

Preservice Teachers' Stories: Content and Context

By Alora Valdez, Betty Young, & Sandy Jean Hicks

The recent call for standards-based education is also reshaping the processes of teacher preparation programs as teacher educators focus on what student teachers know and are able to do, instead of the satisfactory completion of courses and practica (e.g., INTASC Next Steps, 1995). The value of constructivism versus a transmission model of instruction has also found a home in teacher education (Howey, 1996). According to Linda D. Alkove and Betty Jo McCarty (1992),

The idea of professionalism found in the constructivist program asserts that significant education must present the learner with relevant problematic situations in which the learner can experiment, that is, manipulate, object to see what happens, question what is already known, compare findings and assumptions with those of others, and search for their own answers. (p. 20)

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These shifts in focus have led teacher educators to use strategies which tap preservice teacher beliefs as well as the interpretations that teachers-in-training have of classroom events. D. John McIntyre, David M. Byrd and Susan M. Foxx (1996) state that "programs that focus on the development of reflective

practitioners must create experiences in the field that enable preservice students not only to practice reflectivity, but also to observe it being practiced by experienced teachers" (p. 172). Accreditation agents such as NCATE (1994) as well as consortia such as the Holmes Group (1995) have encouraged clear connections between the content and processes of teacher education programs and research on curriculum, teaching, and learning. Thus, it is of interest for teacher educators to monitor and guide the preservice teachers' development of research-based ideas about teaching and learning as well as the actions that student teachers take based on these ideas or beliefs.

The literature concerning teacher education has directed attention to teachers' knowledge and its acquisition (Calderhead, 1987; Carter & Doyle, 1987; Connelly & Clandinin, 1990; Richardson, 1989). The work being conducted on teacher knowledge has shifted from focusing on the skills and behaviors teachers possess to the personal practical knowledge they possess of "classroom situations and the practical dilemmas they face in carrying out purposeful action in these settings" (Carter, 1990, p. 299). Classroom knowledge research has concentrated on the "functional congruence between the structure of the situations and the structure of knowledge that persons have of those situations" (Carter, 1990, p. 302), in other words, what really goes on in the classroom and the understanding preservice or inservice teachers have of those situations. The work in this area has included inquiry into "situated" knowledge (Morine-Dershimer, 1989), "tasks" (Doyle, 1988), "event-structured knowledge" (Gonzales, 1990), and "well-remembered-events" (Carter, 1993).

Kathy Carter's concept of a well-remembered event (WRE) guided the theoretical framework for the study described in this article. Carter (1991) defines a WRE as an episode that a preservice teacher observes in a school situation and considers especially salient. A WRE is "a short story from a novice's stream of experience" (Carter, 1993, p.7). Yet it is much more in that it provides a structured framework within which teachers can assign meaning to events. The concept of WREs posits that the kind of teachers' knowledge that enables them to navigate within the classroom setting can be codified (Carter & Doyle, 1987). Studies of WREs concentrate on preservice or inservice teachers' comprehension processes, how they use their knowledge to make sense of classroom events, and their actions with respect to those events (Carter, 1990; Carter & Doyle, 1987).

The purpose of this paper is to examine how elementary preservice teachers develop classroom knowledge as they explore their practices in relation to the current research concerning teaching and learning through the use of WREs. While research in this area has focused primarily on the content of WREs, the manner in which these stories are used as an instructional tool in teacher education has been largely ignored. The role of the university supervisor as mediator in reading, commenting on, and discussing the WREs with student teachers alters the process of reflection. The teacher educator has a greater repertoire of formal theories that

can be applied to classroom situations. By identifying alternative frames or challenging personal theories held by preservice teachers, the university supervisor enables the student teacher to take a broader, research-based perspective.

The questions that guide this investigation are: What kind of themes were the preservice teachers identifying in the description of their WREs? As a result of their analyses, what kind of changes did preservice teachers discuss making in their classroom practices? Within the analysis section of the WREs, how did student teachers use personal and formal theories to explain their practices? How did the interactions between university supervisors and participants concerning the written WREs encourage further analysis and theory-practice connections?

