SCAFFOLDING INTERACTIONS BETWEEN TEACHER AND STUDENTS: TEACHER CANDIDATES' NOTICING AND ENACTING PRACTICES DURING SMALL GROUP LITERACY INSTRUCTION

By

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ABSTRACT

SCAFFOLDING INTERACTIONS BETWEEN TEACHER AND STUDENTS: TEACHER CANDIDATES' NOTICING AND ENACTING PRACTICES DURING SMALL GROUP LITERACY INSTRUCTION

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The purpose of this study is to analyze how elementary teacher candidates learn to observe, notice, decompose, rehearse, and enact targeted small group reading instruction. The research questions focus on factors that enhance or inhibit pre-service teachers' scaffolding during small group reading instruction, as they enact and reflect on their own small group teaching, over a series of three lessons. Additionally, the research questions focus on if preservice teachers feel more prepared for the next lesson and if there is evidence in their videos that their scaffolded instruction improves, as they go through the three teaching cycles with the same group of students. In this project, I used design-based research to investigate one literacy methods class, as teacher candidates learned to teach small group literacy instruction, over the course of a semester long literacy practicum. The data was analyzed using the small group framework from Essential Literacy Practices K-3 (Michigan Virtual University, n.d.), researchbased reading prompts from Duke and Schutz (2017), and the framework for implementing instruction on a scale of help, from least support to most support (Wood et al., 1976; Lose, 2007). Possible implications of this research and future work are to determine if teacher preparation programs can strengthen novice teachers' small group literacy instruction, particularly do scaffolding actions in lessons, and if those moves help students learn to read and write.

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CHAPTER 1 – INTRODUCTION AND THEORETICAL FRAMEWORK

Rationale: Background, Problem Statement, and Goals

Michigan's new third grade reading law has parents, teachers, and teacher educators concerned (McVicar, 2017; Weyer, 2017). This law raises the stakes for families and educators, because children who are not reading proficiently by the end of 3rd grade, during the 2019-2020 school year, may be retained (Michigan Association of School Administrators, 2016; Michigan Education Association, 2017; Michigan Department of Education, 2017; Oakland Schools K-12, 2017). Research shows that for some children learning to read is challenging (Scanlon et al., 2016; U.S. Congress, 2015). To compound that, for some novice teachers, teaching children who find reading difficult is complex work (McKenna & Stahl, 2015). I argue that learning to teach reading, particularly at children's acquisition phase of literacy, can begin in university methods courses. To put this in context, elementary teacher candidates at Michigan State University spend their junior, senior, and internship years learning methods in the four content areas, which are broad in scope for grades K-5. In addition, that knowledge does not necessarily focus in on teaching children who are beginning readers across grade levels. Furthermore, many of those candidates exit teacher preparation with wide-ranging knowledge about differentiating instruction for learners (Michigan State University, personal communication, 2016). Researching factors that enhance and inhibit preservice teachers' scaffolding during small group reading instruction is a compelling question for research and practice because many of our teacher candidates are currently in their year-long internship with K-3 students during the implementation year of the new reading law, and they will be first year teachers soon (Michigan Education Association, 2017).

Differentiating instruction is an important instructional strategy for teachers in today's classrooms to increase learning for all students. One approach to differentiating instruction is to implement small group targeted lessons that include scaffolded interactions between teachers and students (The IRIS Center, 2005, 2016). I argue that it is our obligation to prepare teacher candidates to differentiate literacy instruction for all students (Tomlinson, 2008; U.S. Congress, 2015). In my practicum project on scaffolding readers during small group reading instruction, I researched (1) How effective elementary literacy teaches scaffolded students' decoding when reading continuous text, (2) How elementary literacy teachers made moves to gradually release responsibility, and (3) Why those teachers made specific scaffolding decisions when assisting students to decode in continuous text (Lose, 2007; Wood et al. 1976). I used a case study design to analyze the scaffolding moves of two teachers. For the first question, I found that a student must get stuck while reading to initiate the scaffolding cycle; getting stuck signals to the teacher to provide support. In addition, I found that a teacher must know students' literacy skills and understand literacy development to make scaffolding decisions for each student. For the second question, I determined that even though I was looking for scaffolding for decoding, I found that decoding did not happen in isolation. The third finding was that scaffolding for decoding and comprehension happen at the same time. When the teacher scaffolded for decoding, she also focused on decoding to support comprehension. The fourth finding was that the teachers allowed students to do most of the reading work, because the goal of differentiated instruction is to shift the reading work from teacher to student. For the third question, I found that teacher beliefs were important when scaffolding in small group reading instruction. Since the teachers believed their students could learn, they prompted them to engage in problem solving rather than simply providing them with the answer or telling them to sound it out (Council of Chief School Officers,

2013). In my practicum study I claimed that talking about scaffolding at the broad, conceptual level is too vague for educators; therefore, I believe that teachers need a better repertoire of contingent responses to implement when scaffolding literacy instruction. This type of teaching is complex and involves implementing a series of instructional moves and decisions while teaching to accelerate student progress that are intricate and require many areas of teacher expertise (Parsons et al., 2013; Pentimonti, 2010; Pentimonti & Justice, 2011; Rodgers 2004; Rodgers et al., 2016; Tomlinson, 2008).

My research questions for this dissertation study examined (1) Factors that enhance or inhibit pre-service teachers' scaffolding during small group reading instruction, as they observe, enact, and reflect on their own small group teaching, over a series of three lessons and (2) Preservice teachers' preparedness for teaching the next lesson and evidence of improved scaffolded instruction, as they complete three teaching cycles. The design for this study combined findings from my practicum on scaffolding during small group literacy instruction, content from the K-3 Literacy Essential Practices, observation of small group literacy videos (with noticing and decomposing practice), and enactment of practice in teaching small groups. The end goal was for teacher candidates (TCs) to plan, teach, and evaluate three small group lessons by watching videos of their own lessons in their field placement for their senior literacy methods course for three weeks in a row, and discuss what they learned during that experience. TCs received the content from parts one and two of the framework in the previous literacy methods courses and in the former version of TE 405. Parts three and four of this framework were new to the course, and aligned to my research questions for this study.

Conceptual Framework

My conceptual framework for this study focused on four ways to support novice teachers in engaging young children in small group reading instruction: (1) Understanding of literacy development and instructional practices, (2) Understanding of students' literacy skills, strategies, and knowledge. (3) Observation of exemplar teachers enacting literacy instruction, and (4) Enactment of literacy instruction with a small group of students. Each part is shown in Figure 1 and described below:

Figure 1

Conceptual Framework

Part 1: Understanding of literacy		Part 2: Understanding of students'
development and instructional	Teach in	literacy skills, strategies, and
practices	TE301	knowledge
	Review in	
Assessments & standards used to	TE405	Students' literacy development right
understand literacy development &		now used to plan targeted instruction
instructional practices for teaching	+	
	Small	
+	Group	+
	Literacy	
	Instruction	
Part 3: Observation of exemplar	+	Part 4: Enactment of literacy
teachers enacting instruction		instruction with a small group
	New to	
Exemplar teacher videos used to	TE405	Parts 1, 2, and 3 of framework used to
notice what teachers & students do		plan, rehearse, teach, & reflect on
during small group instruction		three small group literacy lessons

Part 1: Understanding of Literacy Development and Instructional Practices

The first part of the conceptual framework focuses on TCs' understandings of students' literacy development and instructional practices. Information for this part of the framework combines information from my practicum study findings on scaffolding during small group literacy instruction, K-3 Literacy Essential Practice 3 (small group literacy instruction), and the

Common Core State Standards for English Language Arts. The following paragraphs provide details about those findings, K-3 Essential 3 content, and (Michigan Virtual University, n.d., Essential 3 Slides), and the K-3 Common Core State Standards (Council of Chief School Officers, 2010).

Scaffolding Practicum Findings. Five findings from my practicum research study, informs the conceptual framework for this dissertation. In summary, first, a student must get stuck while reading to initiate the scaffolding cycle; getting stuck signals to the teacher to provide support. Second, a teacher must know students' literacy skills and understand literacy development to make scaffolding decisions for each student. Third, scaffolding for decoding and comprehension happen at the same time. When the teacher scaffolded for decoding, she was also focusing on decoding to support comprehension. Fourth, teachers allow students to do most of the reading work, because the goal of differentiated instruction is to shift the reading work from teacher to student. Five, teacher beliefs were important when scaffolding in small group reading instruction. Since the teachers believed their students could learn, they prompted them to engage in problem solving rather than simply providing them with the answer or telling them to sound it out (Council of Chief School Officers, 2013). These beliefs were carried through as the teachers made decisions to zoom in or fade out, as students needed more or less support when reading.

Essential Literacy Practices Content. The third practice from Essential Literacy

Practices K-3, adopted by the Michigan Department of Education (Michigan Association of

Intermediate School Administrators General Education Leadership Network Early Literacy Task

Force, 2016), contributes to the conceptual framework for this dissertation. In the third Essential

Practice, called "Small Group and Individual Instruction," teachers are called to use data

collected from observing and assessing students' literacy development to plan for small group

instruction. According the Essential 3, small group and individual instruction is defined as "using a variety of grouping strategies, most often with flexible formed and instruction targeted to children's observed and assessed needs in specific areas of literacy development" (p. 3). In addition, during small group instruction, a teacher "ensures students use most of their time actually reading and writing" (p. 3). Furthermore, the teacher listens to students read and "coaches children as they engage in reading and writing, with reading prompts that focus primarily on monitoring for meaning, letters and groups of letters in words, and rereading" (p. 3). Also, a teacher "employs practices for developing reading fluency, such as repeated reading, echo reading, paired and partner reading" (p. 3). Additionally, a teacher provides, "explicit instruction, as needed, in word recognition strategies, including multisyllabic words decoding, text structure, comprehension strategies, and writing strategies" (p. 3). Lastly, a teacher "is deliberate in providing quality instruction to children in all groups with meaning-making the ultimate goal of each group's work" (p. 3). See Table 1 for a crosswalk between my scaffolding practicum findings and the Essential Literacy Practices K-3 content.

Table 1

Crosswalk: Practicum Findings and Essential 3 Bullets

Scaffolding Practicum Findings	Essential 3 Bullets
Who is Doing the Work?	Bullet 1: Children Actually Read & Write
Goal of differentiated instruction is to shift	Teachers ensure that children spend most of
control from teacher to student	their time actually reading and writing
Students Getting Stuck Initiates the scaffolding cycle, and then the teacher implements the scale of help	Bullet 2: Reading Prompts Teachers coach children as they read and write, with reading prompts
Teachers Believe Students Can Learn By teaching children ways to develop fluent reading that are scaffolded and include more support	Bullet 3: Develop Fluency Teachers employ practices for developing reading fluency including repeated reading, echo reading, paired and partner reading

Table 1 (Cont'd)

Teacher Knowledge of Students Evident at macro and micro level of scaffolding, and evident to launch contingent and adaptive teaching moves	Bullet 4: Explicit Instruction Teachers include explicit instruction, as needed, in word recognition strategies
Decoding vs Comprehension Scaffolding for decoding leads to making meaning; the teacher begins and ends the group with a discussion of meaning	Bullet 5: Meaning Making Focus Teachers are deliberate in providing quality instruction to children in all groups with meaning-making the ultimate goal of each

Standards for Reading. The three reading strands from the English Language Arts (ELA) CCSS contribute to the conceptual framework for this study (Council of Chief School Officers, 2010). Teacher candidates are introduced to the CCSS in TE 301 their junior year and use those standards in their lesson planning for TE 405 in the senior year, TE802 in the yearlong internship, and into their teaching careers. Each strand contains four broad standards that increase in complexity as the grade levels increase. The first strand is reading literature, the second is reading informational texts, and the third is reading foundational skills. The standards for reading literature and informational texts include key ideas and details; craft and structure; integration of knowledge and ideas; and range of reading and text complexity. The standards for reading foundational skills include print concepts phonological awareness, phonics and word recognition, and fluency. It is important for TCs to understand that these foundational skills are not the end goal of teaching, instead they are taught so that children become automatic and fluent readers and writers. The CCSS states that "instruction should be differentiated: good readers will need much less practice with these concepts than struggling readers will. The point is to teach students what they need to learn and not what they already know—to discern when particular children or activities warrant more or less attention." (Council of Chief School Officers, 2010, Foundational Skills Introduction for K-5).

Part 2: Understanding of Students' Literacy Skills, Strategies, and Knowledge

The second part of the conceptual framework focuses on TCs understanding of students' literacy skills, strategies, and knowledge. This part of the conceptual framework focuses on how teachers use assessments and standards to understand literacy development and instructional practices for literacy teaching. These components are taught in TE 301 in the junior year and are reviewed in TE 405. Teacher candidates learn about literacy assessments from texts on elementary literacy assessments (McKenna & Stahl, 2015, Leslie & Caldwell, 2010), class lectures, and field assignments. Additional information is learned in TE 405 from texts on early reading (Scanlon, Anderson, & Sweeney, 2016), class lectures, and field assignments. Ongoing observation and assessment is actually K-3 Literacy Essential Practice 9. Since our TCs spent a semester learning about literacy assessments and instruction, we will emphasize the content they already learned and will not teach this. Teachers must know where students are in their literacy development right now in order to plan and organize small group instruction.

Part 3: Observation of Exemplar Teachers Enacting Literacy Instruction

The third part of the conceptual framework focuses on TCs guided observations of exemplar teachers' videos of small group literacy instruction (Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force, 2016). The Introduction to K-3 Essential 3 clearly defines the format for a small group lesson, which includes five steps. TCs will be guided to observe, notice, and decompose hose steps. The first step is the teacher bringing the students together, based on an area of need they all share. When the teacher gathers them, she explains why they are in a group together, what they already do well, what they need to work on, and how this group will help them become better readers. The second step is the teacher implementing explicit instruction, based on a

research tested instructional teaching point. The teaching point is carefully chosen based on that particular group of student's literacy needs. One example is looking all the way through a word and reading every letter, not just reading the first two and making a guess. The third step in small group instruction is to have the students try out that teaching point in actual reading and writing. The materials for this part of the lesson are carefully chosen by the teacher to allow for students to read about a topic being studied in class, while not having students all read at the same level or the same book.

The fourth step in small group reading is the part of the lesson when TCs listen and scaffold student's reading. Teacher should lean in during each child's reading and listen to each child read, while coaching and prompting for meaning making and implementation of the reading skill or strategy taught earlier in the lesson. The fifth step in small group instruction is to bring the students back together to discuss two things. First, they talk about what they learned about the topic they just read. This is an important step in the small group lesson because it reinforces for students the purpose of reading: to comprehend the text to learn. After that, the teacher asks each student for an example of a word they just read in their text, using the targeted skill. This gives the teacher a chance to reinforce the message of the lesson and gives students an opportunity to reflect on their reading and to reinforce for themselves how they were applying the skill or strategy (see Appendix H for the small group lesson plan format).

Part 4: Enact Independently Literacy Instruction a Small Group of Students

The fourth part of the conceptual framework focuses on TCs' independent enactment of small group literacy instruction. This four-part framework prepared TCs to enact and reflect on small group instruction through the gradual release of responsibility from course instructor to TCs. According to K-3 Literacy Essential Practice 3, an additional phase should be added to the

GRR as defined in the literature review. In Pearson and Gallagher's (1983) original model, the highest level of support is teacher modeling or demonstrating, however, more support is needed to teach the students something new. The teacher must do something before modeling can begin. In other words, teachers must provide explicit teaching or explaining first and foremost. In this study, I will give TCs a set of experiences that prepares them to teach small group reading instruction that begins with explicit teaching. The model created for this study includes this additional phase (see Table 2). Phase 1 has the most teacher support, where the teacher gives explicit instruction to students before modeling or demonstrating begins. This phase is new to the GRR. In the former model, teachers would think out loud about literacy actions while modeling or demonstrating; in this model, teachers explain first, then model and demonstrate after that. Phase 2 has high teacher support, where the teacher models or demonstrates for students before they try it alone. Phase 3 has moderate teacher support, where the teacher and the students engage in the practice together. Phase 4 has low teacher support, where the teacher lets the students try the practice alone but is there to help if needed. Phase 5 is little or no teacher support, where the students do the task on their own.

The new model of the GRR was followed in this study as TCs learned to learn how to teach small group literacy instruction. In phase one of the GRR, TCs received full support through explicit teaching about the content of small group literacy instruction and how to use ongoing observations and assessments of students to plan for small group lessons. In this phase the instructor taught and TCs learned. This incorporated parts 1 and 2 of the conceptual framework above. In phase two of the GRR, TCs received high support by watching demonstrations of small group instruction through exemplar videos, to observe and notice what teachers and students said and did during small group instruction. In this phase the instructor did

the work and TCs watched. In phase three of the GRR, TCs received moderate support to work together to decompose practice from those videos to name exactly what happened in order to apply it to their own practice. In this phase the instructor did the work and TCs helped. In phase four of the GRR, TC received low support by planning and rehearsing their own small group literacy lessons. In this phase TCs did the work and the instructor helped. After phase four of the GRR, TCs learned part three of the conceptual framework and had enough information to shift from instructor control to TC control. In phase five, TCs received little or no support as they taught and video recorded their own small group lessons. In this phase TCs did the work, the instructor watched.

Table 2

Operationalizing the Conceptual Framework

The Gradual Release of Release of Responsibility from Instructor to Teacher Candidate

Level of INSTRUCTOR Support → Level of TEACHER CANDIDATE Control

Teach → Demonstrate → Shared Demonstration → Guided Practice → Independent Practice Full Support **High Support** Moderate Support TC Receives Low Support TC Observes Explanation Little Support **Exemplars** TC Decomposes Exemplars TC Plans and Rehearses TC Enacts Practice **Instructors Teach** TCs Do TCs Do Instructors Do Instructors Do TCs Learn TCs Watch TCs Help Instructors Help **Instructors Watch**

Adapted from Pearson and Gallagher, 1993; and Duke et al., 2011

Overview of the Dissertation

Given the relevance of scaffolding during small group reading instruction, it is important to understand how to prepare pre-service teachers to do that work. Differentiated small group

instruction is a recommended practice for improving student reading, however, teachers do not know the specifics for breaking down the steps to implement instructional scaffolding in small groups. Building on the conceptual framework described in this chapter, Chapter 2 presents the literature on scaffolding and learning to teach, as well as findings from my practicum study on scaffolding and how those constructs connect to the research questions in this current study. Chapter 3 explains the methods used in this study to answer those questions. Chapter 4 presents the findings from this design-based research study regarding the factors that enhanced and inhibited scaffolding during small group reading instruction and if teaching a series of three lessons contributed to pre-service teachers' of feeling more prepared to teach the next lesson. Finally, Chapter 5 discusses the ways in which the findings from Chapter 4 relate to the conceptual framework from this chapter and the literature review from Chapter 2. Chapter 5 also includes considerations and limitations, significance and implications, and final conclusions.

CHAPTER 2 – LITERATURE REVIEW

This chapter encompasses two main components including literature on scaffolding and literature on learning to teach. The literature on scaffolding is divided into early and more recent constructs of scaffolding, as well as macro-level and micro-level scaffolding. More specifically, macro-level scaffolding focuses on differentiated instruction and small group instruction, while micro-level scaffolding focuses on teacher decision making, and teacher and student interactions. Furthermore, the literature on learning to teach is divided into constructs of practice and how such constructs connect to noticing in teacher education, as well as how scholars define these constructs. More specifically, Cochran-Smith and Lytle (1999) focus on three conceptions of knowledge for, in, and of practice, and Grossman et al. (1999) focus on opportunities for noticing through representations, decompositions, and approximations of practice. The last section of this chapter includes the main findings of my practicum study and connects the literature and practicum findings to this dissertation study.

Literature on Scaffolding

The definitions of scaffolding have evolved over time. In this review of the literature, I begin with a discussion of scaffolding terms and how those definitions have developed over the last 40 years, which include the following concepts: the zone of proximal development, assisted problem solving, scaffolding, the gradual release of responsibility, contingent support, and adaptive and responsive instruction. Next, I focus on ways in which teachers implement scaffolding in the classroom at the macro-level of organization for literacy teaching, during differentiated, small group instruction. Then, I target micro-level of contingent and responsive scaffolding, through teacher decision making and contingent teaching moves during the gradual release of responsibility. Lastly, I link the research on scaffolding to research on learning to

teach as justification for this study on examining how teacher candidates learn to observe, notice, decompose, plan, rehearse, and enact scaffolding practices during small group instruction.

Constructs of Scaffolding

The terms differentiated instruction, small group instruction, scaffolded instruction, gradual release of responsibility, and the zone of proximal development are often used interchangeably when referring to just right instruction for young learners. According to Lose (2007), this type of instruction ignites a student's "strategic control over literacy processing while encouraging his independence and without doing for the child what he can manage for himself" (p. 17). Even though this type of instruction occurs in all subject areas, I am interested in scaffolded literacy instruction because research shows that children need scaffolding in small groups when learning to read (Foorman & Torgesen, 2001). According to dictionary.com (2016), a scaffold as a noun is a temporary structure, or as a verb is meant to give support.

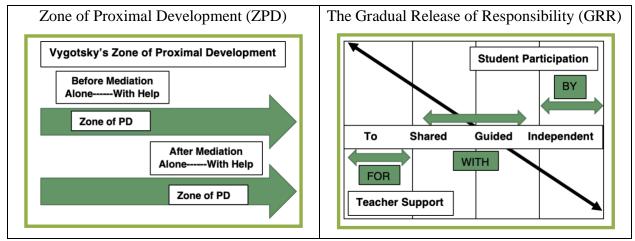
Early scaffolding constructs. The zone of proximal development and assisted problem solving are two scaffolding theories that developed during the 1970s. The concept of assisting students in achieving next steps of learning with the help of an expert other is called the Zone of Proximal Development (ZPD). The work of Vygotsky (1978) introduced educators to the ZPD in the 1970s, decades after his work was originally written. Vygotsky (1978) explained ZPD as "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 33). ZPD is a widely used concept in education as a way of supporting students' learning. The concept of assisted problem solving was coined by Wood et al. (1976), who wrote about the ZPD in terms of help or assisted problem solving that teachers give students when working "to solve a task or achieve a goal that would be

beyond his unassisted efforts" (p. 90). The concepts of the ZPD and assisted problem-solving inspired Wood et al. (1976) to name such support as "scaffold" to define research around mother and child dyads when problem solving in block building scenarios.

Instructional scaffolding and the gradual release of responsibility are two scaffolding theories published in the 1980s and 1990s. The term instructional scaffolding explains the instructional relationship between a child and an expert other when the child is on the cusp of learning something new. According to Applebee (1983), "The scaffolding provided allows the novice to carry out new tasks while learning strategies and patterns that will eventually make it possible to carry out similar tasks without external support" (p. 169). During this time, the concept of the Gradual Release of Responsibility (GRR) helped teachers understand the process of scaffolding. According to Pearson and Gallagher (1983), when the teacher does most of the work of a task, "he is 'modeling' or demonstrating the desired application of some strategy" (p. 35). Furthermore, when the student does most of the work of a task, "she is 'practicing' or 'applying' that strategy" (p. 35). The learning happens in the transfer of the task from the teacher to the student, "between these two extremes" (p. 35) and is called the gradual release of responsibility. Educators and researchers created visual representations to portray Pearson and Gallagher's GRR, to clarify the movement of support during a scaffolded teaching episode and to help teachers conceptualize the scaffolding process as it unfolds. A rectangle divided by a diagonal line shows the increase or decrease in support between the teacher and student. On one end of the rectangle, the teacher does all the work, and on the other end, the student does all the work. The space in the middle represents the increase and decrease of support between teacher and student. Early definitions of scaffold were now applied as a representation for learning situations between student and teacher. See Figure 2 for samples of these representations.

Figure 2

Zone of Proximal Development and The Gradual Release of Responsibility



ZPD Adapted from Mathhomebre, 2016; GRR Adapted from Mooney, 1988

Teachers took up the terms modeling, demonstrating, sharing, guiding, practicing, and applying as ways to release control on the continuum of help known as GRR. The terms scaffolding and the GRR were now used in education as ways for teachers to assist, support, or help students in learning to do something independently. Teachers learned that "scaffolding is a tool for teachers to use to support children to learn skills and how to apply them through the work they do and therefore to become independent learners" (Gibbons, 2002, p. 36). Even though Pearson and Gallagher (1983) enlightened teachers about the importance and meaning of scaffolding, the phases of the GRR were still conceptual; teachers needed more information about *how* to model, guide, and build independence in reading and writing.

Recent scaffolding constructs. Contingent, adaptive and responsive teaching are scaffolding constructs published since the year 2000. With the implementation of scaffolding and the GRR, teachers became experts at modeling and allowing for independent practice; however, they did not know how to precisely release control along the guided part of the continuum (Parsons, 2013). Rodgers (2004) and Lose (2007) wrote about contingent teaching, as they

moved the conversation about scaffolding to the complex relations of one-to-one tutoring in Reading Recovery, a program for low achieving first grade students. According to Rodgers, "The complexity of scaffolding is described in terms of the instructional decisions that teachers must make on a moment-by-moment basis about the kind of help (what to work on) and level or amount of help to provide at points of difficulty during reading" (p. 501). Lose (2007) applied Wood's levels of support to Reading Recovery and stated that although contingent support seems uncomplicated, "it is, according to Wood (2003), a task that is quite difficult and one that can never truly be mastered" (p. 23). Teachers need clarification of scaffolding moves at the guided part of the GRR.

These moment-by-moment decisions are similar to Lose's (2007) contingent support and similar to the third step of Parsons et al.'s (2013) model of differentiated instruction, which is called *adaptive and responsive teaching*. The guided portion of the GRR is very conceptual and abstract for teachers, so it must be broken down and discussed in terms of what teachers must do to release responsibility. As Parsons et al. (2013) explained, "Teachers must be able to be responsive to unanticipated issues that arise when their differentiated plans are put into action" (p. 40). It is important to separate scaffolding from the other terms used alongside it because it keeps teachers at the macro level of support instead of the micro level of support. Scaffolding must be analyzed at a small grain size to allow change in instruction.

Macro-Level Scaffolding

Scaffolding often occurs during differentiated and small group instruction. That kind of teaching, however, is often thought of as a way to organize students for instruction. Scaffolding at the conceptual, organizational, and procedural level is large in scope. I call this the *macro-level of instructional scaffolding*. What really occurs during differentiated instruction is the

question at hand. The above terms are helpful, but are not enough. In the following section I discuss *macro-level of instructional scaffolding* in the areas of differentiated and small group instruction.

Differentiated instruction. Tomlinson (2008) posits that differentiated instruction is two-fold, one part is giving students access to content and knowledge, and the other part is providing students with access to literacy as future lifelong learners. In stating that, Tomlinson argues that teachers not only must plan and organize for instruction that meet the needs of all students, they must also continually provide adaptive and responsive teaching that builds a generative system for lifelong learning. Clay (2001) calls this phenomenon building "selfextending systems" (Clay, 2001; Doyle, 2013), which means that students learn more about reading and writing each time they work on reading and writing. In addition, structuring the environment in a classroom, with intentional opportunities to learn, can happen in a variety of ways. Tomlinson makes clear that teachers should not just implement these structural practices because they are best practice; instead, they must implement them because that is what differentiated instruction means (Tomlinson, 2008). During planning and organization, teachers must know content, know where students are as learners, and know students' learning styles (Parsons et al., 2013, p. 40). Teachers who differentiate instruction have knowledge of the content and knowledge of the students, and when combined, that knowledge can "help students become focused, motivated, and independent learners" (Tomlinson, 2008, p. 26). In other words, if teachers know their students as learners, they can help students know themselves as learners, too. Teachers often get as far as knowing students and grouping students, but do not know what to do next (Parsons et al., 2013).

