutting short the preparation time, setting the expectations for the day, and cutting down transition times. Steven instead focused on what Mrs. Wayne did during the day which included verbal reminders, reviewing expectations, and moving around the room more. Both participants explained that you might have to be more flexible and fluctuate your expectations on such days. Mrs. Wayne discussed how she would like to change the entire plan for days like these, and focus less on completing academic tasks.
Looking at the days without “bumpy moments” that matched up

There were four days without “bumpy moments” according to both Steven and Mrs. Wayne. They were days two, three, four, and five of the study. Each of these days are discussed below.

October 13

Mrs. Wayne thought that this day was a fairly typical day. She said that there “wasn’t anything unmanageable or dysfunctional as a normal day goes.” Because they were actually ahead of where they needed to be in the curriculum, Mrs. Wayne was able to change gears and have a whole group discussion on a Weekly Reader. The topic was baseball and highlighted the issues of character and attitude to illustrate how Mark McGwire and Sammy Sosa had been so successful. Students got to express themselves through the classroom dialogue. Mrs. Wayne explains, “I felt like it was a good day because it wasn’t a day where you sat down and filled in a worksheet. It was discussion and higher-level thinking.” She also allowed Steven to lead the class at one point which allowed her the time to work with a few students independently, which is something that she doesn’t often have a chance to do.

Although Steven admitted that he was tired and not as observant during his visit, he agreed that the students were very interested in the Weekly Reader discussion. He observed that this activity was “Something different from what they usually do in their reading and English time.” The students were focused on the activity, and he feels the topics of baseball, character, and sportsmanship contributed to a calm environment. He also observed that there was a lot of sneezing and coughing, and wondered if some of the students were on the verge of getting ill.
October 27

On this day, Mrs. Wayne talked more about how she didn't expect to have many "bumpy moments" in fourth grade. She also discussed how she attempts to prevent these moments from happening by thinking about the potential problems and taking strides to avoid these situations. The only thing she said specifically about this day in particular was that the students were reading in the whole group setting rather than reading in circle groups because the book had a lot of Spanish vocabulary. Again, she changed her plan so that she might avoid the students getting frustrated. She knew that they would need extra help, and used the whole group setting to check for understanding and help the students through the book.

Steven failed to notice this change however, and instead commented on the teacher's quick transitions which allowed "Less time for [the students] to try and act up. They did their lesson... and then moved real quick to the next one." He also discussed how the teacher had moved desks sometime in the last week and it appeared to help, although he was not sure. Finally, he discussed Mrs. Wayne's teaching style in general, to help explain why there were no "bumpy moments." He said that the students understand and comply with her high expectations for them.

November 10 (the day before Veteran's Day)

Before school began on this day, Mrs. Wayne expressed to me that she might have a "bumpy moment" because they were going to make Chorizo and Eggs in class this morning. Although there was a lot of activity in the classroom, she says that the energy level was functional. She also attributes the "non-bumpy" morning to being able to anticipate and plan for the activity based on her experience:
I think it went well because I gave [the students] something to do that they were interested in doing... However, if they aren't doing something that they are interested in, they waste a lot of time checking out what you're doing too much. Really it's unproductive. That's why I am very picky about having it organized and them working on something and knowing the rules.

Steven also talked about cooking the Chorizo and Eggs. He says that Mrs. Wayne didn't expect the students to be absolutely quiet, and this created a more relaxed environment. He also agreed that the students were involved in and excited about the other activity that they were completing.

**November 24**

Mrs. Wayne felt that several things contributed to this good day. First of all, she allowed Steven to take over some activities, and felt that it was a smooth transition because he was prepared. She believes that having Steven in the room positively impacts the students. Also, she thought that the students were really interested in a Thanksgiving activity that they also did this morning. Because they were doing different kinds of activities rather than the normal curriculum, Mrs. Wayne felt that the students were allowed some flexibility: "We didn't do hard based curriculum where you need to have direct instruction and complete quiet. It was more of a hands-on activity kind of day."

Although Mrs. Wayne discussed the day as being different from the normal curriculum, Steven felt that it was the same as most days he had seen in her classroom. He did notice, however, that the students were really interested in the Thanksgiving activity and were disappointed when they had to stop. This led him into a discussion of how Mrs. Wayne managed transitions
in her room and talked about the table point system that she uses to keep students accountable during transition times. He says that this system motivates the students to be calm during the transitions which he feels "are usually the roughest parts." He says that the students now take the initiative to get themselves ready as well as to encourage the other table members to do what is expected of them.

Looking at the days and "bumpy moments" that didn't match up

There was only one day during the study that didn't match up completely for Steven and Mrs. Wayne. On the first day of data collection, Steven told of a second moment that Mrs. Wayne failed to mention.

What did the preservice teacher see that the teacher didn't, or the teacher didn't think was "bumpy?"

Steven discussed a moment that occurred first thing when the students were arriving. One student came up to Mrs. Wayne and told her that she would be absent tomorrow due to family problems. At first Steven thought that the moment didn't seem "bumpy" but he reconsidered when Mrs. Wayne took him aside and explained the student's background and family situation. This led him to believe that this issue was problematic for Mrs. Wayne. It was also salient to him because he was faced with the realization that all students will not come from backgrounds similar to his, and that there is so much diversity among the students. In talking to him it seemed that this was one of the first times he had realized that.

Although Mrs. Wayne seemed to think that this situation was problematic, it is possible that she didn't label it as a "bumpy moment" because it didn't fit her description. Using her definition, the moment would
have had to stopped learning. But in this case, the students were just entering the classroom and it appears that she had the time to talk to the student privately and deal with the problem. It may be that Mrs. Wayne did not consider this sensitive student issue to be a "bumpy moment" because the two moments she mentioned were both whole group Management issues. Another possibility is that Mrs. Wayne forgot to tell me about this moment because it happened first thing on Tuesday and I did not conduct her interview until Wednesday afternoon. Whatever the reason, Mrs. Wayne felt that the issue was important enough to discuss it with Steven, but did not discuss it with me.

"Bumpy Moments" in Dr. Owen's Sixth Grade Classroom

Dr. Owen, a sixth grade teacher, was paired with Renee, a TTE 300 preservice teacher. On one scheduled data collection day, Dr. Owen was ill and not at school. We decided to make up for this day on the following Tuesday, rather than another day in the week. Because of this, there was a time that I met with Dr. Owen and Renee two weeks in a row. Given the consistency of keeping them on a Tuesday and the fact that no other factors seemingly came into play, this seemed to have little impact on the data or the outcome of the "bumpy moments" recorded in this classroom. The dates for the study are now listed and the Early Release days are noted: September 22; October 6 (Early Release); October 20 (Early Release); November 10 (Day before Veteran's Day and also the day made up because Dr. Owen was ill the Tuesday prior); November 17; December 1 (Early Release). On these six days of data collection, Dr. Owen and Renee identified the "bumpy moments" illustrated in Table 4. An arrow indicates that there was a match between the "bumpy moments" or days without "bumpy moments" that both Dr. Owen and Renee identified.
Table 4.
"Bumpy Moments" in Dr. Owen's sixth grade

<table>
<thead>
<tr>
<th>Day</th>
<th>Dr. Owen</th>
<th>Renee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 Stopping a lesson to try to get the announcements on e-mail</td>
<td>1 Noise-level started rising and students were off-task</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 Own &quot;bumpy moment&quot;- student refused to take a test</td>
</tr>
<tr>
<td>2</td>
<td>1 Students couldn't find worksheet needed for the lesson today</td>
<td>1 Overall &quot;bumpy morning&quot;</td>
</tr>
<tr>
<td>3</td>
<td>1 Went to hand out report cards and some grades were not done</td>
<td>0 for teacher/ 1 for herself: Own &quot;bumpy moment&quot;- Gave spelling test for first time</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1 Students not paying attention during the lesson</td>
<td>1 Student brought to school an inappropriate magazine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 Student said or typed an inappropriate word</td>
</tr>
<tr>
<td>5</td>
<td>1 Principal walks in and disturbs students during an important lesson</td>
<td>1 Principal walks in and disturbs students during a formal lesson</td>
</tr>
<tr>
<td>6</td>
<td>1 Teacher's mind on other things this morning</td>
<td>1 Teacher made computational error while reviewing math</td>
</tr>
</tbody>
</table>
Of the six observation days for "bumpy moments," three of these days were Early Release days for the school. This meant that the sixth graders had to alter their morning schedule. During the Early Release days, Dr. Owen made several comments about how her students were more excitable and found it difficult to concentrate on their school work. She often listed the Early Release as one of the factors for the "bumpy moment" she experienced on those days. However, she consistently identified one "bumpy moment" each day, whether it was an Early Release day or not. Thus, it is difficult to determine if these days truly had an impact on whether she experienced "bumpy moments" with her sixth graders.

**Dr. Owen**

At the time of the study, Dr. Owen was completing her twenty-eighth year of teaching experience. She had previously taught first grade, and grades three through twelve, including high school band and gifted education. She had worked on Staff Development in four states. She previously was a Principal at an elementary school. In addition to her work in the public schools, she has also been an instructor at the University level for over twelve years, teaching math and methods classes. Dr. Owen currently holds the title of Faculty Curriculum Coordinator for the post-baccalaureate program at an accredited University and was personally responsible for writing five of the courses for the program. She was also instrumental in obtaining certification for that program. She is additionally the Area Department Chair for this program in Southern Arizona. At the time of the study, she was teaching sixth grade and also serving as the Assistant Principal for the school. She completed her doctoral program the semester before this study began.
Given her background, Dr. Owen was by far the most educated member of the study and remained very closely tied with Teacher Education programs. She demonstrated an ability to easily translate what is happening in her classroom to the education of future teachers and often told me what she thought her TTE 300 student might be thinking or experiencing at this stage in her career. She was quick to support what was happening in her classroom with the current research in education or her experiences working with preservice teachers. Dr. Owen often referred to her strong educational background and many teaching experiences as a reason for why she had so much confidence and was willing to take risks while teaching: "I thought to myself, 'Oh, I can get myself out of this one. Even if it dies, I'll get myself out" (September 22). Often this attitude led to a sort of frustration because she knew she was attempting to do too many things at once:

I wish that sometimes I didn't have as much experience so that I wouldn't even attempt to do two or three things at once. Because sometimes you pull it off and that gives you confidence to try it again. If I had been a new teacher, I never would have even thought about the science class. I would probably only be thinking about the class in front of me (December 1).

Dr. Owen also felt really strongly that the teacher is responsible for anything that happens in the classroom including any discipline problem. She maintains, "anything that goes wrong is really the teacher's fault because you plan for it all" (October 6).

Dr. Owen did not record the day's events so that we may go back and talk about them. Instead, she would sit back with me and reflect on the day's events, even on the one day that we didn't meet until the following day. She seemed really willing to be reflective about what had happened and was very
open when talking about the particular events and how they impacted her teaching. She was very honest when talking about the “bumpy moments” and frequently laughed about them. Even when she admitted to being tired after a particularly difficult day, she would maintain a sense of humor: “No sense in getting upset- a lot of smiling, a lot of wait time... It’s Early Release. Let’s just enjoy them because they’re off the wall today!” (October 6). Dr. Owen identified a total of six “bumpy moments” for the six data collection days, exactly one on each day.

**Dr. Owen’s Types of Moments**

On the first day of data collection, Dr. Owen made a decision to stop a lesson to try to get the school announcements from the e-mail, even though they had been having difficulty with the computer. This moment was “bumpy” to her because she knew she was taking a risk and might have difficulty getting the students involved in the lesson again. It was considered to be a Spontaneous Problem or Interruption because the urgency of the students needing to see the announcements right away prompted Dr. Owen to interrupt her instruction to take care of it. On the second day Dr. Owen interrupted her lesson again, but this time out of necessity. She had begun a lesson using the worksheet from the day before, only to find that most of her students could not find the particular sheet in their desks. Because she could not go on with the lesson until they had the paper, she had to allow them the time to look for it, and clean out their desks in the process. Because this moment differed from the first in that the students themselves caused the instruction to stop, I considered it a whole group Management “bumpy moment.”

On the third day, Dr. Owen was in the process of handing out the
students' report cards when she discovered that all of them were not complete. She found that the error had been made after the students were already in the room, and she did not have any other time in the day to finish them. Thus, she was Not Prepared for the events of the day and hadn't discovered that until it was too late. The fourth "bumpy moment," which occurred on the fourth day of data collection, was a whole group Management problem because Dr. Owen's students were not paying attention to the lesson. Dr. Owen had to try several techniques to gain their participation.

The fifth moment on day five was also an interruption of a lesson, this time caused by the Principal walking into the classroom. Dr. Owen was in the middle of a complex lesson and she felt that the students were just about to grasp the concept. As she made every attempt to keep the students with her and participating, the Principal happened to walk in the back door and begin to talk to some of the students. Despite her non-verbal and verbal cues to him, it took him a few minutes until he realized he was interrupting and left. This was considered to be a Spontaneous Problem or Interruption that threatened to disrupt the teacher's instruction. Finally, the last moment on day six was a morning-long "bumpy moment" that occurred because the teacher admitted that her mind was on different things. Thus, she was not fully prepared to teach her sixth graders today.

Dr. Owen's six "bumpy moments" fell evenly into three separate categories. Two of the moments could be classified as whole group Management problems, as a particular student or students interrupted the activity or instruction. Two of the moments were instances in which the teacher was Not Prepared. The final two moments were both Spontaneous Interruptions that threatened to disrupt an activity or instruction. An analysis of how these moments occurred over time now follows.
Dr. Owen over time

Dr. Owen's three types of "bumpy moments" were interspersed throughout the data collection days. No moments of the same kind followed another. Thus, Dr. Owen seemed to be concerned with these three types of moments throughout the study. On the overall, Dr. Owen tended to identify moments that occurred during her whole group instruction time. In fact, five of the six moments identified had a direct impact on a particular lesson that was taking place in the classroom. The sixth moment, when Dr. Owen explained how her mind was on other things, affected the lesson and then continued to have an impact on the rest of her morning as well.

The fact that the moments occurred during whole group time seems to be reasonable because this is the dominant activity structure that composes her morning. Following this whole group time, students go out to recess and then to computers. After computer class, the students are divided and go to different rooms for math instruction. Although her TTE 300 student was present for all these different segments, Dr. Owen identified no moments that occurred during recess, computers, or math class (the one exception is her last moment, which carried on through computer time). Her TTE 300 student did, however.

It might be assumed that this whole group time first thing in the morning was the most important instructional time for Dr. Owen. Thus, "bumpy moments" occurring during this time period were more salient and thus worth further reflection. It is however also possible that when Dr. Owen sat down to discuss her moments with me that she began by reflecting about the beginning of the day which happened to be this whole group instruction time. In this case she might have identified what came first to her mind. Although we have no other sixth grade teachers to compare this to, it may be
possible that the beginning of the day with sixth grade or whole group instruction time with sixth grade is the most "bumpy" time with this grade level.

Dr. Owen also failed to have any days without "bumpy moments." This suggests that there was always something going on in her room that caused her to stop and reflect. I was often struck by the similarities in what was happening in sixth grade and what was happening in my first grade classroom. One might think that we would be dealing with very different types of moments, yet I found that Dr. Owen dealt with the kind of Management moments that I deal with on a consistent basis as well. Although the children are much older in sixth grade, it often sounded as if Dr. Owen were talking about first graders when she described her students' behavior and excitement levels.

Dr. Owen's thoughts

Dr. Owen described a total of thirteen thoughts with me during the "bumpy moment" interviews. Of these thirteen thoughts, the greatest amount dealt with considerations and predictions about students or groups of students. In these thoughts, she often considered what she knew about sixth grade students and used this knowledge to make a decision. For example on data collection day one, she discussed that the sixth graders have a strong sense of urgency, in this case needing to know if there was going to be a Student Council meeting after school. Thus she says, "Even though the lesson had started, it needed to be done." She also made academic evaluations, such as discussing how certain students needed extra opportunities to learn new skills, and expressing that she didn’t want any of her students to miss valuable teaching time. There were an equal amount of thoughts concerning
developing a plan of action and considering alternatives when handling a "bumpy moment."

There were three categories of thoughts that held two thoughts apiece: feeling frazzled, evaluating whether she was doing the right thing, and thinking that she should have been able to predict what was going to happen or prevent it from happening altogether. When she expressed feelings of being frazzled, it either consisted of feeling that she was never going to be able to get her lesson and students back on track, or having other things on her mind that interfered with her thinking about the present situation in her classroom. She evaluated whether she was doing the right thing by asking herself questions such as, "Should you have taken the time to really stop and answer their question and go to the computer knowing full well this would be a problem?" (September 22). Dr. Owen also expressed thoughts of feeling responsible for the problems that had occurred in her classroom because she felt that everything that happens in the classroom is the responsibility of the teacher.

Finally, during the moment in which the Principal interrupted her lesson, Dr. Owen expressed her only thought about balancing priorities. She told me that prior to this day she typically engaged the Principal the moment he walked through the door. She was also fully aware that he may have been there for a purpose, for example he may need to talk to one of the students. However, she had to balance her priorities and decide whether she would engage him or continue with the lesson that she knew was important. In this instance she explained, "I have [the students’] attention, I'm not going to allow this to disrupt it" (November 17).
Dr. Owen's knowledge and beliefs

When discussing the six "bumpy moments" that were identified, Dr. Owen expressed nine beliefs or knowledge about teaching that she brought to these moments. Five times she described her knowledge, which fell into four different categories. First of all, she discussed that her previous experiences with students allowed her to make judgments on what they needed from her teaching. For example, she talked about how the Learning Disabled students in her class often needed extra practice before they understood a concept. She also described knowledge derived from classes that she herself had taken, particularly explaining adolescents' sense of urgency which was discussed in an Adolescent Development Class. A third type of knowledge referred to scholars in the field and their interpretation of a particular situation. For example, she explained how Harry Wong talks about a teacher's need to practice routines and procedures, and also discussed Madeline Hunter's Essential Elements of Instruction when she was interrupted during a lesson. Finally, she brought her experience of being an Administrator to the moment in which she was interrupted by the Principal entering the room during an important lesson.