Methodology

Participants and Context

The six participants in this study were selected from a group of 57 elementary education students who were student teaching full time in rural, suburban, and urban settings. Three supervisors who each chose two students to participate in the study selected the six student teachers. In this NCATE and NASDTEC approved teacher education program, the six student participants (three graduate level and the three undergraduates) took the same sequence of professional courses and interned in the classroom for at least three hours a week for a semester prior to their student teaching experiences. Generally, student teachers are supervised by the university methods instructors who have direct knowledge of research-based methods which preservice teachers have studied in preparation for practicum.

The three university supervisors participating in this study were assistant professors who teach a wide range of undergraduate and graduate courses in their specialty areas of math/science, reading/language arts, social studies, and multicultural education. The methods courses they team-teach emphasize integrating the curriculum. The supervisors taught a combined total of 32 years in elementary and middle schools before joining the teacher education faculty. The university supervisors' activities focus on areas such as teacher education reform, charter schools, and partnerships between urban and suburban schools and the university. Their research interests include a common interest in the development of preservice and inservice teachers as reflective practitioners as well as individual studies related to teaching social studies in the elementary classroom; changing teachers' beliefs, understandings, and practices concerning multicultural education; and examining policy issues related to teachers' working lives. Thus, the university supervisors were well aware of the practical realities of the classroom in addition to having advanced theoretical knowledge and a common course-based experience with the student teachers.

While each university supervisor had various reasons for selecting the two individuals from their groups of 13 student teachers, there were no systematic selection criteria used. One supervisor chose her students based on their student

teaching settings—Eileen (E) student taught in an urban elementary school while Fran (F) student taught in a suburban elementary school. Another supervisor chose one, Ann (A), because she was a fluid writer and another, Barbara (B), because her work in methods classes reflected a somewhat shaky knowledge of theory-based practice. The third supervisor selected students who expressed strong beliefs about education but had contrasting discourse styles. The first, Cathy (C), was the more outgoing and the second, Debbie (D), was reserved, but thoughtful in her class discussions prior to the student teaching experience.

These participants as well as all elementary preservice teachers who were student teaching in the fall semester were asked to write WREs once a week on a topic of their choosing. The written WREs included: a detailed description of the event, an analysis (drawn from recent research on teaching and learning, seminar discussions, and/or their own practical knowledge), and the teaching implications the writer uncovers as a result of analyzing the event. Written feedback was provided by the supervisors on the students' WREs and handed back to students weekly. They were not graded. Supervisory conferences regarding the participants' WREs led to interactive discussions related to the preservice teachers' stories and analyses. These conferences enabled the university supervisors to explore the novices' thinking and to guide the student teachers into making further theory-practice connections. As the university supervisor engaged in practical arguments (Fenstermacher, 1986), proposing alternative frames for explanations and actions, the student teacher could construct new meaning, not as a sole result of her own reflection, but also in relation to the dialogue with the supervisor.

Study Design

This study investigated four questions related to the content of 50 WREs, supervisor comments on each WRE, and six supervisor/student teacher conferences related to the WREs (Table 1). Three of the research questions related to the content of the 50 WREs in terms of general themes, any changes in teaching practice proposed by the preservice teacher as a result of the reflection in the WRE, and types of theoretical explanations offered by the preservice teachers. The final question related to the nature and effect of the comments and practical arguments made by supervisors on the 50 WREs themselves and in the six audiotaped conferences with student teachers related to the WREs.

Sandra Mathison (1988) claims enhancing the validity and reliability of the research findings can be accomplished through the process of triangulation. She defines triangulation as using multiple methods, data sources, and researchers. To enhance the validity of this study, the data were collected through written WREs—including the supervisor's written feedback—and the conversations within the supervisory conferences concerning the written WREs; and content analysis was done on both the text and discourse. To check the reliability of the coding systems, multiple researchers coded the data separately according to the criteria discussed

above and then came back together to compare the results, revealing a high reliability.