As an expert in differentiation, Tomlinson (2008) created a framework to help educators think about the phases of differentiation. The first step, knowing students, incorporates learning about students through assessments, observations, and conversations about what motivates them. The second step, monitoring progress, incorporates ongoing learning about students through monitoring students' progress through the cycle of learning, including assessment, planning, teaching, and evaluating. The third step, adapting teaching, incorporates responsive and contingent teaching during a lesson based on students' interests, what they need next, and how they learn. Scaffolding seems to take place in third step of differentiation. According to Tomlinson, most research on differentiated instruction stops with assessment and planning. She argues that adaptive teaching is the third step for teachers, and she includes a final step, which is setting students up for a literate life and releasing control of learning, where students "take charge of their own learning" (p. 28).

According to Parsons (2013), "as diversity of the K-12 student population increases, it is critical that teachers differentiate their instruction to meet all students' needs" (p. 42). With academic diversity in classrooms, differentiation is necessary for a portion of daily instruction. One way teachers differentiate learning for students is by grouping them into needs-based groups based on assessment data. Literacy researchers agree that grouping is crucial to advance students in their learning (Duke, et al., 2011; Foorman & Torgesen, 2001). However, teachers must learn how to scaffold their instruction in finer degrees of detail, in addition to initial planning for differentiated lessons. The process of simply grouping students together in the name of differentiation is not enough; teachers must adjust their levels of support and consider their responses while teaching. Firmander, Reis, and Sweeny (2013) suggest that differentiation can occur through assorted groupings and time schedules, varied opportunities for enrichment and

acceleration, and deliberate plans for scaffolding. Furthermore, they suggest that differentiation relies on teachers' "knowledge and skills" to assess and teach students, to help them progress (p. 11). According to Duke et al. (2011), "differentiation should be a priority" (p. 82), and "more research and development is needed around needs-based grouping for comprehension instruction" (p. 81). Differentiation is necessary for student growth in reading, even though it is challenging for teachers in terms of planning and implementation.

Small group instruction. Four studies contribute to the research on the importance of small group literacy instruction for the K-3 Literacy Essential Practice 3 (Michigan Virtual University, n.d., Essential 3 Introduction Slides). In one study, Elbaum et al. (1999) discuss the benefits of small group practices and reading outcomes for students with disabilities and found that small group instruction was more effective than whole group. In a second study, Taylor et al. (2000), discuss small group lessons in primary grade reading instruction in low-income schools, and found that more effective teachers had students in small groups more often than whole class. In a third study, Connor et al. (2011) discuss the impact of instructional interactions on third graders' reading comprehension by differentiating literacy instruction and found that students in small groups performed better than those in whole group. Finally, the authors of the What Works Clearinghouse Practice Guide on Teaching Academic Content and Literacy to English Learners in Elementary and Middle Grades (2007) discuss the benefits of small group literacy instruction for students who need support in literacy, who live in poverty, and those who are English learners (Michigan Virtual University, n.d., Essential 3 Introduction Slides).

Organization for small group instruction is often based on assessment data, which is at the macro-level of support. Even though small group instruction increases reading performance, it important for teachers to vary the ways in which they organize students for small group instruction. Duke (2016), in K-3 Literacy Essential Practice 3 on small group literacy instruction (Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force), asserts five reasons for varying group structures when planning for small group instruction. First, levels are very approximate. For example, children might read at a higher level than the assessment shows based on their interest and background knowledge. Furthermore, students can be at the same level for different reasons and therefore need different instruction. For example, students with stronger word recognition skills might compensate for their weaker meaning skills, and vise-versa; students with stronger meaning making skills might compensate for their weaker word reading skills. Duke (2016) suggests that stronger skills may "bootstrap" and fix the problem. Teachers who place students at the same level all the time, could miss the opportunity for targeted instruction. In addition, students who read below grade level might never get to work on reading and problem-solving grade level texts. For example, students need opportunities to read and get stuck on grade level texts, especially as they enter the third-grade state reading tests. Furthermore, research studies challenge whether teachers should always match students with text levels. For example, research on partner/dyad reading and the Concept Oriented Reading Instruction (CORI) approach shows that reading level did not matter in the students' reading gains. Finally, students who are in leveled reading groups all the time might develop negative self-perception of themselves as readers.

I argue that planning and organizing for differentiated instruction is the conceptual and procedural part of preparing for differentiated instruction. The act of scaffolding while teaching, however, is the contingent and responsive part of in the moment instruction. Even though the need for differentiated instruction has existed for decades, teachers know more about the *macro-*

level of instructional scaffolding, which remains at the conceptual, planning, and organizational level. Teachers group students together, but do not change how they respond and adapt while teaching. In other words, once teachers place students in a small group they need to know what to say and do while teaching them; they need to know how to scaffold the learning. In this study, TCs engaged in the small steps in planning and implementing small group literacy instruction with support and feedback.

Micro-Level Scaffolding

At the other end of macro-level of instructional scaffolding is contingent and responsive scaffolding, which includes teacher decisions and actions that are more narrow, precise, and needs-based than the macro-level scaffolding. I call this the *micro-level of contingent and responsive scaffolding*. We know the tenants of differentiated instruction and small group instruction, which focus on conceptual, organizational, and procedural levels. The question remains about how teachers make scaffolding moves when teaching students in differentiated small groups, to support them in decoding and meaning making while reading continuous text. In the following section I explain micro-level scaffolding as teacher decisions and actions.

Scaffolding decisions. Research is strong on the planning portion of differentiated instruction; however, more research must be conducted on what takes place during actual instruction (Parsons et al., 2013). The literature suggests that planning might include compacting the curriculum, flexible grouping, staggered activities, and student accountability. Parsons encourages researchers to look closely at what happens during teaching because this portion has been neglected. He posits that the missing piece of differentiated instruction is the adaptive, responsive aspect of a teacher's' practice during a lesson, which includes "real time" adjustments teachers make and "moment-by-moment adaptations" they decide to implement during teaching

(p. 39). Teachers not only need to know what to teach their students and how to teach it, they also need to know when to use or change practices based on the conditions of the lesson (Parsons et al., 2013; Tomlinson, 2008). In order to be adaptive, teachers must be reflective in two ways: by applying "reflection-on-action" once the lesson is taught, and "reflection-in-action" while actually teaching the lesson (Parsons et al., 2013, p. 41). Both types of reflection are necessary for adaptive, responsive teaching. Adaptive, responsive teaching is contingent on many aspects of the lesson including the learner, the text, the activity, and the socio-cultural context (Snow, 2002). Teachers need systematic and explicit lesson plans for differentiated instruction, however, they must be responsive and adaptive during lessons.

Ankrum and Bean (2013, 2014) researched verbal scaffolding in a single case study. Kindergarten small group differentiated lessons were videotaped, transcribed, and coded for verbal scaffolding, which is necessary to increase comprehension and higher order thinking. A series of one-week lessons were studied three times in a year and included teacher interviews before and after the lessons. The data was analyzed using constant comparison, and the findings suggested that the teacher used "high levels conversations" (p. 42). Types of talk included direct explanation, explicit modeling, and invitations to participate for clarification, verification, and telling. This type of intentional verbal scaffolding is a part of differentiated instruction and is adaptive and responsive teaching because it is the moment-to-moment decisions made when working with differentiated groups in reading. According to Ankrum and Bean (2013, 2014), "exemplary teachers of literacy weave scaffolds into their reading instruction, particularly in small group lessons" (p. 40). This extends students' learning in their zone of proximal development. When using verbal scaffolds, like prompts, questions, and praise, teachers use language to help the students build meaning of the text. In this study, verbal scaffolds were

implemented to extend students' learning, which relates to my current study on TCs' listening, scaffolding, prompting, and coaching during step four of the small group reading lesson.

Questions remain about how we know scaffolding when we see it, what scaffolding looks like in teaching, and how teachers learn to scaffold, which will be explored in this dissertation.

Scaffolding actions. Wood et al. (1976, 2003) and Lose (2007) broke down the steps of guided instruction into moves teachers can make when carrying out differentiated, small group instruction. Lose (2007) applied Wood et al.'s (1976) levels of assisted performance to create a model that helps teachers provide less support to more support when implementing contingent, responsive, and adaptive teaching during guided instruction. Level 1 is "general verbal intervention," when the teacher focuses on the child's problem-solving behaviors. Level 2 is "specific verbal intervention," when the teacher focuses on prompts, comments to continue, or reminders. Level 3 is "specific intervention and nonverbal information," when the teacher continues to focus on level 2 interventions but adds nonverbal cues. Level 4 is "prepares for next action," when the teacher focuses on adding more support and giving one or two choices to solve problems. Level 5 is "demonstrates action," when the teacher focuses on modeling or demonstrating, with verbal and nonverbal cues. These unique features of the gradual release of responsibility, from less to more support, are evidence of the explicit language and nonverbal cues teachers implement when scaffolding in differentiated, small group instruction (Lose, p. 18).

There are more studies on micro-level scaffolding. In one study, Gibbons (1998) conducted discourse analysis research of one teacher in a mainstream elementary classroom, where all but two students were from homes where English was a second language. The teacher used micro-level scaffolding during a three-part cycle of instruction (small group work, teacher

guided reporting, and journal writing), within science and English language learning. She studied scaffolding moves by analyzing conversational and text-based discourse through transcripts of student-teacher interactions, which progressed from more teacher support to less teacher support. Stage one was small group work, which included a context-dependent hands-on magnetism activity, an authentic discussion with science terms, and an expectation that students would report their findings to the whole class. Stage two was teacher guided reporting, which included less context-dependent discussion, introduction of the term "repel," student rehearsal of what they would say (which was closer to written text), and teacher support of the reporting out of the answers. Finally, stage three was journal writing, which was furthest away from the concrete experience, that showed what the students learned about science and language and was supported by the teacher. Gibbons found evidence of longer stretches of language use, improved use of school registers around the academic language of science, and "uptake" of written academic language (p. 113). This study challenged the traditional ways in which English language learners are taught, which separates English and content areas, and supported micro-level scaffolding as a way to teach academic content through the use of English in elementary classrooms.

In a second study, van de Pol et al. (2014) conducted an experimental investigation of 30 teachers who participated in a professional development program on the model of contingent teaching (MCT), that had four steps (diagnostic strategies, checking diagnoses, giving contingent support, and checking of student learning), during their secondary social studies instruction. Step one was diagnostic strategies, which included asking diagnostic open-ended questions. Step two was checking the diagnoses, which ensured that teachers understood the students' thinking through Socratic dialogue. Step three was giving contingent support, which included two types of contingency: contingency control and contingency uptake. Step four was checking of student

learning, which included checking for students' *new* understanding through demonstration. They compared 17 teachers who implemented the MCT, with 13 teachers who did not use the MCT. Both groups of teachers taught the same five-day social studies lesson plan. The authors videotaped lessons, coded cycles of contingent teaching using teachers' three turn sequence and identified the MCT steps used in interaction fragments. The authors found that teachers who attended the MCT PD, had "more complete cycles of contingent teaching", than those who did not attend (p. 600).

In a third study, Rodgers et al. (2016) conducted an experimental research investigation of 10 teachers who made three types of contingent scaffolding moves (temporal, instructional, and domain contingency) during one-to-one reading instruction. They defined teacher moves per teacher-student scaffolding cycles. Temporal scaffolding was the number and frequency of teacher moves, instructional scaffolding was the amount of support given, and domain contingency was the type of response given to students at error. The authors compared scaffolding moves of six teachers whose students had "lower average gain scores at the end of the year" with four teachers whose students had "higher average gain scores at the end of the year" (p. 345). They analyzed 1,199 teacher-student moves with hierarchical linear modeling analysis and found no significant difference with temporal contingency or instructional contingency between groups. They did, however, find statistically significant differences for domain contingency, which is teachers' knowledge of content to support students at error. Their findings suggest that more research on contingent scaffolding is necessary.

In summary, the concept of scaffolding has evolved over the years to represent support that teachers provide for students when teaching new concepts or skills. Based in the theories of Vygotsky (1912, 1978), Wood et al. (1976, 2003), and Pearson and Gallagher (1983),

scaffolding requires knowledge of the student's zone of proximal development, knowledge of assisted problem solving, and knowledge of the gradual release of responsibility. Educators often assign the word scaffolding when describing how to plan for small group, differentiated instruction, which is broad in scope and encompasses the conceptual, organizational, and procedural levels of guided instruction. I argue that teachers need more than conceptual ideas about scaffolding. They need to learn the moves that are smaller in scope, that include decisionmaking actions that occur during actual teaching. This study examined factors that enhanced and inhibited pre-service teachers' scaffolding during small group reading instruction, as they observed, enacted, and reflected on their own small group teaching over a series of three lessons. It also explored teacher candidates' preparedness for consecutive lessons and evidence of improved instruction over a series of three lessons. These are compelling questions for theory and practice because teachers are charged with differentiating instruction to meet the needs of all students, however they have not been explicitly taught how to do this while teaching, beyond following a series of steps at the conceptual and organizational levels (Parsons et al., 2013; Pentimonti, 2010; Pentimonti & Justice, 2011; Rodgers 2004; Rodgers et al., 2016; Tomlinson, 2008). In this study, TCs learned how to observe, notice, decompose, enact, and reflect on their own small group instruction, and then responded to questions about how prepared they felt to implement these practices.

Literature on Learning to Teach

Learning to teach small group literacy lessons adds complexity to this study. In this section I review relevant research on learning to teach. I begin with constructs of practice and how it connects to teacher education and literacy education. Next, I connect literacy practice to Cochran-Smith and Lytle's (1999) three conceptions of knowledge and understandings for, in,

and of practice. Next, I join Cochran-Smith and Lytle's (1999) knowledge for, in, and of practice, with Grossman et al.'s (1999) opportunities for TCs to observe and notice practice through representations, decompositions, and approximations of practice. Lastly, I connect the literature on scaffolding to the research on learning to teach as a rationale for this study on examining how teacher candidates learn to observe, notice, decompose, plan, rehearse, and enact scaffolding practices during small group instruction.

Constructs of Practice

The term practice has many definitions (Merriam-Webster dictionary, 2016). One definition is to be "professionally engaged," such as in practicing law, medicine, or teaching. Another definition is to "perform or work repeatedly, as to become proficient." I argue that practice in education aligns with the first definition, because it represents teachers as professionally engaged, not as repeating a performance to become proficient. Teachers professionally engage in their work while balancing the competing demands of stakeholders in the field of education, including educational policy, research, and school administrations. In this section, I examine practice for teaching and practice for literacy instruction, as a lens to think about preparing TCs to learn the essentials of small group literacy instruction as a practice.

Lampert (2010) defines teaching as a collection of practices - practice as constant and habitual, as best practices, as competency statements, as core practices, as generative practices, and as high leverage practices. When viewed this way, teaching as a collection of practices can focus on practice without attending to student learning. It is problematic to analyze practices for learning teaching without discussing ways in which those practices ensure student learning. Practices in teaching could inadvertently become constant and habitual behaviors implemented

in teaching, without ever impacting student learning. This aligns with Merriam-Webster's second definition of practice, as repetition of behavior, instead of professional engagement.

Practice in Teacher Education. In Lampert's (2010) analysis, four conceptions of practice evolved, beginning with "practice as that which contrasts with theory," moving to "teaching as a collection of practices," continuing with "practice for future performance," and arriving at the "practice of teaching" (pp. 23-29). Lampert's first two conceptions of practice focused on teaching without attending to student learning, practice for teaching alone. In this scenario, the discussion of theory and practice in teacher education is presented as a dichotomy, or a linear progression of teaching. This common view is limited because it focuses on theory and practice as two distinct entities that are learned separately, instead of focusing on the reasons why teachers are in schools in the first place - to accelerate student learning. Lampert's (2010) last two conceptions of practice focused more intentionally on practice while attending to student learning. In this scenario, practice for future performance and practice of teaching, both portray practice as doing something, such as rehearing and getting feedback. Lampert's final comment on the term practice - as a common goal for all teachers to improve student learning - provides a recommendation for preparing teachers for a "community of practice" (p. 30), where they learn together as novices and veterans, teach ambitiously, and help students learn. These components of practice align with Cochran-Smith and Lytle's (1999) knowledge for-in-of practice.

According to Cochran-Smith and Lytle (1999), the first component of practice, knowledge-*for*-practice, is the declarative and procedural knowledge needed for teaching. An example of knowledge-*for*-practices is knowing how students comprehend texts. The second component of practice, knowledge-*in*-practice, is the observable and assessable practices teachers carry out *in* teaching. An example of knowledge-*in*-practice is the ways in which

teachers teach comprehension strategies to students in schools. The third component of practice, knowledge-of-practice, are the "habits of professional action and moral commitments" (Council of Chief School Officers, 2013, p. 6) that teachers need of teaching, that guides decision making. An example of knowledge-of-practice is the customs established in a school culture around learning together as teachers and teaching students to comprehend while reading to further their learning.

In the area of literacy instruction, teacher preparation programs are charged with preparing teacher candidates to plan, implement, and evaluate strong literacy practices when teaching diverse groups of students in school settings (Council of Chief School Officers, 2013). An essential practice expected of all elementary teachers is differentiated instruction for diverse learners. One way teachers implement differentiated instruction is through scaffolded, small group teaching (Council of Chief School Officers, 2010, The IRIS Center, 2005, 2016). This practice is complex because it involves implementing a series of instructional moves and decisions while teaching to accelerate student progress (Parsons et al., 2013; Tomlinson, 2008). Even though it is complex, all teachers must add differentiated instruction methods to their practice to meet the learning needs of all students. Planning for differentiated small groups in literacy is an essential first step in teaching; however, actually enacting those practices with students is even more important in meeting their diverse learning needs (Parsons et al., 2013; Tomlinson, 2008). This dissertation study seeks to understand how TCs learn to plan, enact, and reflect on small group instruction over a series of three lessons.

Knowledge and Practice

Teacher preparation programs are often criticized for the ways in which they instruct teacher candidates in theory and practice in preparation for the profession (Washburn, Joshi, &

Cantrell, 2011). The purpose of Lampert's (2010) article was to clarify "practice in relation to learning teaching" (p. 21). She made a point to name this process "learning teaching" instead of "learning to teach." Her specific naming convention put learning in the present tense, meaning that learning teaching happens during teaching, instead of something learned first (in coursework) and implemented later (in practice). She also emphasized that "classroom teaching is relational work" (p. 22); it requires complex interactions with both students and subject matter. Learning teaching in university settings, away from students and content, may not be the best way of learning teaching. However, learning teaching during instruction with students when they learn content causes "multiple kinds of problems... in establishing and maintaining relationships with students and subject matter" (p. 22, emphasis added). Preparing teacher candidates to juggle students and subject matter through practice is not an easy problem for teacher educators to solve. Simply putting teacher candidates in front of students in classrooms, without purpose and planning, is similar to the apprenticeship model of learning to teach. Lampert raised many questions about the happy medium for learning practice when learning teaching. Teacher preparation programs must be more intentional when placing teacher candidates in the field to learn teaching. This dissertation study seeks to understand the ways in which TCs balance the complexities of preparing and enacting teaching over a series of three small group lessons.

Knowledge-For-Literacy Practice. Cochran-Smith and Lytle's (1999) first construct, knowledge-for-practice, can be defined as the formal knowledge needed to teach. In the field of education, this is often known as content knowledge (Shulman, 1998). Even though knowledge-for-practice is essential for teachers to be successful practitioners, it is not the only knowledge teachers need. Since my research focuses on literacy practices, I call this "knowledge-for-literacy practice." Formal knowledge for differentiated, small group reading instruction is declarative and

procedural knowledge in the areas of phonics, phonemic awareness, fluency, vocabulary, and comprehension (McKenna & Stahl, 2015). In addition to that content, teachers need knowledge of students' understandings in those content areas. This dissertation study seeks to understand how TCs' knowledge-for-literacy practice, in the areas of literacy development and instructional practices (Conceptual Framework Part 1), along with students' literacy skills, strategies, and knowledge (Conceptual Framework Part 2), assists them with planning and enacting small group reading lessons over three weeks.

Knowledge-In-Literacy Practice. Cochran-Smith and Lytle's (1999) second construct, knowledge-in-practice, can be defined as the practical knowledge needed when implementing the formal knowledge mentioned above. In the field of education, this is often known as pedagogical knowledge (Shulman, 1998). Even though knowledge-in-practice is essential for teachers to be successful practitioners, it is not the only knowledge teachers need. I call this knowledge-inliteracy practice, because my research focuses on literacy teaching and learning. Practical knowledge for differentiated, small group reading instruction includes the observable and assessable knowledge of pedagogy, which includes the actual teaching of phonemic awareness, phonics, fluency, vocabulary, and comprehension (McKenna & Stahl, 2015). Teacher candidates who have "opportunities to probe the knowledge embedded in the work of expert teachers" (p. 250), will learn knowledge about teaching in practice. In other words, a teacher's pedagogical knowledge can be learned, observed, and assessed while they teach. According to Cochran-Smith and Lytle (1999), teachers will learn knowledge-in-practice "when they have opportunities to examine and reflect on the knowledge that is implicit in good practice" (p. 262). Reconnecting coursework and field work in literacy methods classes could help make those opportunities to notice more explicit for future teachers. This dissertation study seeks to understand how TCs'

knowledge-in-literacy practice in the area of observation of exemplar teachers enacting instruction (Conceptual Framework Part 3), assists them with planning and enacting small group reading lessons over a series of three lessons.

Traditionally, university teacher preparation programs provide many opportunities for pre-service teachers to learn knowledge-for-practice and provide limited disconnected opportunities to learn knowledge-in-practice. In our teacher preparation program, teacher candidates spend more time learning content knowledge for teaching at the university, than they do learning pedagogical knowledge in the field. For example, in the first course in our literacy methods sequence, pre-service teachers learn the content, procedures, and essential knowledge for teaching reading through lectures, course readings, and the Common Core State Standards (National Governors Association Center for Best Practices, & Council of Chief State School Officers, 2010), and they learn the pedagogical and performance knowledge for teaching reading through field experiences outside of the university setting. Field experiences that are separate from methods courses cause a disconnect between knowledge and performance. Therefore, "to improve teaching, teachers need opportunities to enhance, make explicit, and articulate the tacit knowledge embedded in experience and in the wise action of very competent professionals" (pp. 262-263). Placing methods courses in school settings that leverage the expertise of practicing teachers could help bridge this gap.

Knowledge-Of-Literacy Practice. Cochran-Smith and Lytle's (1999) third construct, knowledge-of-practice, can be defined as the critical knowledge needed for teaching. This construct is a reform initiative and has not been widely applied in the field of education. As with the above two constructs, I call this knowledge-of-literacy practice. Critical knowledge for differentiated, small group reading instruction includes the "habits of professional action" and

"moral commitments" to teaching and learning that are necessary for teaching reading (Council of Chief School Officers, 2013, p. 6). Critical habits and commitments to teaching *all* children to read are evident in teachers who build on students' strengths when learning about them as people and teaching them something new. According to Cochran-Smith and Lytle (1999), "active learning requires opportunities to link previous knowledge with new understandings" (p. 258). In other words, this third construct is necessary for teacher candidates to learn about teaching while teaching in a reflective fashion. The more opportunities pre-service teachers have to "explore and question their own and others' interpretations, ideologies, and practices" (p. 278), the more critical they will become as teachers. This dissertation study seeks to understand how TCs' knowledge-of-literacy practice in the area of their own enactment of literacy instruction with a small group (Conceptual Framework Part 4) assists them with planning and enacting small group reading lessons over time.

More specifically, teacher educators need to provide "school structures that enhance opportunities for collaboration and collegiality among teachers" (Cochran-Smith and Lytle, 1999, p. 281). University teacher preparation programs do not always provide opportunities for pre-service teachers to learn knowledge-of-practice. The main focus of teacher preparation programs has been on content for teaching and pedagogical tools (Cochran-Smith and Lytle, 1999). Teaching practice was traditionally viewed as doing teaching, without considering the teacher's identity, how teaching is broken down, and why teachers implement it in a particular way (Grossman at el., 2009). In this study, TCs learned and reflected on their own learning and teaching of small group literacy instruction. In the next section, I link Cochran-Smith and Lytle's (1999) knowledge for-in-of practice with Grossman et al.'s (2009) opportunities for student noticing, which include representations, decompositions, and approximations of practice.

Practice-based Teacher Education

Teacher candidates are often inundated with classroom behaviors and practices when observing classrooms to learn to teach. With all the content to be learned for teaching and all the commotion of daily classroom life, it is difficult for teacher candidates to notice specifics of practice. Teacher preparation programs can help new teachers focus their attention on precise practices, when spending time in classrooms. Levin, Hammer, and Coffey (2009) make a case for focusing novice teachers' attention on student thinking, as opposed to focusing solely on teacher identity and classroom management at the beginning of learning to teach. Their argument, that teachers can learn to construct or reconstruct their teacher identity and learn about classroom management during instruction and focus attention on student thinking at the same time, is contrary to traditional teacher preparation programs' dominant focus on the developmental or stage theory of learning to teach. In that model, novice teachers must learn to look inward at their own identity and learn about classroom management before they can begin to focus on student thinking during instruction. Levin et al.'s (2009) argument presents learning to teach as either a dominant development/stage theory versus a new focus on learning to teach that focuses in on student thinking. Presenting this binary assumes that teacher preparation programs follow the stage theory, without considering specific teacher preparation program's purpose or vision in preparing teachers to teach.

Lampert (2010) argued that theory and practice are intertwined in teaching, however, the field treats them as distinct in the ways in which they prepare teachers - teaching theory at the university and practice in the field placements. This binary distinction of learning knowledge-for-practice (content focused, declarative, procedural, and essential), and learning knowledge-in-practice (practical, pedagogical, observable, assessable, and performance based) (Council of

Chief School Officers, 2013; Cochran-Smith & Lytle, 1999), is limited and closer to the apprenticeship model of teaching, which is not a widely agreed upon method for preparing teachers. Teachers candidates who learn in this way may believe "teaching practice is something one does by oneself while doing the work" (Lampert, 2010, p. 24). An alternative to this view is where teacher educators prepare teachers to teach critically and collaboratively in a variety of contexts with diverse groups of students to promote student learning.

Grossman et al. (2009) constructed a framework for which novices build teaching practices around the term "relational practices" (p. 2057). For example, in teacher education, relationship skills are integral to one's practice. When teacher preparation programs in university settings maintain the disconnect between coursework and fieldwork, the relationship building required with adults and students is difficult to practice and improve. When university students do work in schools, they are not with professors or classmates to assist them in constructing knowledge for, in, and of practice. In other words, how can future teachers learn to work with students, mentors, staff members, principals, and families if they are not assisted in that work? According to Grossman et al. (2009), teacher candidates should be given opportunities to observe effective practice through representations, try out small parts of practice through decomposition and rehearsal with classmates, and implement approximations of practice on their own with elementary students (Cochran-Smith & Lytle, 1999; Grossman at el., 2009; Lampert, 2010). In this dissertation study, TCs link theory and practice in this way.

Representations. Opportunities for teacher candidates to notice complex teaching practices can occur through representations, decompositions, and approximations (Grossman et al., 1999). Representations of practice are the ways in which practices are "represented in professional education and what these various representatives make visible to novices" (p. 2058).

In other words, teacher candidates will have opportunities to learn the formal or content knowledge for a literacy practice through observations and representations. In the senior level literacy methods course at MSU, preservice teachers should learn about the pedagogy of differentiated instruction through scaffolded small group instruction. In order for teachers to learn scaffolded small group instruction, they should observe representations. In this study, TCs were given opportunities to "notice" expert teachers implementing practice and "try out" specific moves to gradually release and increase support for learners as they teach reading.

