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———————— **Abstract** ————————

In today's diverse schools, meeting individual literacy needs of students is one of the most challenging aspects of teaching. Instructional scaffolding is a powerful tool that many literacy teachers use to meet the challenge. While the term denotes a wide array of strategies, most teachers use scaffolding in some form or another in their classrooms. Many consider it to be one of the most effective instructional procedures available (Cazden, 1992; Graves, Graves, & Braaten, 1996).

Scaffolding refers to support that a teacher or a more knowledgeable peer supplies to students within their zone of proximal development enabling them to develop understandings that they would not have been capable of understanding independently (Many, 2002; Meyer, 1993). Researchers have examined the use of scaffolding strategies such as modeling, cognitive structuring, providing information, prompting, encouraging self-monitoring, and labeling and affirming as means of assisting students' performance in the classroom (Many, 2002; Tharp & Gallimore, 1988). Scaffolding can be shaped by broad frames for instruction which are pre-planned by the teachers as well as by responsive instruction which is dictated by the needs of those participating

(Many, 2002; Roehler & Cantlon, 1997). To be responsive, teachers must be alert to teachable moments in instruction and choose supportive strategies based on the individual movement of students through their individual zones of proximal development (Eeds & Wells, 1989; Maloch, 2002; Tharp & Gallimore). During such episodes, Maloch (2002) stressed the importance of the layering of back and forth moves by the teacher aimed towards a gradual release of responsibility to students. Similarly, Meyer (1993) argued that educators and researchers must consider the appropriateness of the instructional level at which scaffolding is directed and the ways in which responsibility is transferred to the learner. This process is complicated by teachers' need to weigh, in a moments notice, questions regarding what to teach, what to ignore, how much help to give, and what kind of help to give (Rodgers, 2004).

Although research regarding how literacy teachers develop expertise with instructional scaffolding is scarce, three approaches to reading instruction are founded on the concepts of instructional scaffolding: (a) Reading Recovery (Rodgers, Fullerton, & Deford, 2001; Pinnell & Rodgers, 2004), (b) reciprocal teaching (Brown & Campione, 1996; Pallinscar & Brown, 1984), and (c) transactional strategies instruction (Brown, Pressley, Van Meter, & Schuder, 2004; Pressley, 2002). These studies reveal teachers can be taught to scaffold students' development, however, learning to effectively use such approaches may take extended time and requires an in-depth understanding of the domain.

Advances in our understanding of research-based best practices, such as instructional scaffolding, can only have an impact if teachers know how to adopt such practices (Sykes, 1999). Examining research on how these approaches such as Reading Recovery, reciprocal teaching, and transactional strategy instruction have been taught to in-service teachers can help us understand more about how experienced educators have developed skills in using instructional scaffolding. This work tells us little, however, about how preservice teachers develop conceptions and expertise with instructional scaffolding. Smagorinsky, Cook, and Johnson (2003) assert that due to the constraints of time, finances, mandates, and politics of varying perspectives within teacher education programs, preservice teachers are likely to develop incomplete or incorrect understandings regarding concepts of scaffolding. In addition, the challenges of scaffolding can become further complicated when teachers are working with students from diverse language and cultural backgrounds (Aljaafreh & Lantolf, 1994; Roehler & Cantlon, 1997). Therefore, this study was designed in light of

the growing awareness of the importance of scaffolded instruction and the need to understand preservice teachers' knowledge and ability to implement specific forms of reading instruction for diverse learners. This study focused on the question: How can we describe preservice literacy teachers' initial attempts to provide instructional scaffolding to second language learners?

## Methodology

The context of this inquiry was an alternative master's program in reading, language, and literacy education that leads to an initial certification as K-12 ESOL teachers with a reading endorsement. We collected data in the first year of program implementation with eight preservice teachers who enrolled in the program. The participants had undergraduate degrees in a variety of fields, experience in having learned a second language, experiences in working with children or adults through either religious programs, missionary or volunteer work, or teaching as a substitute, provisional teacher, or abroad. Most had traveled extensively prior to enrollment.