Data Collection

Similar to all student teachers, the participants wrote nine WREs during the student teaching semester, turning them in at weekly intervals. Six of the 56 WREs

**Table 1:
Study Design**

<i>Question</i>	<i>Data Source</i>	<i>Analysis</i>
What kind of themes were the preservice teachers identifying in the description of their well-remembered events (WREs)?	50 WREs from 6 student teachers.	Content analysis of text using constant comparative method. Multiple coding done on subsample to establish interrater reliability.
Within the analysis section of the WREs, how did student teachers use personal and formal theories to explain their practices?	50 WREs from 6 student teachers	Content analysis of text relative to personal or formal theory. Multiple coding done on subsample to establish interrater reliability.
As a result of their analyses, what kind of changes did preservice teachers discuss making in their classroom practices?	50 WREs from 6 student teachers.	Content analysis of text relative to change or no change indicated. Multiple coding done on subsample to establish interrater reliability.
How did the interactions between university supervisors and interns concerning the written WREs encourage further analysis and theory-practice connections?	University supervisor comments on the 50 WREs. 6 audiotaped conferences between student teacher and university supervisor.	Content analysis of text using constant comparative method. Content analysis of discourse using constant comparative method. Multiple coding done on subsample to establish interrater reliability.

were not usable as data; thus a total of 50 WREs were analyzed in the present study. Along with the bi-weekly observations and conferences with the university supervisors, the six participants had two separate audiotaped conferences that related solely to their WREs. These conferences took place at somewhat irregular intervals during the student teaching semester. Each conference was designed to discuss roughly three of the WREs, but there was no predetermined structure for the conferences. The supervisory conferences were audio taped and the audiotapes were then transcribed.

Data Analysis

The 50 WREs, supervisor comments on the WREs, and six conference transcripts were first read in their entirety to gain a better sense of the content. Barney Glaser and Anselm Strauss' (1967) constant comparative method was used to develop categories, and the text was coded accordingly. Content analysis was used to examine both the text and discourse from the conference exchanges. The first analysis identified the themes that the preservice teachers chose to highlight in their WREs. Once the complete domain of themes was identified, the frequencies of responses were recorded.

The second question related to whether the preservice teachers indicated making a change based on their reflection of the specific classroom event. The constructivist teacher education framework guides "student teachers...[to] view teaching as ongoing decision making rather than as a product or recipe" (McIntyre et al., 1996), so the issue of change is critical to the growth process of the preservice teacher. In a program aimed at helping students make theory-practice connections, changes based on formal theory are relevant to program goals. Thus, in the analysis, any changes proposed were identified further by whether they were based on formal or personal theory and in relation to the theme of the WRE.

The third analysis centered on whether preservice teachers connected formal or personal theories to their practice. Within the theme areas above, frequencies of formal and personal theory connections were noted. The category of formal theories included when the student teacher analyzed the WRE in relation to a formal theory or a theory-based construct. An example of the formal theory category would be to make a connection between a lesson that did not go well due to misjudging the developmental level of the students according to Piagetian theory. The category of personal theories included those explanations in which the preservice teacher interprets classroom events through professional folklore and personal beliefs. Professional folklore is based on teachers' practical experiences, an example being "don't smile until Christmas." This "common" knowledge is generally passed among teachers and is not seen by them to relate to research. Personal beliefs originate from a number of sources, the most pervasive of which is teaching how we are taught or "apprenticeship of observation" (Lortie, 1975; Crow, 1987; Ross, 1989).

The fourth analysis focused on the interactions between university supervisors

and student teachers concerning the WREs. The data used in this analysis included both the comments made in the margins of the students' weekly WREs and the supervisors' dialogue focusing on the written accounts. Separate categories were developed for each of these data sources, and frequencies of each type as well as percentage of the total number of comments were calculated. The student teacher discourse and its interrelation to the supervisors' discourse were not analyzed.

Results

Themes of WREs

Eight themes arose from the content analysis, and three of those accounted for 90 percent of the classroom situations described by the participants (Table 2). These dominant themes were: instruction and learning (48 percent), classroom management (30 percent), individual differences (12 percent). Individual WREs related to conferencing, parent volunteers, evaluating one's own teaching, role of the teacher, and illegal drugs made up the final eight percent of WREs. These results are very similar to Carter's (1991), who found that management issues predominated the WREs of secondary student teachers, and other common themes were curriculum, individual students, and diversity.