Decompositions. In addition to having opportunities to notice using representations, teacher candidates need opportunities to notice complex teaching practices through decompositions (Grossman et al., 1999). Decomposition of practice is "breaking down practice into its constituent parts" (p. 2058). In my literacy methods course, teacher candidates had opportunities to learn the small pieces of pedagogical and practical knowledge for literacy practice and then tried them out with peers. For teachers to learn differentiated, scaffolded small group instruction in the senior level literacy methods course, students should do more than observe representations by exemplar teachers. In this study, I provided opportunities for TCs to "notice" expert teachers implementing literacy practices and "try out" those moves to gradually release and increase support for learners as they taught reading to their own small group lessons. Moving beyond observing and noticing expert teachers to implementing part of the practice themselves is an intentional move of decomposition.

Approximations. In addition to having opportunities to notice teacher expertise using representations and decompositions, teacher candidates need opportunities to notice complex teaching practices through approximations of practice (Grossman et al., 1999). Approximations of practice "refer to opportunities for novices to engage in practices that are more or less

proximal to the practices of a profession" (p. 2058). In other words, TCs had opportunities to try out small pieces of scaffolded small group instruction with peers. Trying out this practice, under the supervision of a course instructor, helped teacher candidates learn small group literacy teaching. In this study, TCs approximated practice by rehearing lessons they planned.

This method of teaching teachers focuses teacher candidates' attention on teacher moves at all three levels of noticing and increases student learning at the same time. We do not want TCs to think that teaching is mimicking or copying a mentor teacher's behavior. Instead, we want teachers to take the stance of a learner throughout the process of learning to teach by learning knowledge of practice, seeing it enacted by effective teachers through exemplar videos, and continuing to take the stance of learner by learning to unpack representations, decompositions, and approximations of practice themselves (Lampert 2010; Cochran-Smith & Lytle, 1999). In this section I reviewed research that contributed to sense making of elementary teacher candidates' "learning to teach" diverse learners in school settings in a teacher preparation program. I highlighted the theme of Cochran-Smith and Lytle's (1999) "opportunities to learn" and linked those to Grossman et al.'s (2009) opportunities for TC's observations and noticing. This review contributes to the following two sections, where I highlight the findings from my practicum project on scaffolding and explain connections to this dissertation on preparing teacher candidates to purposefully plan, enact, and reflect on small group literacy practices.

Practicum Research Findings

To begin looking at gaps in the research regarding how teachers scaffold during small group reading instruction, I planned, implemented, and evaluated a practicum study on scaffolding during small group reading instruction. It was my intention to unpack the scaffolding practices of experienced teachers and connect those to pre-service teacher learning on this topic.

The findings from the practicum study are relevant to this dissertation study because they connect the ways in which teacher educators can learn from practices of veteran teachers to prepare pre-service teachers to scaffolding during small group instruction. In the practicum study, I investigated the ways in which two effective elementary teachers scaffolded students' decoding during differentiated, small group reading instruction to promote student success in independent reading. I implemented a multiple case study to analyze micro-level scaffolding moves that included what teachers say and do during such instruction. The findings for this practicum study helped inform my current dissertation study.

For the first practicum question, regarding how effective elementary literacy teachers scaffold students' decoding when reading continuous text during small group reading instruction, I found that a student must get stuck while reading to initiate the scaffolding cycle because getting stuck signals to the teacher to provide support, and I learned that a teacher must know students' literacy skills and development to make scaffolding decisions for each student. For the second practicum question, regarding how elementary literacy teachers make moves to gradually release responsibility, I determined that even though I was looking for scaffolding for decoding, I found that decoding did not happen in isolation. In other words, scaffolding for decoding and comprehension happen at the same time. Another finding for research question two was that teachers should allow students to do most of the reading work, because the goal of differentiated instruction is to shift the reading work from teacher to student. For the third practicum question, regarding why teachers make specific scaffolding decisions when assisting students to decode in continuous text, I found that teacher beliefs were important when scaffolding in small group reading instruction. The beliefs were visible as teachers made decisions to zoom in or fade out as students needed more or less support when reading.

The findings for this practicum case study are meaningful and important because there is little research on micro-level scaffolding in small group settings. Much of the previous research looked at how teachers scaffold on a macro-level to organize and plan for instruction; however, this practicum research study looked at the micro-level of contingent and responsive scaffolding. In addition, there is research on contingent scaffolding with teachers who work in one-to-one settings, with English Learners, and in content area discussions, but not with small groups of students. According to Rodgers et al. (2016), more research needs to be conducted on instructional, temporal, and domain scaffolding. The practicum findings suggest that effective literacy teachers who scaffold students while they decode know precisely when to step in to scaffold and also know the type, amount, and duration of scaffolding that is most effective for students to get back to reading and on their way with comprehending texts. It was my aim to apply the findings from this practicum study to inform the ways in which teacher preparation programs educate pre-service teachers to scaffold students during reading instruction. Accordingly, I used the results of the practicum study to launch this dissertation project on scaffolding interactions between teachers and students during small group literacy instruction.

Area for Future Research and Research Questions

The studies in the above literature review investigated how teachers implemented contingent scaffolding when teaching English language learners, in content area classes, and in one-to-one settings. Those studies did not, however, examine teachers' scaffolding when teaching elementary students in differentiated small groups for reading, when decoding and making meaning while reading real texts. This dissertation study sought to fill a gap in the literature on small group instruction, differentiated instruction, scaffolding, and teacher preparation by zeroing in on teacher preparation in the area of micro-level scaffolding that is

contingent and responsive to student learning. In addition, for this dissertation research study I examined how I, as a university literacy course instructor, prepared elementary TCs to notice, decompose, and approximate the practice of implementing scaffolding moves and decision making during small group reading instruction. This study is important for educational research and practice because there is a gap in the literature about teachers' knowledge and practice related to micro-level scaffolding during small group reading instruction.

This study might contribute to future research because current research on micro-level scaffolding is limited and does not focus scaffolding in small groups. Therefore, this study might contribute to the missing piece of research on micro-level scaffolding during small group instruction, and help TCs learn these instructional practices in their teacher preparation programs. In addition, this study might contribute to classroom practice, because both preservice and practicing teachers need to know more about how to implement micro-level scaffolding during small group instruction. All K-5 elementary, self-contained classroom teachers are responsible for differentiating reading instruction for their students. This study can support a range of practitioners, from novices to veterans, in using scaffolding more intentionally during small group reading instruction.

In summary, understanding how to prepare pre-service teachers to scaffold decoding and meaning during small group reading instruction was the purpose of this study. The research questions flow directly from the conceptual framework and literature review because, as stated above, not all teachers or TCs know how and why to make scaffolding moves in small group instructions beyond the conceptual and organizational levels (Parsons et al., 2013; Pentimonti, 2010; Pentimonti & Justice, 2011; Rodgers 2004; Rodgers et al., 2016; Tomlinson, 2008). To

build on my practicum study, I implemented a design-based research study to answer the following questions:

- 1. Which factors may enhance or inhibit pre-service teachers' scaffolding during small group reading instruction as they observe, enact, and reflect on their own small group teaching, over a series of three lessons?
- 2. As pre-service teachers go through the three teaching cycles, (a) do they feel more prepared for the next lesson and (b) is there evidence in their videos that their scaffolded instruction improves?

To answer the first question, I planned and taught a literacy methods course that focused on preparing pre-service teachers to learn how to observe, notice, plan, enact, and reflect on a series of three small group lessons with the same group of students. It was my hypothesis that several factors would enhance and inhibit pre-service teachers' scaffolding during small group reading teaching, including my instruction and feedback, TCs' analysis of their own videos, the students in their group, the grade level, how they reflected on practice, how many times they reflected and implemented feedback, and my instruction including the changes and ways I adapted over the semester. As a design-based research study, I set out to determine the most common factors that enhanced and inhibited scaffolding during small group reading instruction during the semester-long literacy methods course and in the analysis after the conclusion of the course. I predicted that some factors might contribute to TCs' successful teaching more than other factors. As described in the next two chapters, by analyzing the data I learned which factors influenced the TCs' scaffolding during small group reading instruction. To answer the second question, I analyzed the TCs' teaching videos, surveyed the TCs before and after each lesson, and interviewed them during the internship the following year. It was my hypothesis that when

TCs received more explicit instruction on how to teach students to read in small groups and received feedback on how to improve before the next lessons, that their instruction would improve over time. The answers to these questions will contribute to the literature on preparing pre-service teachers to plan, implement, and evaluate differentiated small group reading lessons. In the following chapter, I describe the methods for answering both research questions.

CHAPTER 3 – METHODS

Methods

Design and Logic

The purpose of this study was to understand factors that enhance and inhibit teacher candidates' scaffolding during small group reading instruction and understand if teaching a series of three lessons supported their preparedness and improvement and over time. Therefore, I implemented a design-based research study (DBR), which allowed me to examine the ways in which TCs observed, noticed, and decomposed videos of exemplar small group literacy instruction; planned, rehearsed, and enacted their own small group lessons based on those exemplars; and finally, improved their practice by receiving iterative cycles of feedback and reflection over a series of three small group lessons. According to Bradley and Reinking (2011) DBR fills "a neglected gap in research aimed at guiding instruction because they address more directly the questions and issues that practitioners face and that are not addressed as authentically or as directly by other research methodologies" (p. 192). In addition, DBR answers questions such as "what factors enhance or inhibit an intervention's effectiveness?" (p. 193). Furthermore, "the primary focus of DBR is to achieve a pedagogical goal, which is accomplished by recognizing the complexity of the instructional environment and making adaptations or modifications to the environment or the intervention, as needed" (p. 193). This study fits with DBR because it examined iterative cycles of improvement in preparing TCs to teach small group reading lessons. This design afforded me opportunities to observe, question, and give feedback to TCs as they learned to teach small group lessons. This happened before, during, and after planning, as TCs implemented and evaluated their own teaching. DBR is appropriate for this research because it provided many opportunities for interactive feedback and improvement and examined three cycles of planning, teaching, and reflecting on small group instruction.

The setting for this design-based research study was a senior level literacy methods course that was the second course in a sequence of three required literacy methods classes. In the first course, TCs worked with one child and learned how to conduct literacy assessments and plan lessons based on that one child's age, grade level, literacy assessment data, standards, development, and instructional practices. In the course for this study, teacher candidates spent two hours a week with the same mentor teacher and taught three small group lessons to the students in that class. Data collection took 16 weeks, with weekly course sessions of best practices for small group literacy instruction, weekly discussions of exemplar small group literacy practices, and three distinct points where TCs planned, rehearsed, and enacted practices of scaffolding during small group literacy instruction. The literacy methods course took place at a local elementary school in an urban district in a mid-sized mid-western city. The school population was 36% White students, 32% African American students, 13% Hispanic students, 5% Asian students, and 14% two or more races. In addition, 80% of the students were eligible for free lunch or reduced lunch. This school served 210 students in grades pre-kindergarten through 3rd grade.

Context for the Class

The context and structure for this class was different from the other eight sections of the course. After teaching this course two times, in the spring semesters of 2017 and 2018, I adapted the course in the spring semester of 2019 to use as a focus class for my dissertation data collection on scaffolding during small group reading instruction. There were three main ways that this class differed from the other sections. First, I planned for TCs to learn specific content and procedures related to small group reading instruction. This content came from my practicum on expert teachers' scaffolding during small group instruction and the content from Essential 3 of

the Essential Instructional Practices in Early Literacy, Grades K-3 (Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force, 2016). Second, I expanded the typical assignment on small group reading instruction from TCs teaching only one lesson to a small group of students, to teaching three lessons with the same small group of students. Third, I planned for iterative cycles of lesson feedback and improvement over the series of three lessons taught over three weeks. During the 16-week semester the TCs worked on three projects. They collected and analyzed data on students' literacy development (assignment one), and they used that data to plan, teach, and reflect on three small group reading lessons (assignment two). They also planned and taught a large group writing lesson at the end of the semester (assignment three), but that assignment was not included in this study.

In making the first change from the other sections of the course, I frontloaded the content for teaching small group reading instruction early in the semester for the TCs to learn specific content for teaching small groups, including an introduction to the small group teaching lesson plan format, specifics on students' actual reading and writing, research-based reading prompts, developing fluency, explicit instruction procedures, and the importance of focusing on meaning while reading. I concentrated on these six components from Essential 3 of the Essential Instructional Practices in Early Literacy, Grades K-3 (Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force, 2016). During each weekly class I taught from the Essential 3 modules, the TCs took notes on participation guides for each bullet (see Appendices A – F), and we analyzed exemplar videos of each of these components. For example, during weeks 2 and 3, I taught the TCs about the overview of small group reading instruction and the importance of students actually reading and

writing during small groups, the TCs took notes on the introduction and Bullet 1 participation guides, and we analyzed videos of exemplar small group teaching. Each week had a particular take away. For the introduction it was, "Small Group and Individual Instruction, using a variety of grouping strategies, most often with flexible groups formed and instruction targeted to children's observed and assessed needs in specific areas of literacy development" and for Bullet 1 it was, "The teacher ensures that children use most of their time actually reading or writing or working toward this goal in kindergarten and early first grade" (Michigan Virtual University, n.d).

To support this additional content, each week I focused on a new element of small group instruction, until all six were examined. In week 4 the topic was research-based reading prompts, the video was on coaching reading in small groups, and the primary Bullet 2 take away was, "The teacher coaches children as they engage in reading and writing, with reading prompts focusing primarily on a) monitoring for meaning, b) letters and groups of letters in words, c) rereading" (Michigan Virtual University, n.d). In addition, in week 5 the topic was developing reading fluency during small groups, the video was on small group fluency instruction, and the Bullet 3 key element was, "The teacher employs practices for developing reading fluency, such as repeated reading, echo reading, paired and partner reading" (Michigan Virtual University, n.d). Furthermore, in week 6 the topic was procedures for explicit instruction, the video was on small group literacy strategy instruction, and the Bullet 4 dominant point was, "The teacher includes explicit instruction, as needed, in word recognition strategies, including multisyllabic word decoding, text structure, comprehension strategies, and writing strategies" (Michigan Virtual University, n.d). Lastly, in week 7 the topic was the importance of making meaning while reading, the video was from my practicum study on practicing teachers' scaffolding for

meaning during small group instruction, and the Bullet 5 key element was, "The teacher is deliberate in providing quality instruction to children in all groups, with meaning-making the ultimate goal of each group's work" (Michigan Virtual University, n.d). Most of the sample videos were from the Literacy Essentials website (Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force, 2016).

I built ideas about practice-based teacher preparation into the class sessions. During the weeks of immersion into content on teaching small group reading lessons, I used the key bullets as an opportunity for TCs to look closely at practice. As stated above, each class was designed with a content focus that we took apart and put back together as defined by Grossman et al.'s (2009) representations, decompositions, and approximations of practice. As a classroom community we built the ideas about practice into our weekly meetings which provided TCs with opportunities to try out these essential elements with peers before working with K-3 students during their own lessons. For example, when learning Bullet 3 on developing fluency, we examined the content and definitions of fluency and we analyzed video for evidence of fluency. After that we defined the representations of this practice from the course materials. In doing that the TCs could explain repeated, echo, and partner reading in their own words. This was a representation because we intentionally noticed and named the three fluency practices from the videos and defined them. Following that we decomposed what both the teacher and student did during these fluency practices. For repeated reading the teacher reads a sentence and the student repeats it back with intonation, phrasing, and prosody. For echo reading the teacher reads a little ahead of the students and they echo right after each part. For partner reading the teacher and students take turns reading a sentence, paragraph, or page, and go back and forth with these predetermined roles. This was a decomposition because they identified the specific teacher and

student roles in each practice. Finally, the TCs approximated practice by working with partners or small groups to plan and teach one of these fluency practices with each other before they would plan to implement this in their small group lesson with students.

To make the second change from the other sections of the course, I expanded the typical assignment on small group reading instruction from TCs teaching one lesson to a small group, to teaching three lessons with the same small group of students. The window for teaching the three lessons was between weeks 9 and 12 of the semester. Therefore, during the first 7 weeks of the course when the TCs learned about small group instruction, they also worked with their mentor teachers to identify two students and explore data about their literacy development. One major component of small group reading instruction is targeting the lesson content to the needs of the students. Accordingly, TCs were instructed to work with their mentor teachers to collect and analyze assessment data for two students, while they planned for small group instruction. Each TC used assessments from literacy foundational skills that aligned with the CCSS. For example, one TC used data from a letter identification assessment and another TC used data from a high frequency word assessment. Often the mentors gave the TCs a raw score such as the student knows 5 letters or 8 sight words; however, the TCs did not know how that compared to the typical expectation at that grade level. Therefore, I instructed the TCs to dig deeper with that assessment to find out the exact letters or words the students knew, which ones they were confused about including the substitutions they made, and which letters or words they did not know at all. They used that information to plan their small group lessons. A draft of each lesson was due the week before the TCs planned to teach the lesson for them to receive feedback on their plans. For example, a draft of lesson 1 was due during class in week 8, the TC rehearsed, taught, and video recorded lesson 1 during week 9, and they brought notes and a draft of lesson 2 the following week. Each class session occurred on a Monday in the school library which enabled TCs to begin the week with lesson feedback and rehearsal, and then they had the remainder of the week to teach, record, analyze the video, and plan for the next lesson. We built momentum with each class, learning about how to plan and teach the first small group lesson.

To implement the third change from the other sections of the course, I planned for iterative cycles of lesson feedback and improvement over the series of three lessons taught over three weeks. The class sessions between iterations of the TCs' reading instruction were comprised of lesson analysis, problem solving, and discussion about where to go next with this group of students. Weekly lesson iterations were supported in class with TCs' working together and with me to focus on aspects learned in the content of small group instruction and practiced in class through approximations. The topics of iterative improvement ranged from the content at the beginning of the course to unexpected difficulties that arose during instruction. For example, after lesson 1, one TC said she only made it through part 3 and did not get a chance to read the book. One of our goals for the first lesson was for TCs to complete all components of the fivepart lesson plan. This TC's goal for the next lesson was to complete all five parts. This is designbased research! Each week the TCs had similar concerns when we met for class. They brought their questions and concerns about each lesson and needed support in planning the next lesson. During our problem solving the TCs worked together to determine who had similar issues with operationalizing the small group lesson. For example, after lesson 1 a TC realized she did not know how to keep the students seated at the table during the lesson because they were distracted by activity in the hall. We worked together to determine who else had that issue and we talked about changing the direction of the group from facing outward to facing the wall, so the foot traffic happened behind the students during the lesson. In another example, after lesson 2 a TC

recognized that the pictures she used for the phonemic awareness activity had multiple meanings. We worked together to add a piece to the lesson plan to teach the students the name for the objects on the cards before the students made guesses during the lesson. Iterative improvement happened in many areas of reading instruction to prepare for more effective lessons the next time.

I supported TCs to learn how to engage in macro and micro level scaffolding by teaching them about the Gradual Release of Responsibility (Pearson & Gallagher, 1993; Duke et al., 2011) and the levels of support (Lose, 2007; Wood et al., 1976). This content was represented in the content for week 6, on providing explicit instruction "as needed" during the reading portion of the lesson. More specifically, the content from Essential 3, Bullet 4 incorporated the expanded Gradual Release of Responsibility (GRR), which included the additional step of explicit instruction for students, before the teacher models the strategy (which was the first step in the GRR in the original model). This is explained in the literature review and in Figure 2. The key elements that were frontloaded during the beginning of the class became repeated refrains as we planned for each small group lesson. For example, after lesson 1 a TC said her students had difficulty transferring the skill from the explicit instruction part of the lesson to the reading part of the lesson. We worked together to determine if other TCs experienced the same issue and generated solutions to make this more transparent for students. One solution was to keep the letter or word card visible for students during the reading, so TCs could connect for students the words they wrote during the sight word game with the same words written in the new book. In another example, after lesson 1 a TC said her students were nervous about reading on their own during part 4 of the lesson. Again, we worked together to determine if other TCs noticed students' reluctance to read and we practiced increasing support at difficulty from the range of 1

to 5 on the scale of help. In a third example, after lesson 2 a TC recognized that her students still could not point one-to-one at words while reading. We worked together to brainstorm explicit instruction activities for those students and ways to connect one-to-one pointing in a new book. The activity I taught the TC was called the cut-up sentence. First, the TC had the student verbally say a sentence out loud. Then, the TC repeated the sentence and wrote it down on a strip of paper. After that, the student pointed and read the sentence back to the TC. Next, the TC cut apart the sentence into word units, moved the words around on the table, and asked the student to reassemble the sentence. After that, the student read the sentence back to the teacher and pointed one-to-one while reading. Lastly, the TC kept the cut-up sentence visible at the top of the table and introduced the new book that contained the same exact sentence. After this carefully planned lesson, the student was able to demonstrate one-to-one match while reading. Our weekly class sessions provided opportunities for each TC to problem solve ways to improve the next lesson for the following week. As stated above in the section on practice-based teacher education, this is design-based research.

Participants

There were 22 pre-service teachers enrolled in the senior level literacy methods course, 19 females and 3 males. Participants in this study included five of the 22 elementary TCs enrolled in the course. The participants were selected based on consent from the children in the classroom and their parents, as well as consent from the TCs themselves. Even though almost all of the TCs were willing to participate in this study, we were only able to secure a complete set of consent forms from five TCs' small group of elementary students. Many TCs collected some forms, but not all from each member of the small group. Therefore, I followed the learning of five TCs placed in five different K-3 classrooms in one local urban school district who were

learning to be literacy teachers in K-5 classrooms. For the purposes of this study, literacy instruction included small group reading lessons that took place in the regular education classroom during literacy instruction. The data collected included assignments (student data analysis, lesson plans, and lesson reflections), videos of their teaching, surveys, and interviews. Participants in this study were enrolled in this section of TE 405 for the spring semester 2019.

This paragraph describes the demographic information for the TCs. All five TCs in this study were white, female students, who were 22 or 23 years old and spoke English as their first language. In addition, the college major for four of the TCs was special education and for one TC was elementary education. In our Teacher Preparation Program, students who major in special education take several of the same courses for elementary education, because their program leads to certification in K-12 Special Education and K-5 Elementary Education. Furthermore, our TCs earn a teaching major, have the option to earn a teaching minor, and have the option to join either the Urban Educators Cohort Program (UECP) or the Global Educators Cohort Program (GECP). For the TCs in this study, two earned teaching majors in English language arts, two in mathematics, and one in science. Only one TC earned a teaching minor, and it was in TESOL. Lastly, each TC in this study was part of a cohort program, three were in the UECP program and two were in the GECP program. This could be an important consideration in the ways that TCs took up practices for teaching in diverse contexts. The fact that all five TCs were part of a cohort program might have shaped what I learned about them along their journey of learning to teach literacy in small groups. With backgrounds in urban and global education, these TCs might have arrived to this class with the dispositions to teach all children to learn to read. See Table 3 for participant demographic information.

Table 3

Participant Demographics

	Teacher	Teacher	Teacher	Teacher	Teacher
	Candidate-A	Candidate-B	Candidate-C	Candidate-D	Candidate-E
G 1	Б. 1	ъ. 1	.	Б. 1	. 1
Gender	Female	Female	Female	Female	Female
Age	23 years old	22 years old	23 years old	23 years old	22 years old
	White or	White or	White or	White or	White or
Race/	European	European	European	European	European
Ethnicity	American	American	American	American	American
First					
Language	English	English	English	English	English
College	Special	Special	Special	Special	Elementary
Major	Education	Education	Education	Education	Education
Cohort	UECP	UECP	GECP	UECP	GECP
Teaching		English		English	
Major	Mathematics	Language Arts	Mathematics	Language Arts	Science
Teaching					
Minor	none	none	TESOL	none	none
Grade					
Placement	1st Grade	Kindergarten	Kindergarten	Kindergarten	1st Grade

My positionality, as a former elementary classroom teacher, reading specialist, Reading Recovery® Teacher, and literacy coach who implemented small group instruction, added to the richness of the course instruction and data collected from this design-based research study. Teaching children to read is complex work, as shown in my practicum on teachers' use of verbal and non-verbal scaffolding during small group reading instruction (Lose, 2007; Wood et al., 1976). This study was positioned to add to the next step in my research, to determine best ways to teach future teachers to make subtle scaffolding moves that consider knowledge of students,

monitoring their progress, adapting teaching during a small group lesson, and transferring control of learning to the students (Tomlinson, 2008).

While my positionality added richness to this study, there were some limitations to my positionality in terms of planning, teaching, and collecting data for this study. Even though this was the third time I taught the course, I made some assumptions about TCs' incoming knowledge regarding small group instruction. For example, considering that the TCs learned about elementary students' literacy knowledge and skills in the previous course (TE 301), I believed that they would be able to easily apply that knowledge to a new context, school, grade level, and group of students. That was not the case. My positionality did not allow me to see how challenging that would be for novice TCs. In addition, I might have overlooked the TCs' lack of experience in working with students in a variety of grade levels and contexts, and that this was really only their second placement in the teacher preparation program. Given my own experience and familiarity with the context of teaching reading, I neglected to see how challenging this could be for beginning teachers. Furthermore, there were limitations of studying my own practice, such as being so immersed in the planning and that I did not check for understanding often enough. I mitigated these by reviewing the lessons taught each week and assisting TCs in planning for the following lesson.

Data Sources

This section focuses on data collection and measures. I answered my research questions by collecting qualitative data to examine how TCs learned to teach small group literacy lessons; plan, rehearse, and enact their own small group lessons based on that learning; and finally, improve their practice by receiving iterative cycles of feedback and reflection over a series of three small group lessons. To inform my research about factors that enhanced or inhibited pre-

service teachers' scaffolding during small group reading instruction, as they observed, enacted, and reflected on their own small group teaching over a series of three lessons, I collected several sources of data while teaching TE 405. The data included written class assignments, videos of their own teaching, surveys before and after teaching, and interviews after the conclusion of the course. I collected this data on five TCs. I collected this range of data in order to understand whether and how TCs enacted small group reading practices and if their scaffolding of students' reading improved over three lessons. Each data source contributed to answering the research questions by illustrating the ways that coursework supported TCs' initial learning to teach small group reading lessons and their iterative cycles of improvement over three weeks. When TCs needed support implementing the teaching practices, I responded by modeling and providing opportunities for a closer look and rehearsal during the next class session. To explain, during the class periods, before and after each lesson, TCs had opportunities to work collaboratively with classmates and me to reflect on what went well and what needed improvement as they prepared for the next lesson. In other words, they had many opportunities to practice and receive feedback on their planning and teaching. In providing ongoing feedback that supported TCs' improvement in teaching small group lessons, I assisted TCs in fine-tuning their practice in precise ways. The specific measures and how they contributed to answering the research questions are listed in the next section.

Additional data was collected for each TC, including participation guides, exemplar video observation forms, and exit tickets. Weekly course meetings of TE 405 included content on teaching small group literacy lessons from the K-3 Literacy Essential Practice 3: Small Group and Individual Instruction (Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force, 2016). TCs completed content

participation guides for each session of Essential 3, including an Introduction (see Appendix A for the Introduction), Bullet 1 on actual reading and writing (see Appendix B for Bullet 1), Bullet 2 on reading prompts (see Appendix C for Bullet 2), Bullet 3 on developing fluency (see Appendix D for Bullet 3), Bullet 4 on explicit instruction (see Appendix E for Bullet 4), and Bullet 5 on instruction with a meaning making focus (see Appendix F for Bullet 5). In addition, I designed an Exemplar Video Observation Protocol (see Appendix H for video protocol) for TCs to record observations while watching exemplar videos from Literacy Essential Practice 3. The video observation protocol included areas to observe, notice, and decompose practice of a teacher teaching a small group of students on a targeted literacy skill or strategy that students needed at that time, as determined by their assessment data, standards, development, and instructional practices. Finally, I used exit tickets (see Appendix G for exit ticket) at the end of each class to learn what TCs understood about teaching small group reading that they did not know before that course session, what questions they still had about collecting data for their small group of students, and what questions they still had about planning for their small group reading lessons. I collected the participation guides, video observation protocols, and exit tickets to inform my weekly teaching, however I did not analyze those sources for this dissertation.