Dr. Owen also expressed four different beliefs about teaching and learning. She discussed that sometimes things in teaching happen which create an environment less conducive to learning. On the Early Release day she said, "Yes, we know these days are nuts" (October 20). Another belief that Dr. Owen expressed involved believing that a certain lesson is important enough to persist, even if the students are having difficulty paying attention. In her explanation of this event, she also offered the belief that at least one-third of the class must demonstrate that they know the concept before she considers it to be learned. Thus, she believes it is essential to check for
understanding during a lesson. The final belief she presented was that you should only try to do one thing at a time. On this day, Dr. Owen was so preoccupied with worrying about her science class that she couldn't give her full attention to the group of students in front of her. She says this made it almost impossible to be the best teacher she could possibly be.

**Dr. Owen's actions**

When faced with a "bumpy moment" in her teaching, Dr. Owen tried a variety of actions in an attempt to remedy the situation. She identified a total of fourteen actions that she took to resolve the six "bumpy moments" she experienced. Nine of these actions fell into the following four categories:

1) Stopping a lesson (3 moments); 2) Reinforcing positive behavior to shape group behavior (2 moments); 3) Seeking the aid of the TTE 300 student in the classroom (2 moments); and 4) Checking for understanding (2 moments). Her other actions included continuing a lesson despite interruptions, giving verbal redirections or whole group reminders, controlling environmental factors, attempting to motivate students, and trying an alternative.

Three times Dr. Owen stopped a lesson to pursue something else that she felt was important or necessary for her students to be able to pay attention to the lesson. In one instance, she knew that her sixth graders would not be able to attend to the lesson at hand until they were able to find out if there was a Student Council meeting after school. When Dr. Owen tried to find out through the written announcements and failed, she stopped her lesson to retrieve the announcements on e-mail. On another day, Dr. Owen had begun a lesson only to find that most of her students didn't have the worksheet that was necessary for them to continue. So, she stopped the lesson and had the students clean out their desks and folders in an attempt to organize and find
their paper. She also took the opportunity to review the procedure for putting things away and storing them in their folders. The third time she stopped a lesson was when she wanted to encourage students to do well on a difficult upcoming test. To show that their grade was important, she stopped the spelling lesson to have students average their grades in spelling thus far. She then went back to the lesson after the students were convinced that they needed to get a good grade and should pay attention to the lesson.

Twice Dr. Owen reinforced positive behavior to shape the entire group's behavior. In one of these instances, she provided positive encouragement to the group so that they would stick with her through a difficult lesson. On the other day, the Principal came into the room and threatened to disrupt an important lesson. Dr. Owen positively reinforced the group and told them they only had a little more to go so that they would focus their attention back to her. During a lesson, Dr. Owen also checked for understanding. Two actions she used for checking for understanding were calling on individual students to see if they understood the concept and giving an impromptu test to the class.

When faced with certain "bumpy moments," Dr. Owen twice called on her TTE 300 preservice teacher to offer her assistance. When she discovered that not all the grades were done and she had no breaks during the day in which to finish them, Dr. Owen asked Renee to give the students their spelling test. She then used this time to complete the report cards. On another day, Dr. Owen was very distressed because she couldn't find some science papers. Instead of interrupting her lesson any further, she called on Renee to look through her things in an attempt to find the papers.

Dr. Owen also identified five different actions that she used once to help remedy a problematic situation. On one occasion, she attempted to motivate
students to continue with a lesson by engaging them in a chat about why spelling is important. On the day that the Principal came in, Dr. Owen chose to pursue her lesson despite the interruption. During that same time, she gave a verbal redirection to one of her students, reminding him that his attention should be focused on the lesson. On a different day, Dr. Owen attempted to control the environmental factors by adjusting the air conditioning so that the room wasn't too warm and the students would be able to pay attention to the lesson. Finally, on the day that she chose to get the announcements on e-mail, she had already tried the alternative of getting the written announcements from the office.

**Dr. Owen's future implications**

Discussion of the future implications for Dr. Owen's six "bumpy moments" produced five different responses, and on one day there was no response to the question. The five different responses fell into four different categories. Two times Dr. Owen said that she may change a procedure if it presents additional problems in the future. She is going to practice using the computer with her students in case things go wrong again, and she might take the time to check over report cards before she hands them out next time. One "bumpy moment" led her to immediate action, as she was going to go talk to the Principal about how he interrupted her formal lesson.

Dr. Owen also discussed that she is making future plans for how she handles her particular group of students. She says, "I'm going to watch this group real closely because it is an immature, fast-moving group and in that they don't think about the next moment" (October 6). She also indicated that she would like to review some procedures and routines with them. Finally, when Dr. Owen's admitted that her mind was on other things during the
“bumpy” events on the final day of data collection, this led her to reflect on her future career plans. She says that she will have to engage in further reflection to decide if she will continue to teach at the elementary level or exclusively teach at the University. However, the decision is not an easy one for her to make because she maintains that she loves them both.

Renee

At the time of the study, Renee had just begun her fourth year at the University, and had just been accepted into the College of Education. Before this semester, she had several experiences working with children including working as a volunteer teacher’s aide in a second grade classroom. She had been doing this for four years, and had opportunities to do small units with the whole class and work with small groups at reading and centers. She also volunteered in a fifth grade class and participated in a College Bound program in a fourth grade class to promote higher education.

Renee seemed to be a naturally reflective TTE 300 student who was very excited about the possibility of being able to talk about and learn from “bumpy moments.” When I thanked her for participating in the study, she told me that she learned a lot from the process and enjoyed talking and reflecting with me. She would leave our school at noon and attend a class at the University every afternoon. Then she would tutor a sixth grade student, from the class at school, at his home until around 5:00 PM. Then she would come back to school and sit down for our interview. Although Renee did not bring any notes or a recording of the day’s events, she always entered my room ready to talk. It is possible that the time away from our school allowed her time to think and reflect about what had happened and what she wanted to discuss.
Renee started off the semester in an interesting way. On the first day, the sixth grade students were sure that one answer was correct during a lesson. When the teacher began to explain why the answer was incorrect, Renee stepped in and told the teacher that she agreed with the students and also thought their answer was correct. The teacher then went on to explain the fault in their reasoning. A second incident occurred when a math student was refusing to take a test and Renee intervened and attempted to reason with him. After talking with the student and not having much success, the teacher finally gave her a non-verbal cue to stop. These incidents seemed to greatly affect Renee. On one hand, she wanted to remain involved. But on the other hand, she was more cautious about her involvement and how much she was expected to participate in these situations.

Renee identified a total of eight "bumpy moments." Two occurred on the first day of data collection. One of these moments was her own personal "bumpy moment," experienced when she attempted to get the student to take his math test. She was the only preservice teacher to identify her own "bumpy moment." Although the other preservice teachers had opportunities to work with either small groups or in a whole group situation, it is presumed that they did not discuss their own "bumpy moments" because I only asked them to identify moments the teacher was experiencing. Renee identified the second of these moments on another day of the data collection. On the second day I interviewed her, Renee discussed one "bumpy moment" for the teacher. The third day, Renee didn't identify any "bumpy moments" for the teacher, but described her second own "bumpy moment" that occurred when she gave a spelling test to the sixth graders. On the fourth day Renee identified two "bumpy moments," followed by one each day for the last two days of data collection.
Renee's Types of Moments

On the first day of data collection, Renee witnessed a whole group management "bumpy moment" that occurred when the noise-level during a lesson began to rise and the students exhibited off-task behavior. Although the teacher seemed to be able to get the situation under control fairly quickly, Renee still thought it was important enough to discuss with me. On that same day, Renee herself experienced her own "bumpy moment." This moment was personal to her because she engaged in a process of attempting to get a student to take a test after he had refused. She expressed to me her thoughts, frustrations, and feelings that she wasn't sure how to handle the situation. This incident prompted her to want to learn more about this particular student and how she might deal with him in the future.

On day two, Renee thought that the entire morning was "bumpy." She felt like the problematic events of the day were primarily caused by whole group Management issues. On the third day of data collection, Renee did not witness any "bumpy moments" for the teacher, but again had a "bumpy moment" herself. The teacher had asked her to give a spelling test for the first time. Overall, Renee thought that the experience was valuable and felt that she had learned a lot in the process. Renee identified two "bumpy moments" on the fourth day of data collection, both she considered to be Sensitive Student Issues. In one case a student brought an inappropriate magazine to school. Following this incident, another student either said or typed an inappropriate word while they were in computer class.

On the fifth day of the study, Renee identified a Spontaneous Problem or Interruption "bumpy moment" when the Principal walked in the classroom and threatened to disrupt a formal lesson. Finally, Renee noted a teacher mistake while reviewing math on the board before a test. She
considered this to be a minor "bumpy moment" for the teacher.

The eight "bumpy moments" that Renee identified fell into five separate categories. Two of these moments were considered to be whole group Management issues. Two others were Sensitive Student Issues. Another "bumpy moment" was the Spontaneous Interruption when the Principal entered during an important lesson. The final three moments fell into categories that were unique to Renee. No other preservice teacher identified their own "bumpy moments." Renee discussed two. Also, Renee was the only preservice teacher to classify a teacher mistake as a "bumpy moment."

**Renee over time**

On the first day of data collection, Renee identified both a whole group Management issue and her first of two personal "bumpy moments." After she identified a Management moment on the second day, she never again mentioned this type of moment. However, Renee seemed to be the most affected by her own "bumpy moment" which was also could be considered a Sensitive Student Issues. Sensitive Student Issues resurfaced again for both moments on day four. When she talked about these moments, she seemed to be very concerned and also contemplated her role in these situations.

On two of these moments, Renee was directly involved. During the first moment in which a student refused to take a math test, Renee had spent a considerable amount of time and energy trying to convince the student to at least try the test. After reasoning with him and attempting to appeal to his interests and abilities, she was called away from the situation by the teacher. Renee was very concerned that maybe she had done something wrong, and she wanted to learn more about how she might be able to reach this particular student. She explained, "I'm the kind of person who likes to fix things"
The other Sensitive Student Issue that Renee was involved in concerned the inappropriate magazine. In this case, the student was talking with Renee and showing the magazine to her while they were sharing a common interest in wrestling. Although Renee knew that the pictures in the magazine might be inappropriate, she was hesitant to take it away because the student was so excited to talk with her about it. A discussion of these incidents showed that Renee was eager to make connections with the sixth graders, and was uncomfortable when she was either unable to reach them, or had to draw the line between student and teacher.

After her second own "bumpy moment" on day three, the other two days in the study presented two totally different moments. On Day five there was a Spontaneous Problem or Interruption, and on Day six the teacher made a computational mistake on the board. Thus, Renee seemed to identify several different moments over the course of the study and there wasn't much repetition across time.

**Renee's thoughts**

Renee discussed a total of thirteen different thoughts during our discussion of the "bumpy moments" she witnessed. Five of these thoughts concerned her awareness of how her behavior and presence in the classroom was impacting the "bumpy moment" itself. All of these thoughts consisted of wondering what she should do in the situation. She sums it up by saying, "I want to help... but at the same time I don't know which way to go with this" (September 22). She also explained that she often wanted to talk to the teacher about how the situation should be handled and whether she was making a mistake herself in how she had been involved.

Renee expressed two thoughts each that fell into the three separate
categories: 1) watching and wondering what will happen; 2) thoughts about particular student(s) or groups of students; and 3) evaluating whether the teacher was experiencing a "bumpy moment." When she described thoughts about particular students she tended to focus on what she already knew about that student, based on her past experiences with him or her. In her evaluations of whether the teacher was experiencing a "bumpy moment," she tended to look for signs of frustration on the teacher's face, or determined that it was "bumpy" when the teacher took extra time and effort to resolve the situation. Renee also discussed one thought admitting that she was preoccupied with other things, in her case grading papers, and was not able to fully witness what was happening in the classroom. Finally, on one occasion she also expressed that she had questions about why certain things happen in classrooms. In this instance she was wondering why the Principal came through the classroom on a regular basis. She wished to find out why he comes in, how he chooses the time, and what the reason for his visits could possibly be.

**Renee's knowledge or beliefs**

During the discussion of the eight "bumpy moments" that Renee observed, she identified a total of ten beliefs or knowledge that she brought to these moments. Her knowledge consisted of four instances in which she relied on her previous experiences with students. She discussed how her experiences prior to working in this classroom helped her understand how difficult it is to entertain individual questions while maintaining all the students' participation. She also described her experience working with students who are stubborn or not in a good mood to help her decide how to handle the one she encountered during the study. She questioned why the
Principal came to visit so often, because she hardly ever saw a Principal in her three years of volunteer work in other classrooms. Finally, when the teacher made a computational mistake on the board, Renee was cautious to tell her because she had corrected this teacher before and ended up being wrong in her correction.

Renee expressed five beliefs that fell into four different categories. Twice she indicated the belief that teachers often take more extreme measures to make an impact on students. In one of these instances, the teacher took an inappropriate magazine away from the child and Renee thought this would make more of an impact rather than just asking him to put it in his backpack. In the other situation, Renee felt it was important that the teacher follow through on school consequences when a student said a bad word. In Renee's words, "It wasn't that big of a deal but it was important that the teacher take care of it" (November 10).

All four of Renee's other beliefs fell into separate categories. First of all, she felt that keeping the students in past their recess time was a good natural consequence because they had wasted some of the teacher's lesson time. She also proposed that the students should assume responsibility and not bring certain things, such as inappropriate magazines, to school. Renee also discussed her expectations for students to be respectful, and how it is important to handle the issue seriously. Finally, she expressed her belief that it's okay to make mistakes. When the teacher made a computational error on the board, Renee realized that she too might make mistakes in teaching, and it shows the students that no one is perfect.

**Renee's perception of the teacher's actions**

In the discussion of the eight "bumpy moments" Renee identified
during the study, she perceived that the teacher took a total of ten actions to help remedy the problematic situation. Three of these actions included calling on individual students to make sure they were paying attention to the lesson, and two involved enforcing and following through with school rules. The other five actions fell into separate categories. These categories included: picking up the pace of the lesson, moving around the room, ignoring inappropriate student behavior, reexplaining a certain concept, and continuing a lesson despite time constraints.

Three times Renee noticed that the teacher called on individual students to make sure they were paying attention to the lesson. She commented that she used to hate when teachers did that when she was a student. Now she says that she understands why teachers do, and realizes that they are just trying to rope students back into the lesson. On two separate occasions, although they did happen on the same day, Renee witnessed the teacher enforcing and following through with school rules. In the first incident the teacher removed an inappropriate magazine from the student and showed him the rule in the Student Handbook when he protested. Later that same day, a student said or typed a word that was inappropriate. The teacher sent the child to a lunchtime detention program and referred to the Student Code of Honor to explain why his language was unacceptable.

Renee also discussed five separate actions that the teacher took to remedy other problematic situations. When it seemed that the students were getting off-task and began talking during a spelling lesson, the teacher moved around the room and made her presence known. During this same lesson, the teacher also began to pick up the pace and move through the lesson at a faster rate. On another day, the students had wasted some instructional time and the teacher wasn’t able to complete what she wanted to
accomplish. She chose to continue the lesson, even though it had become time for the students to go out to recess. When the teacher made a computational error during a math review, she decided that she should reexplain the concept because “She realized that they were more focused on her math mistake than on what she was saying” (December 1). Finally, when a student refused to take a math test, the teacher ignored his behavior so that it would not interrupt the rest of the class.

**Renee’s future implications**

In the discussion of the eight “bumpy moments” that she identified, Renee thought that each moment had a future implications for her teaching or thinking about her future teaching practice. Six of these implications fell into three different categories. Twice Renee commented that watching the “bumpy moment” allowed her to think about what she might do if faced with a similar situation in her teaching. On one occasion she realized that it is okay to make mistakes and she will bring this belief into her own teaching practice. On two other occasions, Renee discussed that she might try a certain technique that she witnessed the teacher doing. She says that she doesn’t know if she would have thought to pick up the pace of the lesson, for example, but might try that when she herself is teaching. She also liked the way the teacher handled a sensitive student issue and this allowed her to see how she might deal with these type of issues.

Two “bumpy moments” made Renee realize that she would like to learn more about certain things in teaching. First of all, she discussed that would like to be better prepared to handle students such as the one that she tried to reason with. She had tried every technique she could think of, but none of them were working. She hopes to talk with the teacher to see if there are
other techniques she may try or things that she should or shouldn't do when working with this type of student. On the second occasion, Renee expressed that she would like to know why the Principal visits the classrooms on a regular basis. She says that she might ask him herself if she can find a tactful way to approach the issue with him.

Finally, Renee thought that the two remaining “bumpy moments” held different future implications than the others. The same moment with the difficult student helped her realize that it is important for teachers to know the students that they are teaching. The other moment helped her look at things from a teacher’s perspective, rather than a student’s. In this moment, the teacher called on students who were not paying attention to the lesson. Renee says that she hated when teachers did this to her, but now she understands why it is important for teachers to make sure that their students are following along with the lessons.