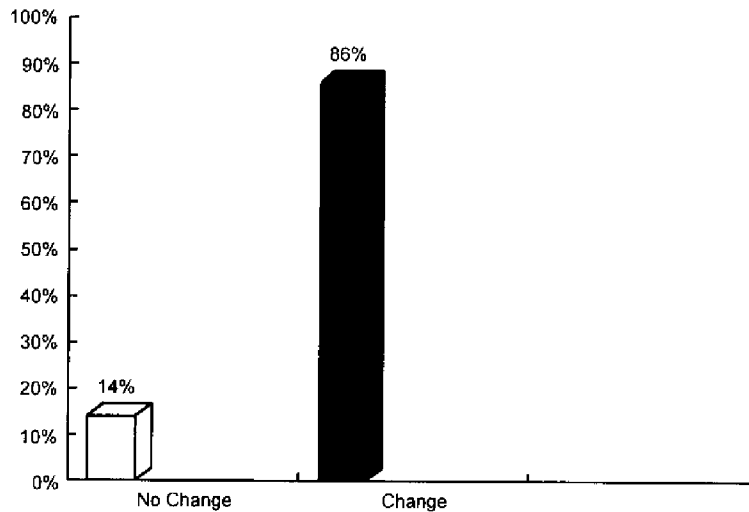
Table 2
Themes of WREs in Relation to Type of Theory and Change

	Personal Theory, No Change	Formal Theory, No Change	Personal Theory, Change	Formal Theory, Change	Total
Classroom Management	1		5	9	15 (30%)
Instruction and Learning	2		7	15	24 (48%)
Individual Difference	1		1	4	6 (12%)
Conferencing			1		1 (2%)
Parent Volunteers			1		1 (2%)
Evaluating Own Teaching			1		1 (2%)
Role of Teacher	1				1 (2%)
Illegal Drugs	1				1 (2%)
Totals	6 (12%)	0 (0%)	16 (32%)	28 (56%)	50 (100%)

Change

Analyses of the written WRE data determined that the six participants discussed making changes, whether based on their own personal theories or on more formal theories, in 43 out of 50 (86 percent) WREs (Figure 1).

Figure 1
Percentage of Change Discussed in WREs



These six preservice teachers used their own theories to justify their practice and did not discuss making any changes in their practices in six out of 50 (12 percent) of the WREs (Table 2). For example, in Cathy's WRE, she describes a boy who she feels is obsessively neat and organized. She says his work is done with 90 to 100 percent accuracy, but it is sloppy and done without the proper headings. She, also, says his homework usually cannot be located, but when it is found, it is on a jagged half-slip of paper. During the analysis part of her WRE, Cathy wrote,

Jimmy...has a chaotic home life with an absent mother and ten people living in one household. Jimmy needs structure and order. He appears to obsessively create

order to his belongings (his desk is one example), possibly to compensate for the disorganization he experiences when trying to complete tasks.

This student teacher seems to justify retaining her practice by saying,

Jimmy will probably continue to frustrate me, and himself, with his late and missing assignments. With understanding and structure, hopefully, we can improve the situation.

This example demonstrated that the WRE technique alone cannot help some student move beyond preconceived notions, some of which have alarming implications (e.g., the classist viewpoint of Cathy's WRE). The role of the university supervisory is critical to challenging student teachers to reexamine their perspectives and consider alternative views which could result in changes in practice. It is interesting to note that in *all* 28 WREs that were connected to formal theories, the participants reported plans to change their practice as a result of reflecting on the event.

Use of Personal or Formal Theory

Overall, the preservice teachers in this study related their WREs to personal theory in 22 out of 50 (44 percent) of the WREs (Table 2). The participants analyzed their practices in light of personal theory and discussed making changes in their practice in 16 out of 50 (33 percent) WREs. For example, Fran described an incident in which a parent volunteered to help in the classroom but all the parent did was hover over her own child. She analyzed this event in relation to professional folklore when she said,

I can't really throw a theory onto this, but I felt it was something I had to comment on. The closest to a theory I can come on this is a discussion in EDC 250 about teaching dealing with parents. We were told that there is a thin line to walk when talking to parents.

Fran went on to say,

I don't see why you couldn't write a very nice letter at the beginning of the year expressing your excitement and pleasure at having parent volunteers to help you out in the classroom. Tell them what a great experience it will be for all, but to remember that our goal is to educate all children in an environment that provides the best learning experience for all the students. Would this be inappropriate?