Written assignments. The purpose of the two written assignments was to help measure TCs' use of students' assessment data to plan instruction and TCs' ability to rehearse, enact, and reflect on their small group teaching. I used assignment one, which focused on data collection and analysis of literacy assessments to plan for small groups, as a data source (see Appendix I for assignment one). I collected assignment one from five TCs who were in my literacy methods course. In addition, I used assignment two, which focused on TCs' planning, rehearsing, enacting, and reflecting on lessons for their small group of students in their classroom, as a data

source. The selection of the small group of students for assignment one and two was negotiated between the mentor teacher and the TC, and was the same group of students for each assignment (see Appendix J for assignment two). I collected assignment two from five TCs who were in the literacy methods course, and provided each TC with feedback on their planning, rehearsing, enacting, and reflecting on their series of small group lessons and videos of their teaching.

Video. The purpose of video-recording each lesson using GoReact (2018) video commenting software was to provide opportunities for feedback and improvement. Both TCs and I analyzed their videos for uptake of lesson structure and scaffolding during reading instruction. TCs tagged their own videos with these noticings and I provided feedback to fine-tune and improve TCs' instruction over a three-week period. For data analysis purposes, I took notes while observing videos and made notes about the components of the small group lesson. I checked for five steps of small group lesson learned in TE 405 (see Appendix H for the video observation protocol). I also made specific time stamps in the videos to refer to later, where I noticed cycles of teacher coaching, prompting, and scaffolding, as well as student responses and additional TC verbal and nonverbal moves (see Appendix N for the codebook). In addition to analyzing video, I analyzed artifacts and documents from the TCs' instruction, including the three lesson plans for small groups and the resource materials used for small group instruction. This additional data helped examine iterative cycles of improvement made by TCs in teaching small group reading lessons.

Surveys. The purpose of TCs completing a survey that examined preparedness in teaching small group literacy lessons was to capture their self-assessment of improvement over time. I created a survey for TCs to fill out before they taught each of the three small group literacy lessons and after the final lesson was taught. The first survey, Survey Part

I, was administered and collected before the TCs taught their first lesson in the series of three lessons (see Appendix K for survey part one). Survey Part II was administered after lesson 1, lesson 2, and lesson 3 (see Appendix L for survey part two). I collected and analyzed the surveys, that were administered four times, from five TCs in my literacy methods course.

Interviews. The purpose of interviewing the five TCs during their internship year (see Appendix M for the interview protocol) was to gather information about reflections and uptake of course material during the internship. I used the TCs' videos of their three small group literacy lessons as part of the interviews to learn more about how they made teaching decisions during small group instruction. The interviews provided an opportunity to investigate how prepared TCs felt to teach small group literacy instruction. The purpose of the interviews was to discuss the operationalization of small group reading instruction and the complexity of decision making when scaffolding and prompting students while reading. This follow-up interviews with the five TCs occurred in the spring semester of 2020, during their yearlong internship.

In sum, I collected data that aligned with research question one, which focused on factors that enhanced or inhibited pre-service teachers' scaffolding during small group reading instruction as they observed, enacted, and reflected on their own small group teaching over a series of three lessons. I also collected data that aligned with research question two, which focused on pre-service teachers feeling more prepared for the next lesson, and if there was video evidence that scaffolded instruction improved as they went through three teaching cycles.

Standards of quality. Design-based research combines theory and practice. In this study, there was enough evidence to analyze and interpret the data because I implemented the standards of quality for design-based research. Standards one, two, and three include traditional qualitative data collection and analysis, as well as a research informed conceptual framework that is based

in multiple theories and perspectives (Bradley & Reinking, 2011). Multiple sources of data were collected for this study including written work from assignments, videos of TCs' teaching, surveys before and after teaching, and post teaching interviews. In addition, each data source was situated in a conceptual framework that combined many theoretical perspectives. Furthermore, the data was triangulated, and the findings were member checked for clarity. For example, I connected evidence from the TC's lesson plans and videos of their teaching, to the "five components of a small group lessons" as learned in the introduction to Literacy Essential Practice 3. This helped tell the narrative about how TCs prepared to teach small group literacy instruction. After that, I triangulated the evidence from those data sources with the TCs' lesson reflections, surveys before and after teaching, and post teaching interviews about their teaching and about how this course prepared them to teach small reading groups. I addressed the key informants' review requirement by sharing my research findings with the five TCs who participated in this study and asked for their feedback for clarification. I addressed the ethical issues by sharing my positionality and bias in relation to the study and I kept the data collected confidential by using pseudonyms. Attending to the first three standards for quality ensured that I implemented a solid study that provided a "compelling case" (Barone, 2011, p. 23) for my conclusions and sought to answer my research questions.

In addition, standards four, five, and six include careful selection of a research site, objective presentation of the intervention, and responsiveness to intervention changes if needed (Bradley & Reinking, 2011). The site was carefully chosen in collaboration with the university and a K-12 school partner in a diverse urban district. In addition, the intervention design was based in research on scaffolded small group instruction and was implemented to prepare preservice teachers to teach literacy in small groups. For example, the literacy methods course was

taught in a local elementary school that included students in grades K-3. This was an appropriate site to teach this course on early literacy instruction, conduct research on how pre-service teachers learn to scaffold during small group literacy instruction, and to be prepared to make changes to the intervention if needed. Finally, standards seven and eight include receptivity to unexpected outcomes from the intervention and possible changes in the instructional setting as a result of the intervention (Bradley & Reinking, 2011). As stated above, because this was a design-based research study, as the instructor I was open to unexpected outcomes and possible changes in the instructional setting based on the intervention to meet the needs of the pre-service teachers and the school community. For example, there were instances when the TCs could not complete a lesson as planned because of a change in the school's schedule, or when the school had a snow day and we were required to reschedule planned lessons.

The data collected for this study sought to describe and explain the ways in which the intervention (teaching preservice teachers to plan and teaching small group literacy lessons) enhanced and inhibited their scaffolding during small group reading instruction, as well as how they improved over time. Data collection spanned 16 weeks, with three consecutive weeks of small group teaching, which further justified the iterative nature of these research methods and standards. I did not draw causal inferences, test whether factors were related, or generalize to a broader population, because designed-based research is meant to describe and explain only (Bradley & Reinking, 2011). I believe that this study answered my research questions in ways that describe and explain factors that enhance and inhibit preservice teachers' scaffolding during small group reading instruction, and will contribute the literature on how to prepare TCs to differentiate and provide small group scaffolded instruction.

Data Analysis and Interpretation

This section focuses on how I coded and analyzed the data. Data sources for five TCs included two written assignments, three videos, surveys before and after teaching, and interviews during the internship year. After the conclusion of the spring semester literacy methods course I cross-checked the names of the TCs who agreed to be part of this study with the consent forms from the students and families who agreed to have their videos included in this research project. In the end, I had five TCs who agreed to be part of this study and who had the correct permissions from the students (and families) in their small group lessons, for me to use video of the lessons for research. The five TCs also agreed for me to analyze their written work, teaching videos, surveys, and to participate in an interview after the course concluded. Once I knew I had five TCs in this study I organized the data sources and I made a data inventory (Galman, 2016), which is a comprehensive excel spreadsheet that included all of my data sources.

Video. I launched data coding and analysis with the teaching videos. To begin, I created a new course in GoReact (2018) called dissertation video analysis (that only I could access) and uploaded the videos into three folders, one for lesson 1 videos, one for lesson 2 videos, and one for lesson 3 videos. From there I begin transcribing the videos, watching lesson 1 for all five TCs, then lesson 2 for all five TCs, and finally lesson 3 for all five TCs. This first round of coding involved applying time stamp markers in each lesson to signify the five parts of the lesson. I created the markers in GoReact, and they included, 1st bring the group together, 2nd explicit instruction, 3rd active engagement, 4th listen, coach, and prompt, and 5th bring the group back for a meaning question and a skills question. See Figure 3 for a picture of the marker codes.

Figure 3
Small Group Lesson Structure Tags



GoReact (2018)

These tags align with the initial pertaining to the structure of the small group lesson, which were: step one (SGS1) the TC brought the students together, step two (SGS2) the TC provided explicit instruction with a teaching point, step three (SGS3) the students read and the TC implemented the teaching point, step four (SGS4) the TC listened, coached, prompted, and scaffolded while students read, and step five (SGS5) the TC brought the group back together and made two points about text meaning and the new skill. See Table 4 and Appendix N for the structure and format of small group literacy lessons.

Table 4

Initial Codes Pertaining to Structure of a Small Group Literacy Lesson

Code	Small Group Step	Small Group Step Description
SGS1	Small Group Step 1	First, teacher brings small group together
SGS2	Small Group Step 2	Second, teacher provides explicit instruction
SGS3	Small Group Step 3	Third, students read and implement the teaching point
SGS4	Small Group Step 4	Fourth, teachers listen, coach, prompt, & scaffold, students read
SGS5	Small Group Step 5	Teacher brings group back together and makes two points (meaning and teaching point)

Once the data was organized, I realized that I had more video data than I could analyze for this study, so I decided to narrow my focus while maintaining the goals of my research questions. More specifically, my research questions targeted TCs' scaffolding during small group reading which is in part four of the lesson. Therefore, after watching each video from start to finish and adding timestamps, I went back to transcribe the critical portion (part four) where students were expected to do most of the reading work and TCs made decisions about listening, coaching, prompting, and scaffolding during reading. The GoReact software is organized for commenting! Once I began typing what the teacher and child said during each lesson, the video stopped and resumed once the comment was completed. Once I had watched, timestamped and transcribed the reading portion for the first lesson for the five TCs, I downloaded the transcription and created a file for each TC. While watching the videos and reading each transcript for lesson 1, I began to code cycles of scaffolding and prompting during the reading portion of the lesson for all five TCs. I then repeated the same process for the second and third lessons. By the end of each cycle of observing, timestamping, and transcribing for the second and third lessons, I began to see repeated aspects of instruction that seemed to enhance and inhibit scaffolding. After each round of coding, for all three lessons for all five TCs, I downloaded the transcriptions and created an expanded document for each TC that included all three lessons.

At that point I had video transcriptions for all 15 lessons. Then, I began reading through the transcripts and assigning deductive categories based on my research questions and theoretical framework (Galman, 2016). As a next step, I applied deductive coding (Galman, 2016, & Saldana, 2015). The deductive coding scheme that I applied originated from my theoretical framework, which is based in Wood et al.'s (1976) scale of help, Lose's (2007)

levels of support, and Pearson and Gallagher (1983) gradual release of responsibility. It is important to note that the Literacy Essential Practice 3 document specifies step four of the small group lesson structure as listening, coaching, prompting, and scaffolding. For coding and analysis purposes, I divided scaffolding into one category and prompting into another category, even though they often happen together. Initial codes pertaining to scaffolding were teacher scaffolding level (TSL) and the number from 1-5 for the amount of support, based on my framework. For example, teacher actions received a level one (TSL1), for general verbal interventions, when the TC focused on a child's problem-solving behaviors. Teacher moves received a level two (TSL2), for specific verbal interventions, when the TC gave prompts, comments to continue, or reminders. Teacher actions a level three (TSL3), for specific interventions and nonverbal information, when the TC continued to focus on level 2 interventions but added nonverbal cues. Teacher moves received a level four (TSL4), for preparing for next action, when the TC focused on adding more support and giving one or two choices to solve problems. Teacher actions received a level five (TSL5), for demonstrating action, when the TC focused on modeling or demonstrating with verbal and nonverbal cues. Analysis included transcription for the TCs' videos, matrices comparing specific topics and responses, and coding and establishing themes. See Table 5 and Appendix O for these levels of support.

Table 5
Initial Codes Pertaining to Teacher Scaffolding

Code	Level of Support	Teacher Scaffolding Level Description
TSL1	Teacher Talk General	Least support from teacher, child in control of problem solving
TSL2	Teacher Talk Specific	Keep learning moving forward; prompts/reminders; no new teaching

Table 5 (Cont'd)

TSL3	Teacher Talk/Nonverbal Actions	New learning introduced; show or teach child new problem solving
TSL4	Teacher Higher Support	Add more support to problem solve
TSL5	Teacher Models/ Demonstrates	Most support from teacher; teacher in control of problem solving

Adapted from Wood et al., 1976, Lose, 2007

As stated above, in addition to coding for the scaffolding levels, I also coded for use of reading prompts at difficulty (Duke & Schutz, 2017). Initial codes pertaining to research-based prompts were applied to those reading prompts that TCs learned in the methods course, and were coded TP1 through TP9. The TCs learned eight prompts to use when a child struggles to read a word. For example, the first three included looking at the word (TP1), where the TC prompted for letters and sounds at the word level, slide through each sound (TP2), where the TC prompted for letters and sounds to blend word parts, and look for parts you know (TP3), where TCs prompted for letters and sounds to connect with known parts. The next three prompts included break the word apart (TP4), where TCs prompted for letters and sounds to segment word parts, try a different sound (TP5), where TCs prompted for letters and sounds with flexibility in looking at letters and sounds, and reread (TP6), where TCs prompted for students to reread for fluency and meaning. The final two prompts included think about what would make sense (TP7) and check the picture (TP8), where TCs prompt for meaning. Even though there were eight prompts, I added TP9 for other prompts that were not on the original list. See Table 5 and Appendix O for initial codes pertaining to teacher scaffolding, and Table 6 and Appendix P for initial codes pertaining to prompting at difficulty in step four of lesson.

Table 6

Initial Codes Pertaining to Prompting at Difficulty

Code	Prompt Language	Teacher Prompt Description	
TP1	Look at the word	Prompt for letters and sounds, at the word level	
TP2	Slide through each sound	Prompt for letters and sounds, to blend word parts	
TP3	Look for parts you know	Prompt for letters and sounds, to connect with known parts	
TP4	Break the work apart	Prompt for letters and sounds, to segment word parts	
TP5	Try a different sound	Prompt for letters and sounds with flexibility in looking at letters and sounds	
TP6	Reread	Prompt to reread for fluency and meaning	
TP7	Think about what would make sense	Prompt for meaning	
TP8	Check the picture	Prompt for meaning	
TP9	Other	Other prompts that teacher candidates used	

Adapted from Duke and Schutz (2017)

In summary, I applied deductive codes to videos in three distinct ways. First, videos were coded for the structure of the small group lesson. Second, videos were coded for the TCs' scaffolding levels in step four of the small group lesson. Lastly, the videos were coded for the TCs' prompting during step four of the small group lesson.

After that, I made inductive categories that aligned with my deductive categories and began assigning additional codes to analyze the data. The inductive and deductive codes helped me think about the relationships among my data sources (Galman, 2016). In doing that, I applied Miles et al.'s (2014) concept of designing matrix displays to move my analysis forward. I designed case level displays for TCs' small group reading lessons, and began organizing these displays by selecting portions from the transcriptions, of feedback cycles

between TCs and students, and comparing those to the accurate text. Then, I began coding places in those reading cycles where TCs scaffolded and prompted students during reading. Initially, my matrices had two columns when analyzing these case level displays, however I added a third column to code for scaffolding and prompting. The approach of displaying the data helped me look for processes and patterns in the data (Saldana, 2015). According to Saldana (2015), process coding is better for developing new theory; I am trying to build a theory of teaching new teachers how to scaffold during small group reading instruction. The methods of looking for processes enabled me to look at patterns in the data. A pattern is a "repetitive, regular, and consistent occurrences of action" (Saldana, 2015, p. 5) that is present more than two times. With that, I applied pattern coding as an additional coding method. With the third column added to the display I began to sort out processes and patterns, which eventually helped me link those codes to factors that enhanced and inhibited scaffolding during small group reading. Organizing the codes for scaffolding and prompting allowed me to assign names to particular processes and patterns that I found in the data, when implementing this round of coding. Those names were factors that enhanced and inhibited scaffolding during reading.

When continuing to analyze the data, I enhanced the matrices by adding a fourth column. In doing that I applied Emmerson, Fretz, and Shaw's (1995) "excerpt-commentary units" (pp. 214-215), to analyze each example in four-part columns, which included: orienting text information with the book title and accurate text, excerpts of students reading the new book and the teacher responding, analytic points about instructional scaffolding and prompting, and analytic comments with an interpretation of the codes for scaffolding and prompting. Given the large number of excerpts of TCs scaffolding and prompting during small group reading

instruction in my transcripts, I carefully chose a select number of examples to represent each finding. Those examples are illustrated in the findings chapter. Analyzing the processes and patterns in the data displays enabled me to decide the factors that enhanced and inhibited scaffolding. I defined a factor as enhancing scaffolding as an episode during reading when a TC provided enough supports and challenges for students to move forward in their problem solving while reading. I defined a factor as inhibiting scaffolding as an episode during reading when a TC provided too much or too little support for students to move forward in their reading. To say more about enhancing scaffolding, when I saw TCs implementing the lesson structure and implementing the scaffolds and prompts learned in the literacy methods courses, that was evidence of factors that enhanced scaffolding because the TCs had a clear plan to follow and knew what to say and do during most parts of the lesson. Furthermore, when I saw TCs providing feedback cycles at error during students' reading, that was evidence of factors that enhanced scaffolding because students needed to get stuck on a word to initiate scaffolding in the first place. When that happened, the TC was able to implement the scaffolding practices learned in class and they were able to practice even more by repeating three lessons with the same group of students.

On the contrary, when I saw TCs missing opportunities to leverage students' literacy knowledge to provide levels of support or when they chose materials without considering supports and challenges of the texts, that was evidence of factors that inhibited scaffolding because the TCs' lack of attention to those details prevented students' reading success. Furthermore, when I saw TCs unable to provide feedback during long stretches of accurate student reading and maintain control of the reading work during the times when students could do the reading themselves, that was evidence of factors that inhibited scaffolding because the

TCs' choose materials without enough challenge or did too much of reading work when students were capable of reading the text themselves. In summary, when I analyzed the data and saw student's problem-solving during reading and TCs moving in and fading out with increased and decreased support, I was able to categorize that factor as enhancing scaffolding. However, when I analyzed the data and saw students reading text that was too easy or not scaffolding or prompting to move students forward, I was able to categorize that factor as inhibiting scaffolding. As stated in the section above, I began coding and analysis with the teaching videos. After several rounds of coding with deductive and inductive codes and defining and deciding the criteria for factors that enhanced and inhibited scaffolding, I continued with data analysis for the other three data sources, including written assignments, surveys, and interviews.

Written assignments. The two written assignments were coded and analyzed for literacy understandings that informed teaching. For these assignments, TCs collected and analyzed assessment data for a small group of students and then used that data to plan, teach, record, and reflect on three small group literacy lessons. The lesson plans were coded for the five components of the lesson structure, alignment of the explicit instruction portion of the lesson to students' independent text reading during the lesson, and scaffolding moves included in planning. Analysis included matrices comparing the lesson focus, the Common Core State Standards, and the lesson texts read by the students. Assignments were analyzed for uptake of best practices for small group instruction that TCs learned in their methods class. From this coding and analysis, findings and themes were established (see chapter 4).

Surveys. TCs completed surveys that were coded and analyzed. The five TCs filled out a

survey before their first small group lesson and then they filled out another survey after completion of lessons one, two, and three. In addition, surveys were used to collect information on TCs' background, professional preparation, and description of their classroom setting, as well as their feelings about their preparedness to teach reading before and after all three small group lessons. The surveys were coded and analyzed to explore whether TCs felt more prepared as they continued to teach three weeks in a row. Analysis included transcription of the five TCs' surveys, matrices comparing specific topics and responses, and coding and establishing themes.

Interviews. The TCs participated in this study during their literacy methods course, at the end of their senior year. Then, they entered a yearlong student teaching internship the following fall. During the internship, I interviewed the five TCs. During the interview, I asked the TCs how prepared they felt about teaching small group reading based on what they learned in their literacy methods courses. I sought to find out information that I could not find from the other data sources. I asked TCs what they thought, understood, and felt was required for small group instruction, and why they thought that. The purpose of the interviews was to find out how prepared TCs felt to plan, teach, and reflect on small group reading instruction. Interviews were transcribed and used to triangulate data from other sources. TCs also watched their own videos and received feedback from their course instructor to continually improve their small group literacy teaching over the three weeks of instruction. See Table 7 for the data collection and analysis matrix.

Table 7

Data Collection and Analysis Matrix

Source of Data	Analysis
Research Question 1: Which factors may enhance	e or inhibit pre-service teachers' scaffolding
during small group reading instruction, as they o	bserve, enact, and reflect on their own small
group teaching, over a ser	ries of three lessons?

Table 7 (Cont'd)

Written Assignments

- Three lesson plans (based on data)
- Uptake of scaffolding in each lesson
- Teaching reflection

Videos

- Lesson 1
- Lesson 2
- Lesson 3

Written Assignments

- Analyze TC's lesson plans based on content & structure of small group instruction
- Analyze lesson plans for uptake of course content & instructor feedback, after each lesson

Videos

 Deductive and inductive coding/analysis of TC's videos based on conceptual framework, course content, and change over time in scaffolding practices

Research Question 2: As pre-service teachers go through the three teaching cycles (a) do they feel more prepared for the next lesson, and (b) is there evidence in their videos that their scaffolded instruction improves?

Surveys and Interviews

- TC Surveys before & after 3 lessons
- TC Post-interview SS20

Videos

- Lesson 1
- Lesson 2
- Lesson 3

Surveys and Interviews

- Deductive and inductive coding/analysis of TC surveys
- Deductive and inductive coding/analysis of TC post-interviews

Videos

 Deductive and inductive coding/analysis of TC's three videos

CHAPTER 4 – FINDINGS

Findings: Research Question 1

My first research question was: "Which factors may enhance or inhibit pre-service teachers' scaffolding during small group reading instruction as they observe, enact, and reflect on their own small group teaching over a series of three lessons?" The findings for this research question are divided into part A: factors that enhance, and part B: factors that inhibit. After analyzing my primary data source, the teacher candidates' videos, and my secondary data sources, the TC's lesson plans, lesson reflections, surveys before and after each lesson, and interviews after the course, I found four factors that enhanced pre-service teachers' scaffolding during small group reading instruction (research question part A), and four factors that inhibited preservice teachers' scaffolding during small group reading instruction (research question one-part B).

As a result of my analysis as described in the methods chapter, I believe the data presented in this chapter supports my claims about factors that enhance and inhibit TCs' scaffolding during small group reading instruction and changes in TCs' instruction over time. The process by which I deduced and induced patterns of supports and challenges for TCs' instruction during small group reading led to the four factors that enhanced and four factors that inhibited scaffolding over a series of three lessons. By stating that factors enhanced scaffolding I claim they strengthened or bolstered TCs work with students toward productive reading. By stating that factors inhibited scaffolding I claim they hindered or constrained TCs' work toward students' productive reading. Successful scaffolding is the micro-level scaffolding described in the rationale for this study, which leads to students' productive reading. Furthermore, productive reading is generative, meaning students get better at reading when they have opportunities to

problem-solve during reading, and a teacher who supports them with scaffolds and prompts at difficulty. TCs learned how to do this work through practiced-based teacher education routines implemented in the literacy methods course. See Table 8 for the summary of findings for research question one.

Table 8
Summary of Research Question 1 and Findings

	Research Question 1 Part A:		
Which fact	tors may enhance pre-service teachers' scaffolding during small group reading		
instruct	ion, as they observe, enact, and reflect on their own small group teaching,		
	over a series of three lessons?		
Findings:	1. Lesson structure		
Factors that	2. Scaffolds and prompts learned in methods course		
Enhance 3. Feedback cycles at error during reading (S feedback and T response)			
Scaffolding 4. Lesson repetition, teaching a series of lessons			
	Research Question 1 Part B:		
	ctors may <i>inhibit</i> pre-service teachers' scaffolding during small group reading ion, as they observe, enact, and reflect on their own small group teaching,		
	over a series of three lessons?		
Findings: Teacher candidates' understanding and experience			
Factors that 1. Students' literacy development (skills, strategies, and knowledge) an			
Inhibit how much scaffolding different tasks need.			
Scaffolding 2. Literacy materials, book choice, and book supports and challenge			
	3. Feedback cycles at accurate reading (S feedback and T response)		
	4. The gradual release of responsibility (teach literacy content & students		

RQ1 Findings Part A

Research question one, part A, refers to factors that enhance pre-service teachers' scaffolding during small group reading instruction. The first factor is the lesson structure itself, that included specific language the teacher planned to say during a five-part lesson sequence. Factor two is the scaffolds and prompts learned in the literacy methods course, including scaffolds to implement at difficulty (Wood et al. 1976, 2003), and prompts to implement at difficulty (Duke & Schutz, 2017). Factor three is the feedback cycles at error during reading, including both student feedback and teacher response during inaccurate reading.

The teachers' responses included two types of support at error, one type of support included scaffolds at difficulty for unplanned moments (Wood et al. 1976, 2003) and the other type of support included teachers' responses with prompts at difficulty for unplanned moments (Duke & Schutz, 2017). The fourth and final factor that enhanced pre-service teachers' scaffolding during small group reading instruction was the teachers' opportunity to repeat small group reading instruction with the same group of students over a series of three lessons, one each week.

The goal of my dissertation study was for TCs to learn how to do this work, by fading in and out during part four of the lesson where students read on their own with TCs providing various levels of support as needed. During the semester long course, I taught TCs what they needed to know about how to implement macro and micro level scaffolding and they had opportunities to implement three lessons and receive feedback between lesson iterations. Part of my study analyzed whether what I taught about small group instruction and how I taught that content was taken up by TCs in their teaching practice during small group reading instruction. This content was new to TE 405, based in my practicum research and the recently published K-3 Literacy Essentials 3 (Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force, 2016). I implemented practice-based teacher preparation techniques to learn the smaller pieces of the lesson structure, levels of support, prompts, and how to provide feedback during our weekly class sessions. More specifically, enhance factor 1, lesson structure, was taught as a macro-level scaffold to organize the lesson, and was learned and practiced through representations, decompositions, and approximations (Grossman et al., 2009). In addition, enhance factor 2, scaffolds and prompts learned in methods class, were taught as micro-level scaffolds to provide levels of support and prompts during reading, and were learned and practiced through representations,

decompositions, and approximations (Grossman et al., 2009). Furthermore, enhance factor 3, feedback cycles at error during reading, were taught as micro-level scaffolds to provide practice with increasing and decreasing control during reading, and were learned, practiced, and improved during weekly class sessions. Lastly, enhance factor 4, lesson repetition, was taught as a macro-level scaffolding for big picture planning and micro-level scaffolding for fine-grained improvement, and was learned through three iterations with feedback and development. See Table 9 for a summary of the factors that enhance pre-service teachers' scaffolding. In the remainder of this section, I provide select examples of the four factors that enhance scaffolding during small group reading instruction.