### Data Collection

Prior to program entry, individuals completed written reflections. Next, they were interviewed regarding their conceptions of relationships between teachers and students in an ideal teaching environment and ways they had supported students' learning in previous experiences. During their first summer in the program, participants took courses related to reading methods, reading assessment and instruction, and ESOL methods. These courses were taught in the field and included opportunities for preservice teachers to plan and implement literacy lessons in a K-5 classroom and to tutor a struggling reader in a one-on-one setting. Throughout the summer block of courses, the primary researcher and two research assistants acted as participant-observers in the morning discussion sessions and post-teaching debriefing sessions in the afternoons.

In addition, the research team took extensive observational field notes of the participants' instructional practices during the classroom literacy lessons and one-on-one sessions and, when asked, provided feedback and suggestions to interns regarding their lesson plans and teaching. The research team met weekly to discuss and scan the data for instances of scaffolding that informed our understandings of each participant's conception of scaffolding. Those notes were charted and analyzed for patterns that would inform the initial codes.

Field notes and research logs were shared regularly between the research team members collecting data (1st, 2nd, and 5th authors) and the two professors (3rd and 4th authors) teaching the courses.

## Data Analysis

Data analysis began with the first day of data collection following a constant-comparative approach (Glaser & Strauss, 1967). As patterns began to emerge in the data, working hypotheses were used to guide the creation of follow-up questions which were posed to participants in informal discussions. At the end of the summer coursework, each participant was interviewed again regarding his or her conceptions of instructional scaffolding and how to implement instructional activities in ways that scaffolded students' literacy development.

Following the summer data collection, the primary researcher and one other member of the research team began a recursive generative process of data analysis. Through this process, the team identified individual instances of scaffolding and compared these to initial codes developed in the summer and categories found in previous research examining scaffolding in instructional conversations (Many, 2002; Meyer, 1993; Roehler & Cantlon, 1997). This led to continual refinement of the coding system and elaboration of specific definitions for each category. The categories related to students' use of strategies and conceptual understandings can be found in Table 1.

**Table 1. Coding of Scaffolding Episodes**

**Scaffolding Students' Use of Strategies**
- Reading Strategies
    - Sounding out
    - Chunking
    - Predicting
    - Self Monitoring Strategy Use
- Writing /Spelling Strategies
    - Writing
    - Spelling
    - Understanding Text Format
- Navigating the Classroom Culture

**Scaffolding Students' Conceptual Understandings**
- Through Cognitive Analysis
    - Reflecting on one's own understanding
    - Building background knowledge
    - Drawing on prior knowledge
- Through Use of Texts
    - Turning to Outside Sources
    - Analyzing Textual Information

## Findings

This paper focuses on those episodes of scaffolding evident in preservice teachers' instruction which were related to two areas: (a) students' use of strategies, and (b) students' conceptual understanding. Analysis of the data revealed these eight interns implemented a total of 288 episodes of instructional scaffolding in these areas, with the majority focusing on supporting students' development of individual strategies (69%). Each of these areas, and the subcategories within each, will be addressed in the sections to follow.

### Scaffolding Students' Use of Strategies

Preservice teachers supported their students' ability to use a range of independent strategies. The largest categories of independent strategy use on which the interns focused included reading (106 episodes) and composing (67 episodes). In addition, some interns scaffolded students' understanding of text format (18 episodes) and worked to help their ELL learners navigate the classroom culture (9 episodes).

### Reading Strategies

All eight interns included instructional scaffolding to support their students' development of reading strategies. The scaffolding support that was offered in this area focused on sounding out, chunking, predicting, and self-monitoring.

*Sounding out*. Episodes related to sounding out accounted for almost 50% of the interns' scaffolding units coded as reading strategies (51/106). The majority of the preservice teachers' attempts to help students sound out words focused on letter-sound correspondences. For example, the teaching intern, Kathy, focused one first-grade student's attention on a word he did not recognize

by writing the word (scale) on his paper and saying, "What is that word?" When the child responded that he did not know Kathy continued, "What sound does the 'c' make?" The child hesitated and she supported his attempt by supplying information, "The 'c' makes the /k/ sound – like in /can/." She then wrote "sale" on the boy's paper and asked, "What is this word?" When the child responded "sale," Kathy continued, "Now put the "c" sound in it."