**Comparison of the moments identified by Dr. Owen and Renee**

Of all the moments identified by both Dr. Owen and Renee, only one moment matched exactly. There were also no days without “bumpy moments” that matched. Two of the other moments were related in that a moment identified by Dr. Owen might have led to a moment identified by Renee on that same day. For example, the teacher was not prepared with report cards on day four, which led Renee to give the spelling test so that Dr. Owen could have time to finish. The spelling test itself was the only “bumpy moment” Renee identified on that day. The other closely related moments occurred on day six. On this day, Dr. Owen admitted that her mind was on other things this morning, which may have had an impact on her making the computational mistake that Renee identified. However, Dr. Owen did not mention this
specific event when recalling how her day was affected by her thoughts of other things.

The only "bumpy moment" that matched up exactly was the Spontaneous Problem or Interruption caused by the Principal entering the classroom during an important lesson. It is possible that this moment matched up because it had such a great impact on both Dr. Owen and Renee. On one hand, Dr. Owen thought that the Principal should recognize an important lesson and make every attempt not to interrupt. On the other hand, Renee had noticed that all of the Principal's visits usually caused a distraction and really wished to know the purpose of his visits. Dr. Owen also mentioned to me that it was important that Renee witness this type of moment and see how to handle it. This moment will now be discussed.

**Looking at the "bumpy moments" that matched up**

**Moment: Principal walked in and disturbs an important lesson**

Both Dr. Owen and Renee recognize that this particular incident was "bumpy" because the students were paying attention to an important lesson with a difficult concept. Renee describes how the student were 'on the verge' of understanding the concept completely: "They were so close to all this clicking, and (the teacher) knew it too." Both Dr. Owen and Renee recognized that the Principal came in and immediately started talking to one particular student. The teacher barely mentioned this student, only indicating once that the student was an English as a Second Language (ESL) student. Renee however emphasized this point because the student had just come back from his ESL class and Renee had just spent the last few minutes catching him up with the lesson. She was afraid she might have to do it again because the Principal was now interfering with his participation in the lesson.
Dr. Owen and Renee differed the most on the knowledge and beliefs that they each brought to this experience. Dr. Owen has personal experience being a Principal and has a specific way of dealing with informal observations. She explained that she always felt as if she was interrupting, and was very careful to sneak in a classroom rather than "bolting in the room." She also talked about how she tried to be sensitive to what was going on inside the classroom and how she feels she could recognize a formal lesson. She believes very strongly that a formal lesson should not be interrupted and that she would have just sat down and tried not to interfere if she was caught in that situation. On the other hand, Renee was unsure why the Principal came into the room and was not familiar with informal observations. She wanted to know why this Principal had come in so many times, when other schools barely saw their Administrator.

Renee believed that the teacher only had to make one comment to the student being interrupted by the Principal, and that was sufficient for the Principal to get the idea and leave. However, Dr. Owen felt that it was much more complicated. She says that she called to the student once, asking him to keep his undivided attention on the lesson, she reminded him a second time, and also used non-verbal cues to alert the Principal. After he left, Dr. Owen reports that she had to redirect the entire class and encourage them to keep with the lesson. In her estimate, all the students on one side of the classroom were affected by his presence. Renee only mentioned that the one student, who he came and talked to directly, was affected. Experiencing this moment led both Dr. Owen and Renee to contemplate further action. Dr. Owen plans to talk to the Principal and tell him how she would rather he did not disturb formal lessons. Renee also would like to speak to the Principal, but only to ask why he comes into the classrooms.
Looking at the days without "bumpy moments" that matched up

There were no days without "bumpy moments" identified by either Dr. Owen or Renee. Although on some days they discussed very different moments, there was never a day when one of them said that there wasn't any "bumpy moments."

Looking at the days and "bumpy moments" that didn't match up

What did the teacher see that the preservice teacher didn't, or the preservice teacher didn't think was "bumpy"?

There were several times throughout the study that Dr. Owen stopped a lesson to take care of a particular problem or situation. Renee either didn't notice these moments, or perhaps thought that Dr. Owen had planned to do it that way. For example on day one, Dr. Owen identified a moment in which she stopped a lesson to allow the students to get the announcements on e-mail. In this instance, she felt that she was not going to be able to teach effectively if the students did not have the announcements from e-mail. For whatever reason, Renee did not mention this incident.

The second incident in which Dr. Owen stopped a lesson to take care of a problem came on day two. In this situation, she attempted to begin a lesson and the students couldn't find the worksheet they needed for that lesson. She stopped the lesson and had the students clean out their folders and throw things away so that they might be able to find the worksheet. Renee noticed that the students were doing a lot of moving around and out of their seats, but she claims she was too involved in the grading of papers to notice exactly what was happening. The third time Dr. Owen stopped a lesson was when the students weren't paying attention to an important spelling lesson. In addition to giving a "little chat about why spelling is important," Dr. Owen stopped and
had the students average their spelling grades to see if they needed a good grade on the upcoming test. She then used this as motivation for continuing with the lesson. Renee failed to mention the situation completely.

Renee noticed the other two incidents that didn't match up, but she failed to classify them as "bumpy moments" during our discussion. The first of these moments was the fact that the report cards were not done on day three. Renee was aware that Dr. Owen was flustered because she had so much to do, but she didn't talk about it as a "bumpy moment" in and of itself. Instead, Renee only mentioned her difficulty giving the spelling test on that day. For the second moment on day six, Dr. Owen reported that the morning was "bumpy" because her mind was on other things. Renee may or may not have picked up on this, but she did notice that the teacher made a simple computational mistake on the board that day. Renee might not have been aware of everything on the teacher's mind, but she did notice that the teacher seemed to be in a hurry when she made her mistake.

What did the preservice teacher see that the teacher didn't, or the teacher didn't think was "bumpy?"

Renee tended to talk about moments involving individual students, or sensitive student issues, and Dr. Owen did not. On day one, Renee was greatly disturbed by the student who refused to take the math test. She was most likely affected by this moment because she was personally involved. She had made several attempts to reason with the student before Dr. Owen stepped in and asked her to leave the student alone. It is very probable that Dr. Owen has dealt with this same student in this same situation before, and thus it is less "bumpy" to the teacher than if she had been dealing with this for the first time.
The other two Sensitive Student Issues were both on day four. These two incidents seemed to have an impact on Renee because she was watching carefully to see how the teacher handled the situations and all the steps she took while handling the problem. Dr. Owen did not mention either of these situations however. It is possible to suggest that dealing with these types of issues is fairly routine for Dr. Owen, especially given her background as an Administrator. Therefore, Renee was struck by seeing them for the first time while Dr. Owen possibly considered them to be more routine.

There were two moments that Renee identified that dealt with the overall behavior of the class and how Dr. Owen handled it. When Renee was describing the events of Day one, in which the students began to get rowdy and were talking, she discussed how Dr. Owen stood up, picked up the pace and called on students individually. Although Renee identified this as a "bumpy moment" it is possible that Dr. Owen didn't consider it as "bumpy" because she had the proper techniques to handle it. When the entire class was restless on day two, Dr. Owen kept the students in for part of their recess to finish their lesson. Again Dr. Owen did not identify this as a "bumpy moment," possibly because she knew how to take care of the situation.

The other two moments that Renee identified and Dr. Owen didn't were Renee's own "bumpy moment" on Day three and the computational mistake on day six. Dr. Owen did not discuss Renee's "bumpy moment" because it was not asked of her, although she knew that it had been a great learning experience for her. On day six however, Dr. Owen did not mention at all the computational mistake on the board. It is difficult to say whether Dr. Owen simply forgot about the mistake, or didn't deem it "bumpy" enough to discuss with me. Perhaps this moment was just not as memorable for the teacher as it was for the observer in the classroom.
ANALYSIS OF PRACTICING AND PRESERVICE TEACHERS

The following chapter is an analysis of the group of practicing teachers and the group of preservice teachers in general. This analysis is divided into three sections. The first section discusses the practicing teachers and what types of moments they experienced, their thoughts, knowledge and beliefs that they brought to these moments, the actions taken during a “bumpy moment,” and their thinking about the future implications of such moments. The second section is a similar analysis of the preservice teachers' understandings of the “bumpy moments” that they witnessed. Following these analyses, a final section is presented discussing the findings gained from this study that contribute to the existing knowledge about “bumpy moments,” teacher reflection, and teaching experience.

Analysis of the Group of Teachers in General

Teachers’ Types of “Bumpy Moments”

The four teachers in this study differed greatly on whether they accepted my definition of a “bumpy moment” or sought to define the term through their own experiences. On one hand, Ms. Porter accepted my definition of a “bumpy moment” and never offered any alternative definition. On the other extreme, Mrs. Anderson began a process of redefining the “bumpy moment” term that continued throughout the study and affected what moments she identified. She would often tell me that she had not experienced any “bumpy moments” on a given day, because she only had management moments and not ‘teaching flubs,’ as she described them.

In between were Mrs. Wayne and Dr. Owen who each began the study with a personal definition of a “bumpy moment” that eventually was explained to me during the interviews. Mrs. Wayne suggested that a “bumpy
moment," in her opinion, completely stops learning while she attempts to take care of the problem (November 24). This might be why she identified so few “bumpy moments” during the course of the study. Dr. Owen discussed that she considered “bumpy moments” to include moments in lesson, delivery and organization (October 20). She did not, however, label each moment so that I might see which type she was experiencing on a given day.

Despite these differences, the teachers collectively identified 19 “bumpy moments.” Six of these moments were identified by both Dr. Owen in sixth grade and Ms. Porter in first grade. Mrs. Anderson, in third grade, identified five. Mrs. Wayne identified only two in her fourth grade class. The nineteen moments fell into six separate categories: Management, Not Prepared, Problems with Dual Segments, Spontaneous Problem or Interruption, Time Management, and Sensitive Student Issues. These categories are described below:

**Management**- Whole group  Problem with particular student(s) that interrupts or threatens to interrupt the whole group activity or instruction;

**Not Prepared**- A moment that is caused by the teacher not being adequately ready for a particular activity and/or moment in his or her teaching;

**Problems during Dual Segments**- Problems that occur during or as a result of running two or more different activities in the classroom at one time;

**Spontaneous Problem or Interruption**- Something unexpected that occurred in the classroom and interrupted or threatened to interrupt the activity or instruction;
Time Management - Difficulty staying on the planned schedule or a problem that results from allowing one activity to run too long or short, thus interfering with the other scheduled activities;

Sensitive Student Issues - A problem with an individual student that does not threaten to interrupt the activity or instruction.

Table 5 lists each category with the amount of moments the teachers as a group identified in each category. Following that number, the teachers are identified with how many moments they personally discussed in this category.

Table 5. Teacher "Bumpy Moments"

<table>
<thead>
<tr>
<th>Category</th>
<th>Anderson</th>
<th>Owen</th>
<th>Porter</th>
<th>Wayne</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Not Prepared</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Dual Segments</td>
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<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Problem or Interruption</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Time Management</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sensitive Student Issue</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td><strong>19</strong></td>
<td><strong>5</strong></td>
<td><strong>6</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

Teachers’ Thoughts

Teachers' thoughts, compiled from the interviews about the "bumpy moments" in their teaching fell into seven different categories. The amount of teachers who offered each thought varied. Thus, the thoughts are listed
and described below, beginning with the categories that were described by the most amount of teachers in the study:

Thoughts shared by every teacher in the study (at least once):

- **thoughts about particular student(s) or groups of students**: making predictions about how student(s) may feel or behave based on prior experience and anticipating future actions, including what the students need or will need in the future;

- **developing a plan of action**: deciding how to handle the particular situation, considering alternatives and contemplating what her level of involvement will be;

Thoughts shared by three out of four teachers in the study:

- **balancing priorities**: thoughts about what is considered valuable to the individual teacher when making decisions about the particular moment;

Thoughts shared by half of the teachers in the study:

- **"I should have known better"**: thoughts about how the particular situation, or parts of the situation, may have been avoided had it not been for teacher error or lack of anticipation of a problem;

- **thoughts about time constraints**: assessing a situation given the time allotted and what needs to be accomplished in this amount of time;

- **feeling "frazzled"**: teacher frustration during a moment sometimes caused by thinking about other things that were occurring during the teaching segment;

Thought shared by only one teacher in the study:

- **"Am I doing the right thing?"**: a teacher's evaluation of her
performance and/or actions and its effect on the students.
(Dr. Owen was the only teacher to explicitly evaluate her decisions by telling me that she was thinking about whether she was doing the right thing.)

**Teachers' Knowledge and Beliefs**

When looking at the knowledge and beliefs mentioned by the teachers in this study, four different categories of knowledge emerged as well as ten different belief categories. There was only one category of knowledge that was expressed by every teacher in the study. The four knowledge categories included:

**Knowledge shared by every teacher in the study (at least once):**
- previous experiences working with students;

**Knowledge shared by half of the teachers in the study:**
- knowledge derived from reading about teaching or scholars in the field;

**Knowledge shared by only one teacher in the study:**
- knowledge derived from taking courses in teaching;
- previous experience with another responsibility in the schools
  (Dr. Owen was the only teacher to identify both of these two types of knowledge)

Teachers' beliefs, which came about in the discussion of "bumpy moments" while teaching, were also diverse. Of the ten different beliefs expressed, there was only one belief that was mentioned by all four teachers. This belief, that some things in teaching just happen and are out of the
teacher's control is discussed at length below. Besides that common belief, there was only one other category that two teachers discussed and all other beliefs were expressed by a single teacher. The ten different beliefs are listed below, beginning with the most common belief:

**Belief shared by every teacher in the study (at least once):**
- Some things just happen and are out of the teacher's control;

**Belief shared by half of the teachers in the study:**
- Determining how to handle a situation depends on the importance of a particular lesson;

**Beliefs shared by only one teacher in the study:**
- Students should behave in a certain manner and should be able to do what is expected of them;
- A worksheet takes secondary importance and a lesson should not be stopped when students are working well and expanding their thinking;
- Students are supposed to ask clarification questions;
- Students should be treated with respect;
- A teacher shouldn't get into power struggles with students;
- Adults working in the classroom should meet the teacher's expectations;
- At least one-third of your students should demonstrate they know a concept before you decide the whole group has learned it;
- Teachers shouldn't try to deal with more than one thing at a time.

In the wide variety of beliefs, some teachers were more represented than others. For example Mrs. Anderson is represented in eight of the
different belief categories. Dr. Owen is represented in four and Ms. Porter in two. Mrs. Wayne was the only teacher to share just one belief, which was the common belief suggested by all four teachers. A more specific description of each teacher’s knowledge and beliefs is presented in their individual analysis section. However, a discussion of the one belief identified by all four teachers now follows.

Some things are typical, to be expected

When discussing the daily events with practicing teachers, it became clear that they believe some things that happen in classrooms are just expected, but do not necessarily constitute a “bumpy moment” in teaching. However, these events do require that a teacher is flexible and able to handle the given situation. As Ms. Porter says, “These things occur and you just roll with it” (September 22). Mrs. Anderson suggested that deviations from what you had planned for the day happen so regularly that she explains, “You’re in the wrong business if you think you can control and have everything go just as planned” (September 29). Coping methods include calling back on your previous experiences and repertoire of techniques for dealing with such situations, and knowing your students well enough to know what they can handle.

At the school where the study took place, once a month (and for an entire week during conferences in October) there was an Early Release day. The students were dismissed at 12:20, rather than 2:15. These days were all on Tuesdays, which happened to be the day for my study. Three of the four teachers in the study experienced at least one Early Release day during their data collection days. All three of these teachers were in agreement that these types of days created an atmosphere that was less conducive to learning than
other days. On one day, Dr. Owen offered this example:

It was an Early Release day and [the students] minds were on what they were going to do after school, not on what they were doing [in the classroom]. They were ready for, ‘Let’s play football after school. Who’s coming to my house?’ (October 6).

Dr. Owen explained that on these days she tries to maintain a good sense of humor and enjoy the higher energy level and excitement in the classroom.

For two of the four grade levels, the Early Release time change affected when the students would go to their Specialist (Music, Physical Education, and Art) classes. On these days, Ms. Porter's first grade class attended their Specialist class in the morning rather than the afternoon. This caused her to completely rearrange the schedule of events on these mornings. She describes her reasoning for creating this change:

I've seen them at Early Release just be totally wigged out of their head because it's different... and I think it really threw them off because they’re used to having their specialist after lunch, and for Early Release it's in the middle of the day. It's that frenzied, you know, trying to get all of your centers done before you go to lunch. So this [change in our schedule] created a little calmer atmosphere for them (October 6).

On the last day of her data collection, Mrs. Wayne talked about how she had an Early Release day with a full hour and a half of Physical Education. Because of the way the fourth grade teachers arranged their Specialist time on such days, this happened once every three months. Mrs. Wayne describes how these days have an impact on the teachers:

I would describe the day as 'on the verge' of any minute it could blow, which made me very tired. But I did not let my guard down all day. It
was one of those days where my energy had to be up with theirs and I was exhausted even though it was a half day (December 1).