Table 9

Findings RQ1 Part A: Factors that Enhance Pre-Service Teachers' Scaffolding

Factor	Enhance Scaffolding		
1	Lesson Structure		
	Lesson Part 1: Begin lesson		
	• Lesson Part 2: Explicit instruction		
	 Lesson Part 3: Read and implement skill 		
	 Lesson Part 4: Students read a book; teacher listens, coaches, prompts 		
	 Lesson Part 5: Lesson closure to revisit skill and meaning of text 		
2	Scaffolds and Prompts Learned in Methods Course		
	• Scaffolds to implement at difficulty (Wood et al. 1976, 2003)		
	Prompts to implement at difficulty (Duke & Schutz, 2017)		
3	Feedback Cycles at Error During Reading		
	 Student feedback at error during reading 		
	• Teacher response at error with scaffolds (Wood et al. 1976, 2003)		
	 Teacher response at error with prompts (Duke & Schutz, 2017) 		
4	Lesson Repetition		
	 A series of three lessons 		

Examples of Factors that Enhance Scaffolding

Enhance Factor 1: Lesson Structure. The first factor that enhanced pre-service teacher candidates' scaffolding was the structure of the lesson plan that included precise language, both provided from the instructor and written by the TC. The lesson structure included five specific

parts for TCs to write down and plan what they would say and do during key moments during the lesson. The five parts included: 1) begin the lesson, 2) explicit instruction, 3) read and implement skill, 4) students read book and teacher listens, coaches, prompts, and 5) lesson closure to revisit the skill and the meaning of text. More specifically, the lesson plans included preplanned sentence starters (provided from the instructor) and areas where the TCs wrote their own words (to customize the lesson for that specific group of students).

Lesson structure part one. For part one of the lesson, teacher candidates wrote down how they would begin or introduce the purpose of the group lesson that day. Part one of the lesson structure included these statements, "You are doing well at ______ however, you need to work on _____." "Learning this will help you _____." The two examples described below are evidence that teacher candidates used the specific lesson structure provided by the instructor to plan and launch a clear lesson with language that was direct for the students to learn. For example, TC-A began her lesson on the following sight words: you, come, where, what, and us, with the specific language for the lesson written down for her small group of first grade students. She began with, "I brought you together today because... You need extra help on sight words and decoding words. You're really good (TC looks at student and TC says student's name) ... you're really good at reading and spelling your words, but you need some extra practice at it. I mean, you need extra practice at some of your sight words. So, I'm going to be helping you learn and learn to become better at... become better readers, become faster readers, and learn more about what you are reading" (TC-A lesson 1, time 1:26-2:00).

In another example, TC-C began her lesson on phoneme matching with the specific language for the lesson written down for her small group of kindergarten students. She began with, "So, since I know that you guys are really good at hearing the sounds in words and

knowing that bat has a /b/ in it, right? You guys are really good at that! But we are going to practice hearing the first sound in words, and we're also going to practice finding the letters in the words that go with the sounds. So, then you guys will be even more superhero readers" (TC-C lesson 1, time 0:05-0:32).

Lesson structure part two. After the introduction of the lesson, the TCs planned for the explicit instruction. For part two of the lesson, teacher candidates wrote down how they would teach the specific strategy or skill in a series of steps. Part two included these statements to begin the planning of how to teach the specific strategy or skill: "What is the specific lesson focus? What are going to say first? Then what? After that? Finally?" This lesson structure prompted TCs to write down what they will practice together and what they will have students read on their own. The two examples described below are evidence that teacher candidates used the specific lesson structure provided by the instructor to plan the explicit instruction portion of the lesson to teach the new skill or strategy that the students were ready to learn next. For example, TC-A continued her lesson on the sight words: you, come, where, what, and us, by following the specific language she wrote down for the explicit instruction component of the lesson for her small group of first grade students. She stated, "So, first I'm going to show you what we are going to do together. And then we are going - I'm going to have you do it on your own. So, the first word we are going to do... My first word is 'you'... And I'm going to write it three times. What does this spell? Now I'm going to give you two a white board. And you are going to write the word. What are you writing? What's the word Joe? What are the letters in it? Okay, let's do it again" (TC-A lesson 1, time 2:01-3:59). The teacher and students continued to practice writing the sight words on white boards.

In another example, TC-C continued her lesson on phoneme matching by following the specific language she wrote down for the explicit instruction component of the lesson for her small group of first grade students. She stated, "Okay, so we are going to play a fun card game, and these are our cards. (The teacher hands out cards to the students). So, each row is 1, 2, 3 across. I'm going to read the pictures. I'm going to say what they are out loud. So, I'm going to say house, zebra, helicopter; (the teacher repeats house, zebra, helicopter). Now I need to figure out the first sound in each word. So, house is /h/, zebra is /z/, and helicopter is /h/. So, two of these words started with the same sound and it was /h/ house, and /h/ helicopter. So, the /z/ zebra does not belong. House and helicopter both have a /h/ and zebra has a /z/. The teacher hands out the cards and says, 'I'm going to give you each one (set of cards) and I'm going to give you each a marker. Since I did the first one, go ahead and put an X through zebra" (TC-C lesson 1, time 0:39-2:02). The teacher and students continued to play the phoneme matching game with cards.

Lesson structure part three. After the explicit instruction, the TCs planned for getting students ready to read. For part three of the lesson, teacher candidates wrote down how they would transition to the next part of the lesson where students would read a book on their own and implement the skill or strategy the TC just taught. Part three of the lesson structure included these statements, to transition to the part of the lesson to read a book: "The books I chose for you to read today is _____." "When you read today, I will listen for ____." "Go ahead and read now ____." The plan from the instructor prompted TCs to write down what they will do as the teacher. The two examples described below are evidence that teacher candidates used the specific lesson structure provided by the instructor to plan the active engagement to connect the explicit instruction to the new book reading part of the lesson. For example, TC-A continued the lesson on the sight words, including the words you, come, where,

what, and us, by transitioning to part three of the lesson with this specific language written down for her first-grade students to implement the new skill to read a new book. She stated, "So, now you are going to read this book. So, we are going to read this book; you two are going to read it separately, at your own pace. I'm looking for you to read the sight words we just read. I'm looking for you (to) read(ing) the words. If you get stuck, try a different sound. Or, slide through the word (points and models). So, we are going to be reading A Party for Brown Mouse. It's about a party, about a birthday party. (The teacher hands out the books). You two are going to be reading at your own pace" (TC-A lesson 1, time 9:39-10:28). The students continued to read the book A Party for Brown Mouse with the teacher as a support.

In another example, TC-C continued her lesson on phoneme matching by transitioning to part three of the lesson with this specific language written down for her kindergarten students to implement the new skill to read a new book. She stated, "Okay, so we're going to read this, and we are going to practice being superhero readers, okay. So, we'll read together and some of the pages, you guys can read on your own. But when we are listening to the words, and when we are reading the story, we are going to look for words on the page that say the same sound. Kind of like house and helicopter start with the same sound and lion and lizard start with the same sound, okay? So, we are looking for words that start with the same... (The teacher hands out the books). Let's put our finger on the title. Put your finger on the title. So, let's read it together, Before I Go to School. Ready, again, Before I Go to School. So, what this book is going to talk about is all the things that this boy does before he goes to school. Okay, I'm going to read this page to you, and then you can read. 'Before I go to school, I make my bed'. Which two words sound the same, which two words start with the same sound?" (TC-C lesson 1, time 11:23-

13:30). The students continued to read the book *Before I Go to School*, with the teacher as a support.

Lesson structure part four. After transitioning to reading, the TCs planned to have the students read on their own. For part four, teacher candidates wrote down how they would listen, coach, and prompt while students were reading the book. The plan prompted TCs to take notes on each student while they listened and decided what moves (scaffolds and prompts) to make with students at success and at error. The specific examples of the TCs listening, coaching and prompting were not preplanned. These moments were based on students' feedback at accurate reading or at error during reading. More specific examples of part four of the lesson are described below in conjunction with factors 2 and 3 that enhance scaffolding. Factor two is the cycle of student feedback and teacher response during accurate reading. Factor three is feedback cycles at error during reading, the cycle of student feedback and teacher response at difficulty. More specifically, when students made an error during reading, the teacher candidate provided scaffolds and/or prompts to support their problem solving. Student comments and teacher responses at success and at error during reading were factors that enhanced scaffolding.

Lesson structure part five. After listening, coaching, and prompting during reading, the TCs planned for students to come back together. For part five, teacher candidates wrote down how they would bring the group back together when they completed the book reading. Part five of the lesson structure included these statements: "First, encourage students to talk about what they learned about the topic of the book," In other words, "What will you ask students about the meaning." Make sure to write notes on each student in their share out about the book's meaning. "Second, ask the students for an example of a word they read in their text, where they had to

the strategy or skill?" "Make sure to write notes on each student, in their demonstration of the strategy or skill." The two examples described below are evidence that teacher candidates used the specific lesson structure provided by the instructor to bring the students back together to discuss the meaning of the book and how they used the new skill during reading. For example, TC-A concluded the lesson on the sight words: you, come, where, what, and us, by bringing her small group of first grade students back together to talk about how they used the skill learned at the beginning of the lesson to read and make meaning of the new book called A Party for Brown Mouse. She stated, "Okay, what is this book about? First, Bill, tell me what this book is about. Joe what is it about? Now I want you to open to a page and look for one of the sight words that we learned. And you're each going to read the sentence to me." Student two read, 'Come on said brown mouse'... Student one read, 'It is my birthday.... you' (emphasis YOU). Okay, so once again we are going to go through these sight words" (TC-A Lesson 1, time 15:34-17:21). The teacher and students wrapped up the lesson by going through the sight words one more time.

In another example, TC-C concluded the lesson on phoneme matching by bringing her small group of kindergarten students back together to talk about how they used the skill learned at the beginning of the lesson, to decode and make meaning of the new book. She stated, "Okay, excellent reading, you guys are superhero readers already. Okay, let me ask you, did you guys like that book? What was it all about? (The students said, 'Combing your hair, washing your face, and making your bed'). What were all those things, what was he doing that for? (The students said, 'For going to school'). All the things he does before going to school. So, today, we practiced listening really closely to the sounds that the words make. What did you learn about that? Do you know? Did you learn that you can find the letters? What did you learn about the

sounds? What's one word you remember from our book that starts with the same sound?" (The student said B and B). (TC-C lesson 1, time 21:24-23:31). The teacher and students wrapped up the lesson by finding words in the book that begin with the same sound.

Video analysis of the three small group lessons provided evidence that the lesson structure enhanced TCs' scaffolding during small group literacy instruction. For example, across the series of three lessons 4 out of 5 of the TCs completed all five lesson structure components during each lesson. For the one TC who did not complete all the lesson components, her lesson component completion increased over time. In other words, this TCs completed three out of five components for lesson 1, she completed four out of five components for lesson 2, and she completed all five lesson components for lesson 3. In addition to video analysis, three other data sources were analyzed to support lesson structure as a factor that enhanced scaffolding over a series of three lessons, including lesson reflections, surveys, and interviews.

Lesson reflections at the conclusion of three small group lessons indicated that the lesson structure enhanced TCs' scaffolding during small group literacy instruction. For example, according to one TC, "The three small group lessons generally looked the same. I first brought them together to tell them what they are good at, what they still need work on, and what I am going to be teaching them. Then I got to the explicit instruction part. I picked five sight words that they did not know from their sight word assessment and then I taught it to them. I said the sight word a loud, spelled it and then wrote it three times. I also used it in a sentence. Then I had them do the same thing. Having them say it and write it makes them see it in writing, so they will know it when it comes to the book. I did this for all the sight words that I taught them in every lesson. I then had them read a book with the sight words in the book. After that I asked them questions about the book, like what is the meaning and where in the book they saw the sight

words they just learned. I did the five steps of teaching a small group lesson" (TC-A, Lesson Reflection, 2019). According to another TC, "All three of my lessons followed a similar structure. I sat down with my two students, told them what they were good at and mentioned a skill that we could work on to be better readers. I introduced and modeled the activity, allowed the students time to complete the activity, and then we read a story that we could use the skill to help us decode" (TC-C, Lesson Reflection, 2019). As reported by the TCs in the lesson reflections, the lesson structure was used to plan, implement, and reflect on teaching children in small group literacy sessions.

Surveys before and after each small group lessons provided additional evidence that the lesson structure enhanced TCs' scaffolding during small group literacy instruction. One of the survey questions asked TCs, "How confident do you feel to implement step four of small group instruction: Teachers listen, coach, prompt, and scaffold and why do you feel that way about step four?" The survey data supported that TCs felt more prepared after each lesson. For example, before the first lesson TCs stated, "I haven't done much of this in the past" and "It is my first time working to really work with multiple students at once" (Survey Before Lesson 1, 2019). In the middle of the series of lessons TCs stated, "I think I'm doing this right" and "Easy to point out blends and digraphs" (Survey After Lesson 1, 2019). After the final lesson, TCs stated, "I know the strategies to help them with reading" (Survey After Lesson 3, 2019). As reported by the TCs in the surveys, the lesson structure over a series of three lessons helped TC feel more prepared to plan, implement, and reflect on teaching children in small group literacy sessions.

Interviews with the TCs during the internship indicated that the lesson structure enhanced TCs' scaffolding during small group literacy instruction. For example, in an interview one TC stated that, "I hadn't done lessons like that where I connected it to the reading. Bringing in the

text really helped because it connected it to the reading part. That was really useful and going in (to materials) to find the correct books" (Interview, March 2020). In another interview, a TC stated that, "Your class really helped me. I did follow these five things (lesson steps) because it really helped them. And I used that structured lesson plan, that helped me as well" (Interview, March 2020).

The organized lesson structure was the first factor that enhanced preservice teachers' scaffolding during small group reading instruction. By stating factor 1 enhanced scaffolding I claim it strengthened and equipped TCs to support students toward productive reading. I argue that instructing TCs to plan at this macro-level was a way to secure that a detailed and organized lesson structure was in place before setting out to work with students. As stated earlier, this structure was learned and practiced through the practice-based teacher education techniques of representations, decompositions, and approximations (Grossman et al., 2009). The structured lesson planning document created a clear, concise lesson structure for TCs to plan and implement a small group lesson that provided purpose, explicit instruction, a link between the skill and continuous text, a time for students to read, and a clear lesson closure. In addition, this structure provided a clear beginning and end to each lesson, which enhanced TC's scaffolding during each small group lessons. The following sections describe three additional factors that enhanced scaffolding which were evident during the part of the lesson when students read on their own. The TCs had a space in their lesson plans to take notes during the students' reading to note where students were successful and where they needed support.

Enhance Factor 2: Scaffolds and Prompts Learned in Methods Course. The second factor that enhanced pre-service teacher candidates' scaffolding was the scaffolds and prompts TCs learned in their literacy methods course. More specifically, TCs learned two types of

responses they could implement if students needed support during the reading portion of the lesson. The first possible TC response was to provide different levels of scaffolded support as needed when students read (Wood et al. 1976, 2003). The second possible TC response was to provide one or more of the research-based reading prompts as needed when students needed support (Duke & Schutz, 2017).

Scaffolds to Implement at Difficulty. The scale of help by Wood et al, (1976) and Lose (2007), is described in Table 10. This model provides a level, definition, target, and example for each of the five levels on the continuum, from less support to more support. The lowest level on the scale of help is level 1 and is implemented to encourage students to keep reading. These are general verbal interventions that focus on students' problem solving (Wood et al., 1976, Lose, 2007). At this level TCs provide general, encouraging statements to the child as they listen to students read. Examples of a general verbal interventions that TCs might say include, "you try it", or "maybe", or "you worked that out" (Lose, 2007). When TCs say general verbal interventions, they propel students forward to keep reading. Level 2 on the scale of help includes specific verbal interventions, that prompt, direct, and remind students about what they should continue doing, or what they need a reminder to do (Wood et al., 1976, Lose, 2007). At this level, TCs provide specific statements to the child as they listen to students read. Examples of a specific verbal interventions that TCs might say include, "Do this next" or "What else can you try?" or "Look for something that can help you" (Lose, 2007). When TCs make specific verbal interventions to students, they nudge students forward to keep reading.

The middle level on the scale of help, level 3, includes specific verbal interventions plus non-verbal information that assists students to keep focusing on level 2 but adds a nonverbal cue to launch problem solving with and for the child (Wood et al., 1976, Lose, 2007). At this

level, TCs add non-verbal help for the child as they listen to students read. Examples of the combination of verbal and non-verbal feedback that TCs might implement include drawing Elkonin boxes, saying a word slowly, or covering up part of the word to highlight for the child to solve a new word (Lose, 2007). When TCs make specific verbal and non-verbal interventions to students, they increase the support to keep students reading. Level 4 on the scale of help included increased support with one or two choices to prepare the child for the next action. At this level, the TC continues to launch problem solving, but adds more support (Wood et al., 1976, Lose, 2007). Examples of an increase of support that TCs might say include, "What letter do you add to that word?" or "You know a word that looks like bent, you know went, write it" or "It (shop) starts like she, sh-, try it" (Lose, 2007). When TCs provide this level of support, they are doing more of the problem solving for the child, and increasing scaffolding.

The highest level of support, level 5, includes the TC modeling or demonstrating, with verbal and non-verbal actions, to take back control of task (Wood et al., 1976, Lose, 2007). At this level, the TC does the task for the child, as the child cannot do the task alone yet. Examples of demonstration include the TC adding the 'a' in bot to make the word boat and quickly telling why, or demonstrating letter formation with verbal cues to help the child make a letter, or telling the child a name or a phrase that is too tricky at that time (Lose, 2007). When TCs provide this level of support, they show the child how to solve the word. In the next section, I define the types of research-based prompts that TC learned to use in small group reading instruction.

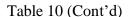
Table 10

Instructional Levels of Support: Less Support to More Support

Level 1: General Verbal Intervention

Target: Child's problem solving

- Focus on the child's problem solving (Wood et al., 1976)
- General, encouraging statements to the child (Lose, 2007).



Examples:

- Say "You try it"
- Say "Maybe"
- Say "You worked that out"

Level 2: Specific Verbal Intervention

Target: Prompt, direct, remind

• Focus on what the child should do next, what the child should continue doing, or what the child needs a reminder to do. Tell the child this (Wood et al., 1976, Lose, 2007).

Examples:

- Say "Do next"
- Say "What else can you try?"
- Say "Look for something that can help you"

Level 3: Specific Intervention & Nonverbal Information

Target: Add a nonverbal cue

• Continue to focus on level 2, but add nonverbal cue. Launch problem solving with/for the child; combine verbal and nonverbal feedback (Wood et al., 1976, Lose, 2007).

Examples:

- Draw Elkonin boxes or say a word slowly
- Cover up part of the word to highlight for solving

Level 4: Prepares for Next Action

Target: Add more support and give one or two choices to solve problem

• Continue to launch problem solving, but adds more support. Gives one or two choices. Higher level of support with one or two of options (Wood et al., 1976, Lose, 2007).

Examples:

- Ask "what letter do you add to that word?"
- Say "you know a word that looks like bent, you know went, write it"
- Say "It (shop) starts like she, sh-," try it"

Level 5: Demonstrates Action

Target: Model or demonstrate, with verbal and nonverbal cues

• Take back control of task. Model/demonstrate, with verbal/nonverbal cues. Do task for child as he/she cannot do it on his/her own, yet (Wood et al., 1976, Lose, 2007).

Examples:

- Say add the "a" in bot to make it boat and quickly tells why
- Demonstrate letter formation, add verbal cues for writing, help the child make letter
- Tell the child a name or a phrase that is too tricky at that time

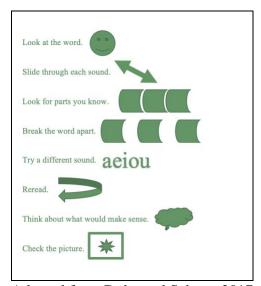
Adapted from Lose, 2007; Wood et al., 1976

Prompts to Implement at Difficulty. The prompts to use when students have difficulty reading a word, by Duke and Schutz (2017), are shown in Figure 4. This document includes specific language, picture cues, and a supporting rationale for teachers about when and how to

implement these specific research-based prompts when students are stuck on a word during reading. The eight prompts include: look at the word, slide through each sound, look for parts you know, break the work apart, try a different sound, reread, think about what would make sense, and check the picture. The list includes two types of problem-solving prompts. The first is prompting for letters and sounds and the second is prompting for meaning. The first six prompts focus on letters and sounds and the last two prompts focus on meaning. Duke and Schutz (2017) recommend prompting for letters and sounds first because prompting for meaning might take the focus away from tricky words. Instead, TCs should prompt for letters and sounds and then help the students confirm meaning to keep reading. There are instances when students need prompts for meaning first, for those students who read accurately, however do not read for meaning.

Figure 4

Instructional Prompts for When a Child is Having Difficulty Reading a Word



Adapted from Duke and Schutz, 2017

Video analysis of the three small group lessons provided evidence that scaffolds and prompts learned in the methods course enhanced TCs' scaffolding during small group literacy instruction. For example, as stated in the above examples, TCs provided a range of support

during small group instruction and practiced using prompts during reading when students had trouble reading a word. In addition to video analysis, the analysis of three other data sources (lesson reflections, surveys, and interviews) supported scaffolds and prompts learned in the methods course as a factor that enhanced scaffolding over a series of three lessons.

Lesson reflections at the conclusion of three small group lessons indicated that the scaffolds and prompts learned in the methods course enhanced TCs' scaffolding during small group literacy instruction. For example, according to one TC, "In my last video, you can see that I correct my student when she says on instead of in. This was a mistake she made throughout the book but I chose not to correct her most of the time" (TC-B, Lesson Reflection, 2019). And according to another TC, "In this assignment, I learned how to create a lesson and connect the ideas throughout. I learned strategies to connect letter sound comprehensions to reading. For example, bringing attention to letters that we had just learned with explicit instruction. I also learned explicit instruction activities for letter sound correlation" (TC-D, Lesson Reflection, 2019).

Surveys before and after each small group lessons provided additional evidence that scaffolds and prompts learned in the methods course enhanced TCs' scaffolding during small group literacy instruction. One of the survey questions asked TCs, "How confident do you feel to implement step four of small group instruction: Teachers listen, coach, prompt, and scaffold and why do you feel that way about step four?" The survey data supported that TCs implemented the scaffolds and prompts learned in the methods course and that those actions enhanced their scaffolding during small group instruction. For example, one TC stated these comments regarding scaffolds, "I can listen and know the strategies to help them," and "I can listen and help them if they need it" (Survey, 2019). In addition, another TC stated these comments

regarding prompts, "I'm not sure my prompts are the best for the situation," and I "just need practice on language" (Survey, 2019).

Interviews with the TCs during the internship indicated that scaffolds and prompts learned in the methods course enhanced TCs' scaffolding during small group literacy instruction. For example, in an interview, one TC stated that she currently implements scaffolds and prompts during the internship, "As well as the anchor charts from TE 405, that I still keep in my classroom" (Interview, March 2020). In reference to prompts, in an interview a TC stated that the specific prompts are good reminders for her and that, "A lot of time I'll catch myself and say no, no, no, it's this..." and then self-correct herself with a more precise prompt (Interview, March 2020).

When analyzing small group lessons, it was evident that TCs used the scaffolds and prompts learned in the literacy methods course to support the students at difficulty during reading. In other words, by stating factor 2 enhanced scaffolding I claim it strengthened and supplied TCs with language to support students toward productive reading. I argue that instructing TCs to implement scaffolds and prompts at this micro-level provided TCs with precise language to use with students before sending them to work with students. As stated earlier, the scaffolds and prompts were learned and practiced through the practice-based teacher education techniques of representations, decompositions, and approximations (Grossman et al., 2009). In the next sections I describe how those scaffolds and prompts were implemented with students within feedback cycles at error during reading. This occurs as students read and get stuck, which signals teachers to make moment by moment scaffolding and prompting decisions to keep students reading.

Enhance Factor 3: Feedback Cycles at Error During Reading. The third factor that enhanced pre-service teacher candidates' scaffolding was feedback cycles at error during reading. This feedback happened during the part of the lesson when students read on their own and the TC was available to listen, coach, and prompt during reading. This is an extension of enhance factor two, where the TCs learned about scaffolds and prompts during their literacy methods course. In factor three, TCs learned how to operationalize scaffolding and prompting when students were stuck on a word. The two instructional tools that TCs learned during their literacy methods course, scaffolds and prompts, were strategies that enhanced scaffolding because TCs had some options of what to say and do when students were stuck. The scaffolds increased in help from the teacher, from least to most support, and included general encouragement, then specific suggestions, next, the addition of non-verbal moves with new learning, after that the addition of even more support with specific choices, and lastly modeling or demonstrating from the teacher on how to solve the word. The prompts were available in list form to TCs during their small group lessons for a quick reference.

While TCs listened to reading, students were either successful and accurate, or unsuccessful and inaccurate. When students were successful, the TC did not scaffold or prompt, because the students did not need extra support. The behaviors at accurate and inaccurate reading varied. Students were excited when they could read the text and make meaning and were frustrated when they were stuck and could not make meaning. Feedback cycles at error during reading enhanced scaffolding because the TCs knew they could offer a range of support or offer a prompt. However, feedback cycles during accurate reading inhibited scaffolding because TCs only listened to the students read and did not need to offer additional support. Even though feedback cycles at error enhanced scaffolding, it was not yet automatic for TCs to

implement the just right scaffold or prompt to keep the students reading. Feedback cycles during accurate reading and providing the right level of support at error are discussed in research question part B: factors that inhibit preservice teachers' scaffolding during small group instruction.

Student Feedback at Error. Each feedback cycle at error reading consists of a student reading and getting stuck and the teacher listening, prompting, and coaching. When the reading is successful and accurate for the student, the teacher does not need to intervene; however, when the student is stuck on a word, the teacher moves from listening to intervening with prompts and scaffolds. Therefore, the third factor that enhanced TCs' scaffolding included the ways in which students provided feedback or comments to the TC when they were stuck during reading, and then how the TC responded. As stated above, TCs were encouraged to note what happened when students were stuck on a word during reading or when they kept reading at error. They were also encouraged to note the students' reading behavior during success and at error.

Teacher Response at Error with Scaffolds and Prompts at Difficulty. The counterpart to students' feedback and problem solving at error during reading is how the TCs responded to their students' reading behavior during that interaction. This is a continuation of factor three that enhanced pre-service teacher candidates' scaffolding during small group reading. The TCs' responses happened during the part of the lesson when the students read on their own or with support. Students talked out loud as they tried to figure out a word or sat silently, which was feedback to the teacher. The talk included student attempts to figure out a word, scenarios where there were no attempts to figure out a word, or times when students kept reading through an error did not monitor during reading, such as problem solving while reading A Hug is Warm (Cowley & Fuller, 1996). In that lesson, the student read, "A hug is as warm as a stove" (the

word was oven), "A hug is as warm as a tub" (the word was bath), "A hug is a warm as a hot cocoa" (the word was chocolate). The reading behavior at error was productive because it included attempts at using the initial letter sound and resulted in substitutions that made sense. There were other times when the reading behavior did not make sense, such as "A hug is a warm as soap (the word is soup). The TC's response to these types of student reading were verbal and nonverbal as the TC scaffolded and prompted to help the child solve the word (TC-E Lesson 2). At times the student kept reading at error and other times the student stopped reading and required additional teacher scaffolds and prompts to keep going. In these examples, the students needed help to problem solve to make meaning, which is the goal of reading.

When analyzing TCs' scaffolding during new book reading, and the reading was not accurate, the teacher's scaffolding ranged from a level 1 to a level 5 on the scale of help, as defined by Wood et al. (1976) and Lose (2007). When I analyzed the data of TCs' scaffolding during students' reading, I observed that TCs listened when the reading was successful (which inhibited scaffolding) and listened, coached, prompted, and scaffolded when it was challenging. In addition, I noticed that TCs provided support at both extremes on the scale of help; they either provided general, encouraging comments when the students needed more support, or did all the work for the students when they were capable of problem solving on their own. See Table 11 for the initial codes pertaining to teacher scaffolding levels during student reading. Scaffolding and prompting at error during reading are important factors that enhanced preservice teachers' scaffolding during small group reading instruction.