While there was evidence in this category that preservice teachers like Kathy were drawing words from actual texts in which their students were engaged, at times these skills were stressed with no discussion of how to apply the strategy independently while reading. In addition, in some lessons there was not as much emphasis on the sound-letter correspondence as there was on matching beginning letters. For instance, another preservice teacher, Cindy, had students identify words from stories they had read that had the same beginning sounds as the letters "wh", "ch", and "th" which were written on a chart at the front of the room. The children were to list the words they found in columns on their paper. As students worked, she circulated around the room monitoring their progress. At one table she stopped and said, "Can you find a 'ch' or 'wh' word? No?" She examined one of the books on his table briefly and then traded books with another student who was sitting there. "Look, what is this?," prompted Cindy, holding the page open to him. The child mumbled his response and she continued, "Yes, where does that go? Now try to find another one." While the purpose of this lesson was to work on words containing particular diagraphs, Cindy didn't emphasize the sounds themselves, nor did she have the students read their resulting list of words. The nature of the activity, therefore, was one of matching letters rather than matching sounds to the letters that sometimes spell those sounds.

During tutoring sessions where they worked one-on-one with students, preservice teachers often focused on sounding out as the main strategy, even when comprehension had broken down. On one page of a picture book for example, a third grader missed 10 words, but the preservice teacher, Lori, continued to have the child read aloud while she prompted him to sound out the words. When it was finished, Lori picked up a second book and said, "This book is a real challenge, but let's see if you can get through it." Although interns participated in debriefing sessions focusing on understanding the link between the students' stage of reading development and the choice of texts, interns seldom abandoned a story that was too difficult for the student during the tutoring

sessions. In contrast, preservice teachers often labored with students on difficult texts, trying to assist students in sounding out any word that was missed.

*Chunking.* In addition to assisting students with sounding out words based on letter-sound correspondence, in 39% of the scaffolding related reading, preservice teachers focused on decoding by chunking parts of words together. These episodes took two major forms, (a) looking for little words in big words, and (b) noticing patterns or rimes. Two of the preservice teachers, Holly and Martha, focused on the strategy of looking for little words in big words. Martha chose compound words such as "grandpa" and "upset" to help her first grade students see the value in sometimes using this strategy. For instance, one intern had the following interaction with a student:

> One of the things that we said that good readers do — they look at the picture, they look at the letter and they get their mouths ready to say those sounds, and they look for little words in big words that might help them. Let's try Grandpa. What little words do you see in there? (The student circled "and'). So we look at the first sound /Gr/, /and/, /pa/.

While Martha and Holly used this approach to scaffold their students' processes while reading, the strategy was not always an ideal choice to recommend. For instance, as Holly tutored her student they came to the word 'other'. She covered up the 'ot' and had him look at 'her' in the word. The exchange was as follows:

> *S:* 'har'
>
> *H:* "her, let's use her in a sentence" ( The student made a correct sentence using 'her'.)
>
> *H:* "Now let's look at these other two letters." (They sound out /o/ then /th/, then /her/.)
>
> *H:* "So maybe next time you can think about this little word inside of it is her and maybe it'll help."

In addition to Holly and Martha's focus on little words within big words, five of the eight preservice teachers included scaffolding episodes which encouraged students to sort words according to word families, or more often, to think of words that might belong in a word family, or words that rhyme. For example, Kathy played a game with her first-grade student in which he attempted to guess as many words that fit a rime pattern as he could within a

timed period. In one session, she turned the timer on and indicated she wanted words in the "boat" family.

*S:* "poat"

*K:* "not a word – but okay we'll count it"

*S:* "moat"

*K:* "okay"

*S:* "soat"

*K:* "not a word – words we've been talking about"

*S:* "coat"

*K:* "good"

*S:* "how many do I got?"

*K:* "what is the one with f?"

*S:* "foat"

Rather than providing a list of words from the same family and having students notice the pattern, Kathy, and others, gave the patterns and had students guess words that might fit that pattern. Scaffolding attempts such as these were problematic because the students were second language learners. As a result, students often didn't know when their rhyming "words" were real words or nonsense words.