**Teachers' Actions During a "Bumpy Moment"**

When faced with a "bumpy moment" in teaching, teachers acted in a variety of different ways. The teachers in this study reported sixteen different actions that they took in an attempt to remedy a "bumpy moment" in their teaching. Most of these actions were discussed by only one teacher in the study. There were two action categories that were identified by three teachers and two more that were offered by two teachers in this study. All other twelve categories were only mentioned by one teacher, although she may have acted in this way more than once during the study. Although the actions are quite diverse, it is important to list all of the actions here so that one might gain an insight into all the many ways a teacher may take action to handle a problematic situation in teaching:

**Actions shared by three out of four teachers in the study:**

- Verbal redirection or reminder to an individual student or the whole group of students;
- Continuing a lesson despite problems, interruptions, or time constraints;

**Actions shared by half of the teachers in the study:**

- Reinforcing positive behavior to shape group behavior;
- Dealing with individual students in private;

**Actions shared by only one teacher in the study:**

- Refusing to answer questions during whole group instruction;
- Ignoring inappropriate student behavior;
• Offering additional help or assistance to students;
• Stopping one segment to attend to another;
• Stopping an entire lesson to take care of another issue;
• Taking preventative actions in anticipation of a later problem;
• Collecting work to complete at a later time;
• Checking for understanding;
• Trying an alternative method;
• Controlling environmental factors;
• Attempting to motivate students;
• Seeking the aid of the TTE 300 student in the classroom.

**Teachers' Future Implications**

Following the discussion of each "bumpy moment," the individual teachers were asked about the future implications of experiencing this moment in teaching. More specifically, they were asked if each moment helped them to reflect and possibly would lead them to further action. There were six different categories of responses to this question. No category held the same response from all four teachers. Rather, four categories represented half of the teachers in the study while the other two categories were only mentioned by one teacher. The categories are listed below.

**Future implications shared by half of the teachers in the study:**

• No- These things will always happen in teaching or the teacher doesn't care enough about it to make a change;
• The teacher may change a procedure or reexplain a procedure;
• Immediate action will be or was taken;
• Future plans were made for this type of student or this type of day;
Future implications shared by only one teacher in the study:

- Teacher was happy with the results and may do the same thing again;
- Future decisions need to be made regarding this teacher's career.

Dr. Owen was represented the most across the categories, as her discussion of implications included four of the six responses. Ms. Porter was represented in three of the six categories while Mrs. Anderson discussed thoughts included in two of the categories. Mrs. Wayne offered two responses which fit into the same category. A discussion of each teacher's personal implications can be found in the individual analysis sections.

Analysis of the Group of Preservice Teachers in General

Preservice Teachers' Types of "Bumpy Moments."

The preservice teachers collectively observed and identified 23 “bumpy moments.” Renee, in the sixth grade classroom discussed eight of the twenty-three total moments. Six of the moments were identified by both Beth in third grade and Jeanne in first grade. Steven, in fourth grade, reported only three. The twenty-three moments fell into six separate categories: Management, Sensitive Student Issues, Student Understanding, Spontaneous Problems or Interruptions, Teacher Mistakes, and a preservice teacher's own Personal “bumpy moment.” Each category is described below.

Management- Whole group  Problem with particular student(s) that interrupts or threatens to interrupt the whole group activity or instruction;

Sensitive Student Issues- A problem with an individual student that does not threaten to interrupt the activity or instruction;
Student Understanding- When several students have difficulty or are perceived to have difficulty understanding and completing an assigned activity or task;

Spontaneous Problem or Interruption- Something unexpected that occurred in the classroom and interrupted or threatened to interrupt the activity or instruction;

Teacher Mistake- A problematic situation caused by a teacher error;

Preservice Teacher's Own "Bumpy Moment"- A "bumpy moment" that is not experienced by the teacher, but rather by the preservice teacher him/herself.

Table 6 lists each category with the amount of moments the preservice teachers as a group identified in each category. Following that number, the preservice teachers are identified with how many moments they personally reported in this category:

Table 6.

Preservice Teacher "Bumpy Moments"

<table>
<thead>
<tr>
<th>Category</th>
<th>Beth</th>
<th>Renee</th>
<th>Jeanne</th>
<th>Steven</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>11</td>
<td>1</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Sensitive Student Issue</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Student Understanding</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Problem or Interruption</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Teacher Mistake</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Own &quot;Bumpy Moment&quot;</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td><strong>23</strong></td>
<td><strong>6</strong></td>
<td><strong>8</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>
Preservice Teachers’ Thoughts

Preservice teachers’ thoughts, compiled from the interviews about the “bumpy moments” in their teaching, fell into nine different categories. Four of the nine categories were suggested at least once by every preservice teacher in the study. Two thoughts were expressed by half of the preservice teachers, while the last three categories were mentioned by only one. The categories are described as follows:

Thoughts shared by every preservice teacher in the study:

• watching and wondering what will happen- observing the students and the teacher to see what might occur during the “bumpy moment.” These thoughts often included trying to figure out what the teacher or students might do next;

• thoughts about particular student(s) or groups of students- thoughts about what the student(s) might be thinking and what motivates their behavior. This category is similar to the teachers’ thoughts category, although preservice teachers tended to put themselves in the students’ shoes as an attempt to decide what the student might be thinking or might need in a particular situation;

• awareness of his or her impact on the classroom events- knowing that his or her presence in the classroom might impact the outcome of the “bumpy moment” and often having thoughts about what the right thing to do in this situation might be;

• preoccupation with other things outside the “bumpy moment”- in these instances, the preservice teacher admitted that he or she was not completely observant when the teacher was
experiencing a "bumpy moment." Either the preservice teacher said that there were too many things happening in the classroom or he or she was thinking about something else.

**Thoughts shared by half of the preservice teachers in the study:**

- **evaluation of teacher's actions**: thoughts about whether the preservice teacher approved or disapproved with how the teacher was handling a situation in the classroom;

- **evaluating whether they were witnessing a "bumpy moment"**: observing what was happening in the classroom and thinking about whether what they were witnessing could be classified as problematic to the teacher;

**Thoughts shared by only one preservice teacher in the study:**

- **questions about why certain things happen**: this single thought dealt with trying to figure out an unfamiliar situation and why it happens in classrooms;

- **disbelief at student behavior**: this single thought was expressed by a preservice teacher who simply couldn't believe that a student was acting in a particular manner.

- **thinking about what she might have done herself**: this single thought consisted of exploring what the preservice teacher might do herself if she had been faced with this exact moment in teaching;

Jeanne was also the only preservice teacher to offer a thought about what she might have done herself to remedy a similar situation in her own teaching. Although other preservice teachers contemplated such issues during the discussion of "bumpy moments" in teaching, Jeanne was the only one to identify them when asked directly about her thoughts while she was
witnessing the particular moment.

Preservice Teachers' Knowledge and Beliefs

During the discussion of the "bumpy moments" that the preservice teachers observed, three different categories of knowledge emerged, as well as nine separate kinds of beliefs. Of the three knowledge categories mentioned, there was no category that represented all the preservice teachers in the study. One category was identified by three of the four. The second category was discussed by two preservice teachers. It is interesting to note that the third category, knowledge derived from taking courses in teaching, was only mentioned by one preservice teacher. Beth was the only preservice teacher to discuss the readings from the University, and bring that knowledge to the events in the classroom. All three other preservice teachers failed to share any connection between the university course and their simultaneous experiences in the schools when they were asked about their knowledge and beliefs. The three knowledge categories included:

Knowledge shared by three of four preservice teachers in study:

- previous experiences working with students;

Knowledge shared by half of the preservice teachers in the study:

- personal experiences as a student;

Knowledge shared by only one preservice teacher in the study:

- knowledge derived from taking courses in teaching.

Preservice teachers' beliefs that were mentioned during the discussion of "bumpy moments" comprised nine different categories. There was only one belief that was offered by two preservice teachers. All other categories
were expressed by a single preservice teacher. The nine beliefs are listed below, beginning with the belief that was suggested by two preservice teachers:

**Belief shared by half of the preservice teachers in the study:**
- Students are expected to behave in a certain manner;

**Belief shared by only one preservice teacher in the study:**
- Natural consequences are effective in the classroom;
- Students shouldn't bring certain things to school;
- Teachers often need to take more extreme measures to make an impact on a student;
- It's okay to make mistakes;
- Teachers should read worksheets before they give them out and stop to reexplain if the students are having difficulty;
- Sensitive student issues should be handled privately;
- Students need structure;
- Directions for work should be presented in smaller portions to first grade students.

Across these nine belief categories, some preservice teachers were more represented than others. Renee expressed the first five beliefs, although she also identified the most amount of “bumpy moments.” Jeanne discussed three beliefs and Beth offered only two. Steven did not indicate a single belief. When discussing his three “bumpy moments” he either said he had no knowledge or beliefs, or relied on his previous experiences with students. A more specific discussion of each preservice teachers' knowledge and beliefs is presented in their individual analysis section.
Preservice Teachers' Perceptions of the Teachers' Actions During a "Bumpy Moment"

Preservice teachers noticed and identified seventeen different kinds of actions that they thought the teacher took in an attempt to resolve a "bumpy moment" in their teaching. Three categories were mentioned by three of the four preservice teachers in the study. Four action categories were identified by half of the preservice teachers. All other ten categories were mentioned by only one preservice teacher, although they may have witnessed the teacher do this action more than once during the study.

Actions identified by three of four preservice teachers in study:
- Verbal redirection or reminder to a student or whole group of students;
- Moving around the room or moving closer to certain students;
- Ignoring inappropriate student behavior;

Actions identified by half of the preservice teachers in the study:
- Calling on individual students to make sure they're with the teacher;
- Reexplaining a certain concept;
- Dealing with individual students in private;
- Refusing to answer questions during whole group instruction;

Actions identified by only one preservice teacher in the study:
- Continuing a lesson despite time constraints;
- Picking up the pace of the lesson;
- Enforcing and following through with school rules;
- Modifying an activity;
- Using non-verbal cues;
• Having students help other students to help them understand a task;
• Taking some time to decide how to handle a particular situation;
• Making sure everyone was in their seats and ready to begin;
• Choosing not to deal with the noise level in the classroom;
• Having some students do one thing and other students do another.

Preservice Teachers' Future Implications

Following the discussion of each “bumpy moment” that they observed during the course of the study, the preservice teachers were asked to reflect about whether each moment might have any future implications for their own teaching practice or may have helped them think about certain issues in teaching. There were six different categories of responses to this question. One category, helping them think about what they would do in this situation, was mentioned at least once by all four preservice teachers. Another category, helping them be more aware of issues in teaching, was discussed by three of the four. Two other categories were reported by half of the preservice teachers, while the last two were mentioned by only one preservice teacher. The categories of responses are:

Future implication shared by every preservice teacher:
• Helped them think about what they would do in that situation;

Future implication shared by three of four preservice teachers:
• Made them more aware of issues in teaching;

Future implications shared by half of the preservice teachers:
• Might try a technique demonstrated by the teacher;
• No affect on their future teaching or thinking about teaching;
Future implications shared by only one preservice teacher:
  - Gained the teacher's perspective;
  - Made them want to learn more about a particular issue.

Renee was represented the most across the categories, as she offered a response in every category except the 'No' category. She also was the only preservice teacher to discuss the final two implications discussed above. Jeanne and Beth were both represented in three of the six categories. Steven offered three responses that fit into two different categories. A discussion of each preservice teacher's future implications can be found in the individual analysis sections.

Discussion of “Bumpy Moments,”
Teacher Reflection, and Teaching Experience

From the analysis of the “bumpy moments” experienced and discussed by practicing and preservice teachers, insights can be gained about “bumpy moments,” teacher reflection, and teaching experience. A discussion of these findings now follows with suggestions about how these insights might contribute to the existing knowledge base in each of these areas.

“Bumpy Moments”

Interest in the notion of “bumpy moments” began with a self-study of one teacher’s “bumpy moments” in her own teaching practice (see Romano, 1995). The present study became an extension of the earlier study to illicit the “bumpy moments” of other practicing teachers. Further, an additional component offered insight into what types of moments preservice teachers are observing while working in these classrooms. Through the identification
and analysis of the "bumpy moments" of both practicing and preservice teachers, several interesting findings emerged about the term itself, and the potential for having teachers identify "bumpy moments" both in their teaching practice and in teacher education.

From the discussions with the practicing teachers, it became apparent that these four teachers all experienced several "bumpy moments" in their own teaching, even if their definition of such moments differed slightly from mine. In fact, it became unnecessary that the practicing teachers accept a set definition for the term, rather than they were able to use the notion of a "bumpy moment" to discuss the teaching events that they were personally experiencing. Identification and reflection on "bumpy moments" in their own teaching not only created a common language to discuss teaching events, but it also allowed teachers the opportunity to examine problematic teaching instances. Many of the "bumpy moments" led the teachers to further reflect on deeper issues in teaching, or led them to make a change in their future teaching practice.

The preservice teachers in this study were also able to discuss the act of teaching using the "bumpy moments" as a springboard for further discussion and reflection. Although every one of the preservice teachers accepted my definition and did not attempt to redefine the term as the practicing teachers had, the moments that they identified were unique to the individual preservice teacher. In fact, preservice teachers were inclined to be more consistent on the types of moments they were observing over time, thus presuming that their observations are being driven by their preconceived notions of teaching. All four of the preservice teachers in the study expressed that identifying and discussing "bumpy moments" in the classroom helped them to think about how they might prepare themselves for teaching,
and also allowed them to be more aware of various issues in teaching.

Identification and discussion of "bumpy moments" in teaching does seem to hold promise for examining the reflective processes involved with the act of teaching. Not only does experience with a "bumpy moment" require reflection, but the discussion encourages further thoughts and considerations about the implications for future teaching practice. Comparing the "bumpy moments" that the practicing and preservice teacher pair described in the same classroom supports the notion that two people experiencing the same event might interpret the event in very different ways. What might be "bumpy" to a preservice teacher is not necessarily "bumpy" to a practicing teacher and vice-versa.

However, when the moments matched up, there was a strong match between the practicing teacher's report of the events, and what the preservice teacher observed. A possible improvement, however, might be to ask the preservice teacher to propose what he or she thought the teacher might be thinking or considering at the time. It might be helpful to examine how preservice teachers interpret the practicing teacher's reflections during the moment in teaching. Insights could be gained into whether preservice teachers are able to recognize the teacher's priorities, what alternatives she might be considering, and what her proposed plan of action might be. If the preservice teacher is encouraged to analyze these reflections and how the teacher is making immediate decisions during the teaching act, he or she might be able to gain awareness of the complexities of teaching and begin to contemplate such issues in their own teaching practice.

**Teacher Reflection**

Through the identification and discussion of the many "bumpy
moments" presented in this study, it is apparent that both practicing and preservice teachers are engaged in a process of reflection in both their teaching and observation of teaching. Analysis of the practicing teachers' "bumpy moments" offers insights into the many things that teachers are considering when handling one particular moment in teaching. Not only is reflection encouraged by the identification and discussion of "bumpy moments," but it is also an inherent component of the process. Quite simply, the teacher cannot act upon a "bumpy moment" without engaging in some process of reflection. "Bumpy moments" offer one way to get at these reflections and begin to understand how and when they occur, and what they look like while happening instantaneously during the act of teaching.

Analysis of the practicing and preservice teachers' reflections in this study revealed that many reflections about teaching consist of beliefs about the teaching and learning process, rather than consideration of existing knowledge. While both practicing and preservice teachers relied on their previous experiences with students or as a student themselves, very few participants shared any other type of knowledge derived from education studies or teacher education. Instead, each participant expressed several different beliefs that guided their decisions or thoughts about teaching. The overwhelming amount of beliefs compared to knowledge identified suggests that a teacher's belief system guides his or her decision-making process and has the greatest impact on his or her teaching practice.

Only one practicing teacher, Mrs. Anderson, discussed an educational experiment to explain a phenomenon in her teaching. Dr. Owen, who is very involved in higher education and preservice teacher education, was the only practicing teacher to discuss any knowledge derived from scholars in the field or from taking classes at the University level. Similarly, Beth was the
only preservice teacher to make any connection between what she was learning in her University class and apply it to what she was experiencing in the classroom. It seems that the experience in schools continues to be viewed separately from the experiences in teacher education. Thus, the work of teacher education and the work in schools comprise separate “situated learning experiences” and few participants made the connection between the two.

Most surprisingly, the preservice teachers were observing in the classroom as a requirement for their teacher education course and still failed to discuss any connections during the study. These findings are consistent with Winitsky and Kauchak (1995) who found that preservice teachers tended to deemphasize the work in teacher education, yet stressed the importance of work in the field with children. Teacher educators are then challenged to find ways to assist preservice teachers in making connections between the University learning and the elementary school classroom experiences.

**Teacher Experience**

Results of this study indicate that there were definite differences in both the kinds of moments that practicing and preservice teachers identified, and how they interpreted these events. Analysis of the “bumpy moments” described by both groups suggest that preservice teachers are either not aware or not concerned about problematic issues stemming from the management of dual segments, time management issues, and not being prepared for teaching. On the other hand, practicing teachers did not identify student understanding issues or teacher mistakes as contributing to “bumpy moments” in their teaching practice. It is possible that if both groups were asked, they might be aware of the other group’s concerns, and
just failed to mention these issues. It is also feasible, however, that practicing and preservice teachers differ in the types of concerns that dominate their thinking about the practice of teaching.

For example, some of the preservice teachers were consistently keyed into particular features of classrooms and tended to interpret the events in a similar manner no matter what they might be experiencing. For example, every one of Beth's "bumpy moments" was in some way related to student issues, whether it be a sensitive student issue or a matter of student understanding. This suggests that she was viewing the moments in the classroom through the eyes of herself as a student. Further, Jeanne began the study with preconceived notions about how students should behave in classrooms and again compared them to her own experiences as a student. Analysis of the "bumpy moments" identified and discussed by these two preservice teachers supports the notion that preservice students' entering beliefs remain central in their interpretations of teaching (Anderson and Bird, 1995).