Table 11
Initial Codes Pertaining to Teacher Scaffolding

Code	Level of Support	Teacher Scaffolding Level Description
TSL1	Teacher Talk General	Least support from teacher, child in control of
		problem solving

Table 11 (Cont'd)

TSL2	Teacher Talk Specific	Keep learning moving forward; prompts/reminders; no new teaching
TSL3	Teacher Talk/Nonverbal Actions	New learning introduced; show or teach child new problem solving
TSL4	Teacher Higher Support	Add more support to problem solve
TSL5	Teacher Models/ Demonstrates	Most support from teacher; teacher in control of problem solving

Adapted from Wood et al., 1976, Lose, 2007

When analyzing TCs' prompting during new book reading, and the reading was not accurate, the teacher's prompting ranged from all eight prompts learned in our literacy methods course, defined by Duke and Schutz (2017). When I analyzed the data of TCs' prompting during students' reading, I observed that TCs listened when the reading was successful and listened, coached, prompted, and scaffolded when it was challenging. In addition, I noticed that TCs provided prompts for both types of reading support: prompts for letters and sounds, and prompts for meaning. The TCs had their list of prompts available on their small group table to refer to when students read. See Table 12 for the initial codes pertaining to teacher prompting during student reading. Scaffolding and prompting at error during reading are important factors that enhanced preservice teachers' scaffolding during small group reading instruction.

Table 12

Initial Codes Pertaining to Prompting at Difficulty

Code	Prompt Language	Teacher Prompt Description
TP1	Look at the word	Prompt for letters and sounds, at the word level
TP2	Slide through each sound	Prompt for letters and sounds, to blend word parts
TP3	Look for parts you know	Prompt for letters and sounds, to connect with known parts
TP4	Break the work apart	Prompt for letters and sounds, to segment word parts

Table 12 (Cont'd)

TP5	Try a different sound	Prompt for letters and sounds with flexibility in looking at letters and sounds
TP6	Reread	Prompt to reread for fluency and meaning
TP7	Think about what would make sense	Prompt for meaning
TP8	Check the picture	Prompt for meaning
TP9	Other	Other prompts that teacher candidates used

Adapted from Duke and Schutz (2017)

The following examples provide evidence regarding how students provided verbal and non-verbal feedback to TCs while problem solving at error, and then how the TCs used scaffolding (Wood et al. 1976, 2003) and prompting (Duke & Schutz, 2017) to assist students. Student talk included productive struggle during reading, the use of letters and sounds to problem solve unknown words, and student appeals to the TC for support. Feedback cycles between students and TCs occurred while reading *A Party for Brown Mouse* (Giles & DeWitt, 1999), such as when both students stopped at the word bread. Student one reached the page first and read "I like bride and cheese, said White Mouse" (said bride for bread). The teacher used TLS3 by combining verbal and non-verbal support to assist the student in looking at the word bread again. She said, "sound it out, slide through the word", which are prompts TP2, slide though each sound, and TP4, break the word apart. The student said bride again, and the TC responded with, "bride, does bride sound right", which is TP7, think about what would make sense. The student attempted the word a third time, "/b//r//e//d/" and voiced each individual sound, then "/br//ed/" and broke the word into two parts, and finally read "bread" and put it back

in the sentence, while the TC nodded (TC-A Lesson 1). See Table 13 for these examples of feedback cycles between the teacher and student at error during reading.

Later in the lesson, the second student was stuck on the same word and read, "Here is the party said Brown Mouse. I like" (stops at bread and cheese). The teacher used a SL3 that combined verbal and non-verbal scaffolding by pointing and prompting. She said, "Slide through the word," which is also TP2. The student responded with, "Cheese, cheese" (he skipped the two words: bread, and). The teacher said, "That one is cheese, what is this one," pointing to bread. The student looked at the picture and said, "Lemonade." The teacher brought the student back to the word a third time, "Look at the word, what is it?" and the student looked at the word and said, "Broom" (which has the same beginning as bread). The teacher pointed to the word a fourth time, "Not broom" and provided even more scaffolding with, "/br//e/..." and left the end sound open. That is when the student looked, followed her lead and said, "br-ea-d" (TC-A Lesson 1). See Table 13 for these examples of feedback cycles between the teacher and student at error during reading.

Table 13

Feedback Cycle at Error During Reading

Orienting Excerpts:		Analytic Point:	Analytic Comment:
Text Information:	Student Reading New	Instructional	Interpretation
A PARTY FOR	Book and Teacher	Scaffolding or	
BROWN MOUSE	Responding	Prompting	
(Giles & DeWitt, 1999))		
p. 10	S2: Says bride for bread	dTime: 12:16	Scaffolds:
Here is the party said	and stops	New learning	TSL3 Teacher
Brown Mouse. I like	T: Sound it out. Slide	introduced; show or	Talk/Nonverbal
bread and cheese said	through the word.	teach child new	Actions
White Mouse. I like	S2: Bride	problem solving	Prompts:
cake said Gray Mouse.	T: Bride, does bride		TP7: Think about
Where is your birthday	sound right?	Prompt for letters and	what would make
cake?	S2: B-r-ea-d	sounds, to segment	sense.
	S2: Br-ead	word parts	
	S2: bread	-	

Table 13 (Cont'd)

	T: Bread (pointing and nodding) S2: Bread, said white mouse.	Student kept going, teacher leaned in with a prompt.	Prompts: TP2: Slide through each sound. Prompts: TP4 Break the word
			apart
p. 10	S1: Reads Here is the	Time: 13:00	Scaffolds:
Here is the party said	party said Brown	New learning	TSL3 Teacher
Brown Mouse. I like	Mouse. I like (stops)	introduced; show or	Talk/Nonverbal
bread and cheese said	T: Points, and says	teach child new	Actions
White Mouse. I like	slide through the word	problem solving	
cake said Gray Mouse.	S1: Cheese, cheese		Scaffolds:
Where is your birthday	T: That one is cheese	Add more support to	TSL4 Teacher
cake?	T: What is this one?	problem solve	Higher Support
	S1: Lemonade,		
	lemonade	Most support from	Scaffolds:
	T: Look at the word,	teacher; teacher in	TSL5 Teacher
	what is it?	control of problem	Models/
	S1: Broom,	solving	Demonstrates
	T: Not Broom		_
	S1: Looks at the picture		Prompts:
	and says, "Oh these" pointing to bread.	sounds, four times Slide through the	TP2: Slide through each sound.
	T: What is it?	word.	The teacher used
	T: /br/ /e/	What is this one?	this prompt four
	S1: bread	Look at the word,	times.
	T: bread	what is it?	
		What is it?	

TC-A Lesson 1; Text from A Party for Brown Mouse (Giles & DeWitt, 1999)

In another example, feedback cycles between students and a TC occurred while reading What Is It? (Avery, 1997). During that lesson, the student read correctly, "Green. It is green, what is it?" and then guessed the next word using clues from the pictures, "Water, pickles, tomato..." (for the word avocado). The teacher began by combining verbal and non-verbal support, TLS3, to point out the word avocado. She said, "No, look at this" (as she pointed to the word avocado). The student responded with, "It is... I don't know, an...." and the TC said, "Yeah." The student continued with, "Is that an? What is a-n?" The TC confirmed that it is the

word an. The TC then added more support, TLS4, as she leaned in and said, "Let's sound it out, sound it out, slide through the word" and the student made sounds such as, "/f/, fivy, ivy, tomato, favo." Finally, the TC added the highest level of support, TLS5, and demonstrated for the student how to say the word slowly and say all the sounds in the word, "av - o - ca - do" (TC-A Lesson 2). The feedback cycle between the TC and student moved from the middle level of support to the highest level of support on the scale of help (Wood et al. 1976, 2003). In addition, the TC used prompts that focused on letters and sounds (Duke & Schutz, 2017) that took the student back to the word that was tricky. In this example, the TC shared control of problem-solving with scaffolded levels of support and reading prompts. See Table 14 for these examples of feedback cycles between the teacher and student at error during reading.

Table 14

Feedback Cycle at Error During Reading

Orienting Text	Excerpts:	Analytic Point:	Analytic Comment:
Information:	Student Reading New	Instructional	Interpretation
WHAT IS IT?	Book and Teacher	Scaffolding or	
(Avery, 1997)	Responding	Prompting	
p. 6	S: Says water, pickle,	Time	Scaffolds:
Green.	tomato for avocado.	New learning	TSL3 Teacher
	T: No, look at this (and	introduced; show or	Talk/Nonverbal
p. 7	points)	teach child new	Actions
It is green.	S: It is I don't know	problem solving.	
What is it?	S: an	The teacher points	
	T: Yeah	(scaffolding).	
pp. 8-9	S: Is that an?		
It is an avocado.	T: Yeah	Add more support to	Scaffolds:
	S: What is $a - n$?	problem solve.	TSL4 Teacher
	T: an	The teacher says let's	Higher Support
	T: Let's sound it out,	sound it out, sound it	
	sound it out, slide	out, slide through the	
	through the word	word (T leans in).	
	S: /f/ fivy, ivy		
	T: No, not ivy	Most support from	Scaffolds:
	S: Tomatoes	teacher; teacher in	TSL5 Teacher
	T: no	control of problem	Models/
	S: Makes sounds favo	solving.	Demonstrates

Table 14 (Cont'd)

T: favo?	The teacher models for	Prompts:
S/T: Trying to sound	student how to sound	TP2: Slide through
out avocado	out avocado:	each sound.
T: av - o - ca - do	av - o - ca - do	
S: avocado		

TC-A Lesson 2; Text from What Is It? (Avery, 1997)

Later in the lesson, the student read "It is green and swobby" (said swobby for sour). The teacher used TLS2, specific teacher talk, to keep the learning moving forward, to use prompts and reminders, with no new teaching. After telling the student, "Not swobby," the TC added the prompt, "slide through the word." The student responded with, "sobby" (said sobby for sour). With that, the TC added new learning and increased support with TSL3, to teach the student new problem solving by saying and pointing, "Okay look, this is a sight word" (points to our) and encouraged the student to read this sight word. The student guessed at the word "our" by saying, "out, outside, your, your shoes" and the teacher increased support again. Then, the TC added more support to problem solve with TSL4, by telling the student the sight word "our" and the student repeated the word "our." The TC continued, "so now put the /s/ in front of /our/" and the student responded with, "Our shoes." The TC asked again about the sight word "our", however the student said he did not know the word. Finally, the TC increased support to TSL5, the highest level of support where she demonstrated how to solve the word sour. The TC said, "It's our, put an S, /s/, in front of our." The student said something and the TC clarified, "We are not taking (sounds) away, we are adding. Add /s/ to the beginning of our" and the student said, "sour" (TC-A Lesson 2). In this example, the TC shared control of problem-solving with scaffolded levels of support and reading prompts. See Table 15 for these examples of feedback cycles between the teacher and student at error during reading.

Table 15

Feedback Cycle at Error During Reading

Orienting Text	Excerpts:	Analytic Point:	Analytic Comment:
Information:	Student Reading New	Instructional	Interpretation
WHAT IS IT?	Book and Teacher	Scaffolding or	-
(Avery, 1997)	Responding	Prompting	
p.14	S: It is green	Keep learning moving	Scaffolds:
It is red and sweet	and swobby (for sour)	forward; prompts/	TSL2 Teacher Talk
What is it?	T: and what?	reminders; no new	Specific
	S: swobby	teaching.	_
It is green and sour.	T: Not swobby, slide	The teacher says slide	Prompt:
What is it?	through the word S: /s/ /o/ /b/ /y/	through the word.	TP2: Slide through each sound.
It is yellow and hot.	T: Okay look, this is a	New learning	
What is it?	sight word (our)	introduced; show or	Scaffolds:
	S: out, outside, your,	teach child new	TSL3 Teacher
	your shoes (S guesses	problem solving.	Talk/Nonverbal
	at the word our)	The student guesses	Actions
p. 16	T: our	at the word our and	
It is a strawberry.	S: our	the teacher points to the	2
It is a lime.	T: So now put the /s/	word our.	
It is a chile.	in front of /our/.		
	S: our shoes.	Add more support to	Scaffolds:
	T: So, what's this?	problem solve.	TSL4 Teacher
	S: I don't know	The teacher says add a	Higher Support
	T: It's our, put S, /s/	sound to our.	
	in front of our		
	S: Says something	Most support from	Scaffolds:
	T: We are not taking	teacher; teacher in	TSL5 Teacher
	away, we are adding.	control of problem	Models/
	Add/s/ to the	solving.	Demonstrates
	beginning of our	The teacher models	
	S: sour	how to add /s/ to	
	T: sour	/our/ to make sour.	
TC A Losson 2: Toyt	from What Is It? (Avory	1007)	

TC-A Lesson 2; Text from What Is It? (Avery, 1997)

Video analysis of the three small group lessons provided evidence that feedback cycles at error during reading enhanced TCs' scaffolding during small group literacy instruction. For example, as stated in the above examples, TCs provided ongoing feedback cycles of support at error during reading throughout the three lessons. In addition to video analysis, three other data sources were analyzed to support feedback cycles at error during reading as a factor that

enhanced scaffolding over a series of three lessons. The additional data sources included lesson reflections, surveys, and interviews.

Lesson reflections at the conclusion of three small group lessons indicated that feedback cycles at error during reading enhanced TCs' scaffolding during small group literacy instruction. For example, according to one TC, "I changed the amount of instruction by my second lesson. My first lesson contained too much information and the questions asked at the end of the reading did not show a lot of understanding from the lesson. I changed from looking at a list of blends to just one blend. The second lesson showed that they were still having trouble with the "st" blend. I centered my third lesson on this to make sure that the students felt confident using all blends even the ones they had trouble with from the previous lesson. Overall, I think my creativity and instruction amount was more appropriate by the third lesson" (TC-E, Lesson Reflection, 2019).

Surveys before and after each small group lessons provided additional evidence that feedback cycles at error during reading enhanced TCs' scaffolding during small group literacy instruction. One of the survey questions asked TCs "How confident do you feel to implement step four of small group instruction: Teachers listen, coach, prompt, and scaffold and why do you feel that way about step four?" The survey data supports that TCs implemented the feedback cycles at error during reading and it enhanced their scaffolding during small group instruction. For example, one TC stated these comments regarding feedback at error, "I'm nervous to see some issues students might encounter in case I don't have a solution/strategy for them" (Survey, 2019). Another TC stated, "I need to get better at delivering the lesson and not thinking about delivery more than listening and coaching" (Survey, 2019). A third TC stated, "Sometimes it can be difficult to listen to both readers and help them because they get stuck on different

things" (Survey, 2019). Note that surveys were given after each small group lesson, and this evidence indicates that TC grabbled with learning to implement this portion of the lesson.

Interviews with the TCs the following year during the internship indicated that feedback cycles at error during reading enhanced TCs' scaffolding during small group literacy instruction. For example, in an interview, I asked a TC to look at a clip from *What is It* (Avery, 1997) and asked her to describe the kinds of scaffolding moves she made in this lesson. After watching the clip, she described the feedback cycle, "So for sour I said one of our sight words was our and add the /s/ in front of it. And I kept trying to repeat that because our was one of our sight words, and I kept saying it's our and put /s/ in front of our. He said we are taking it away, and I said no we are not taking it away, we are adding it on, like /s//our/. And he finally got it" (Interview, March 2020). In another example, I asked a TC to look at a clip from Before I Go to School (Williams, 1998) and asked her to describe the kinds of scaffolding moves she made in this lesson. After watching the clip, the TC described the feedback cycle, "First I was reading. Then I let her read. I gave her 3-4 seconds when she struggled. After that I modeled reading with my finger" (Interview, March 2020).

The examples described above, of TCs scaffolding and prompting at error during reading, are evidence of the third factor that enhanced preservice teachers' scaffolding during small group reading instruction. The range of scaffolds on the scale of help and the list of prompts were instructional strategies that TCs learned to implement during feedback cycles between students and teachers at error during reading. By stating factor 3 enhanced scaffolding I claim it strengthened and prepared TCs to support students toward productive reading. I argue that instructing TCs to provide feedback cycles at error during reading was the heart of this project. TCs were taught micro-level scaffolds, which incorporate the levels of help and prompts

to use with students to increase and decrease control during reading. Even though feedback cycles were learned in class, they were difficult to approximate in class because they are contingent on students' accurate and inaccurate reading in the moment. Feedback cycles occurred during part four of the lesson and TCs practiced and improved factor 3 during weekly lessons and class sessions, with my feedback and support as they planned the next lesson. The next section describes how the repetition of three distinct lessons with the same group of students over three weeks enhanced TCs' scaffolding during small group reading.

Enhance Factor 4: Lesson Repetition. The fourth factor that enhanced pre-service teacher candidates' scaffolding was the way in which teacher candidates planned and taught a set of three lessons with the same group of students over a series of three weeks. To clarify, the TCs did not repeat the exact same lesson as the week before; however, they gained experience and momentum in the process of planning, teaching, and analyzing student learning over several weeks. In addition, TCs connected the new lesson to the explicit instruction target from the week before. For example, one TC began lesson 2 by reviewing the sight words learned the week before, and then added a few more words for students to learn in the current lesson. In another example, a TC began lesson 2 by reviewing the letters and sounds learned the week before, and then added more letters and sounds for student to learn in the current lesson. In a third example, a TC taught a series on three lessons beginning with digraphs for lesson 1, blends at the end of words for lesson 2, and "st" blends within a word for lesson 3.

Furthermore, factors one, two, and three that enhanced TCs' scaffolding during small group reading instruction, came together in a more orchestrated way with each consecutive lesson. In other words, TCs were more familiar with the structure of the lesson, as well as how they could support students' during successful and difficult reading. In the first lesson, teacher

candidates knew they could offer a range of support in terms of scaffolding and they could read from a list of prompts to propel students forward, however these moves were tentative and not automatic for TCs to carry out. The analysis shows that TCs gained more confidence in providing scaffolds or prompt to keep the students reading in each successive lesson.

The following example provides evidence regarding how the set of three lessons enhanced TCs' scaffolding over a series of three weeks. In that lesson, the TCs' implementation of scaffolding improved with each additional lesson. In the first lesson, she only taught half of the plan and did not reach the part where the students read on their own. In the second lesson, she taught all five parts, however she chose a book that was difficult for the student to access and she lacked confidence in her ability to listen, prompt, coach, and scaffold during the students' reading. By the third lesson, the TC taught all five parts of the plan, and she chose a book that had the right amount of supports and challenges for the student. The lesson structure, combined with feedback cycles between students and the TC, occurred smoothly while reading *Mud* (Lewison, 2001).

During lesson 3, the TC's scaffolding was not at one extreme or the other, instead her support increased and decreased as the student read accurately and with errors. For example, the student read "Mud on your face" (said face for cheeks). The TC provided TSL2, by asking a specific question, "Let's see, what sound is this?" (pointing to the CH). The student responded with "/ck/" and the TC increased support with TSL3, adding more teacher talk and nonverbal actions, and introduced new learning and taught the student, "It's a /ch/ right? What do we say?" and the student responded with, "/ck/ /ck/". Then the TC provided even more support to problem solve with TSL4, by pointing and saying, "Right here, look, /ch/" and the student said, "/ch/. The TC continued with, "So, mud on your... Ready, look." The TC said, "/ch/, and when two ee's are

next to each other they make the /e/ sound; /ch/ /ee/", asking as an open response question, and the student said, "chance". The TC took control of the problem solving and demonstrated the decoding of cheeks with TSL5, saying, "/ch/ /ee/ /k/ /s/" (TC-B Lesson 3). See Table 16 for this example of improved scaffolding over a series of three lessons.

Table 16

Benefits of Teaching a Series of Lessons

Student Reading New Book and Teacher Responding S1: Mud on your face T: let's see, what sound is this? S1: /ck/ T: it's a ch right T: What do we say? S1: /ck/ /ck/ T: points, right here look	forward; prompts/ reminders; no new teaching New learning introduced; show or	Interpretation Scaffolds: TSL2 Teacher Talk Specific Scaffolds: TSL3 Teacher
Responding S1: Mud on your face T: let's see, what sound is this? S1: /ck/ T: it's a ch right T: What do we say? S1: /ck/ /ck/ T: points, right here look	Prompting Time 18:32 Keep learning moving forward; prompts/ reminders; no new teaching New learning introduced; show or	TSL2 Teacher Talk Specific Scaffolds:
S1: Mud on your face T: let's see, what sound is this? S1: /ck/ T: it's a ch right T: What do we say? S1: /ck/ /ck/ T: points, right here look	Time 18:32 Keep learning moving forward; prompts/ reminders; no new teaching New learning introduced; show or	TSL2 Teacher Talk Specific Scaffolds:
T: let's see, what sound is this? S1: /ck/ T: it's a ch right T: What do we say? S1: /ck/ /ck/ T: points, right here look	Keep learning moving forward; prompts/ reminders; no new teaching New learning introduced; show or	TSL2 Teacher Talk Specific Scaffolds:
is this? S1: /ck/ T: it's a ch right T: What do we say? S1: /ck//ck/ T: points, right here look	forward; prompts/ reminders; no new teaching New learning introduced; show or	Specific Scaffolds:
S1: /ck/ T: it's a ch right T: What do we say? S1: /ck/ /ck/ T: points, right here look	prompts/ reminders; no new teaching New learning introduced; show or	Scaffolds:
T: it's a ch right T: What do we say? S1: /ck/ /ck/ T: points, right here look	new teaching New learning introduced; show or	
T: What do we say? S1: /ck/ /ck/ T: points, right here look	New learning introduced; show or	
S1: /ck/ /ck/ T: points, right here look	introduced; show or	
T: points, right here look	introduced; show or	
look	· · · · · · · · · · · · · · · · · · ·	TSL3 Teacher
	teach child new	Talk/Nonverbal
T: /ch/	problem solving	Actions
S1: /ch/	-	
T: So, mud on your	Add more support to	Scaffolds:
T: ready look		TSL4 Teacher
T: it says ch, and when		Higher Support
two ee's are next to		
each other they make	Most support from	Scaffolds:
•	* *	TSL5 Teacher
	•	Models/
		Demonstrates
	501,1118	
	Time 20:20	Scaffolds:
		TSL1 Teacher
_		
•	ŕ	Tuni Cunuu
	or proofem sorting	
	T: /ch/ S1: /ch/ T: So, mud on your T: ready look T: it says ch, and when	T: /ch/ S1: /ch/ T: So, mud on your T: ready look T: it says ch, and when two ee's are next to each other they make the ee sound T: /ch//ee/ S1: chance T: /ch//ee/ /k//s/ S1: mud on your chin T: good, that was, did you notice that was what we worked on? T: /ch// problem solving Trime 20:20 Least support from teacher, child in control of problem solving

TC-B Lesson 3; Text from Mud (Lewison, 2001)

Video analysis of the three small group lessons provided evidence that lesson repetition enhanced TCs' scaffolding during small group literacy instruction. For example, across the series

of three lessons, all five TCs taught three connected lessons to the same group of students. One TC taught three lessons on phonological awareness and letter sounds, one TC taught three lessons on letter sound correspondence, one TC taught three lessons on decoding strategies and blending sounds, one TC taught three lessons on blends and a reading strategy, and one TC taught three lesson on sight words. In other words, all five candidates chose a lesson focus based on student data and taught a series of three lesson over three weeks. In addition to video analysis, three other data sources were analyzed to support lesson repetition as a factor that enhanced scaffolding over a series of three lessons including lesson reflections, surveys, and interviews.

Lesson reflections at the conclusion of three small group lessons indicated that lesson repetition enhanced TCs' scaffolding during small group literacy instruction. For example, according to one TC, "From teaching these series of small group instruction, I learned a lot. I learned about myself as a teacher and how difficult it could be if the students do not behave in the small group. I learned that teaching reading is process and it does not happen in one lesson. I also learned that small group instruction is the best way to teach reading to students. It is so important to know where the students are and then help them in what they need and not what everyone else needs" (TC-A, Lesson Reflection, 2019). According to another TC, "After the small group lessons, I feel much more confident in teaching decoding strategies to emergent readers" (TC-B, Lesson Reflection, 2019). According to a third TC, "From all three of my lessons my students learned how to look at words individually and sound them out based on their beginning, middle, and end sounds. My students showed they could use the skill we practiced while reading the story after and showed improvement across all three lessons" (TC-C, Lesson Reflection, 2019).

Surveys before and after each small group lesson provided evidence that lesson repetition enhanced TCs' scaffolding during small group literacy instruction. One of the survey questions asked TCs "Overall, how confident are you in your knowledge of teaching elementary students during small group instruction?" This question was asked before and after each small group lesson, and response choices included: not at all confident, a little bit confident, somewhat confident, quite a bit confident, and very confident. The survey data suggests that most TCs felt more confident at the conclusion of each lesson. For example, before lesson 1, 5/5 TCs felt somewhat confident (middle on the scale of 1-5). After lesson 1, 3/5 TCs felt somewhat confident and 2/5 felt quite a bit confident. After lesson 2, 3/5 TCs felt somewhat confident, 1/5 felt quite a bit confident, and 1/5 had no response. After lesson 3, 3/5 TCs felt quite a bit confident, 1/5 very confident, and 1/5 was a no answer (Survey, 2019). See Table 17 for survey responses to this question.

Table 17
Survey Question Confidence in Teaching Small Group Lessons

Survey	"Overall, how confid	dent are you in your ki during small gro	nowledge of teaching up instruction?"	elementary students
Lesson	Before Lesson 1	After Lesson 1	After Lesson 2	After Lesson 3
TC-A	Somewhat confident	Quite a bit confident	Quite a bit confident	Quite a bit confident
TC-B	Somewhat confident	Somewhat confident	No response	No response
TC-C	Somewhat confident	Somewhat confident	Somewhat confident	Very confident
TC-D	Somewhat confident	Somewhat confident	Quite a bit confident	Quite a bit confident
TC-E	Somewhat confident	Quite a bit confident	Quite a bit confident	Quite a bit confident

(Survey, 2019)

Interviews with the TCs during the internship indicated that lesson repetition enhanced TCs' scaffolding during small group literacy instruction. For example, in regards to teaching

three lessons one TC said, "I definitely think the three lessons did help because all of my lessons had been 'here, teach just one thing and it was never connected to anything'... but, everything I teach now is all connected to everything" (Interview, March 2020). In addition, a TC stated, "Having those three lessons that connected was really helpful to see. I think I really did improve in managing them and I could see them getting it because I connected it again. By the end of it (three lessons) they had the sounds I was teaching" (Interview, March 2020). A third TC stated, "It was nice to see that they improved" and "When you see progression happening, that is the whole reason we are doing this. I mean, that is the purpose" (Interview, March 2020).

The examples described above, of TCs planning and teaching three distinct lessons with the same group of students over three weeks, are evidence of the fourth factor that enhanced preservice teachers' scaffolding during small group reading instruction. By stating factor 4 enhanced scaffolding I claim it strengthened and provided multiple opportunities for TCs to repeat what they learned about scaffolding during small group instruction with the same group of students. I argue that providing TCs with opportunities to plan, teach, and improve over three lessons with feedback and support combined both the macro-level scaffolding for big picture planning and micro-level scaffolding for fine-grained improvement, and was learned through three iterations with feedback and development. The other factors that enhanced preservice teachers' scaffolding included: factor 1 which is the lesson structure, factor 2 which is learning about scaffolds and prompts in the literacy methods course, and factor 3 which is the feedback cycles between students and the teacher at difficulty during reading. These four factors describe the findings for research question 1, part A: the factors that enhance preservice teachers' scaffolding during small group reading. The next part of this chapter describes the findings for

research question 1, part B: the factors that inhibit preservice teachers' scaffolding during small group reading.