*Predicting.* Another independent reading strategy that three preservice teachers, Martha, Oliver, and Joseph, addressed involved predicting, although this strategy comprised only 8 episodes. For example, Joseph engaged his kindergarten students in previewing pictures and responding to them. Together they would then come to conclusions about what happened and laugh together. Martha used prediction with her first graders to prompt them to notice the patterns in the text, *A House for Hermit Crab* (Carle, 1991). During oral reading, this preservice teacher prompted the students to say the month that was going to come next by whispering "January, February, March...." The students then yelled "April" which cued the preservice teacher to turn the page and show the word, "April."

*Self monitoring of strategy use.* One final category of reading strategies involving two preservice teachers, focused on supporting students' ability to monitor their own reading processes (6 episodes). Martha's teaching demonstrated effective scaffolding in this area. For instance, she encouraged this metacognitive strategy by saying "Why don't we try this again because something you

said didn't sound quite right. If you read something that doesn't make sense, we should read it again to make sure." Similarly, in a different lesson Martha increased the second grader's awareness of his strategy use by stating, "Good! You could see it in the picture couldn't you – that's what good readers do, they use the pictures." Similarly, Kathy also occasionally encouraged self-monitoring. For instance, she helped a student who was stuck on a word by reminding him of the strategies he had used to read the word earlier and pointing to it on the previous page. The student was then able to read the word.

## Composing Strategies

Examination of the scaffolding episodes revealed that all interns focused on scaffolding strategies related to composing in their work with students. There were two areas of attention evident while the preservice teachers attempted to involve students in putting their thoughts on paper, writing and spelling.

*Writing strategies.* Thirty-one percent of scaffolding related to composing was coded as focusing on writing strategies (21 of 67 episodes). In writing, the interns primarily concentrated on supporting sentence level composing. This writing was often based on words that were being studied at the time or words from a text that had been read. Scaffolding typically consisted of prompting children to consider using particular words in their sentences, modeling sentences on the board, encouraging children to copy these sentences or their peer's versions, labeling and affirming children's construction of sentences. For instance, in the following lesson, Oliver began by offering the 5th grader he was working with a chance to write about anything he wanted.

> Putting out a sheet of paper, Oliver told his student, "Write 3 sentences about anything you want to." The young boy looked into space and hesitated. "You can write about family or school or about maps [which they were studying in class] or about Arthur [a character in the book they had been reading]." Oliver waited 5 seconds and then said, "To start out — I'll let you copy out of the book — here copy that sentence first." Oliver held the book up as the boy copied the sentence. He then asked, "What does that sentence say?" The boy read the sentence fairly clearly and then Oliver continued, "The next sentence says, 'now Arthur reads everywhere.' Now, write one more sentence about Arthur — something from the book. It does not have to be hard."

As this lesson excerpt illustrates, the preservice teachers' attempts to support students' writing sometimes resulted in changing the nature of the activity from one of having students compose using their own language and vocabulary to one of copying others' work or copying from the text. This seemed to be particularly apparent when the preservice teachers were attempting to have all students in a class write sentences and some children had difficulty keeping up. In these instances, the activity was typically altered from an authoring task to a copying task. One exception to this approach, is demonstrated below. In this lesson, Lori used a story frame to scaffold third-grade students' writing of a paragraph on a sea animal.

> Lori begins by walking to the board where the words "If I could become a sea animal" are written. She told the class, "My animal is a starfish. If I could become a sea animal I would be..." She added the word "starfish" on the board as she talked. Then she reread the entire sentence and added, "a starfish because a starfish looks like a star." She then explained, "I want everybody to write, 'I would be...'" and write the animal you chose. Don't use a starfish. And then write 'because' and maybe you like it because it is pretty, because it swims, because it is big, because it is fast."

This preservice teacher monitored the students' progress and after a time returned to the board to continue adding to the story frame. In this way Lori supported the students' ability to create a paragraph on a sea animal which highlighted various aspects of that creature's appearance, food preferences, and way of movement. However, she maintained the integrity of the composing activity by having students' incorporate their own language, knowledge, and preferences.