Preservice and practicing teachers also tended to view the same situations using very different frames. Both groups explained that they take students into consideration when making a decision during practice. However, the practicing teachers tended to recall their experiences working with either the students in their present classroom or in years past. The preservice teachers tended to put themselves in the students' shoes and examine the event from the perspective of what it might be like for the student. Thus, the two interpretations of what is best in these situations often differed depending on which experiences with students were being considered.

Teacher experience also seemed to have an impact in that the
practicing teachers each discussed at least one moment that they thought was out of their control. From their experiences as a teacher, they have realized that some things just happen and the teacher has to be flexible in her expectations during that time. They commented that it isn't beneficial to get upset when these things occur, rather it is the teacher's responsibility to make adjustments and not expect things to always go smoothly while teaching. The preservice teachers did not express this belief, although it is impossible to determine if they were aware of such events. It is possible that they have not realized that such events occur, or that these instances seem as problematic as many other things are when one is being introduced to the complexities of the teaching practice (Ducharme and Ducharme, 1996). Such a view of teaching might only be gained through experience.

There were instances during the study in which the preservice teachers all admitted that they were not observant while events were occurring or were preoccupied with other things, indicating that they were in a state of non-concern (Fuller, 1969). In fact, the teaching events that took place during the study, with the exception of Renee's own "bumpy moments," were the responsibility of the practicing teacher, and not the preservice teacher. When a preservice teacher is placed in a classroom for observation, it seems only reasonable that he or she will not be as concerned or aware of the teaching issues as the practicing teacher must be. With increased experience with the complexity of the classroom teaching-learning process, the preservice teachers will most likely become more concerned about some of the issues that they observe the practicing teachers experiencing (Pigge and Marso, 1997). It would be interesting to follow these preservice teachers as they gradually assume more teaching responsibilities and see if and how their concerns and "bumpy moments" change with experience.
CONCLUSIONS AND IMPLICATIONS

This study was an attempt to locate reflection in the practice of teaching, as seen through the eyes of both practicing and preservice teachers. Several intriguing findings about these reflections resulted from addressing the five research questions designed to examine practicing and preservice teachers' perceptions and reflections on "bumpy moments" in teaching and determine the similarities and differences between the two. I begin this section by discussing the results of the study in terms of the five research questions. Following this section, further implications for the use of "bumpy moments" in teaching and teacher education will be discussed.

Addressing the Five Research Questions:

*What do teachers and preservice teachers consider to be "bumpy moments" in their teaching or observation of teaching; how do they differ and how are they similar?*

Three of the four practicing teachers in the study either redefined the "bumpy moment" term or had their own definition for what the term meant. Ms. Porter was the only teacher who accepted my definition and did not make any attempt to share what the term meant to her. On the other hand, every one of the four preservice teachers accepted my definition and not one of them made an attempt to share what the term meant to them. This is to be expected, however, because the preservice teachers were simply doing what was asked of them. The practicing teachers, however, were colleagues who sought to create a better understanding of the moments that presumably all teachers must face. The differences in how the practicing and preservice teachers defined the "bumpy moment" term may have impacted whether they
identified the same moments in each classroom.

Each practicing and preservice teacher pair varied in the amount of times that their identification of "bumpy moments" matched. Mrs. Wayne and Steven matched the most frequently, although many of their days were days without "bumpy moments." Steven identified a total of three "bumpy moments," and Mrs. Wayne also discussed two of these three. Ms. Porter and Jeanne matched a total of four times, two of these were days without "bumpy moments." Mrs. Anderson and Beth also matched four times, one of these was a non-bumpy day. Dr. Owen and Renee tended to identify very different moments, and only one of the "bumpy moments" matched exactly.

Despite the differences in the "bumpy moments" identified in each classroom, it is interesting to note what kinds of moments were identified by the practicing teachers in general compared to the preservice teachers in general. There were a total of nine categories of "bumpy moments" identified by a combination of the practicing and preservice teachers: 1) Management issues in a whole group setting; 2) Spontaneous Problem or Interruption; 3) Sensitive Student Issues; 4) Not Prepared; 5) Problems during Dual Segments; 6) Time Management Problems; 7) Sensitive Student Issues; 8) Teacher Mistakes; and 9) Preservice Teacher's Own "Bumpy moment." Of the nine categories identified, only three of these categories were identified by both practicing and preservice teachers. Of the six remaining categories, both practicing and preservice teachers identified three categories of moments that the other did not.

**Categories of "bumpy moments" shared by both practicing and preservice teachers**

The first category that was shared by both teachers and preservice
teachers is Management Issues during whole group instruction. Each practicing teacher in the study identified at least one of these moments, and three of them identified two during their teaching. Each of the preservice teachers also identified at least one of these moments. Two of the preservice teachers identified two, while one preservice teacher identified six.

Management moments comprised almost half of the preservice teacher "bumpy moments" identified, and a third of the teacher moments shared. Because it was also the only category that had at least one "bumpy moment" from every practicing and preservice teacher in the study, it was also the most representative category in this study. Thus, there is an agreement that Management issues constitute "bumpy moments" in the opinion of every participant in this study.

The second category shared by both practicing and preservice teachers was Spontaneous Problems or Interruptions. One practicing teacher identified two of these moments. Another teacher identified an Interruption, but it was during the Management of Dual Segments, and thus classified in that category. Two of the four preservice teachers each said that they had witnessed one Spontaneous Problem or Interruption during their observations. Of all the categories, this type of moment seemed to match the most times because a Spontaneous Problem or Interruption is fairly easy to detect during the classroom activity. In one case it was obvious that the Principal walked in while the teacher was trying to keep the students focused on an important lesson. Another time the phone rang during the teacher's directions and she had to stop her instruction to answer it. It seems reasonable that both practicing and preservice teachers would notice when these types of moments occurred.

Sensitive Student Issues was the only other category shared by both
practicing and preservice teachers, and it only overlapped slightly. While
three out of four preservice teachers identified at least one of these moments,
only one practicing teacher shared one Sensitive Student Issue. Although
there was a match between the moment that this teacher identified and the
one her preservice teacher identified, it seemed that preservice teachers in
general were more apt to share such issues as being problematic. In these
cases, the preservice teachers often referred to their own experiences as a
student in explaining how they felt about these issues.

**Categories of “bumpy moments” identified only by practicing teachers**

Two of the practicing teachers shared that they had experienced
moments in which they were Not Prepared. It is possible that the preservice
teachers were not aware that the teacher wasn’t prepared for a particular
situation because either she handled it well despite the error, or it looked to
the preservice teacher like it was planned to go that way. Two of the
practicing teachers also shared a Time Management Problem. Again, the
preservice teachers might not have been aware that the teacher did not plan
the lesson as it turned out during that day. Preservice teachers, on the
overall, seemed to accept that things were expected to go as they did in the
classrooms.

The final practicing teacher category of “bumpy moments” that
preservice teachers failed to identify was Problems during the Management
of Dual Segments. Although only one practicing teacher shared such a
moment, she did so twice during the study. The preservice teacher that was
paired with her failed to notice or mention these difficulties. If a preservice
teacher didn’t notice the problems and the dual segments seemed to run fairly
smoothly, it is possible that she will face such problems for the first time if
she decides to run dual segments in her future classroom. If she had noticed such problems, she may have been able to make a judgment about the effectiveness or problematic issues that surround conducting dual segments in a classroom.

Categories of "bumpy moments" identified by only preservice teachers

The three categories that were identified by preservice teachers, but not practicing teachers, were each identified by only one preservice teacher in the study. For example, Beth was the only preservice teacher to identify problems associated with Student Understanding, yet she identified three of these moments. In this case, it seems that the teacher in this classroom did not classify the moments as Student Understanding issues because she felt that the problems stemmed from the worksheets, rather than a lack of understanding on the student's part. Beth would judge that the students were "completely lost," while Mrs. Anderson would say that the directions were terrible, but the students had the understanding to do the work. I also presume that Beth was more likely to discuss such issues because she was confused herself.

Renee was the only preservice teacher to identify the other two categories of moments that were not discussed by the practicing teachers. She discussed a teacher mistake that happened while the teacher was reviewing for a math test on the board. The teacher did not discuss this moment at all, most likely because she had shared how her mind was on many other things that day. Renee also was the only preservice teacher to discuss her own personal "bumpy moments." The teacher did not talk about these issues because it was not in the scope of this study. I had asked the teachers to only share what was "bumpy" to them in their teaching experiences.
What do teachers and preservice teachers think about when faced with a "bumpy moment" in teaching: how do they differ and how are they similar?

Practicing and preservice teachers shared very different thoughts when faced with a "bumpy moment" in teaching. The teachers, in general, tended to share thoughts concerning how they were feeling at the time, what kinds of things they were taking into consideration, and what they might do to remedy the "bumpy moment." The preservice teachers tended to use their thoughts during a "bumpy moment" to gain a better understanding of the moment. At times, they shared that they were simply watching to see what might happen next, and making evaluations of how the moment might impact the students.

Thoughts shared by both practicing and preservice teachers

Of all the thoughts identified by both practicing and preservice teachers, there was only one that was similar. Both groups shared thoughts concerning a particular student or groups of students. Every participant in the study identified at least one of these thoughts when discussing the "bumpy moments" in teaching. However, the teachers usually called upon their previous experiences with students to make judgments about what the students might do or might need. The preservice teachers, on the other hand, tended to put themselves in the students' shoes to determine what they might be thinking or what they might need. Thus, the preservice teachers were thinking about these moments more from a student's perspective, and would typically share how a student might be feeling or why they might have done something. This suggests that the preservice and practicing teacher were looking at the same moment through very different lenses.
Thoughts shared by only the practicing teachers

All four of the practicing teachers shared at least one thought which consisted of thinking about and developing a plan of action. During this time, the teachers were attempting to make decisions based on the alternatives they were considering. It is most likely that the preservice teachers failed to mention such thoughts because they were asked what they themselves were thinking, not what the teacher was thinking. It is impossible to determine if they knew that the teacher was indeed engaged in an instantaneous decision-making process while being faced with a "bumpy moment" in teaching. Similarly, three teachers shared that they were balancing priorities and two teachers felt the pressure of time constraints during these moments. Again, the preservice teacher might not be aware that the teacher is engaged in these reflections because their teaching did not stop while they were contemplating these issues.

The group of practicing teachers also shared three thoughts that were related to how they were feeling or an evaluation of their teaching. Two teachers admitted to feeling 'frazzled' because they had too many things going on and were not able to concentrate on just one thing while teaching. Again, it is impossible to determine if the preservice teachers were aware that the teachers were experiencing this emotion. Perhaps it looked as if the teacher had everything under control and was handling things smoothly. Two teachers shared thoughts that they should have known better, or should have been able to anticipate a problem before it occurred. Another teacher shared a different kind of evaluation. She contemplated if she was doing the right thing and handling the situation in the proper manner. It might be comforting for the preservice teachers to know that teachers are indeed evaluating their teaching and learning from their experiences.
Thoughts shared by only preservice teachers

All four preservice teachers shared that one or more times their thoughts consisted of watching an event occur and wondering what will happen next. Some of these thoughts concerned the teacher and waiting to see how she would handle a problematic situation. They also had their eyes on students, and waited to see how they might react. It was interesting to note, however, that the four preservice teachers also admitted that they also were at one time or another preoccupied with other things and missed what was happening during a "bumpy moment." At times they were grading papers or completing a task given to them by the teacher. Other times they simply admitted that there mind was somewhere else and it was difficult to concentrate fully on the classroom events. Perhaps this signified their removal from a situation that didn't directly concern them.

On the other hand, they each also shared thoughts concerning the awareness of the impact that they themselves might have on the outcome of the classroom event. In these cases, they were careful not to interfere or give signals to the students that might disrupt what the teacher was trying to do. For example in one instance, Jeanne was afraid that she might give positive reinforcement for inappropriate behavior if she watched the student misbehaving during the Pledge of Allegiance and gave him attention. Beth too was aware of her impact, but she was concerned that she wasn't handling problems in the correct manner. She was afraid to help the students because she didn't know what the teacher expected from them.

The other five thoughts were shared by only one or two preservice teachers. Two teachers offered an evaluation of the teacher's actions that she took in an attempt to remedy the "bumpy moment." Another two shared thoughts that they were attempting to determine whether the teacher was
experiencing a “bumpy moment” or not. It is interesting to note that it might not be easy to tell if a particular moment is problematic to a teacher or not. Renee was the only preservice teacher to share that she was thinking about why certain things happen in classrooms during a “bumpy moment.” Jeanne was the only one to admit that her thoughts included disbelief that a student had been so rude. Also, Jeanne was the only preservice teacher to share that she was thinking about what she might have done if she herself was faced with the “bumpy moment.” Although the other preservice teachers discussed this thought during the discussion of “bumpy moments,” Jeanne was the only one to list it when I asked her directly about her thoughts.

What kinds of knowledge or beliefs do teachers and preservice teachers bring to the “bumpy moments,” and where did they come from; how do they differ and how are they similar?

Both the preservice and practicing teachers were more likely to share a greater amount of beliefs than knowledge when discussing the “bumpy moments” in teaching. The practicing teachers shared a total of four different kinds of knowledge, but shared ten different beliefs. Similarly, the preservice teachers shared three different kinds of knowledge, compared to nine different beliefs. The overwhelming amount of beliefs underscores the notion that teachers in general have a set of beliefs that determine how they interpret events in teaching. On the other hand, the lack of knowledge communicated by both preservice and practicing teachers has serious impacts for the education of teachers. Questions arise concerning whether teachers in general are retaining any knowledge from coursework in teacher education and whether it is applied in any way to the practice of teaching.
Kinds of Knowledge

Knowledge shared by both practicing and preservice teachers

All four practicing teachers and three of the four preservice teachers shared knowledge derived from their previous experiences working with students. While the practicing teachers most often referred to their experiences with the unique individual students in their classroom at the present time, they also shared how they have developed certain beliefs after working with groups of students over the years of their teaching. Preservice teachers, on the other hand, only shared experiences working with students prior to coming into this particular classroom. When sharing their knowledge, they typically compared the students at other schools or daycare centers to the behaviors of the students they observed in this classroom.

Knowledge derived from taking courses in teaching, was the only other kind of knowledge shared, although it was only mentioned by one teacher and one preservice teacher. Dr. Owen was the only teacher to discuss what she had learned in teacher education courses. Beth was the only preservice teacher to discuss what she had learned in any of her courses. This is particularly interesting because all four preservice teachers were completing their observations as a part of the Teaching and Teacher Education 300 course. Because I was a Teaching Assistant in this course the previous semester, I was aware when the preservice teacher was reading a part in the text or discussing something in the TTE 300 course that could directly be applied to their observations of “bumpy moments.” However, they either were not making the connection from the University to the classroom, or simply failed to share this type of knowledge with me. It is possible that it never occurred to them that they should talk about the connection they were making, although it was certainly something I expected them to do more.
Knowledge shared by only practicing teachers

Two teachers brought to a “bumpy moment” a type of knowledge that was derived from reading or learning about teaching or scholars in the field. Dr. Owen once quoted a scholar who is well-known to most practicing teachers. Mrs. Anderson discussed an education experiment that she read about to stress a point when sharing why certain things happen during her teaching. The only other type of knowledge was also shared by Dr. Owen. She brought to one “bumpy moment” her previous experiences with another responsibility in the schools, specifically being a Principal. In this moment, Dr. Owen was able to understand the moment through an Administrator’s point of view. Understandably, no other teacher or preservice teacher was able to call on such knowledge.

Knowledge shared by only preservice teachers

The only knowledge that was shared by preservice teachers, and not practicing teachers, was their personal experiences as a student. Two preservice teachers recalled their past experiences, and used them in the discussion of their understandings of “bumpy moments.” Beth shared that her experiences as a student helped her to realize that the teacher and students are often on different wave-lengths and don’t understand each other. Renee shared that she didn’t like when teachers called on her when she wasn’t paying attention to a lesson. After her experiences with this teacher, she now understands how it can be a useful technique to draw students back into a lesson.

Types of Beliefs

The overwhelming amount of beliefs shared by both preservice and
practicing teachers and the lack of similarity between the two suggests that the beliefs are personal to the observer, and might depend on the type of classroom event or "bumpy moment" they are experiencing. At any rate, it can be presumed that both preservice and practicing teachers have several beliefs about teaching, and these several of these beliefs surfaced in the discussion of the "bumpy moments" in teaching.

**Beliefs shared by both practicing and preservice teachers**

The practicing and preservice teachers only shared one common belief when discussing "bumpy moments" in teaching. This belief is that students should behave in a certain manner and should do what is expected of them. Although two preservice teachers shared this belief with me, only one practicing teacher discussed this belief in relation to her "bumpy moments." Thus, although at least one practicing and preservice teacher shared this belief, it did not seem to be a prevalent belief that was shared by all participants in the study.

**Beliefs shared by only practicing teachers**

The practicing teachers shared nine beliefs that the preservice teachers did not. The only belief that was shared by all four teachers was that some things in teaching just happen and are out of the teacher's control. Not one of the preservice teachers mentioned this belief. It is possible that they were able to identify extraneous circumstances in teaching, such as the effect of Early Release days on the students, but have not formed beliefs about what impact such days might have on the teacher. On the other hand, the preservice teachers might not be able to take into consideration factors that the practicing teachers had not planned for or expected.
Two teachers shared the belief that determining how to handle a situation depends on the importance of a particular lesson. In both cases, the teacher was making a decision about whether they should allow a lesson to be interrupted, or persist despite these types of restraints. All seven other beliefs were shared by a single teacher in the study. Mrs. Anderson shared that a lesson should not be stopped when students are working well and expanding their thinking, students are supposed to ask clarification questions, and teachers shouldn't get into power struggles with their students. Dr. Owen shared her beliefs that at least one-third of your class should demonstrate they know a concept before you decide the whole group has learned it, and teachers shouldn't try to deal with more than one thing at a time. Finally, Ms. Porter shared that the adults working in a classroom should meet the teacher's expectations.