RQ1 Findings Part B

Research question one, part B refers to factors that inhibit pre-service teachers' scaffolding during small group reading instruction. The first factor is the teacher candidates' understanding of students' literacy development (skills, strategies, and knowledge) and how much scaffolding different tasks will need. Factor two is the teacher candidates' understanding of how to use literacy instructional materials. Factor three is the feedback cycles at accurate reading, including both student feedback and teacher response, during successful reading. The fourth and final factor that inhibited pre-service teachers' scaffolding during small group reading instruction was the teachers candidates' experience with the gradual release of responsibility.

As stated at the beginning of the chapter, the goal of my dissertation study was for TCs to learn how to fade in and out during part of four of the lesson where students read on their own with TCs providing various levels of support as needed. Even though I taught TCs content to prepare them to do this work with small groups of students, I also made some assumptions about the background knowledge they brought with them to this course. By analyzing patterns and themes in the data, I found alignment between the content I taught TCs in the methods course and factors that enhanced scaffolding during small group instruction. However, there were four factors that inhibited scaffolding. More specifically, for inhibit factor 1, knowledge of literacy development, I knew this was learned in the previous methods course and treated this content as a continuation of that course to plan the series of three small group lessons for this course. In addition, for inhibit factor 2, knowledge of literacy materials, I realized that I covered this component briefly as a means of gathering materials for the lesson implementation, but did not

spend enough time assisting TCs in choosing materials for successful lessons. Furthermore, for inhibit factor 3, feedback cycles during accurate reading, I recognize that this can be a strength of small group instruction, however too much easy reading brings into question whether students are provided enough opportunities to problem solve during reading. Lastly, for inhibit factor 4, the gradual release of responsibility might have been represented as a macro-level scaffold for the five parts for the lesson, however TCs needed more practice with how and when to retain and release responsibility to students during the reading portion of the lesson. I did not provide as many opportunities for TCs to identify representations, decompose those models, and approximate practice for the factors that inhibited scaffolding during small group instruction (Grossman et al., 2009). See Table 18 for a summary of the factors that inhibit pre-service teachers' scaffolding. In the remainder of this section, I provide select examples of the four factors that inhibit scaffolding during small group reading instruction.

Table 18

Findings RQ1 Part B: Factors that Inhibit Pre-Service Teachers' Scaffolding

Factor	Inhibit Scaffolding
1	Teacher Candidates Understanding of
	• Students' literacy development (skills, strategies, and knowledge) and
	 How much scaffolding different tasks will need.
2	Teacher Candidates Understanding of Materials
	 Book choice
	 Book introductions
3	Feedback Cycles at Accurate Reading
	 Student feedback at accurate reading
	Teacher response at accurate reading
4	Teacher Candidates' Experience with
	• The gradual release of responsibility (teaching literacy content, students,
	with materials all together)
	 Teaching more than one student at once

Examples of Factors that Inhibit Scaffolding

Inhibit Factor 1: Student Literacy Development and Scaffolding Needed. Teacher candidates' understanding of students' literacy skills, strategies, and knowledge, combined with how much scaffolding was required for these levels of development, inhibited their scaffolding during the reading portion of the small group lesson. This factor aligns with the second part of the conceptual framework for this dissertation, which focuses on how TCs' use of assessments and standards to understand where students are in their literacy knowledge at the time of the lesson. In that section of the framework, I argue that TCs' need to know how to assess students' literacy knowledge and how to use it to plan a focused small group lesson. In addition, I note that TCs received this content in a previous literacy methods course. The content taught in that course included how to assess students' early literacy skills and the ways in which those assessments can guide instruction. The TCs learned this content from texts on elementary literacy assessments (McKenna & Stahl, 2015, Leslie & Caldwell, 2010), texts on early reading (Scanlon, Anderson, & Sweeney, 2016), class lectures, and field assignments.

When analyzing TCs' scaffolding during small group instruction, the TCs connected students' literacy knowledge to their lesson planning. TCs were instructed to work with their mentor teachers to collect and analyze assessment data for two students. In addition, each TC used assessments from literacy foundational skills that aligned with the CCSS. For example, one TC used data from a letter identification assessment and another TC used data from a high frequency word assessment. Often the mentors gave the TCs a number (raw score), such as the student knows 15/26 letters or 5/30 sight words; however, the TCs did not know how that compared to the typical expectation at that grade level. Therefore, the TCs were then instructed (from the course instructor) to dig deeper with that assessment to find out more specific

data about each student, including the exact letters or words the students knew, which ones they were confused about including the substitution they made, and which letters or words they did not know at all. That data was used to plan a specific series of three small group lessons for those children. The TCs' lesson plans were strong on paper; however, implementing the lessons with students in real time required a more complex level of understanding students' literacy skills, strategies, and knowledge, and how much scaffolding was required for different tasks.

In addition to connecting the explicit skill taught in the lesson to the new book reading, the TCs needed to combine their understanding of where students were in their literacy development with what they would be able to do with the new skill and new book during that particular lesson. Each lesson focused on foundational skills from the Common Core State Standards for English Language Arts, with a specific concentration on one of these areas: concepts about print, phonological awareness, phonics, high frequency words, and fluency, and included a book for students to read on their own while implementing that skill. There were many times the connection that TCs made to the new book assisted the student when reading, however there were other times that knowledge of students' literacy development and how much scaffolding was required for different tasks were needed to match the developmental level of the learners. In other words, even though the lesson focused on one area of literacy content that matched the students' literacy development, the book reading portion of the lesson required TCs match that development with what students could do in that lesson. For example, while reading Before I Go to School (Williams, 1998), a TC asked the students to "Point while I read." Then she read "Before I go to school, I brush my teeth," however she read much too fast for the students to keep up with the 1 to 1 pointing. She was on the last word, while the students were still looking for the first word; the students could not keep up with the pointing (TC-C lesson 1).

Pointing 1 to 1 is a CCSS for concepts about print. Even though this was not the focus of the lesson, it was necessary to implement the text reading. The TC knew that pointing 1 to 1 is a skill that students needed for reading; however, she did not understand where the students were in their development for matching one-to-one, and what they could do with it at that moment of the lesson.

The following examples provide evidence regarding how TCs' understanding of students' literacy development (skills, strategies, and knowledge) and how much scaffolding is required for different literacy tasks continues to develop over time for novice teachers, and it is not a skill that is automatic in the TCs' moment by moment decision making. The interactions between students and TCs occurred while reading Yuck Soup (Cowley, 1996). In that lesson, the TC transitioned from explicit instruction to reading by saying, "Today, if we get stuck on a word that's really tricky for us, we're going to sound each of the parts out, just like you guys did for these ones. When we went /th/ /i/ /n/ (the teacher points to the card thin). So, we are going to do that for our tricky words okay." As the students opened the book, they did not have enough knowledge about the gist of the story to get started with reading. The teacher connected the skill to the book but offered little support with the meaning of the story. The TC understood the importance of teaching students to implement letter sound knowledge when reading new words, however she did not understand where the students were in their development and how much scaffolding they needed to engage in this task. She said, "So we are going to start on the first page. I'm just going to listen, okay?" (NH lesson 1). The students did not read the title. One student looked at the cover and said, "Why does it say snails (pointing to the book), what are snails doing here?"

Then, as the student read the first page, she read, "In go..." (said the first two words in the sentence: In go some snails), and then stopped. The other student read it as "When go... (said when for in). The TC responded with, "You don't know what that word is?" and made general comments, "How are we going to remember" and "Sound it out", which were general comments with the least amount support from the teacher, TLS1. Both students responded to the TC's comments by pointing to the letters and making sounds that did not make sense, because they were stuck and could not get going. This continued as they tried to read. Later in the book, the TH digraph (the lesson focus) was in two words on a single page, thistle and toothbrush, however the TC's scaffolding and prompts did not support the students to connect to those words (NH lesson 1). The TC understood the importance of teaching students the digraph TH, however she did not understand where the students were in their development and how much scaffolding they needed to read TH within words. See Table 19 for examples of TCs tentative understanding of the connection between students' literacy development and how much scaffolding is required to engage students with different literacy tasks while reading.

Table 19
Understanding of Literacy Content, Development, and Instruction

Orienting	Excerpts:	Analytic Point:	Analytic Comment:
Text Information:	Student Reading New	Instructional	Interpretation
YUCK SOUP	Book and Teacher	Scaffolding or	
(Cowley, 1996)	Responding	Prompting	
p. 2	S1: In, go (stops)	Time 8:40	Scaffolds:
In go some snails	S1: When, go	Least support from	TSL1 Teacher
	T: You don't know	teacher, child in control	Talk General
p. 3	what that word is?	of problem solving.	
In go some feathers	S1: No	The teacher says:	
	T: So how are we	Okay, keep going.	
	going to remember?	Keep reading.	
	T: Sound it out		
	T: Let's do it together		
	Ss: Saying sounds		

Table 19 (Cont'd)

	T: The picture is going	Keep learning moving	Scaffolds:
	to help you tell what it		TSL2 Teacher Talk
	is too	reminders; no new	Specific
	S1: Snails	teaching	
	T: Snails	The teacher says:	
	T: Okay, keep going	Does that have all the	Prompts:
	S1: /a/ /i/ /l/	words (sounds)?	TP2 Slide through
	S1: /sn/ /ail/	, ,	each sound
	T: Keep reading	Prompt for letters and	
	S2: Small	sounds, to blend word	
	T: Does that have all	parts.	Prompts:
	the words (sounds)?		TP8 Check the
	T: Sound it out	Prompt for meaning.	picture
p. 4	T: Look at the TH, we	Time 10:51	Scaffolds:
In go some thistles	just learned that, what	Keep learning moving	TSL2 Teacher Talk
	sound does that make?		Specific
p. 5	S1: Toothbrushes	reminders; no new	-
In go some	T: What makes the /th/	teaching.	
toothbrushes	sound?	The teacher says: What	
	S1: Toothbrushes	makes the /th/ sound?	
	T: A /th/ sound, good		
	T: So, sound out the	Prompt for letters and	Prompts:
	rest of it	sounds, to blend	TP2 Slide through each
	S1: Pointing, why does	,	sound
	they have this?	The teacher says:	
	T: Okay	So, sound out the rest	
	S1: What is that?	of it	
	T: I don't know, keep		
	reading		
		1005)	

TC-E Lesson 1; Text from Yuck Soup (Cowley, 1996)

The examples described above, of TCs' understanding of students' literacy development, combined with how much scaffolding is required for these levels of development, are evidence that this knowledge is emerging and continuing to develop. In this lesson, the TC implemented three of the four factors that enhanced their scaffolding during small group reading instruction, including the structured lesson plan, the knowledge of scaffolds and prompts, and the feedback at error during reading. There are three reasons, however, that this lesson was inhibited by the TC's understanding of students' literacy development and when to scaffold, including that she did not

introduce the book or read the title, the students' interface with the book created more challenges than supports so the TC had few opportunities to give feedback during reading, and lastly the TC had too many interactions that were challenging for the students. It is important to point out that this was the TC's first experience managing a K-3 literacy lesson while responding to students' literacy skills, strategies, and knowledge.

In another example, TCs' understanding of students' literacy development (skills, strategies, and knowledge) and how much scaffolding is required for different literacy tasks occurred while reading Dan Gets Dressed (Cowley, & Hayward, 1998). During that lesson, a student read "I put on my flying socks" (said socks for shoes). The teacher used TLS5, which is the highest level of teacher support on the scale of help (Wood et al. 1976, 2003), by modeling and demonstrating the correct word at error, by telling the student the word. She said, "close, it says I put on my flying shoes". The student responded with, "shoes, that doesn't look like shoes," and the TC said, "I know they don't, but what do flying shoes even look like?" The feedback cycle between the TC and student focused on the teacher telling the correct word and then having an exchange about the shoes in the picture, where the flying shoes looked like socks. Instead of using prompts that took the student back to the letters and sounds that are similar and different between socks and shoes (both words begin and end with and S), the teacher used TP8, check the picture, and did not take the student back to the tricky word (TC-D Lesson 1). In this example, the teacher was in control of the problem-solving and provided the most support. This example inhibited scaffolding because the TC did not respond to the students with scaffolds and prompts in the ways learned in class.

Later in the lesson, a student read "put on my flying hat" (the text was, I put on my zoom, zoom hat). The teacher used TLS5 again by telling the student that the pattern changed on

this page, and she did all the work for the student. She said, "you've got to look, read carefully, this one changed, I put on my zoom, zoom hat". The student responded with, "zoom, zoom hat? It has two zooms," and the TC said, "I know it has the little spinning thing up here". Again, the teacher used a TP8 that focused on checking the picture, instead of taking the student back to the text on the page (TC-D Lesson 1). See Table 20 for examples of TCs beginning understanding of the connection between students' literacy development and how much scaffolding is required to engage students with different literacy tasks while reading.

Table 20
Understanding of Literacy Content, Development, and Instruction

Orienting	Excerpts:	Analytic Point:	Analytic Comment:
Text Information:	Student Reading New	Instructional	Interpretation
DAN GETS	Book and Teacher	Scaffolding or	1
DRESSED	Responding	Prompting	
(Cowley, 1997)			
p. 4	S2: I put on my flying	Time 8:48	Scaffolds:
I put on my flying	socks.	Most support from	TSL5 Teacher
shoes.	T: Close, it says I put	teacher; teacher in	Models/
	on my flying shoes.	control of problem	Demonstrates
	S2: Shoes, that doesn't	solving	
	look like shoes		
	T: I know they don't,	Prompt for meaning	Prompts:
	but what		TP8 Check the
	do flying shoes even		picture
	look like?		
p. 7	S2: I put on my flying	Time 9:21	Scaffolds:
I put on my zoom,	hat.	Most support from	TSL5 Teacher
zoom, hat.	T: You've got to look,	teacher; teacher in	Models/
	read carefully	control of problem	Demonstrates
	T: This one changed	solving	
	T: I put on my zoom,		_
	zoom hat.	Prompt for meaning	Prompts:
	S2: Zoom, zoom hat?		TP8 Check the
	It has two zooms		picture
	T: I know it has the		
	little spinning thing up		
	here.		

TC-D Lesson 1; Text from *Dan Gets Dressed* (Cowley, 1997)

The examples described above, of TCs' understanding of students' literacy skills, strategies, and knowledge, are evidence that this was a factor that inhibited scaffolding during small group instruction. By stating factor 1 inhibited scaffolding I claim it hindered and constrained TCs' ability to support students toward productive reading. I argue that this is an example of a factor that inhibited scaffolding because the TC was not using the prompts in the way they learned them in class and the TC did most of the problem solving, which caused the students to miss opportunities to reread, self-correct, and cross-check the text with the pictures. Looking back, I recognize that TCs' knowledge of literacy development inhibited scaffolding because I assumed this was learned well enough in the previous methods course, and neglected to commit enough time learning this content for small group instruction. The next section describes how knowledge of literacy instructional materials also inhibited TCs' scaffolding during small group reading.

Inhibit Factor 2: Literacy Instructional Materials. Teacher candidates' understanding of how to use literacy instructional materials inhibited their scaffolding during the reading portion of the small group lesson. This factor aligns with the third part of the conceptual framework for this dissertation, which focuses on TCs' guided observations of exemplar teachers' videos of small group literacy instruction (Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force, 2016), and how to use those observations to plan for instruction. The introduction to K-3 Essential Three defines the format for a small group lesson, which includes five steps. As stated above, the lesson structure was a factor that enhanced TCs' scaffolding during small group reading instruction, and the use of literacy materials is an essential component of that lesson structure. During step three and four of the lesson, students try out the teaching point in actual reading and

writing. The materials are chosen by the teacher to allow students to read about a topic being studied in class, while not having all students read at the same level or the same book. In that section of the framework, I argue that TCs require practice in observing exemplar teachers enacting small group literacy instruction. In our methods course, we analyzed videos of high-quality small group instruction from the K-3 Literacy Essentials (Michigan Virtual University, n.d., Essential 3). While viewing those videos, the TCs noticed what teachers and students did during small group instruction, and what materials they used in the lessons.

When analyzing TC's scaffolding during small group instruction, book choice was a factor that inhibited many lessons. During the planning stages, the TCs were instructed to choose books from the school bookroom or acquire books from their mentor teacher that included the skill they planned to teach for explicit instruction. In addition, the TCs used the same text with all students in their group, instead of having each student read a different book, at a different level. The rationale for this is that managing many books in one lesson, for novice TCs, adds an extra layer of complexity to lesson enactment that was not necessary for the TCs' first experience teaching small groups. However, TCs did choose a new explicit focus for each lesson, as well as a new book for the reading part of each lesson. The TCs received approximate reading levels for their students, when they worked with their mentor teachers to collect and analyze assessment data. One issue with analyzing reading levels was that TCs did not know what a color level or a number level meant in comparison to where a student should be reading in that grade level. The TCs did have some experience with running records and reading levels from their class on assessment and instruction, however this was their first experience using reading levels and choosing books for small group lessons when planning for instruction.

The following examples provide evidence regarding how TCs' understanding of materials for small group lessons continues to develop for novice teachers. One example is from a TC who learned that her students were reading at a color level red, which is a Fountas and Pinnell level C (Fountas, Pinnell, & Le Verrier, 2001). The interactions between students, the TC, and materials occurred while reading *A Hug is Warm* (Cowley & Fuller, 1996). In that lesson, the TC transitioned from explicit instruction on blends to reading by saying, "What are you going to be looking for? (while reading) and student one said, "/st/." The teacher confirmed and instructed the students with, "When we are reading... we are going to be reading at our own pace, okay?" Then the TC said, "So I want you guys to open up for the first page" and "You guys can read at your own pace" and "So, let's start" (NH Lesson 2). When planning the lesson, the TCs were instructed to verbalize a brief one-two sentence introduction of the book, with the gist of the story, and then read the title. In this lesson, the teacher did not read the title or assist the students in reading the title. Because the TC did not introduce the book and title, the students were slow to start reading. They did not have enough support to move forward.

Then, while the students read the book, the TCs were instructed to provide support on the gradual release of responsibility. However, with no book introduction, more support was needed, yet this TC provided TPL1 (the least amount of support) at the beginning of the reading. At one point, the TC supported the students to read the word warm by covering up the W in warm and revealing a word they knew, arm. The students read the word w-arm with TL3 support, teacher talk with nonverbal actions; however, they were reading word by word and not making meaning. This book had supports including two lines of print per page, text that was in the same location on each page, and picture support on each page. Even though there was plenty of picture support, the illustrations were different than students might be used to seeing. For example, the water

bottle was a picture of a heated water bottle used to stay warm in bed, not the type of water bottle used to drink water, and the wood stove was a picture of a wood burning stove, not the type of electric stove found in homes today. Furthermore, the concept of "a hug being warm" was tricky. Each page represented a figure of speech that compared two things using "like" or "as," as in "A hug is as warm as a" (Cowley & Fuller, 1996). This concept required more support at the introduction and throughout the reading. See Table 21 for examples of TCs' beginning understanding of how to choose literacy materials and support students while reading.

Table 21

Understanding of How to Use Literacy Instructional Materials

Orienting Text Information: A HUG IS WARM (Cowley & Fuller,	Excerpts: Student Reading New Book and Teacher Responding	Analytic Point: Instructional Scaffolding or Prompting	Analytic Comment: Interpretation
1996)			
p. 2 A hug is as warm as a hot water bottle.	Ss: A A T: Use one of your strategies to help you S: hug is as T: uh huh, as S2: Says as T: Um hm, as S1: Worm, S2 worm T: Nope, look at that	Time: 2:42 Least support from teacher, child in control of problem solving. The teacher says: Use one of your strategies to help you. Keep reading.	Scaffolds: TSL1 Teacher Talk General
p. 3 A hug is as warm as a fur coat.	word again, you guys did a good job sounding it out, but T: What is: /w/ /a/ Ss: Worm T: What is that word right there, look at	New learning gintroduced; show or teach child new problem solving. The teacher uses analogy to get from /w//arm/ to warm	Scaffolds: TSL3 Teacher Talk/Nonverbal Actions
p. 4 A hug is as warm as a stove.	that, T covers up the W in warm Ss: says arm T: Arm, yes. So, we're just adding, what letter are we adding? S2: an R T: Look, that's arm		Prompts: TP1 Look at the word

Table 21 (Cont'd)

T: Let's look at that,	Look at, this word right
what sound does that	here, do you know what
make? (pointing at w)	that word is? Look at
Ss: /w/ /w/ warm!	these words, can you
T: Warm, good	guys look right here?

TC-E Lesson 2; Text from *A Hug is Warm* (Cowley & Fuller, 1996); Photos of Water Bottle and Fur Coat from Creative Commons, and Wood Stove from Clker

The examples described above of TCs' understanding of how to use literacy instructional materials are evidence that this was a factor that inhibited scaffolding during small group instruction. By stating factor 2 inhibited scaffolding I claim it hindered and obstructed TCs' ability to support students toward productive reading. I argue that this is an example of a factor that inhibited scaffolding because the TC did not realize how the book choice inhibited students' reading. The students worked to read the words: a, hug, is, as, warm; however, this portion of the lesson had no book launch or title instruction, so the reading was mostly letters and sounds and little meaning. In this lesson, the TC implemented all four factors that enhanced their scaffolding during small group reading instruction, including the structured lesson plan, the knowledge of scaffolds and prompts, the feedback cycles at error, and the lesson repetition (this was the TC's second lesson). One reason this lesson was inhibited by the TC's understanding of materials could be that she believed that the students were supposed to do all the reading during this portion of the lesson. Again, this was the TC's first experience managing a K-3 literacy lesson with students and a new book. In addition, I realized that I covered this component briefly but did not spend enough time assisting TCs in choosing materials for successful lessons. The next section describes how feedback cycles during accurate reading inhibited TCs' scaffolding during small group reading.

Inhibit Factor 3: Feedback Cycles at Accurate Reading. The third factor that inhibited pre-service teacher candidates' scaffolding was the feedback cycles during accurate reading. This feedback happened during the part of the lesson when students read on their own, and the TC was available to listen, coach, and prompt during reading. This part of the lesson was the only part that was not explicitly preplanned before teaching the lesson. In the literacy methods course, the TCs learned how they could provide levels of support and types of prompts to use when a child is having difficulty reading a word; however, they could not plan exactly what they would say and do while students read. When students read accurately, TCs were able to offer general levels of support, such as "good reading" or "keep going". This feedback loop for accurate reading enabled TCs to offer verbal and non-verbal support to keep the students reading. It was only when students were stuck on a word during reading that they needed more support to keep problem solving when it was difficult.

Student Feedback at Accurate Reading. Each feedback cycle at accurate reading consists of a student reading and the teacher listening, prompting, and coaching. When the reading is successful and accurate for the student, the teacher does not need to intervene. The teacher may, however, provide general verbal interventions to keep the student reading. This all depends on how the student expresses success while reading. Therefore, the second factor that inhibited TCs' scaffolding included the ways in which: students provided feedback or comments to the TC during their own accurate reading, and then how the TC responded. For this part of the lesson, TCs wrote down how they would listen, coach, and prompt while students read the book. The lesson plan format provided a space to take notes on each student while they listened and decided what moves (scaffolds and prompts) to make. TCs were encouraged to note what

happened when students were able to read accurately and note the students' reading behavior.

These moments were based on students' feedback at accurate reading or at error during reading.

Teacher Response at Accurate Reading. The counterpart to students' feedback and comments during accurate reading, is how the TC responded to their students' success. This is a continuation of factor two that inhibited pre-service teacher candidates' scaffolding during small group reading. Students either talked out loud as they read, read accurately out loud through the book, or self-corrected while reading which was feedback to the teacher. The talk included productive reading behavior that supports comprehension, such as commenting on comprehension and laughing while reading Mud (Lewison, 2001), and reading "Mud on your nose!" The talk also included self-correcting while reading out loud "Mud on your toys, toes" (self-corrects), and then repeating for meaning, "Mud on your toes" and turning the page to see what happens next (TC-B Lesson 3). The TC's response to this type of student reading was not overly verbal, because when the students read accurately, they did not require additional teacher scaffolds and prompts to keep going. The goal of providing scaffolds and prompts is for students to learn how to learn to read tricky words without the teacher inserting comments. In these examples, the students helped themselves problem solve, which is the goal of reading.

When analyzing TCs' scaffolding during new book reading, and the reading was accurate, the teacher's scaffolding level was a level 0. The scale of help, as defined by Wood et al. (1976) and Lose (2007), begins at level 1, with the teacher talk as general verbal interventions to encourage the student to keep reading. When I analyzed the data of TC's listening, coaching, and prompting during accurate reading, I observed that TCs mostly listened when the reading was successful. In other words, there was no reason to provide verbal encouragement during successful reading if the students were reading accurately, rereading, and self-correcting on their

own. Therefore, I created a new level for the scale of help called teacher scaffolding level 0, where the teacher listened and noted accurate reading, however did not intervene. See Table 22 for the revised codes pertaining to teacher scaffolding levels during student reading. This is an important factor that inhibited preservice teachers' scaffolding during small group reading instruction. When the reading was accurate and the students were solving words and making meaning on their own, the TCs kept the lesson going by not intervening. Too much successful reading, however, provided little opportunity for the TCs to scaffold during reading and brought into question whether the text was challenging enough for the student to problem solve words in text.

Table 22

Revised Codes Pertaining to Teacher Scaffolding

Code	Level of Support	Teacher Scaffolding Level Description
TSL0	Teacher Listens	Does not coach and prompt
TSL1	Teacher Talk General	Least support from teacher, child in control of problem solving
TSL2	Teacher Talk Specific	Keep learning moving forward; prompts/reminders; no new teaching
TSL3	Teacher Talk/Nonverbal Actions	New learning introduced; show or teach child new problem solving
TSL4	Teacher Higher Support	Add more support to problem solve
TSL5	Teacher Models/ Demonstrates	Most support from teacher; teacher in control of problem solving

TSL0 is a new addition to the scale of help (Wood et al., 1976, Lose, 2007)

The following examples provide evidence regarding how a student verbalized when he read successfully and then how the TC responded with nodding and smiling to encourage the student during successful reading. Student talk included productive reading behavior that

supported comprehension while reading *A Party for Brown Mouse* (Giles & DeWitt, 1999), such as "where is the cake" as he turned the page to look to see where it was; rereading to self-correct a word, such as "look out" and then rereading "look, it is a cat"; and repeating a phrase on a page to build fluency, when reading "happy birthday to you, happy birthday to you". This student expressed productive reading behaviors that included pointing, smiling, sliding through the words, and turning the pages to see what happened next. At the end, he exclaimed, "I'm actually done (smiling). This is the last page" (TC-A Lesson 1). In these examples, when the student showed success in reading, the TC responded with feedback that supported the student's successful reading, which was teacher scaffolding level 0 (TSL0), that includes listening and noting when students read accurately, rereading, and self-correcting, however not intervening. See Table 23 for examples of feedback cycles between the teacher and student during accurate reading.

Table 23

Feedback Cycles at Accurate Reading

Orienting	Excerpts:	Analytic Point:	Analytic Comment:
Text Information:	Student Reading New	Instructional	Interpretation
A PARTY FOR	Book and Teacher	Scaffolding or	
BROWN MOUSE	Responding	Prompting	
(Giles & DeWitt, 1999)			
p. 3	S2: Look out/it	Time: 11:05	Scaffolds:
Look it is a cat.	(says out for it), then	The student rereads on	TSL 0: The teacher
	goes back and	his own.	listens to the
	rereads.	He self corrects out for	student read
	S2: Look it is a cat.	it automatically and	accurately, reread
		keeps reading.	and self-correct
		The teacher watches	when he needs to,
		and lets him keep	however she does
		reading.	not intervene.