In another example, Fran described in an episode that occurred in the classroom during an oceanography unit. She reacted in fear to very large shrimp because she "hates things that are creepy and crawly with lots of legs" and was not prepared for its appearance. Initially, she begins to describe how she learned in an educational psychology class that children are very perceptive. However, Fran then relies on her personal beliefs about how it is inappropriate to show fear in front of children to explain the event,

I realized that my behavior was inappropriate because I was in a sense giving the kids the idea that these ocean creatures were something to be afraid of when there was no harm in them at all.

In both cases Fran takes a stab at a connection to coursework, but she cannot make a connection with what the issues are here and how to use theory to guide her choice of action.

The six student teachers used formal theory to reflect on their practice in 28 out of the 50 WREs (56 percent) and discussed making changes in each instance (Table 2). The 28 formal theory/change WREs were categorized by theme: instruction/learning (53 percent), classroom management (32 percent), and individual differences (14 percent).

For example in the area of learning and instruction, Barbara analyzed her disappointment in the quality of a discussion she led in relation to higher-level questioning skills. She wrote,

...according to the discussions I've had in my Education 312 class [psychology of learning], asking questions that require students to know more than the basic facts is an important style of learning.... Benjamin Bloom designed this taxonomy of learning to get the children to use higher level thinking skills to solve problems and to analyze events in their lives.

Making this connection enables Barbara to identify a specific research-based manner to increase the critical thinking in her class.

In an example of management, Eileen described an incident in which the students could not see what she was doing so she asked the students to move closer to her. This direction caused the students to become totally disengaged from the task. The student teacher analyzed this episode in relation to a formal theory, "withitness" that had been introduced in the methods course related to classroom management. In her analysis she writes,

In *Classroom Management for Elementary Teachers* there is a section on preventing misbehavior. Kounin, 1970 has a list of several skill (sic) that need to be practiced to be an "effective manager" who can maintain activity flow. One such skill is called "Withitness"; being able to communicating (sic) general awareness of the classroom to the students. It also includes identifying and correcting misbehavior promptly and correctly. The most important idea that Kounin is trying to get across is that preventative measures are the key to effective behavior management.

In the reflection part of her WRE, Eileen discussed making changes before the next part of her lesson. She wrote,

To prevent the same chaotic situation, I had the students remain in their cooperative groups during instruction. The timing of my lesson was better. Students were focused and less distracted. My whole lesson was not spent on behavior management. Students were made aware of my behavioral expectations.... I felt more in control of the classroom.

Eileen is looking at a difficulty she experienced and relating it back to specific techniques. The meaning of the management theory becomes real to her as she makes this connection.

In an example of an individual difference issue, Debbie dealt with some students in the classroom who were making racial slurs. She analyzed this event in relation to a theory-based construct concerning how multicultural education is a lifelong process (Banks & Banks, 1993). She wrote,

Often, when the necessary attitudes are not constantly stressed, even demanded, they tend to fall into the background. An example of my point is the backlash that has followed the civil rights and women's rights movements.

In her reflection section, she stated,

As a teacher it is my job to bring students to the realization that while we are very different...we are still part of a unified whole...and that we are interconnected and interdependent.

Here Debbie connects research material on multicultural education gained from her social studies course to a racist incident in the classroom. She sees the school incident in relation to larger social issues and formulates an action accordingly.

Context Issues—Supervisor's Written Comments

The development of the written well-remembered events over the student teaching semester was influenced by written comments from the university supervisors in the form of written comments. The comments were designed to assist in the reflection process. As these 252 notations were analyzed, the following five categories emerged:

- (1) Pushing for more detailed description;
- (2) Prompting for the first frame (theory-practice connection);
- (3) Posing alternative theory-based frames to explain event;
- (4) Pushing for possible solutions or situating new knowledge;
- (5) Providing support for emotional reactions, practice described, or student's analysis of the event (Table 3).

Five percent of the comments supervisors wrote involved pushing for more detailed description. These comments provided by the supervisors encouraged the preservice teacher to observe more carefully and write more complete accounts of events. For example, supervisors wrote,

What kind of strategies did you use? (D)
What did the children do? What did you do? (B)

These comments occurred in the first four WREs only, as the six preservice teachers later became more proficient in this part of the WRE. The students tuned into the

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practice of fully describing their events. In a sense they became keener observers during the first part of the reflection.