*Spelling strategies.* Preservice teachers' impetus for scaffolding spelling came from both students and teachers and accounted for 69% of the episodes in the composing category. Student initiated episodes occurred when students asked for assistance in spelling words. In these situations, the preservice teachers prompted the students to use invented spelling or to look in resources such as a dictionary or a book. Often these general comments to student-initiated requests happened in the middle of lessons. In some of these instances, children reacted to the scaffolding by going to other individuals for help or losing interest in the activity. In contrast, the teacher-initiated instances contained more

specific instructions which were then adjusted when students continued to have difficulty. In these situations, preservice teachers prompted students to sound out words; they assisted students by stretching out pronunciations and prompting students to listen to the sounds attending to the beginning and ending sounds. For example, in the following episode, Joseph worked with an emergent writer to scaffold his spelling.

> Sitting side by side at a small table, Joseph asked the young boy he was tutoring what he wanted to write. The boy responded, "Lions eat zebras." Joseph noted, "then we need an 's' on the end so it says more than one lion. Then get started." The child wrote "l." Joseph asked, "What do you hear next? L iiii ooo n," he said stretching out the sounds. "I?" asks the child. "Yep. Then li ooo n. What letter?" continued Joseph providing assistance for the student to hear the sound of the 'o' in the word. "O?" asks the student. "Yep and what does it end with?" "N?" asked the boy and he wrote "m". Joseph pointed to the letter saying, "that is a 'm' — remember an 'n'?" Then Joseph continued, "how do you spell eat?" The child replied, "t." Joseph prompted him to reconsider saying, "have to have some other letters first, 'EEEEat'." The child responded "e?'." "Yes" affirmed Joseph as the child wrote "ette."

As shown in this illustration, when focusing on spelling the majority of the preservice teachers provided scaffolding by introducing strategies which would help them attend to sound-letter correspondences in words without overemphasizing accuracy in students' spelling attempts. Kathy, the exception, had scaffolding typically focused on obtaining the correct spelling rather than developing spelling strategies. As students wrote sentences with words from their lessons, or completed worksheet activities, Kathy scaffolded by calling attention to inaccuracies and how to correct these misspelled words. For instance, as students reviewed their answers to one cloze activity she noted, "Does anyone want to read the second sentence? I will read it. How do we spell 'there'? T. h. e. r. e." The children chimed in as she spelled the word and she continued, "if you don't have that, fix it now. Everybody have 'there' in the first blank?" In contrast to the other preservice teachers who focused primarily on strategies for hearing and identifying sounds in words, Kathy emphasized the use of a variety

of resources for copying correct spelling including the word wall, word cards, and peers' work.

## Understanding Text Format

Of the 200 units of data related to scaffolding strategy use, 18 of these episodes were focused on the efforts of four preservice teachers who attempted to scaffold children's ability to understand text format. Episodes of scaffolding related to text format focused on identifying story structure, parts of speech, capitalization, and periods. For the most part, these scaffolding instances occurred without the preservice teacher clarifying for the students the benefit of recognizing such formats.

The majority of the scaffolding episodes coded as understanding text format focused on the instruction of two interns as they worked to call students' attention to the beginning, middle, and end of stories. Throughout these scaffolding episodes, the preservice teachers clarified the structure of stories, modeled identification of story parts, and prompted students' recall of events occurring at varying times. No attention was given, however, to why recognition of story parts might aid students' in understanding text.

In contrast to these instances of text format focusing on story structure, a small set of scaffolding episodes called attention to sentence structure in a way that helped students realize that identifying particular cues in text is a strategy which can assist them in understanding as they read. Martha, the intern who included such background information, clarified this metacognitive strategy in the following except when she came across the word "but" as she was reading aloud. She noted, "But.... uh-oh, there's a 'but,'. When there's a 'but' you know something is going to happen don't you?" Later, she came across the same word again and she stressed the word in a louder voice, prompting students to anticipate that something would occur.

## Navigating the Classroom Culture

A small number of episodes (9) focused on interns' efforts to help their English language learners understand the culture of classrooms and adjust their behavior accordingly. Three interns, Cindy, Joseph, and Holly, alerted their students to rules and policies in the environment as an attempt to remind students to follow these rules. Such comments typically took the form of prompts such as, "[child's name] stay in your seat – it is a class rule, OK?" or "When

your table is ready, come and sit on the floor" which was then repeated with hand motions to demonstrate what needed to be done.