**Beliefs shared by only preservice teachers**

The preservice teachers in this study shared eight beliefs that the practicing teachers did not. All of these eight beliefs were shared by a single preservice teacher. Renee shared four of these beliefs which included: 1) students shouldn't bring certain things to school; 2) teachers often need to take more extreme measures to make an impact on students; 3) it's okay to make mistakes while teaching; and 4) the use of natural consequences is often effective in teaching. Beth shared that teachers should read worksheets before they give them out to their students and stop to reexplain if the students are having difficulty. She also shared her belief that sensitive student issues should be handled in private. Finally, Jeanne shared that students need structure, and that directions for work should be presented in smaller segments for first grade.
How does the teacher resolve the difficult task of making decisions instantaneously within the classroom context: what did the preservice teacher observe the teacher doing?

According to both the practicing and preservice teachers, there was a wide range of actions the teachers took in an attempt to remedy the "bumpy moments" in teaching. The actions depended greatly on the kind of "bumpy moment" the teacher was experiencing, and how quickly the moment could be resolved. Therefore, some moments called for more than one teacher action. The practicing teachers identified sixteen different actions that they took in an attempt to resolve the nineteen "bumpy moments" in their teaching. The preservice teachers identified eighteen different actions that the teachers took during the twenty-three "bumpy moments" that they witnessed.

Actions identified by both practicing and preservice teachers

There were six actions that both the practicing and preservice teachers identified that were taken in an attempt to remedy the "bumpy moments" in teaching. Three out of four participants in each group shared that the teacher gave a verbal redirection or reminder to an individual student or group of students. This redirection was usually employed as a way of gaining further participation or taking care of a management issue during instruction. In other situations, half of the participants in each group discussed how a teacher chose to deal with an individual student in private. In these cases, the teacher did not want to handle the issue in public, but felt it was more appropriate to discuss it with the student alone.

Three of the practicing teachers discussed how they continued a lesson despite problems, interruptions or time constraints, yet only one preservice
teacher identified such a moment. It is possible again, that the preservice teacher was unaware of the problems that threatened to interrupt instruction. It is also a possibility that the preservice teacher thought that a teacher was expected to continue the lesson despite any problems that might arise. Thus, this notion was obvious to the preservice teachers and they failed to mention it. On the other hand, three preservice teachers noticed that the teacher was ignoring inappropriate behavior during instruction, and only one teacher admitted to using this technique. It could be that there was a discrepancy because the "bumpy moments" discussed were different, but there is also a possibility that teachers use this technique more often than was mentioned.

The final two actions matched almost exactly for the practicing and preservice teacher in the same classroom. In one instance, both Mrs. Anderson and Beth recognized that the teacher had offered additional help or assistance to students having difficulty on an assignment. On another occasion, Mrs. Anderson shared that she had refused to answer questions during whole group instruction because it was continual and interrupting the directions. Two preservice teachers, including Mrs. Anderson's preservice teacher, also identified this action. Another practicing teacher also ignored questions, but she classified her action as continuing a lesson despite interruptions. Thus, there was a very strong match between the practicing and preservice teachers who identified the action of refusing to answer questions during instruction.

**Actions shared by only the practicing teachers**

Ten different actions were identified by the practicing teachers but not the preservice teachers. This might be that the practicing teachers were
taking measures that the preservice teachers failed to notice, or it could simply be that they were discussing different “bumpy moments” in teaching. The amount of different actions, makes it seem obvious that different “bumpy moments” call for different teacher actions. Also, most of these eleven actions were shared by an individual teacher in the study. There was only one action, reinforcing positive behavior to shape group behavior, that two practicing teachers mentioned. Thus, some teachers may take or identify more actions than others.

Dr. Owen shared six of the nine different actions that were mentioned during the discussion of her “bumpy moments.” She shared that on one occasion she stopped an entire whole group lesson to take care of another issue. In this case, the preservice teacher in her room thought that she had planned to do things this way. Dr. Owen also discussed her methods for checking for understanding. Her preservice teacher discussed how she checked individual students for understanding, but didn’t notice how Dr. Owen was assessing the whole group of students at the same time. Dr. Owen also shared how she attempted to motivate students by doing an impromptu lesson on figuring out their grades for the semester. Again, Renee saw the activity but didn’t identify it as an action taken to motivate students.

Dr. Owen also discussed how she tried an alternative method for getting the announcements when her e-mail failed. Renee didn’t mention this issue at all in our discussions. When Dr. Owen feared that she might be losing the students attention during a lesson, she checked the Air Conditioning to make sure the room was not too warm. It is presumed that Renee might have seen Dr. Owen walk to the Air Conditioning controls, but did not recognize it as an action taken to keep students comfortable so that they might concentrate more fully. Finally, Dr. Owen was the only teacher in the study to share that
she had sought the aid of her preservice teacher when she was faced with a "bumpy moment." When she found that her report cards were not done and she had no time to finish them, she asked Renee to give the students their spelling test. Renee knew that the teacher had a lot to do, but also presumed that she was given this responsibility because the teacher was gradually getting her to do things in the classroom.

The final three actions were shared by three different practicing teachers. Mrs. Porter shared how she stopped working with her reading group to attend to another group that was having problems. This action was not identified by her preservice teacher because she did not note any "bumpy moments" during the management of dual segments. Mrs. Anderson discussed how she collected work from her students to complete at another time. Her preservice teacher didn't notice that Mrs. Anderson was short on time, and thus did not mention this action. Finally, Mrs. Wayne discussed several preventative actions that she took in anticipation of future problems. Her preservice teacher might have noticed some of the things she did, but he failed to discuss them as actions taken to prevent further problems.

**Actions shared by only preservice teachers**

There were twelve different actions identified by the preservice teachers that were not mentioned by the practicing teachers. Most of these actions were shared by a single preservice teacher, yet there were three actions that were identified by more than one preservice teacher. Three preservice teachers noted that the teacher was moving around the room or moving closer to certain students as a means of gaining their participation or to keep them on task. The three practicing teachers failed to mention it completely. In two of these cases the teacher did not discuss the "bumpy
moment" identified. In the other case, the teacher discussed some actions that she took but failed to identify this particular one.

Two preservice teachers shared that the teachers called on individual student to make sure he or she was with the teacher. One teacher didn't mention this technique because she didn't share the "bumpy moment" that the preservice teacher was discussing. The other teacher did not mention that she used this technique at all. In her case, she used a student's name during directions as a means of calling her back into the lesson. It is possible that she failed to mention this because it actually occurred after the "bumpy moment" had transpired. Two preservice teachers mentioned that the teacher reexplained a certain concept when it seemed to be difficult for the students to understand. Neither of the practicing teachers said that they had done so. It could be that they consider reexplaining a concept to be a natural part of teaching, or they didn't discuss the same "bumpy moment" as their preservice teacher.

Beth shared four actions that she observed that others did not. First of all, Beth shared that the teacher was taking some time to decide how to handle a particular situation. When the parent called to say she couldn't help with centers, Beth noticed that the teacher didn't decide what to do immediately. Instead, she took the time to balance her options while she continued teaching. The teacher did not mention this because she did not consider this particular moment to be "bumpy." Mrs. Anderson said that this moment was more 'par for the course,' and perhaps she had the tools to deal with such an occurrence.

Beth also discussed how Mrs. Anderson had modified an activity because the students were having difficulty with the assignment. On another occasion, Beth says the teacher had students who understood the task explain
it to those who did not. Another technique that Beth witnessed Mrs. Anderson using was to cross out part of the work, but for only some of the students. Beth thought that it was inconsistent how she had some students do one thing and other students do another. All three of these actions Beth mentioned when she discussed her Student Understanding issues. Although Mrs. Anderson admitted that the worksheets were often tricky, she admitted that she didn't care enough about the worksheets to put more time into preventing these problems.

Jeanne shared three actions that the teacher did not. Two of these actions might be effective tools that Ms. Porter used, but failed to mentioned because she does them naturally while teaching. The first is making sure that all the students were in their seats, not at the pencil sharpener or roaming around the room, and ready to listen before she began a lesson. The other action was using non-verbal cues to demonstrate appropriate behavior. Ms. Porter tended to use non-verbal cues to redirect students during the Pledge of Allegiance, but did not consider these events to be “bumpy moments” in her teaching. Jeanne also noted that on one day, Ms. Porter seemed to accept the noise level in her classroom and chose not to deal with it. On this day, Ms. Porter didn’t feel that there were any “bumpy moments” because she said there was some student chatter, but the students were also getting their work done. Thus, it seems that Jeanne was accurate in her perception that the teacher had accepted the noise level.

Renee was the only preservice teacher to share the final two actions. On one day, she noticed that Dr. Owen was losing the students’ attention, and that the noise level was rising. To remedy the situation, Dr. Owen started to pick up the pace of the lesson so that the students had to concentrate more to stay with her. Dr. Owen didn’t mention this technique because she did not
consider the moment to be "bumpy." Perhaps she considered this to be a preventative technique to avoid larger "bumpy moments" in teaching. Finally, Renee noted two instances in which Dr. Owen was enforcing and following through with the school rules. In these cases, Dr. Owen referred to the student handbook or Code of Honor to explain why the student behavior was inappropriate. Perhaps because Dr. Owen had extensive experience dealing with such issues as an Administrator, she failed to mention both of these incidents as "bumpy moments."

What are the implications of each "bumpy moment" on a teacher's or preservice teacher's thinking about future decisions and teaching practice; how do they differ and how are they similar?

When asked whether the "bumpy moments" that they experienced might have any affect on their thinking about future decisions and teaching practice, the practicing and preservice teachers offered six different responses to this question. Only one response was the same for both groups. It was presumed that this might be the case when the question was asked, because these two groups of teachers are in very different points along their teaching career. While practicing teachers can take immediate action or make immediate plans for the following days, preservice teachers could only ponder certain issues further, or gain new perspectives on issues that they might not have considered earlier. Thus, the responses to the question were naturally more different than they were similar.

Future Implications shared by both practicing and preservice teachers

The only response that was the same for both the practicing and
preservice teachers was to say that the "bumpy moment" had no affect on their future teaching practice or thinking about future decisions in teaching. Two practicing teachers and two preservice teachers offered this response. When the practicing teachers said the moment had no affect, it was usually because they said that those things will always happen in teaching, or they don't care about the particular issue enough to make a change. When the preservice teachers said the moment had no future implications, it was either because they didn't fully understand the event, or they weren't sure that this type of event would ever present a problem to them in their future teaching practice.

**Future Implications shared by only practicing teachers**

There were five practicing teacher responses that were not shared by the preservice teachers. Two of the practicing teachers shared that they may change or reexplain a procedure if it continued to be a problem. This was a conditional answer depending on the future events with their students. On the other hand, two teachers said that experiencing and reflecting on the "bumpy moment" in teaching led them to take immediate action. One teacher moved the nurse's pass so that she wouldn't have to keep leaving her reading group to retrieve it, and Dr. Owen was going directly to talk to the Principal about not disturbing formal lessons in her classroom.

Two teachers shared that after experiencing a "bumpy moment," they were making future plans for particular students or particular types of days. Mrs. Wayne shared that she will have to watch the student who told the inappropriate story, and be cautious not to allow him too much freedom in the future. She also shared how she would like to change the activities of the day when faced with an Early Release and an hour and a half of Physical
Education. Dr. Owen shared that she was going to have to watch her whole group of students carefully, because she was learning that they were an immature group who needed lots of reinforcement and guidance.

The final two implications were shared by a single teacher in the study. In one instance, a teacher discussed that she was happy with the results of her "bumpy moment," and would do the same thing again if she was faced with a similar moment. Dr. Owen discussed how she was frazzled by the events on the last day of data collection because she had too many things, personally and professionally, that were interfering with her teaching. This led her to contemplate the many responsibilities of her dual careers in the elementary school and at the University. She shared that she needs to make a decision about which way her career should go in the future because she didn't think she could keep up her busy schedule much longer.

**Future Implications shared by only preservice teachers**

There were five preservice teacher responses that were not shared by the practicing teachers. Every preservice teacher in the study shared at least once that witnessing and reflecting on the "bumpy moments" in teaching helped them to think about what they might do in that particular situation. Three preservice teachers said that their experience made them more aware of the issues in teaching. Two said that they might try a technique demonstrated by the practicing teacher when they have their own classroom in the future. One preservice teacher said the "bumpy moment" helped her to gain a teacher's perspective, while another moment made her want to learn more about a particular issue in teaching. These responses lead to a discussion of the implications for the use of "bumpy moments" in teaching and teacher education.
Implications for the use of “bumpy moments”
in teaching and teacher education

Results of this study offer insight into how “bumpy moments” might be used as a tool for identifying and encouraging reflection in both practicing and preservice teachers. Practicing teachers identification of the nineteen “bumpy moments” in their teaching suggests that teaching is a highly complex activity that requires reflection and responses that do not always come instantaneously. The analysis of what teachers think about and how they make decisions and take action when faced with “bumpy moments” in teaching offers a description of their personal reflections during teaching. Analysis of the future implications of such events describes how teachers might learn from their experiences and use this knowledge in future teaching situations.

Simply looking at the “bumpy moments” described by the practicing teachers might allow novices to understand how reflective practice is essential to the practice of teaching. Novice teachers may begin to see the many factors taken into account, along with developing an understanding of what teachers know and how this knowledge is used in solving classroom dilemmas or problems (Carter, 1988). The practicing teachers’ stories of the “bumpy moments” in their own teaching might be incorporated into teacher education programs that encourage teacher reflection. Preservice teachers might be able to gain further insight into the many issues of teaching and begin to reflect on these problematic issues.

Analysis of the twenty-three “bumpy moments” that the preservice teachers witnessed during their observations give further insight into the diversity of preservice teachers and how they come to understand classroom processes. Looking at each individual preservice teacher’s “bumpy moments”
supports the notion that novice teachers bring to the teaching profession a set of preconceived notions based on their experiences as a student (Carter, 1994; Lortie, 1975; Holt-Reynolds, 1992). For example, Beth was concerned throughout the study about issues of Student Understanding. She stated that teachers and students are often on different wavelengths, and one gets the impression several times during the study that this is how she felt as a student. Jeanne brought to the study a bias for the schools in Illinois, where she attended elementary school. To her, the schools in Arizona were too laid-back and the students didn’t behave as well. This led her to identify only Management problems throughout the study. Teacher educators need to recognize the power and importance of preconceptions and search for ways to nurture and support the negotiation of their meaning (Carter & Doyle, 1995). Preservice teachers should be guided through their biographical histories, before they are expected to reflect on the moral or ethical dilemmas in teaching (Kagan, 1992).

Practicing teachers also demonstrated that they have a set of preconceived notions, but they are most likely to have been derived from their experiences working with students in their classrooms. The stories of their experiences reflect the fact that “teachers’ knowledge is broadly based on their experiences in classrooms and is directed toward the handling of problems that arise in their work” (Elbaz, 1981). This stresses the importance of making sense of teachers’ lives as narratives of experience (Clandinin, 1992) and illustrates how reflection-in-action contributes to the development of professional expertise (Russell, 1993).

The comparison of the “bumpy moments” identified by both preservice and practicing teachers suggest that there are several issues that might need to be addressed in teacher education programs. First of all, management
moments were the most representative and the most frequently experienced "bumpy moments" during the course of the study. Management moments comprised half of the total "bumpy moments" that the preservice teachers identified and a third of the "bumpy moments" that the practicing teachers shared. These results suggest that teacher education programs should place a stronger emphasis on reflection concerning these issues in teaching.

Although the management moments will differ depending on a particular group of students and a variety of circumstances, the "bumpy moment" stories of such moments might be used as a springboard for identification and discussion of the provisions and procedures necessary to establish and maintain an environment in which instruction and learning can occur (Doyle, 1986).

Further, novice teachers might be exposed to the categories of "bumpy moment" stories that only the practicing teachers discussed, such as Not Prepared moments, issues of Time Management, and problems associated with conducting Dual Segments. The fact that the practicing teachers seemed to be facing moments that the preservice teachers failed to identify suggests that these novices might be missing some issues and may benefit from reflecting on these situations. Similarly, practicing teachers might be offered the chance to see the events of their classroom through the preservice teachers' eyes. They might be able to take into consideration the Sensitive Student Issues and instances of Student Understanding that they failed to notice or mention during the study.

Analysis of the different thoughts shared by practicing and preservice teachers suggests that both groups are considering particular students or groups of students when they are faced with "bumpy moments." However, the practicing teacher usually discussed the students in her own classroom,
while the preservice teachers had to rely on their previous experiences in
different situations. Practicing teachers' thoughts revealed that they were
considering alternatives, balancing priorities, and developing a plan of
action to deal with "bumpy moments" in their teaching. Preservice teachers
offered very different thoughts because they were trying to understand the
event, rather than having to solve the problem in practice. They also each
admitted that, on at least one occasion, they were not aware of what was
happening because their mind was on something else. This signifies a
removal from a situation that apparently didn't concern them because it was
not their personal problem in practice. Perhaps it might have been more
insightful to ask the preservice teachers what they thought the teacher was
thinking and considering during these moments. This may have provided
more insight into the preservice teachers' ability to assess what was
happening and what the teacher might be considering during these events.