The theory-practice connections are sought in 19 percent of the notations as supervisors prompted students for the first frame. These comments were provided by the supervisors to push the students to: (1) look behind the descriptions and examine underlying issues; or (2) analyze their practice in relation to formal theory. For example, supervisors wrote,

- In what way?: What leads you to believe this? (C)
- What do you base this on—your own theory? (C)
- Why do you think you came to this conclusion first? (D)

In some instances student were given the first frame,

- You relate it well to methods. Any connections with formal theories of motivation or learning? (A)
- [This is] Providing for ind. differences. (E)
- As educational reformers talk about the classroom as a "learning community," it is expected that students do some of the teaching. (A)
- Talk about the grounding of the reward/pun. star chart & reward schedule based in behavioral theory. (B).
- Why do you think routine is so imp't.? Why do you think children test teachers? (A)
- Why ability groups? (F).

Here we see the supervisor guiding the reflection or prompting it by leading students or modeling one possible formal theory connection or explanation.

Another group of notations related to posing alternative frames. This group accounted for nine percent of the total comments. These comments were provided by the supervisors to assist students in looking at the same practice from different perspectives. For example, the university supervisors wrote,

Table 3
Type of Written Supervisors' Responses on WREs

<i>Category</i>	<i>Number of Responses</i>	<i>Percent</i>
Push for Detail or Description	13	5%
Prompt for First Frame (Theory-Practice Connection)	48	19%
Pose Alternative Frames	23	9%
Push for Solutions or Situate New Knowledge	15	6%
Support Emotional Reaction, Practice or Analysis	153	61%
Total	252	100%

- Might the issue be focus rather than time? (C)
- Is the issue here sloppiness or his ability? (C)
- Might there be other possibilities? (C)
- Just because it [the book] is below grade level doesn't mean it has no interest—
what else might be going on? (C)

In these cases the student teacher may have oversimplified or shown a limited perspective. The supervisor was encouraging the preservice teacher to use multiple perspectives.

The next category entails pushing for solutions or situating new knowledge. Only six percent of the responses were in this area. These comments were provided by the supervisors to push students to translate the theory-practice connections into future classroom actions. For example, supervisors asked,

- How are you structuring these relationships so that these students will have support when you are gone? (C)
- What can educators do about this? (D)

These types of supervisory comments helped students to go beyond the immediate and discuss the broader implications of the WREs.

Sixty-one percent of the supervisor notations supported emotional reactions or reinforced the student's choice of practice or analysis of the event. Eighteen percent of these comments were provided by the supervisors to encourage analyses by creating a safe environment for the students' revelations about classroom events and their actions and decisions. For example, when students described emotionally disturbing events, supervisors responded with comments such as,

- Many teachers feel like this. (D)
- This is their fault not yours. (C)
- This, too, is normal! (C)

The other 43 percent of the comments reinforced the stated practice or the student's analysis for example,

- Good way to handle this and show respect for the child! (B)
- This is just what I would have used to analyze this situation. (E)
- It seems like you learned a valuable lesson here. You reflected on the steps of your lesson, decided what worked and what didn't, changed what didn't work, and did the lesson over to make it work. And you did all of this in a matter of minutes. Good work! (F)

These comments were provided by the supervisors to maintain the momentum needed for the students to analyze their own practices in relation to formal theory.

Context Issues—Supervisor Discourse in WRE Conferences

In the WRE supervisory conferences, the dialogues between university supervisors and participants were examined to determine the types and frequencies of

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prompts and questions of the supervisor. Using emerging categorization on the 253 items of supervisors' discourse, the same five categories appeared as in the notations on the written WREs. Table 4 presents the results of this analysis. The greatest change appeared in the shift from emphasis on support for practice or analysis to prompting for the first frame of analysis. In the conferences, the responses supported emotional reactions, practice or analysis were down by 43 percent. There was an increase of 54 percent in the supervisor's (indicated by "S") responses that prompted for the first frame—assisting students (indicated by "A" through "F") in making theory-practice connections. One such exchange appears as Barbara discusses a WRE related to a math lesson in which she lost students in an abstract consideration of geometry concepts:

S: And what do you connect that with in terms of (inaudible) better idea instead of the way we learned geometry, which was all paper and pencil?