## Scaffolding Conceptual Understandings

In addition to scaffolding students' independent strategy use, all eight preservice teachers also scaffolded students' conceptual understandings (88 of the 200 episodes). This form of scaffolding drew students' attention to cognitive analysis or to textual information as ways of increasing their knowledge or grasp of certain ideas. The preservice teachers' attempts to scaffold through use of these areas are described below.

### Scaffolding Students' Understanding Through Cognitive Analysis

Of those instances where preservice teachers worked to support students' understanding of concepts, 80% of the episodes involved encouraging or supporting cognitive analysis. In these sessions, the interns provided students with background knowledge at the beginning of lessons, helped students to draw on prior knowledge, and prompted students to reflect on their developing perceptions of stories or of ideas.

*Providing background knowledge.* Five of the preservice teachers supported students' understanding of stories or text by providing background information at the beginning of lessons. For instance, Martha introduced characters and their pictures prior to reading a story and reviewed the names so that "we don't get stuck on the names." On another occasion, she introduced the terms "sea anemone, sea urchin, starfish, snail, coral" using picture word cards noting, "these are some words we need to know to understand the story." Providing background information occurred not only at the beginning of lessons, but also at the word level during reading when clarification was needed, confusion was evident, or the difficulty of terms was assumed. This was the case in one of Lori's lessons. When the child she was tutoring questioned why the fish in the book couldn't get out of the ocean, she supported his understanding by words and gestures to help the child understand that fish breathe water the way we breathe air. The two of them then went back to reading the text together.

*Drawing on prior knowledge.* In addition to building background knowledge, preservice teachers also encouraged students to turn to their own prior knowledge to increase their understanding. A focus on prior knowledge was evident in 18 of the 70 episodes (26%) related to scaffolding understanding

through cognitive analysis. These episodes often happened at the beginning of class as preservice teachers drew on students' memory of previous lessons on a topic prior to starting their instruction. Preservice teachers also drew on prior knowledge to scaffold words or ideas encountered during lessons. By prompting children to consider what they already knew in relation to a word or event, these teachers were able to support their students' understanding of the new concept. In addition, five interns drew directly on students' personal life experiences to help them understand concepts. For instance, Holly read a story focusing on a character who was feeling mad and grouchy. As shown in the following lesson excerpt, she asked questions to prompt the children to consider these emotions from their own prior experiences.

> H.: What's another emotion that you feel?
>
> S.: Scared. (A child yells out.)
>
> H.: What is that? What you just did – there's a word for that.
>
> S: (thinking...) Screaming.
>
> H: Let's hear from somebody at this table. If you have a pet – what might your pet do if it was scared?
>
> S: (child gives a detailed explanation that ends with 'woof')
>
> H:. They might whine.
>
> H.: I'll bet we all feel mad and grouchy sometimes.
>
> S: No
>
> H: What if someone takes your toys?

In this way, Holly worked to tap into the children's personal lives as she helped them to understand the concepts of mad and grouchy.

*Reflecting on one's own understanding.* One final way preservice teachers' supported students' conceptual understanding through cognitive analysis involved students reflecting on their own developing understanding. This approach was evident in 56% of the data focusing on scaffolding understanding through cognitive analysis (39 of 70 episodes). This was evident when preservice teachers used prompts for students to rehearse their literal understanding of both directions and texts. For instance, after giving the directions for an assignment, Cindy circulated the room encouraging students to articulate their plans for completing a drawing from the story and then focusing attention on what they could write in relation to their drawing as needed. Similarly, after finishing a story or a section of a story, all eight preservice teachers would ask questions

designed to focus students' attention on the literal events of the story. These rehearsals would scaffold students' conceptual understanding by prompting them to reflect on their ongoing perception of the story world.

In some instances, preservice teachers asked students' to reflect on their understanding in ways that went beyond considering students' literal understanding. In these episodes, concepts or ideas were addressed in a way to support a variety of personal perspectives on story events. For instance, in one lesson Oliver provided support before, during, and after reading a story to enable students to develop their opinion of horrible things that a character did in a story. Working in groups, students read a chapter together, shared and debated what to write down as 'horrible things,' and then shared their ideas with the class. Students were continually supported in reading the text and determining their own ideas of what qualified as "horrible things" and multiple responses were accepted.