Discovering that both preservice and practicing teachers are more
likely to bring to a moment more beliefs than knowledge about an event
suggests that teachers bring their personal biases to teaching. It is presumed
that these beliefs have been developed and refined during their experiences
both as a student and a teacher. Practicing teachers also have several events
occur during their teaching that they feel 'just happen' and are out of their
control. Thus, teaching cannot be considered prescribed practice when
external circumstances come into play. The preservice teachers in the study
often identified these circumstances, and were given the opportunity to
contemplate the issues and what impact they might have on their future
teaching practice.

Discussion of the future implications of each "bumpy moment" on the
practicing and preservice teachers' thinking about future decisions and
teaching practice indicates that both groups were able to learn from the experience of reflecting on such moments. The practicing teachers shared that they were able to take immediate action or make immediate decisions in their teaching. Preservice teachers shared that witnessing and discussing the “bumpy moments” helped them to think about and become more aware of the issues in teaching. Further, they were able to learn new techniques and consider what they might do themselves when faced with such dilemmas.

As the preservice and practicing teachers continue their teaching careers, they can also be encouraged to identify and reflect on the “bumpy moments” they face along the way. These “bumpy moments” will be more meaningful to the individual that identified them, because they are derived from their personal experiences, rather than being asked to reflect on issues that they did not experience and might not concern them (Oberg & Artz, 1992). Further, these events can be understood in the context of the unique and complex environment in which they teach (Connelly, Clandinin & He, 1997).

Although this study is limited because it offers an examination of only four practicing and four preservice teachers in one particular school, the findings suggest that “bumpy moments” might be a promising tool for identifying and describing reflections during the act of teaching. Future studies are needed to examine the “bumpy moments” of other teachers in other settings. “Bumpy moments” might also be assessed over time, to determine if a practicing or preservice teachers’ perceptions of these types of moments and their related reflections will change as they gain more teaching experiences. Finally, additional studies might address the effectiveness of using “bumpy moment” stories as a means of encouraging reflection and exposing preservice teachers to the many issues of teaching.
APPENDIX A

Different Types of "Bumpy Moment" Stories for use in creating a common language about "Bumpy Moments"

The First Assignment in First grade...

On the first day of First grade, I asked the students to complete an assignment called, "School is just beginning." I handed out a piece of paper and asked my students to write or draw pictures of the things that they would like to do or learn about in first grade. When I asked them to begin, I was alarmed by the range of student behaviors and attitudes about the assignment. Some kids didn’t want to do it (and told me so), and some kids told me they didn’t know what to do. Some kids wanted to know how to spell things, and some kids wanted to know where a certain word was on the board. Some were doing something on the paper but not doing the assignment. Some kids worked for a half an hour straight, and some kids were done in one minute and had one tiny thing on their page. Some students used the time to be silly with the people at their table, and some kids are completely quiet and working diligently. Some kids had blank papers, and several students want to: a) sharpen their pencils, b) go to the bathroom, c) get a drink, or d) do something else when they should be working on the assignment.

No Parent helper today...

Every day I have a different parent helper scheduled to work with a group of students during center time. I then choose an activity for the parent to do with the students, and it is usually an activity that the students could not do alone without the parent’s help. On this particular day, I had set up the parent helper center and it was all ready to go when the students walked in
the classroom. As they got ready and seated in their desks, one of my students announced, "My mom is not coming in for centers today" and she handed me a note from her mother.

I had to think quickly about how to compensate for this change. I was disturbed by the fact that I was not notified sooner, because there wasn't much time to make changes once all my students were in the room. It was also too late to call another parent, yet I knew I could have gotten someone in if I had known before school. I quickly went back to orange dot to see what I had planned for the helper to do at orange dot. I had to assess whether the assignment could be done without a parent helper. I tried to think of another activity that would be better, but lacked the time to go check my unit materials.

**Leaking roof...**

On the first day of school, my students and I came back from a morning assembly and the kids noticed that the roof had leaked onto some kids' desks. I was waiting for kids to enter the classroom, so I couldn't assess the situation immediately. By this time, everyone in the classroom was gathered around the leak or watching it. This scared me because I didn't know what was leaking, and it could be poisonous. I went over to find that one child's desk was completely covered in a yellow liquid. The liquid was bouncing off his desk with such force that it was spraying onto the three desks around him. The liquid was beginning to ruin the papers on the desks, and was spraying on the brand new name tags I had just made for the first day of school.

**Management problems during center time...**

We had an overall bumpy morning today. I had difficulty gaining and
keeping my students' attention during directions, and had to give constant reminders for appropriate behavior. We also had very loud centers, almost too loud for me to concentrate on my reading group. I sometimes feel when I am in the midst of this type of a morning that it is typical for first grade. I know from my experience that first graders need directions and reminders to complete their assignments, work quietly, etc. However, there are times like today when it is just too much for me. I was overwhelmed by the dependence (ie. the kids lining up at reading to ask me what a picture was on the worksheet), the noise (no parent at orange dot certainly didn't help), and the need for me to be on top of everything and everyone (ie. having to tell students to sit down and keep busy, reminding the students to stay at their center and not disturb the workers at another center).

There is simply too much for me to attend to. For example, my orange dot is arguing and when I look over, I see very few students working. Someone from orange dot is also waiting in line at reading to tell on someone for saying something mean. The seatworkers are out of their chairs and talking to the green dot workers. A student at green dot has pulled his traced body right in between the seatwork tables, and is carrying on a conversation with another student. The seatworkers are literally talking to each other across the room, holding up their papers for others to see, or waiting for me to answer their questions. One of my students is using the electrical pencil sharpener and holding it in the sharpener so that it roars loudly for almost 30 seconds. That isn't even mentioning my reading group, that need (and deserve) my undivided attention. Honestly, the first thought that comes to my mind during times like these is: "Why do I teach first grade?", followed by, "I can't handle this..."
Right after lunch, we were watching a Reading Rainbow. The video lasted until 12:30 and I had planned to read them a story until 12:45, and then do sharing. What I forgot is that we don't get ready to go home before recess time today, and this left an entire half hour for sharing (which was way too much time). As my students were returning to their desk from the Reading Rainbow, I also realized that reading a story on the rug, and then having sharing on the rug would be too long for the kids to sit in one place. I don't know why none of this occurred to me earlier. But for some reason, right before I was about to call them to the rug, I reconsidered my plan. I needed a quick substitute activity. Fortunately, the extra worksheet activities that hadn't fit into the week yet were sitting on my desk. I had to find an activity that would fit the amount of time I had left, and I had to find it quickly, because my students were now in their seats and waiting for me.

Checking for head lice...

Approximately forty minutes after school had begun, I was giving seatwork directions to my students on the rug. I was in the middle of showing my students how to make an upper case and lower case H in D'Nealian handwriting when the school health aide and a District nurse walked in the room. They had prongs and gloves and I knew immediately that they were checking for head lice. The District nurse asked me if she could go around and check all the students' heads. I had to quickly choose the least disruptive method and still complete my handwriting and seatwork directions for the day.
APPENDIX B

“Bumpy Moment” Stories from the Study

“Bumpy Moments” Identified by Both Participants in the Pair

“Bumpy Moment” Stories for both Ms. Porter and Jeanne- First grade

September 27

Early in the morning after attendance and discussing the agenda for the day, the teacher was explaining centers. She was going over the work for the last center, which was seatwork. The students were sitting in their desks with the seatwork pages in front of them, and it seemed that everyone was paying attention to the directions. In the middle of explaining one of the seatwork pages, a student yelled out and asked if she could get something from her backpack. After that, another student also blurted out a question during the seatwork pages explanation. While discussing an addition math page, she called out, “Oh good, at least it is not subtraction.”

November 3

It was a few days after Halloween and also an Early Release day. Because it was an Early Release day, the students were doing whole group activities rather than centers. During the phonics book activity, many of the students were asking clarification questions about the directions and saying, “I don’t know what to do.” They continued to ask questions even after the teacher repeatedly explained the directions for the pages.
"Rumpy Moment" Stories for both Mrs. Anderson and Beth- Third grade

**September 15**

The students were sitting in their seats and had their work for center time in front of them. The teacher was explaining directions for the last page before they could start centers. One child raised his hand and asked a question about the final page. Another child, who was two seats away from him, began to snicker and laugh at the student asking the question.

**November 10 (First Moment)**

The teacher gave her students a worksheet with pictures. The students were asked to cut out the pictures and place them in the spaces provided for words having the 'ph' sound at the beginning, 'ph' sound in the middle, or 'ph' sound at the end of the word. The pictures were not identified by name. The worksheet allowed for only a certain amount of pictures to fit in each category. A few of the pictures were confusing because they could be two different things. For example one picture could either be called a 'phone', which would have a 'ph' sound at the beginning, or a 'telephone' which had the sound in the middle. Other pictures were also confusing. One picture looked like it could be either a 'phonograph' or a 'telegraph.' Another could have been an 'autograph' or a 'photograph.' When the students began to complete the worksheet during seatwork time, several of them had difficulty because they didn't know what the pictures were. It became apparent that the students knew how to classify the 'ph' sounds, but they were unable to do so until they were told what the word the pictures represented. Some of them sought help from the teacher who was conducting reading groups, and others went to the preservice teacher for assistance. However, neither of these adults knew what each of the pictures were supposed to be either.
November 10 (Second Moment)

During whole group directions time, one student raised his hand and asked about a worksheet that he had, but many others did not have. The teacher told him that she was not going to answer his question and that he could figure it out himself. A few seconds after her response, the teacher called out to him and another student and told them to stop their rude behavior. The teacher then refused to answer a third student who was also asking a question about the worksheet.

“Bumpy Moment” Stories for both Mrs. Wayne and Steven- Fourth grade

September 29

The class was reading Sarah Plain and Tall. In the book, Sarah is very sensitive to the animals and wants to protect them. However, some of the animals are raised on her farm only to be eaten. After reading a chapter in the book, the teacher asked the class how they would feel about living on a farm and having to eat animals instead of keeping them as pets. To begin the discussion, the teacher told a story about how she had chickens when she was a child. One day, her mother took one of the chickens and killed him to make dinner. Then the students began sharing stories and talking about the issue. In the middle of the discussion, one student raised his hand and the teacher called on him. He shared how his dad took his BB-gun out one day and shot a bird in the wing. He said that the bird survived the incident and they took him home to nurse it. Then he added, ‘But then my dog ate it.’

December 1

It was Early Release Day at the school and the fourth graders in this class had a double Physical Education time, which amounted to about an hour
and a half. The students came into the room and did the normal activities such as lunch count, attendance, announcements and the expectations for the day. Following a language lesson they went to P.E. When they returned their energy level was much higher than normal and it remained this way until the end of the school day.

"Bumpy Moment" Stories for both Dr. Owen and Renee- Sixth grade

November 17

The class was in the middle of an English lesson concerning direct objects and preparing for an upcoming test. Both teacher and preservice teacher agree that the concept was quite complex, and that the students were on the verge of completely grasping it. The students seemed to be completely involved in the lesson and were giving the teacher one-hundred percent participation. One student had come in late because he attends an English as a Second Language class, and the preservice teacher had just finished bringing him up to speed. The teacher was up at the board with a marker in her hand and all students were facing her. Right at that moment, the principal of the school walked through the back door and happened to enter directly behind the ESL student's desk. The principal leaned down and started talking to the student. He then proceeded to another student and began to talk with her.

Practicing Teacher "Bumpy Moment" Stories

Ms. Porter's Stories- First grade

September 22 (Second moment)

"Morning centers had begun and I was conducting a reading group. I could see that this one listening center was having a difficult time with the
tape recorder. The first time they fiddled around and there were five students talking to each other while I'm trying to do this reading group. Finally, they yell at me because they have the headsets on and of course they can't hear how loud they are. They said that the lid won't go down on the tape recorder. It isn't but three minutes later, and they're yelling about the fact that it won't play. Someone had accidentally knocked the plug out of the outlet about halfway. And again it was about two minutes later and they're yelling that the group leader says that they have to hold the button down in order for it to play. To me, that was something that interrupted my group and you have to take care of."

**September 22 (Third moment)**

"There was trouble at math center during center time today. It happened to be at a time when I have a math group with some kind of challenging children in it, and I think they're all boys if I am remembering correctly. They were doing a game today where they were helping a bird get to his nest with this path with number words on it. So they were to read the number word and then move that many spaces. There were three of them and I think all three of them were playing together because there was an odd number in the group. They got to arguing real loudly even though there was an adult there. This person had never been in to help before, but I fully expected the person who is there to handle it. The math kids were so loud that I couldn't hear the students in my reading group."

**October 20 (First moment)**

"We have Early Release days and parent conferences this week. I had a conference this morning at 7:40. The mother came on time, the father was
probably five minutes late. So we're trying to crank something out in 17 minutes [before the bell rang to begin school]. We were talking and I wasn't watching the clock that well and I happened to hear the school bell ring. The kids were all outside kind of yelling around with their backpacks and that type of thing."

**October 20 (Second moment)**

"We were late getting our morning started [because of the first moment] and I was explaining the seatwork and the centers for the morning. In the middle of directions, I was being interrupted while I was explaining a certain center. Some of the students were calling out and asking, 'Do we have to do this?,' 'Well, can we use markers on these?' You know the things that, had they waited, I would have given them. Along the same lines as interruptions there were two people, each within probably two minutes of one another that while we had already started centers and I'm already doing my reading center, there were two health issues- one person with a neck issue. As soon as that person goes (to the nurse) then someone else comes up to tell me they don't feel well. And these two students happen to be friends. So the second one comes up and has a nose issue. You know, and this happened to be the reading group that needs a lot of help from me. And I'm looking at the clock and thinking we've got a lot of things to do with this group, and I've got these people coming up to me with these issues."

**Mrs. Anderson's Stories- Third grade**

**September 15**

"We were doing a math lesson this morning and we had a whole group lesson that extended beyond my allotted time because [the students] were
doing really well with it and expanding on finding patterns in numbers. I got
carried away with the fact that they were doing so well finding and
explaining patterns, and they were doing so well and getting so intricate with
their thinking that I let that time for that introduction to the lesson overflow.
So when it came time for them to do their worksheet, I rushed them through
it, not realizing that the directions were more confusing than the concept.
They understood what to do but they couldn't understand the directions. So
what happens is, I figure 'Okay, I can work through break.' Except the
teacher on duty calls, she needs to go the bathroom. I need to go out and
relieve her. Well I can't because I've got eleven kids in the room, so I left
the poor teacher out there- and then it all snowballed from there. I shooed
the kids out without really explaining to the ones who were confused, helping
them through it, collected their work, went out [to do recess duty], then of
course I wasn't set up because I was also planning to use that time to set up for
the next lesson."

**September 29**

"We were starting a new math group, an enrichment group that was
for all three third grades, so we had to coordinate it. I was in charge of
organizing it because it was my TTE 300 student who was doing it. So I had to
sit down with her and then double check with the other teachers and make
sure we're all in order. Then some of the kids that were pulled out into the
math group in the hall, the rest of their morning schedule got messed up and
I didn't realize it until it was too late. I didn't double check their center
schedule and their reading schedule to make sure that nothing conflicted. So
[the students] got all worried because I had assigned them to simultaneously
be in two different places at the same time."
Mrs. Wayne's Stories- Fourth grade

Each of the moments that Mrs. Wayne identified were also identified by Steven. Thus, her stories can only be found in the joint story section.

Dr. Owen's Stories- Sixth grade

September 22

"This week the kids were hyper for some reason. Today we were in the middle of a spelling lesson during the first few minutes of the day. We have been having difficulty getting the e-mail and we couldn't figure out what the problem was. [But we needed to use e-mail] to get the announcements because of the Student Council and the kids kept asking when we were going to go to the meeting. And the kids needed to call their parents because if the meeting was that day after school, they would have to have somebody pick them up. So that was the problem and that's what the sense of urgency was. There was one particular kid who was very urgent because he said, 'My father goes to work in about ten minutes.'

I had sent one student down to get the announcements in written form from the office. But he came back empty-handed and said we had to get it from the computer. So, the kids wanted to try and I had trained them how to do that and they remembered, and they wanted to know. So we stopped the lesson and we did a “bumpy moment.” When they went over to the computer to do it, of course the computer wouldn't retrieve it. So it was time lost and I was thinking, 'Oh my gosh, I'm never going to get them re-focused.” And so that's what goes through your mind: Should you have taken that time to really stop and answer their question and go to the computer knowing full well that this would be a problem? I don't know if this was such a hot decision."
October 6

"It was about 8:15, right away in the morning. The students come in at 8:05 and we were doing attendance and then I said, 'First thing, we're going to hit that reading thing from yesterday. Get out that reading worksheet we started yesterday with Robert Louis Stevenson.' After I took the attendance. I realized the students didn't have [the worksheet] out. About half of them didn't have it. Not only did I realize that, but they've got too much in their desks. So that's a "bumpy moment" because it does stop you dead. We had started about inference, that was the whole lesson. Well, you just about get your hook out there and then you realize, nobody is with you."

October 20

"We had a late parent conference last night and didn't get out of here until 7:00 PM, and had to be back here at 7:00 AM. And I have a cold. I thought I was ready with the report cards, and I handed out the report cards today to the kids. Everything is really organized, everything is going along... [and I find out] three report cards aren't finished. Aaaah! So the kids say, 'But, this isn't quite done.' And look at me. So, we have no breaks today and more conferences this afternoon. And there's no time to finish their report cards before I have those conferences with their parents"

November 11

"The kids were hyper today. They were very hyper today. Tomorrow is a day off of school and their 'Serf to King' projects were due today and I think they were tired because they stayed up too late working on them. We also have no specialists today and no specialists yesterday, and no recess yesterday. So they didn't get a chance to talk to anybody. We never have
recess. We only have lunch recess, and it just isn't enough maybe for these adolescents. Holidays are coming and they're hyper, and soccer is coming to an end. Or maybe it did just end and so they have no way to release their energy. So, I got them calmed down, did the attendance, the whole bit. Then, I started into spelling and they weren't paying one bit of attention to anything. That's a 'bumpy moment.'