B: Just from doing some research and reading that children need hands-on activities and it is more exciting for them and they can decide themselves how to learn. And get more involved with the lesson because they became restless. They found it dull; they were not motivated or stimulated.

The supervisor a bit later pushes for more connections by saying:

S: I was thinking in terms of the NCTM Standards. Do you think of that when you are constructing the math things or does that seem separated or removed?

B: At the beginning I wasn't thinking about that to be quite honest, but now I have been. When I construct my lesson I tried to construct my lessons and reflect on that and look back at that. I wasn't sure how to plan things, and where exactly to begin. Like I had to feel around.

Additionally, there was an increase to 15 percent (up from nine percent of the

Table 4
Type of Supervisors' Dialogue in WRE Conference

<i>Category</i>	<i>Number of Responses</i>	<i>Percent</i>
Push for More Description of Event	17	7%
Prompt for First Frame (Theory-Practice Connection)	136	54%
Pose Alternative Frames	39	15%
Push for Solutions or Situate New Knowledge	15	6%
Support Emotional Reaction, Practice or Analysis	46	18%
Total	253	100%

written comments) in posing alternative frames in the oral exchanges. One example of this occurred as Fran described a situation in which children were placed in ability groups for reading instruction. When the supervisor asked, "And what theory did you tie that to?" the preservice teacher responded, "I tied this to methods and the concept and planning for individual differences." Thus, the student has misrepresented the content of methods (which was taught by the university supervisor and discouraged ability grouping) and has connected planning for individual differences to the practice of ability grouping. The student goes on to conclude that what is needed is to look up individual records and test scores to group children. The supervisor then seeks to change the student's theoretical frame. In the following example, the interactive nature of the supervisory conference allows the push for reexamination of beliefs:

S: I've got something that's going to trip you up on what you're saying right now....
Do kids stay at where they are at on testing all the time?

F: Oh, no. Oh, no. I don't think so.

S: There is a possibility that kids could move around?

F: Oh, definitely. I've seen that.

S: A possibility that kids could move around...

F: And I've seen that in my own class, when we've had to do some adjusting...

S: So test scores alone don't make it?

F: Oh, no. Not at all.

S: O.K. It's just another thing to help you.

The supervisor has the maximum chance to guide the preservice teachers to an in-depth reflection of practice. The theoretical ideas introduced during the methods courses can be pursued by using the first-hand experiences of the student teachers.

Unexpected Findings Related to Student View of WREs

In several of the supervisory conferences, preservice teachers were asked to comment on the reflective process itself. These conversations provided a view of the different ways that the student teachers approached this task as well as revealing some resistance to the notion of analysis. Here are some examples of these comments,

F: The way I did these well-remembered events is that I tended most of the time to write something that I had a problem with and I don't know what it was...

* * * * *

S: Did you find it helpful to do this activity [WREs]?

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B: Definitely. Because it made me just decide something happening in a day it really made me reflect upon what I could do differently or how I could improve my teaching skills, you know, exactly. I went through in my mind, step by step, what I had done and what maybe I could have done and by writing it out, I think its great that I can reflect on me someday.

* * * * *

S: ...In general, what value were the well-remembered events to you, if any?

D: I really think that, yes, they did help me... And by having to actually sit down, write about it, think about it, it really gets me to think a little more deeply about many issues. Many of these points I came through with, I probably wouldn't have if I wouldn't be forced to. You know what I mean [laugh].

* * * * *

C: The other thing I thought was first a burden and then a positive was that we had to refer back to specific classes or specific books and to me at first that was a major burden because it was like, "I don't remember where I learned it, I just learned it somewhere" and then you had to try to figure out and at first that was a major burden, but then it became good because I wasn't, that did teach me something, because I wasn't used to trying to identify where I got that from and I found myself even now when I don't have to do it, when I'm thinking of something like "where did I learn that?" and thinking of where, what source, that information came from.

* * * * *

S: And then you've gotten back and read my comments, does it, did it changed the way you looked at the event at all or does it, do you sometimes think that I did not explain it enough or you don't understand?