## Scaffolding Understanding From Texts

A second way the preservice teachers worked to support their students' understanding was to draw their pupils' attention to specific textual information. This form of scaffolding occurred in 19 episodes (22% of the 88 episodes focusing on understanding concepts). In these instances, the interns focused on (a) the analysis of information in the text itself or (b) the use of outside sources, to scaffold students' abilities to use text as a source for clarification or elaboration of meaning.

*Analyzing textual information.* In the majority of these episodes, preservice teachers were again involved in asking questions to assess whether students understood story events. When students had difficulty responding, the preservice teachers scaffolded their knowledge of the story by prompting the students to look at pictures or to focus on particular areas of text to find the answers. For instance, in the following lesson, Kathy flipped back and forth to various pictures in the text to support her students' understanding:

> "There were two times when there was peace. In the beginning there was peace — what did they do here?" Kathy asked, turning to the front of the book. "Look at this picture — and then compare it to ..." She showed them another picture, "here where there is peace." She then repeated the process, flipping back and forth to show the pictures. "Here there is peace — there is not

peace... The question we are asking is 'what happens when there is peace?'" One child responded, "People [are] being nice." Kathy affirms, "people being nice."

*Turning to outside sources.* In addition to drawing children's attention to a particular text that had been read, Martha and Lori also scaffolded students' understanding by encouraging them to turn to outside sources for information. Such scaffolding was not frequent but when it did occur it involved calling attention to related television shows or to other books by the same author.

## Discussion

In summary, these findings illustrate that preservice language and literacy teachers attempt to provide scaffolding as their students develop literacy strategies and concepts. The majority of scaffolding occurred as individual, spontaneous instances where the focus and nature of scaffolding were situation specific and responsive to the needs of individuals (Bauman & Ivy, 1997). Thus, interns were involved in addressing issues and trying to provide support as teachable moments arose (Eeds & Wells, 1989; Many, 2002). In debriefing sessions after teaching, the interns noted their ability to pick up on students' needs, but they expressed concerns over feeling overwhelmed with the number of areas that needed attention. However, as a group, the interns and faculty agreed that the objectives of a lesson should help keep them focused on what to scaffold and what to ignore. Throughout the semester, the interns felt tension over what needed to be addressed and what should be overlooked. Often, literacy lessons were designed to integrate reading and writing processes and the interns' scaffolding took on a scattergun approach to hit the widespread areas they felt needed attention. While such scaffolding instances indicated preservice teachers' attempts to assist students with particular difficulties during the lessons, there was, however, little evidence of attention to the ongoing development of specific strategies or content across time. Previous research stresses the importance of systematic attention to areas such as phonics (National Institute of Child Health and Development, 2000) and notes that focusing on single areas of phonemic awareness can also be more effective than a multi-skilled approach (NICHD, 2000; O'Connor, Jenkins, & Slocum, 1995). With the content of scaffolding episodes spread across so many different domains, the overall effectiveness of the interns' scaffolded instruction may have been diluted.

The scaffolding episodes of these interns did encompass many reading strategies associated with effective reading comprehension instruction. Having students analyze text format, draw on prior knowledge, make predictions, and reflect on their own understanding of content through rehearsing information were categories of scaffolded instruction observed in this study that are consistent with the comprehension strategies found to be effective in previous research (Duffy, 1993; NICHD, 2000; Pressley, Johnson, Symons, McGoldrick, & Kurita, 1989). However, Pressley (1998) noted in his observations of classroom reading instruction that although interns asked students to respond to questions or participate in conversations which focused their attention on the cognitive processes involved in skilled reading, there was little evidence of preservice teachers supporting students' ability to self-regulate comprehension or understand how or when to apply strategies.

Finally, while the analysis of the focus of the preservice teachers' scaffolding attempts did reveal an abundance of scaffolding episodes, there was little evidence of scaffolding embedded within overall instructional frameworks. Many (2002), describes scaffolding within broad frames for instruction as providing teacher-initiated opportunities for scaffolding of particular strategies. Such an approach often reflects a gradual release of responsibility over the course so that the lesson movement is apparent from high levels of teacher support to more and more student involvement (Roehler & Duffy, 1984). Research indicates this type of scaffolded instruction has a positive impact on student learning (Collins, 1991; Palinscar & Brown, 1984). Although this model was consistent with one of the lesson designs discussed with the interns, only a small fraction of the interns' scaffolding episodes focused on concepts or strategies that were supported by input, modeling, checks for understanding, guided practice, and independent practice.