December 1

"The day started out really nice. It really did. It was an Early Out day. It always seems to be an Early Out day. We started out really well. The kids were really hyper the day before and I needed to calm them down. So I had this little lesson about grade point average because I had given out progress reports and [the students] were a little bit more sedate than normal. So I talked to them about the grade point average and we actually calculated their grade point averages. So they were really pretty good.

Then I had to give them a little lecture about completing assignments before they are due, not during the time I am collecting them (laughs). So two of them were hot and heavy about that. And I said, 'What is your problem?' One student (kind of whined) to me and said, 'You haven't gotten to my name yet, I'm P-' and I said, 'Sweetheart, this is not going to work in Junior High.' And then another student was still writing it. I said, 'No dear, you'll finish it tonight and turn it in tomorrow and you'll lose ten points.' So that was a 'bumpy moment.' Got over that one and moved on to another subject.

So we were onto Spelling and it was going pretty well but then it all fell apart and I don't even know why it all fell apart. I think I was disorganized. I was worried about my Science class while I was trying to teach my Spelling
class. I couldn't find the stuff that I had run off for my Science class which was how to make a weather instrument. It was on this desk somewhere and I'm flipping through papers and I can't find them. And I wasn't going to meet with the Science kids and I was nervous about that and they were going to leave in a little bit and if I couldn't find these papers then I couldn't give it to them. Then they wouldn't have time to work on it, and it was due the next day. And I really wanted to do that. That was a 'bumpy moment.' My mind wasn't on the lesson. Although the lesson was going okay, well it really wasn't. And I really wanted—what I really wanted was for them to be quiet for ten minutes so I could go find those papers. But of course you can't do that. So that was a 'bumpy moment.'

Oh, and I had a personal big important teleconference call going to go off at 4:00 and I didn't know how to do a tele-conference call. And I was going to be talking, this is outside of school, but I was going to be talking with people, representatives at the University level from Hawaii, Puerto Rico, Colorado— and I don't know how to do a teleconference. And I'm thinking, 'Oh my gosh,' and in the middle of the lesson, the phone rings and it's my access code for the teleconference. And that of course pre-occupied me, 'I wonder what an access code is? (laughs) What do I do with an access code? Who can I find out about an access code from?'

So then we went off to computer lab when I realize that there are two Science kids that were going to do a videotape (laughs) and they didn't have their critters because the critters were in my car. Uhhhh.... So this Science class was my "bumpy moment" all day long. It just never ended."
Preservice Teacher "Bumpy Moment" Stories

Jeanne's Stories- observing in a first grade classroom

September 22 (First moment)
"Right off in the morning, the teacher stands in the back of the classroom with the flag leader and they do the Pledge of Allegiance. The kids were being disruptive, turning around and jumping around. There were two of them in the corner goofing around. They seemed to be preoccupied with talking to each other. I noticed it from the corner of my eye and the teacher also called attention to it."

September 22 (Third moment)
"Right before lunch the teacher does a clapping game where she goes, 'I'm going to clap to four' and then she claps four times and the kids clap with her. Then, 'I'm going to clap to six,' and the kids clap with her. I think that's the thing that they do before lunch so that they realize we're clapped, it's lunch time, the faster you sit down and be quiet the better off you are. It's already when they are in their seats but they're still rumbling around. And when the teacher stopped it was really quiet except one little girl she's like, 'I'm going to clap to zero and you can clap with me.' And she said it really loud."

October 20
"One of the little boys during the Pledge of Allegiance was playing with his pencil. Then [the teacher] noticed him when he was leaning back on his desk, and then sitting on his desk. She was kind of giving him a hand gesture to move away from his desk and stand up, and he was kind of ignoring her."
December 1

"It was kind of hectic today. I don't know if it was because there was a holiday this past weekend and then of course it is like a shorter day. We did [all the classroom activities] together. We did, what is it, the phonics book? We did that today. So it was kind of "bumpy" with that because everybody wasn't together doing the pages. And one little boy was doing bunny ears behind his friend because he finished the page. So he was around walking and stuff and everybody is like, '(Student's name) is doing bunny ears.' The students were kind of goofing around and talking. A lot of kids must have their birthday coming up this month, so everybody is like, 'It's going to be my birthday soon. It's going to be my birthday.' They just weren't paying attention too much because they were so busy chit-chatting and worried about what everybody else was doing. They were still getting their stuff done but it was taking more time and energy."

Beth's Stories- observing in a third grade classroom

September 15

"There was a math worksheet [in which the students] had to do tens and ones to decipher which was which. Say the number was 43. They had to draw four lines in the tens column and three dots for the ones column. But the directions would ask for hundreds, and there were no hundreds. The directions just were not very well written. I didn't understand them. [The students] would come up and ask me and I was afraid I was telling them the wrong thing because I didn't know what the teacher was having them do. When [the students] finished centers, they were working more on their assignment and I noticed a bunch of them went up to [the teacher] and asked her for help as well."
**October 13**

"[The teacher] was at the board explaining phonics and how the -gh sounds like 'tough' sounds like the 'f' sound. And all of the sudden the phone rang and [the teacher] just kind of sighed because she was in the middle of this huge explanation. She went over and answered it and the kids, it was funny because they all just listened instead of down-time and bickering. They just listened to the conversation. Dead silence. And she was like, 'Oh no, are you serious?' and 'Oh, we'll figure it out. Okay, Okay...' and she said 'okay' like ten times and then she hung up. And one of the boys asked her why she kept saying 'okay.' She told him that one of the parents had broken her wrist who was supposed to come in today to do the centers. So she had to somehow tell the kid without getting him upset. He's going to wonder why in ten minutes his mom is not there."

**October 27**

"[The teacher] handed out a worksheet. They do a bunch of worksheets in there, individual centers, and one of the worksheets was math. It had a diagram and there were two circles at the top and three down vertically, and what they had to do was add. They had the numbers one to seven on the bottom and they had to cut each number out and switch the numbers around and try and see which numbers added up to eleven on each side and at the bottom. And they had probably five other worksheets to do, that weren't just math. But that was a very time-consuming worksheet. And they had to do it twice. They had to do it to add up to eleven, on one that was just drawn and switch numbers and cut and paste them for twelve. Atleast ten out of the twenty-six students came up to me and asked me how to do it. But this time the directions were clear, I think it was just kind of above their level. The
teacher was also helping another group of students on the other side of the room."

**Steven's Stories - observing in a fourth grade classroom**

There was only one "bumpy moment" that Steven identified and Mrs. Wayne did not. This moment occurred on the first day of data collection for this pair.

**September 29**

"The first [bumpy moment] I witnessed but didn't realize until later on that it was a "bumpy moment." One of the students came up and told the teacher that she was not going to be there tomorrow, didn't want to be in school. I heard the teacher [talking to the student] but I didn't realize what it was. But then later on when we had a few minutes and the students were doing some individual work, the teacher pulled me aside and told me a little bit of the background of what was going on. The child's mother was not around. She kind of left her with her grandmother and then took off and hasn't been seen. So the grandmother now doesn't have someone to watch the child for a couple of days. This student is a bright student and has a lot of potential, and when she came up and said, 'I need to not be here because there's not going to be anyone to watch me,' the teacher felt that there was no way for her to get here or for anybody to watch her or bring her- something like that. The teacher felt that it was important that the she be there because she is a good student and she needs to continue to be involved in school and not be pulled from school. She's been to a couple different schools now, apparently. So it sort of affected the teacher at that time because she knows the student's background."
Renee's Stories- observing in a sixth grade classroom

September 22

“Today I noticed that [the teacher] had almost a ‘bumpy moment.’ We had just finished a whole group activity on another topic and the teacher was sitting in the front of the class. She asked the students to get out their spelling books. When the students had their workbook out for spelling, we were going over the new spelling words that they have and the definitions. Then we started doing the workbook together. It was kind of like a crossword that they had to put the words in. So we were reading off the definitions and what each word meant. We were defining them together as a group, and [the students] just started going off on their own tangent. They started to get rowdy and talking. She almost lost them, it seemed like it was on the verge. There was side talking, chatting, loud- and she was losing the control.”

October 6

“The morning was a little restless. [The students] were just chit-chatty. Some of the kids were like goofing off and talking, not really on-task this morning. And [the teacher] would call on someone who wasn’t paying attention or something like that. The student wouldn’t be able to answer because he/she was not paying attention, so the teacher would go on to someone else. There was also a lot of movement going on in the classroom today because they were done with one book and they all had to turn it in. Everyone had to get up out of their desk.

Normally they are just all at their desk and you know, here's math and we switch over to the next subject. But today everybody was getting out of their seats and moving the books, and it was kind of after that that things kind of got noisier. I don’t know, because it was so continual, I don’t know if I
would call it 'bumpy.' I guess it was just a 'rocky' morning overall. When it was snack time they weren't done with English, so they got out late. Because the schedule was off, some students didn't know it was time to go to computers, and they were still outside.

November 1 (First moment)

"In computer class today, the students were typing their spelling words and I was talking to the teacher about grading. During the first ten minutes of class, the students are supposed to practice their typing skills, and afterwards they can play games. But today the typing time was longer than normal because they had a slow start. Everybody wasn't typing. So it was probably the first twenty minutes of class that they had to type. In the middle of this typing time, I didn't see the actual moment, but one of the students either typed or said the word 'suck.'

November 1 (Second moment)

"One of the boys had a magazine and it was a wrestling magazine. We were walking to computers as a class and the child actually brought the magazine to me and said, 'Hey, look what I have' because we share an interest in wrestling. It's not unusual for him to share something with me. Well, the problem with the magazine is that there were also women that accompany the wrestlers and they are in very revealing outfits. They're covered, but inappropriate for school. They had women in there that are wearing sports bras and short-shorts."

December 1

"I would say we had a minor 'bumpy moment' today. Math class started
a little late today because there were so many things going on this morning. There was a math test scheduled, so the teacher was having a kind of a quick review two minutes before the test. She was saying, 'Okay guys, remember this is on the test,' and psyching them up for it. Right before the test we went over what the symbols mean, you know like congruent, similar, and a different way to do averages of mean, median and mode. The teacher was doing an example of the board and she did the math wrong on the board. She just kept talking and the kids were calling out her name. And she was like, 'Just let me get through this.' But the students weren't listening to the point that she was trying to make, they were all concerned with her doing the math wrong."

Preservice Teacher's Own Personal "Bumpy Moments" Stories

Renee, who was observing in the sixth grade classroom, was the only preservice teacher to share her own "bumpy moments." The two moments that follow are her stories.

September 22

"It was math time and the class had corrected their homework, did a quick review, and then they had a test. It was a geometry test with congruent angles, bisecting angles, polygons... And they passed out all the materials and stuff. A boy in the class didn't appear happy and he was just kind of upset and obviously not paying attention to the teacher. I had never had an encounter with him or even noticed him before.

So, I went over and kind of stood over his shoulder. [The teacher] was going step by step through the items on the test to make sure everybody understood what each item was. He was just off in space and wasn't paying
attention. So I went over there and said, 'Okay, what number are we looking at?' You know, trying to get him back on task. He seemed like he wasn't even hearing me and I said, 'Are you okay?' And he looked at me and with a scowl, (says negatively) 'Yeah, why?' And I said, 'Well, you just didn't look to happy.' He's like, '[The teacher] didn't tell us about the test.' So I was like, 'You did the homework and you did well on it' because I had taken his paper last and I know he did well on the homework. So I said, 'That helped you study somewhat so I think you know it.'

At this point he was not listening to [the teacher] whatsoever. So I started to go over the beginning part to make sure he understood the directions and you had to chose whether the angle was obtuse, acute or a right angle. So I said, 'Do you know what obtuse, acute and right angles are?' and he rattled it off right away. I said, 'See, you can do the test.' And he turned to me and said, 'I don't need to. I know what I want to do in my future and math has nothing to do with my future.' So I was like, 'Oh boy...' So, he was very angry and I asked, 'What do you want to do?' He said, 'I want to be a snake holder and that has absolutely nothing to do with math.' And I said, 'Well yeah, it does.' And he got very angry with me and he said, 'No it doesn't.' I said, 'Do you ever have pens for them?' and he said, 'Yeah, I make them all the time.' I said, 'You can use angles and everything to create pens' and I was trying to show him that it was useful. I didn't know whether I could get through or not.

At this point the teacher comes over and sees that I'm talking to him. And I start going into that you can measure angles for the cages so they don't get out and she sees what I'm doing and she starts going, 'Cut it out' you know, with hand motions behind him. And I'm like okay, 'I think you should try.' I left it at that.
October 20

"Well right now is the grading period and teacher conferences and everything and so teachers are going crazy. My teacher was passing out papers and doing things and trying to get everyone through report cards and get everybody organized, and she was flustered because she had so much left to do. Well, [the students] had to take a spelling test. And last week I took over the spelling test. She did the first three sentences, and I did the last two. So she's slowly getting me to do things in the classroom. So she had me take over today and give the spelling test.

So I gave the test and I went way too fast the first time. For their spelling test they don't just do the spelling words. They have to do the whole sentence and the spelling words are within the sentence. They know what their spelling words are, but like one of them was I think, 'Jack portrays an attorney in the school play.' And so 'portrays' and 'attorney' are their spelling words, but they have to get the whole sentence correct. Normally they say the sentence twice. I said the sentence the first time and [the teacher] motioned to me to slow down, telling me I was going way too fast. So I repeated in a third time and she announced to the class that I didn't know the rules and the kids got that as a freebie because they got to hear it three times. She said that next time I would only say it two times.

I knew that they did it only two times but I figured I had to do it a third time because I went so fast (laughs). And the rest of it, I think I slowed down maybe too much. And now because they were also passing papers out and stuff, they were kind of restless to begin with. They were kind of fidgety and stuff, and I was trying to gauge when they were done. And I really don't know their speeds yet. I don't know when to go on to the next word. And I'd break the sentence up in two or three parts depending on how long it was.
Well I was walking around the classroom a lot and I didn't really even notice how much I was really walking. The teacher told me later because I asked her how I did and what I could do better, she goes, 'You made them too nervous.' And I guess I walked around the class so much and that created them to be nervous. And what I was doing is, I was walking around to see where they were at. Okay, who's writing. Okay, this one is a little faster and this one's really slow. So, I was really nervous too and I think that was another reason why I was walking around. So a couple of times there would be a point where I knew not everybody was done, but there would start to be noise. And I was like, 'Shoot, what do I do?' I've got to wait for this person to finish. So I was like, 'Okay, I'm going to state this one more time.' And I'm trying not to read the sentence and just say what I'm going to do to like give that student extra time to finish. And I'm thinking, 'What can I do?'

So I finally do it, and then when we grade them. We only had four sentences this time and for some reason when I read the fourth sentence the second time, because it was so short, they thought I was reading the fifth sentence. I read number four and I only read it once, and you're supposed to read it twice. And then when I went to read it again I said, 'Okay, this is the last one.' You know, 'I'm going to read this last one the last time.' And they said they thought I was going on to number five. So a bunch of them started writing again. And there started to be a bunch of noise. So I was like, 'Okay, calm down. Let me explain. I'm just repeating number four again.' So it was kind of like I wasn't clear and somehow I lost them. I don't know what I did really.

But when you grade it, usually the kids will then call out the sentence and spell each word. Well, I called on one of the kids to do this because I knew that was how the teacher did that. So let's do it the way she does this so that
way they won't get lost. Well he was all mumbling and putting his head on
the desk and you couldn't hear him, and the whole class is just getting noisy
and I'm like, 'Oh shoot, I'm going to lose them' (laughs). So I read the
sentence out loud and I did the first one. And so they were still kind of noisy.
I kept getting, 'Spell that one again. Spell that one again.'

So instead of calling on another student to do number two, what I did
was to keep them settled because it just kept going, I only let them spell out
the spelling word. So I spelled the rest of the sentence and when we got to the
spelling word in the sentence I would say, 'Okay; how do you spell portray'
and they would spell it and then we'd correct it. So that's what I did to modify
it from normally. So that worked actually.

I also tried to bring up, they're working on their handwriting right
now because for some reason the sixth grade class has atrocious handwriting,
so they're going back to the basics and redoing handwriting. And one of the
problems is the letter 'x.' So when we had words with an x in it, I had
everyone check to make sure they did a good job with their x's. I was trying
really hard to anunciate properly. Also, my Canadian accent came out and I
didn't know if the kids would notice or tease me. I was a little worried about
that. So I didn't personally bring it up I just thought if they don't bring it up
I'll just let it go.

But, I think I did pretty good. I was nervous and I guess it showed
because I was pacing. But I don't think I let them see it as much as how much
I felt it inside. I think I kept a pretty straight voice. The teacher made a
comment about my voice. She said what she does to keep them quiet is she has
a very calm voice. So I don't know if my voice changed because she said that.
If my voice changed when I realized, 'Oh shoot, I better do something.'

I thought it was a great experience. I really did, because one I didn't
make a terrible big mistake and it didn't turn out awful, but at the same time I
learned a lot from it. You know, how to keep control kind of thing and just
the whole aspect of being in front of the class. That doesn't bother me. I'm
really surprised about that. I just got up in front of them, no problem. I was
more concerned that I would do it correctly so that they could perform well
was my concern."
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