A: Usually it gives me another direction to think in.. [gives example of illegal drugs WRE]..and that another thing to think about. So basically that allows me to think of something else.

The student teachers indicated that the WRE assignment forced the issue of reflection and led them to make theory-practice connections between the content of the teacher education coursework and their classroom experiences. There was also evidence that the supervisor-student dialogue facilitated the making of these connections. Finally, the repeated experience of writing WRE throughout the student teaching semester enabled students to access, more easily, possible theory-practice linkages and multiple perspectives on a particular classroom event.

Conclusions and Significance

The purpose of this paper was to examine how six elementary preservice teachers deepen classroom knowledge as they explore their practices in relation to the current research concerning teaching and learning through the use of well-

remembered events. This study found that nearly half of the analyses done by students related to personal theories rather than to the formal theories which form the foundation of their research-based teacher preparation program. Even the types of theory-practice connections made by students were limited in depth and required the push from the university supervisor to examine alternatives. The key role of the interactions, particularly the conferences, shows the importance of frequent and structured interactions between student teacher and supervisor. These papers allow the supervisors to have a window into the thinking processes of the preservice teachers. These data provide the university faculty with valuable feedback related to the effectiveness of instruction in the pre-student teaching courses and experiences.

WREs were provided as an instructional device to encourage student teachers to become reflective practitioners. WREs provide a framework in which preservice teachers can tell stories about notable classroom events that occur during their student teaching experience. The contents of the WREs revolve around student teachers' emerging practices and how they connect these practices to formal and personal theories. Part of the context in which these stories are told recognizes that students are producing the WRE for a particular audience, that of the research-oriented supervisor. This context incorporates the role of the supervisor in drawing students toward more sophisticated analysis/reflection processes through written comments as well as through the interactive conferences that push students by asking probing questions or by pointing them to applicable theories.

Beyond the specific themes and patterns of the WREs and supervisor-preservice teacher interactions, the results of this investigation highlight the usefulness of WREs as a tool in constructivist teacher education programs. The findings suggest that written WREs provide preservice teachers with a framework in which they are able to negotiate meaning about their classroom practices first in relation to the outcome of their immediate experiences, then in light of personal and/or formal theory, and subsequently uses their new knowledge to inform future classroom decisions. This framework provides preservice teachers with the self-regulatory, metacognitive strategies necessary to productively reflect on their instructional practices. Thus, the preservice teachers are taught to be self-reflective regarding their practice, as suggested should be done by Donald Schon (1983, 1987) and are able to ground their practice in current theory as suggested by John Dewey (1933).

The ability of the preservice teachers to engage in reflection and change their own practice is enhanced by the interactions with the university supervisors who use the well-remembered events as a starting point for conversations about issues of teaching and learning. These conversations then become the foundation for the modeling and potential internalization of self-regulatory strategies in identifying and solving instructional problems. Such regulation is initially shared, with the more capable other (in this case the university supervisor) initially providing modeling and support of the self-regulatory process (Diaz, Neal, & Amaya-

Williams, 1990). The ultimate goal is to help a teacher continually analyze her practice in light of current theory (Palinscar, 1986).

Carter (1990, p. 305) says in relation to Robert Yinger, "The trick in learning to teach is to acquire sufficient experience to develop a patterned language of practice with which to recognize what situations mean and how they might be responded to in a particular way" (see Yinger 1986, 1987). This study showed that well-remembered events, especially when accompanied by conferences, greatly assist preservice teachers in developing the "patterned language of practice" not only to describe events, but to assign meaning especially related to formal theory connections. The value of the WRE was especially evident in the student accounts of how they approached the task and the importance they attached to it in relation to developing the habit of reflection.

This study adds to the literature related to content of preservice teacher knowledge. It examines the manner in which preservice teachers view their practice in terms of personal and formal theories and the degree to which their stories lead to plans of changing that practice. The sharing of the stories and subsequent conferences provide the supervisors with the opportunity to reflect on the effectiveness of their own practice such as coaching strategies and to expand the students' repertoire of frames. Thus, this study contributes not only to the understanding of the content of student teachers' classroom knowledge, but also sheds light on the context in which university supervisors encourage reflection, challenge preservice teacher beliefs, and offer alternative explanations and actions.

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