During the coursework, interns were also taught to plan lessons which allowed for immersion in reading and writing through literature discussions or workshop approaches. Previous research indicates scaffolding embedded in conversations in social constructivist classrooms can be quite complex and yet not necessarily indicative of a gradual release of responsibility model. Instead, through conversations and experiences students and teachers weave understanding about strategies and concepts by drawing on the participation of all class participants (Bauman & Ivy, 1997; Hogan & Pressley, 1997; Many, 2002; Pressley et al., 1994; Roehler & Cantlon, 1997). Examination of scaffolding

episodes evident in these preservice teachers' initial classroom experiences does indicate that support in some preservice teachers' lessons did integrate scaffolding. Therefore, specific strategy development was intertwined with scaffolding episodes related to children's conceptual development. However, for the most part, the scaffolding episodes operated as distinct unrelated instances of support that lacked the coherence or repetition to be fully effective.

This exploration of preservice teachers' conceptions of scaffolding and their initial efforts to provide support to their students across these areas provides important information for the consideration of teacher educators involved in the preparation of literacy teachers. These interns developed a clear sense of and ability to use scaffolding processes such as modeling, providing information, focusing attention, prompting, and affirming, which have been observed in previous research (Many, 2004; Meyer, 1993). The preservice teachers also understood the importance of recognizing teachable moments and providing support for not only strategy development but also conceptual development. However, the preservice teachers were overwhelmed by the range of literacy processes and concepts for which scaffolding was needed and seldom focused attention to specific areas or developed students' abilities or understandings over time. The fact that their efforts were at times scattered across many diverse areas is understandable given that the complexity of scaffolding requires teachers to make immediate decisions regarding what they should teach or ignore and the nature and amount of assistance to provide (Rodgers, 2004). Such decision making processes may be particularly difficult for novice teachers who are in the first semester of teacher preparation.

Finally, these preservice teachers were involved in a block of courses focusing on reading methods, reading assessment, and ESOL methods. As is common in field-based literacy coursework (Cooner & Wiseman, 2001), as the interns developed their overall understanding of literacy development and pedagogy, they were simultaneously connecting theory and practice through their lessons in K-5 classrooms. Examining this context and these individuals' experiences in light of the research on teaching teachers to provide scaffolded instruction provides an interesting contrast. Previous research focusing on teaching teachers how to scaffold instruction has focused on preparing educators to concentrate on a clearly identified set of strategies. For instance in Reading Recovery, teachers scaffold children by focusing on strategies related to meaning, structure or visual information, self monitoring, and cross checking using

multiple strategies (Rodgers, 2004). In reciprocal teaching, approaches that have been found to impact comprehension performance, teachers learn to scaffold two or more combinations of four strategies: summarizing, question generation, clarification, and prediction (NICHD, 2002). Transactional strategy instruction may include prediction, questioning, clarifying, visualizing, seeking clarifications, responding based on prior knowledge, summarizing, and interpreting but only one or two strategies are introduced gradually and the modeling of multiple strategies may take a great deal of time and ongoing monitoring of success to ensure students are able to use them effectively (Duffy, 1993; NICHD, 2000; Pressley, 1998). This study suggests a need to carefully consider the scope addressed in literacy teacher education programs in light of the tightly focused areas addressed in effective scaffolding research. Effective scaffolding requires extensive, specialized knowledge of the domain so that teachers are able to make decisions about what kinds of help to provide at a given time (Rodgers, 2004). Narrowing the focus of initial preservice courses and providing additional structure for practicum teaching in terms of lesson content may be crucial for novice teachers' success. By making such adjustments, teacher educators can scaffold preservice teachers' beginning experiences so that not only do interns provide more beneficial instruction, but teacher educators can ensure that interns are able to explore specific approaches with the depth necessary to implement scaffolded instruction effectively.

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