Table 23 (Cont'd)

p. 14	S2: Look at/it is a	Time: 13:00	Scaffolds:
Look, it is a cat cake.	cake (says at for it and	The student rereads on	TSL 0: The teacher
Happy birthday to you,	fixes right away)	his own.	listens to the
happy birthday to you,	T: Teacher looks and	He self corrects at for it	student read
happy birthday to Brown	n doesn't say anything.	automatically and keeps	s accurately, reread
Mouse, happy birthday	S2: Happy birthday,	reading.	when he needs to,
to you.	happy/to you (says	He self corrects happy	and self-correct
	happy for to and fixes	for to automatically and	l when he needs to,
	right away)	keeps reading.	however she does
		The teacher watches;	not intervene.
		lets him keep reading.	
p. 16	S2: Smiles "I'm	Time: 13:28	Scaffolds:
Come on, said Brown	actually done"	The student is making	TSL 0: The teacher
Mouse. We will eat the	S2: "This is the last	meaning.	listens to the
cat!	page"	-	student read
			accurately, reread
			and self-correct
			when he needs to,
			however she does
			not intervene.

TC-A Lesson 1; Text from A Party for Brown Mouse (Giles & DeWitt, 1999)

The examples described above of TCs listening to students during accurate reading are evidence that this was a factor that inhibited scaffolding during small group instruction. By stating factor 3 inhibited scaffolding I claim it hindered and interfered in TCs' ability to support students toward productive struggle during reading. I argue that this is an example of a factor that inhibited scaffolding because the TC did not have opportunities to scaffold and prompt as the student did not get stuck during reading. In this lesson, the TC implemented three factors that enhanced their scaffolding during small group reading instruction including the structured lesson plan, the knowledge of scaffolds and prompts, and the feedback cycles at error. However, the TCs spent most of the time listening during accurate reading because the student problem solved on their own. Unlike feedback cycles that promoted scaffolding, where students made errors during reading (enhance factor 3), feedback cycles where students read most of the text

accurately led to no scaffolding. This is an important finding because it suggests that TCs should provide students with texts that have a balance of supports and challenges, that are challenging enough that they make errors and receive scaffolding while reading which helps students actually learn something new, but not too easy that they do not have opportunities to problem solve while reading. Furthermore, for inhibit factor 3, I recognize that this is a true balance as easy reading can be a strength of small group instruction, however too much easy reading brings into question whether students are provided enough opportunities to problem solve during reading. The next section describes how the implementation of the gradual release of responsibility inhibited TCs' scaffolding during small group reading.

Inhibit Factor 4: The Gradual Release of Responsibility Implementation. Teacher candidates' experience implementing the gradual release of responsibility (GRR) by Pearson and Gallaghar (1983) inhibited their scaffolding during the lesson. This factor aligns with the fourth part of the conceptual framework for this dissertation, which focuses on the TCs' enactment of literacy instruction with a small group and is a culmination of the first three parts of the conceptual framework. According to K-3 Literacy Essential Practice 3, an additional phase should be added to the GRR as defined in the literature review. In Pearson and Gallagher's (1983) original model, the highest level of support is teacher modeling or demonstrating; however, more support is needed to teach students something new. The teacher should explicitly teach before modeling. In other words, teachers should provide explicit teaching or explaining first and foremost, before moving into modeling and demonstrating. The lesson plan structure for this study included this additional phase. Phase 1 has the most teacher support, where the teacher gives explicit instruction to students before modeling or demonstrating begins. This phase is new to the GRR. In the former model, teachers would think out loud about literacy actions while

modeling or demonstrating; in this model, teachers explain first, then model and demonstrate after that. Phase 2 has high teacher support, where the teacher models or demonstrates for students before they try it alone. Phase 3 has moderate teacher support, where the teacher and the students engage in the practice together. Phase 4 has low teacher support, where the teacher lets the students try the practice alone but is there to help if needed. Phase 5 provides little or no teacher support, where the students go it alone. See Table 24 for the expanded model of the gradual release of responsibility.

Table 24

Expanded Gradual Release of Responsibility

The Gradual Release of Responsibility from Teacher Candidate to Students

Level of TEACHER CANDIDATE Support → Level of STUDENT Control

Teach → Demonstrate → Shared Demonstration → Guided Practice → Independent Practice Full Support High Support Mild Support TC Teaches Low Support and Explains TC Models and Little Support **Demonstrates** TC Transitions TC Scaffolds to S Reading and S Read TC Listens and S Read S Listen to S Observe S Practice Skill. S Read with Skill. S Read without TC Lesson TC Model TC Scaffolds TC Scaffolds TC Support

Adapted from Pearson and Gallagher, 1993; and Duke et al. (2011)

When analyzing TC's scaffolding during small group instruction, the implementation of the expanded gradual release of responsibility was a factor that inhibited scaffolding during many lessons. Implementing the expanded GRR is not a one-time event! Instead it requires the teacher to plan a lesson. Then during lesson enactment, the teacher constantly observes students and chooses how to respond during accurate and inaccurate reading. Balancing the complexity

of literacy development, using a variety of reading materials, and understanding students' responses, as well as teaching more than one student at one time, inhibited the TCs' scaffolding during part four of the small group lesson. One difficulty for TCs was providing each student with the appropriate level of scaffolding when individual students read at a different pace, have success on different pages, and need support at different parts of the book. For example, while reading *A Party for Brown Mouse* (Giles & DeWitt, 1999), one student read the book more quickly, accurately, and with more meaning than the other student. The TC had to decide how to provide the right amount of support on the GRR for each student (TC-A lesson 1).

The following examples provide evidence regarding how TCs' implementation of the expanded GRR for small group lessons changes over time for novice teachers. One example of the expanded GRR between students, the TC, and text materials, occurred while reading *Before I Go to School* (Williams, 1998). In that lesson, the TC transitioned from explicit instruction on initial sounds in words to reading the book by interrupting the students who started reading early and telling student one to wait for student two (twice), "Wait for M, start over, go ahead" and "Start over and put your finger on every word" (TC-C Lesson 1). The TCs did most of the talking during book reading, even when the students read successfully and were supposed to do most of the reading work during that part of the lesson. The amount of TC talk interrupted the students' ability to make meaning while reading. When looking at the time analysis on page 10 of *Before I Go to School* (Williams, 1998), the students read for 18 seconds (Time 18:20-18:38), and the TC talked for one minute and 11 seconds (Time 18:38-19:49). The TC asked a question on almost every page, such as, "Do we hear any two words that start with the same sound on that page?" (TC-C Lesson 1). Then, on pages 14-16, the students read for 41

seconds (Time 20:24-21:07), and the TC talked for 7 seconds. After the students read, she asked questions about the lesson focus. "What does this word start with?" and student two said "B"; then the teacher asked, "and what sound does B make?" and student two said, "/b/ /b/ /b/". The teacher concluded with, "So, it says, I put on my /b/ backpack" (TC-C Lesson 1). See Table 25 for TCs' experience implementing the expanded GRR.

Table 25

Experience Implementing the Expanded Gradual Release of Responsibility

Excerpts: Student Reading New Book and Teacher	Analytic Point: Instructional Scaffolding or Prompting	Analytic Comment: Interpretation
Responding		
S1: Before T: Wait for M, start over, go ahead Sa: Refere L go to	Students' Read Time 18:20-18:38 Most support from teacher;	Scaffolds: TSL5 Teacher Models/ Demonstrates
school, I brush my teeth T: Good Job. J start	problem solving. The teacher emphasized pointing 1-1 with	Prompts: No Prompt, teacher
over and put your finger on every word T: Here, ready T: Takes	Teacher Talk Time 18:38-19:49	did most of the work
	words that start with the	
T: Alright so, before I go to sch S1: Can I read this one?	Students' Read Time 20:24-21:07 Most support from teacher; teacher in control of	Scaffolds: TSL5 Teacher Models/ Demonstrates
T: (pointing) Before I go to school, I get my S2: leans in, my S1: my lunch T: Close, listen to me and watch my finger T: Before, before I go	Teacher Talk Time 21:07-21:14 T: to S2, what does this word start with? S2: B T: and what sound does B	Prompts: No Prompt, teacher did most of the work
	Student Reading New Book and Teacher Responding S1: Before T: Wait for M, start over, go ahead Ss: Before I go to school, I brush my teeth T: Good Job. J start over and put your finger on every word T: Here, ready T: Takes S's hand, helps point, before I go to school, I brush my teeth. T: Alright so, before I go to school, I go to sch S1: Can I read this one? T: Yeah, go ahead T: (pointing) Before I go to school, I get my S2: leans in, my S1: my lunch T: Close, listen to me and watch my finger T: Before, before I go	Student Reading New Book and Teacher Responding S1: Before T: Wait for M, start over, go ahead Most support from teacher; Ss: Before I go to school, I brush my teeth teacher emphasized pointing 1-1 with the student. T: Takes Takes Tak Time T: Too we hear any two before I go to school, I words that start with the brush my teeth. Same sound on that page? T: Alright so, before I Students' Read Time go to sch T: Alright so, before I Students' Read Time go to sch T: Alright so, before I Students' Read Time go to sch T: Alright so, before I Students' Read Time go to school, I get my S1: Can I read this one? Most support from teacher; teacher in control of T: Yeah, go ahead Time T: Close, listen to me and watch my finger T: Before, before I go T: and what sound does B

Table 25 (Cont'd)

S2: This don't say	T: So, it says, I put on my	Note:
lunch	backpack.	S1 wanted to do
S2: Because lunch	_	more reading
starts with an L		work. With her
T: You're right M that		hand raised, I want
doesn't say lunch		to read this one.
because lunch starts		Can I read this
with an /l/, which		one? Can we say it
is an L, & this is a /b/		after you?
S2: Like Lauren		•

TC-C Lesson 1; Text from *Before I Go to School* (Williams, 1998)

The examples described above of TCs' understanding of how to implement the GRR are evidence that this expertise is expanding and continuing to develop. One suggestion for TCs is to let students keep going when they read successfully without error, and then do the teacher talk at the end of the lesson. The end of the lesson, part five, is when the TC and students talk about the meaning of the book and talk about the places in the book where students implemented the new skill. In this lesson, the TC implemented three factors that enhanced their scaffolding during small group reading instruction, including the structured lesson plan, the knowledge of scaffolds and prompts, and the feedback cycles at error. This was the first lesson, so the TC did not have the benefit of lesson repetition.

Another example of the expanded GRR between students, the TC, and text materials, occurred while reading *What Can Jigarees Do?* (Cowley, 1998). In that lesson, the TC transitioned from explicit instruction to reading by saying, "Okay, this says What Can Jigarees Do? and the students read, "What Can Jigarees Do?" The TC continued with "What do you think... have you ever heard of a Jigaree?" and the first student nods her head (meaning yes)! As they opened the book to begin reading, the TC asked, "Do you want me to read it and then you guys read it? Or do you want to try to read it together?" The second student responded with "You

read it and then we should read it." The TC read first, "They can skate" and students repeated, "They can skate," then the teacher, "And they can ride" and then students repeated, "And they can ride." This is echo reading, which is a research-based practice (Michigan Virtual University. (n.d.); however, after those two pages, student one expressed that she was ready to read it on her own, "I know how to do this myself." The TC responded to the student and said, "We'll do it this way and then next time we'll do it that way." As they read the next two pages, the TC lead with, "They can fly" and the students repeated, "They can fly," however before the TC could read the next page, student two got to it first and said, "they can slide" (and looked at the TC to see if he was correct). This time the TC repeated after the student and added a missing word to the sentence, "AND they can slide." When they turned the page, student one expressed again, "I can read this one," however the teacher took back control (TC-D lesson 2). See Table 26 for examples of TCs' experience implementing the expanded GRR.

Table 26

Understanding of Students' Literacy Skills, Strategies, and Knowledge

Orienting	Excerpts:	Analytic Point:	Analytic Comment:
Text Information:	Student Reading New	Instructional	Interpretation
WHAT CAN	Book and Teacher	Scaffolding or	
JIGAREES DO?	Responding	Prompting	
(Cowley, 1998)			
p. 4	S2: I know how to do	Most support from	Scaffolds:
They can fly	this myself	teacher; teacher	TSL5 Teacher
p. 5	T: We'll do it this way	in control of problem	Models/
and they can slide.	and then next time	solving.	Demonstrates Teacher
	we'll do it that way		Models/
	T: Ready, they can fly	The student said, I	Demonstrates
	Ss: They can fly	know how to do this	
	(pointing)	myself.	Prompts:
	S2: They can slide?	-	No prompts. The
	T: And they can slide	The teacher said, we'll	teacher did all the
	Ss: And they can slide	do it this way.	work.
	-	- -	

Table 26 (Cont'd)

p. 6	S1: turning the page,	Keep learning moving	Scaffolds:
Jigarees dance,	I can read this one	forward; prompts/	TSL2 Teacher Talk
p. 7	S2: and they could	reminders; no new	Specific
Jigarees sing.	T: Be careful, what page are you on?	teaching.	-
	T: Let's make sure we	Prompt for meaning	Prompts:
	are on the same page	The teacher said, what	TP8 Check the
	T: Jigarees dance	do you think they are	picture
	Ss: Jigarees dance	doing in this picture	
	T: What do you think	right here?	
	they are doing in this		
	picture right here?		
	S2: Singing		
	T: Yes		
	S2: Jigarees sing		
	T: Jigarees sing		
	S1: Jigarees sing		

TC-D Lesson 2; Text from What Can Jigarees Do? (Cowley, 1998)

The examples described above of TCs' implementation of the expanded gradual release of responsibility are evidence that this was a factor that inhibited scaffolding during small group instruction. By stating factor 4 inhibited scaffolding I claim it hindered TCs' ability to support students toward productive reading. I argue that this is an example of a factor that inhibited scaffolding because the TC stuck to her lesson plan rather than adjusting for where students were and releasing responsibility when the kids said they could do it themselves. Both students wanted to read the book on their own; however, the TC kept control of the reading. Student one said twice, "I know how to do this myself," and "I can read this one," and student two went ahead and read the page on his own. This inhibited scaffolding because when the TC took all the control, TLS5, there was no opportunity for the students to show their skills and strategies during reading. At one point she asked the students to check the picture for the word "sing," which is TP8 and a prompt for meaning, however she did not connect this to the students' knowledge of

letters and sounds to look at the word "sing," which modeled for the students that they can rely on the picture. In this lesson, the TC implemented all four factors that enhanced their scaffolding during small group reading instruction, including the structured lesson plan, the feedback cycles at success, the feedback at error, and lesson repetition (this was the TC's second lesson). One reason this lesson was inhibited by the TC's understanding of students could be that she followed her plan for echo reading or choral reading (she offered both options to the students at the beginning of the reading), and did not respond to their abilities to take more control of the reading as they continued reading the book. Again, this was the TC's first experience managing a K-3 literacy lesson while responding to students' literacy skills, strategies, and knowledge. The TCs' implementation of the expanded GRR is the fourth factor that inhibited preservice teachers' scaffolding during small group reading instruction. Moreover, for inhibit factor 4 the GRR might have been represented as a macro-level scaffold for the five parts for the lesson, however TCs needed more practice with how and when to retain and release responsibility to students during the reading portion of the lesson. In sum, the factors that inhibited preservice teachers' scaffolding included, factor 1, which is the TCs' understanding of students' literacy development (skills, strategies, and knowledge), factor 2, which is the TCs' understanding of how to use literacy instructional materials, factor 3, which is the feedback cycles between students and the teacher at accurate reading, and factor 4, which is the gradual release of responsibility. These four factors describe the findings for research question 1, part B: the factors that inhibited preservice teachers' scaffolding during small group reading.

Summary of Findings: Research Question 1

The first part of this chapter analyzed the findings for first research question: "Which factors may enhance or inhibit pre-services teacher's scaffolding during small group reading

instruction, as they observe, enact, and reflect on their own small group teaching over a series of three lessons?" The findings for this research question were divided into part A, factors that enhance, and part B, factors that inhibit. In summary, for research question 1 part A, I found four factors that enhanced scaffolding, including the five-part lesson structure, the scaffolds and prompts learned in the literacy methods course, the feedback cycles at error during reading as students read independently and TCs provided feedback, and lesson repetition as TCs taught a series of lessons over three weeks. In addition, for research question 1 part B, I found four factors that inhibited scaffolding, including TCs' understanding and experience with students' literacy development (skills, strategies, and knowledge) and how much scaffolding different tasks need; literacy materials, book choice, and book supports and challenges; feedback cycles at accurate reading as students read independently and TCs provided feedback; and finally, the gradual release of responsibility as TCs taught students and content at the same time. Combined, these eight factors answer research question 1 regarding factors that enhance and inhibit scaffolding over a series of three lessons. Implications for these findings suggest that these are important components to include in literacy methods courses as TCs learn to differentiate reading instruction. Furthermore, these eight factors connect to research question 2 about preparedness to teach and evidence of improvement over time. The final section of this chapter describes the findings for research question 2, how preservice teachers' scaffolding during small group reading improved over a series of three lessons.

Findings: Research Question 2

My second research question was, "As pre-service teachers go through the three teaching cycles, (a) do they feel more prepared for the next lesson, and (b) is there evidence in their videos that their scaffolded instruction improves?" The findings for this research question are

discussed in two sections, part A, if TC's feel more prepared, and part B, if is there evidence of improvement in their videos. After analyzing my primary data source, the teacher candidates' videos, and my secondary data sources, the TC's lesson plans, lesson reflections, surveys before and after each lesson, and interviews after the course, I found that the four factors that enhanced pre-service teachers' scaffolding during small group reading instruction were the same factors that made them feel more prepared for each additional lesson, and the four factors that inhibited their scaffolding, strengthened over the series of three lessons. In addition, the teacher candidates' videos provided evidence that their continued use and experience with the factors that enhanced and inhibited scaffolding contributed to improvement in scaffolded instruction over the series of three lessons. See Table 27 for the summary of research question two and findings.

Table 27

Summary of Research Question 2 and Findings

Research Question 2 Part A:

As pre-service teachers go through the three teaching cycles, (a) do they feel more prepared for the next lesson.

Factors that Enhance Scaffolding and Preparation

- 1. Lesson structure
- 2. Scaffolds and prompts
- 3. Feedback cycles at error
- 4. Lesson Repetition

Factors that Inhibit Scaffolding yet Improve Preparation Over Time

- 1. Students' literacy development
- 2. Literacy materials
- 3. Feedback cycles at accuracy
- 4. The gradual release of responsibility

Research Question 2 Part B:

As pre-service teachers go through the three teaching cycles, (b) is there evidence in their videos that their scaffolded instruction improves?

Successive Lesson Videos Show Continued Use and Experience

- 1. Lesson structure
- 2. Scaffolds and prompts
- 3. Feedback cycles at error
- 4. Lesson repetition
- 5. Literacy development
- 6. Literacy materials
- 7. Feedback cycles at accuracy
- 8. Gradual release of responsibility

RQ2 Findings Part A

Research question two, part A, refers to whether a series of three teaching cycles helped pre-service teachers feel more prepared for the next lesson. The findings for this research question align with the factors that enhance and inhibit pre-service teachers' scaffolding during small group reading instruction from research question one. The same factors that enhanced and inhibited pre-service teachers' scaffolding during small group reading instruction were the factors that assisted them in feeling more prepared for the next lesson. The factors that enhanced scaffolding: lesson structure, scaffolds and prompts, feedback cycles at error, and lesson repetition continued to enhance scaffolding over each additional lesson. In addition, even though there were factors that inhibited scaffolding during small group instruction, including students' literacy development, literacy materials, feedback cycles during accurate reading, and the gradual release of responsibility, those factors did improve TCs' preparation with each additional lesson. See Table 28 for a summary of factors that assisted preservice teachers in feeling more prepared for each lesson. In the remainder of this section, I provide select examples of TCs' three lessons and how their feeling of preparedness improved over time.

Table 28
Findings RQ2 Part A: Teacher Candidates Preparedness for the Next Lesson

Lesson 1, Lesson 2, Lesson 3
Enhance More with Additional Lessons
1. Increased practice with the lesson format
2. Increased practice with scaffolds and prompts
3. Increased practice with feedback at error
4. Increased practice with lesson connections
Inhibit Less with Additional Lessons
1. Increased practice with literacy development
2. Increased practice with literacy materials
3. Increase practice with feedback at accuracy
4. Increased practice with the gradual release of responsibility

Examples of Factors that Enhanced Scaffolding and Increased Preparedness to Teach

Data for five teacher candidates were analyzed for this study. Each teacher candidate taught a series of three lessons and implemented the five-part lesson structure for each week, utilized the research-based scaffolds and prompts available during the lesson, provided feedback to students at error during reading, and repeated a series of three lessons over three weeks. Each TC planned, implemented, and evaluated a unique set of lessons for a specific group of students. The five different series of lessons included lessons for first graders on sight words, lessons for kindergarten students on consonant blends, lessons for kindergarten students on phonemic awareness and one-to-one letter correspondence, lessons for kindergarten students on letter sound knowledge, and lessons for first grade students on blends and digraphs.

Teacher candidate A felt more prepared for her lessons on sight words in the areas of lesson structure, practicing scaffolds and prompts, practicing feedback cycles at error, and connecting one lesson to the next. For example, during the interview, when asked about checking for student understanding in each additional lesson TC-A stated, "It kind of was a little bit discouraging, but then you know they are learning and I'm learning, so I took that into

internship year, where I would always review what I taught them before, if they really had no idea, I would scratch what I was doing and review what we were doing. So I think that taught me that you really do have to check all the time because they won't get it in one thing" (Interview, March 2020). Furthermore, "I think those two kids not getting it (each week) really helped me see that" (Interview, March 2020). In addition to the interview, TC-A stated in the surveys before and after each lesson that her confidence remained high regarding, "How confident are you in your ability to teach sight words and fluency during small group reading instruction and why do you feel that way?" She felt quite a bit confident teaching sight words each week, however her comments did reveal that she realized she benefited from the weekly practice when teaching, but that she only learned how to teach sight words in small groups, not other areas of literacy instruction. See Table 29 for this TC's survey data regarding teaching three lessons on sight words.

Table 29

Teacher Candidate A Confidence from Lesson to Lesson

Lesson	Before Lesson 1	After Lesson 1	After Lesson 2	After Lesson 3	
Survey	How confident are you in your ability to teach sight words and fluency during				
Question	small group readi	ng instruction?			
	Quite a bit	Quite a bit	Quite a bit	Quite a bit	
	confident	confident	confident	confident	
Survey	Why do you feel	that way about sig	ht words and flue	ency?	
Question					
	"I am more	"I think I did a	"I think I need	"After this third lesson I	
	confident in	good job	to find a better	don't know about other	
	teaching sight	teaching it, but	way, but I am	ways to teach sight words	
	words than	I need more	confident in	other than the way I did in	
	fluency. I don't	practice	the way I am	lessons 1 and 2"	
	know the steps	implementing	teaching it		
	to fluency"	it"	now"		

Teacher candidate B felt more prepared for her lessons on consonant blends in the areas of lesson structure, practicing scaffolds and prompts, practicing feedback cycles at error, and

connecting one lesson to the next. For example, during the interview, when asked about the benefit of teaching three consecutive lessons, TC-B stated that it was beneficial, "Especially in terms of confidence ... you definitely get more comfortable with more exposure" (Interview, March 2020). She also stated, "I also think it's important to see, from one lesson you can't see what sticks ... especially when I work with special education students, you are going to have to reteach things over and over and over again, until it actually is natural to them" (Interview, March 2020). Finally, "So, I think doing three, you teach the lesson and then you see how much are they actually retaining" (Interview, March 2020). In addition to the interview, TC-B stated in the surveys before and after each lesson that her confidence increased regarding, "How confident are you in your ability to teach decoding during small group reading instruction and why do you feel that way?" She felt somewhat confident after the first two lessons, and then quite a bit confident after the final lesson. She also stated that she was not sure if she introduced enough strategies or time to use them in lesson 2, but thought that the students' showed improvement after lesson 3. Even after lesson 3, she thought she could introduce more strategies if she continued to work with the students in small groups. See Table 30 for this TC's survey data regarding teaching three lessons on decoding.

Table 30

Teacher Candidate B Confidence from Lesson to Lesson

Lesson	Before Lesson 1	After Lesson	1 After Lesson 2	After Lesson 3
Survey	How confident a	re you in your ab	ility to teach deco	ding during small group
Question	reading instruction	on?		
	Somewhat	Somewhat	Somewhat	Quite a bit
	confident	confident	confident	Confident

Table 30 (Cont'd)

Survey Question	Why do you feel that way about decoding?			
	"I've never taught it before, however, we've been given strategies"	"The students did well in this area except in blending sounds which I think I can improve"	"I don't know if I give students enough strategies or time to use them while reading"	"I think both my students have already shown improvement since doing my lessons. I would have wanted to introduce more strategies, though"

Examples of Factors that Inhibited Scaffolding yet Increased Preparedness to Teach

In addition to finding success with factors that enhanced scaffolding during small group reading instruction, the TCs also encountered factors that inhibited scaffolding. More specifically, the factors that enhanced scaffolding, including the five-part lesson structure, the list of scaffolds and prompts, the feedback to students at error during reading, and repeating a series of three lessons over three weeks, continued to enhance the TCs' preparation and improvement over time. However, the factors that inhibited scaffolding in the series of three lessons, including literacy development, literacy materials, feedback during accurate reading, and the gradual release of responsibility, inhibited less with each additional lesson. In other words, even though the TCs carefully planned for the first lesson, there where factors that inhibited scaffolding that they could not plan for as a novice teacher. To put it another way, with each additional lesson with the same group of students, the TCs knew more about those students' literacy development, knew more about materials that worked and did not work, knew more about feedback cycles for accurate reading (and how to increase challenges), and knew more about the gradual release of responsibility. I claim that repeating small group instruction with a second and then a third lesson, made TCs feel more prepared because they knew what to expect and they felt more confident over time.

To add to the two examples above, teacher candidate C felt more prepared for her lessons on phonemic awareness and one-to-one letter correspondence in the areas that enhanced and inhibited scaffolding. For example, when asked about the benefit of teaching three consecutive lessons TC-C stated, "In between each lesson, being able to figure out went right and what didn't" and "with the three lessons that we did in 405, I mean it was only three lessons ... and there's a lot in between that is happening behind the scenes" (Interview, March 2020). In addition, "it was nice to see that they improved; it was reassuring" and "being able to have another chance to come back..." to reteach or teach the next step (Interview, March 2020). In addition to the interview, TC-C stated in the surveys before and after each lesson that her confidence remained high regarding, "How confident are you in your ability to teach phonological awareness during small group reading instruction and why do you feel that way?" She remained quite a bit confident before and after the first two lessons. For lesson 3, she added an additional lesson focus of connecting sounds to print and continued to feel quite a bit confident about that focus. TC-C also stated that as she taught each lesson, she improved on some aspects of teaching such as phonemic awareness, but continued to improve in other areas. See Table 31 for this TC's survey data regarding teaching three lessons on phonemic awareness and one-to-one letter match.

Table 31

Teacher Candidate C Confidence from Lesson to Lesson

Lesson	Before Lesson 1	After Lesson 1	After Lesson 2	After Lesson 3
Survey Questions	How confident ar phonological awa instruction?	•	•	How confident are you in your ability to teach phonics, alphabet, letters, and sounds during small group reading instruction?
	Quite a bit confident	Quite a bit confident	Quite a bit confident	Quite a bit Confident

Table 31 (Cont'd)

Survey Questions	Why do you feel that way about phonological awareness?			Why do you feel that way about phonics, alphabet, letters, and sounds?
	"I could learn more about how to connect PA to print"	"I know many strategies for teaching this, but I could be more fluent"	"I have many strategies for teaching phonological awareness but I could connect it more to reading"	"I learned one strategy for teaching how students can look at each word part but I could find more ways to teach it"

Teacher candidate D felt more prepared in both the factors that enhanced and inhibited scaffolding. For TC-D, she felt more prepared for her lessons on consonant blends in the areas of literacy development, literacy materials, feedback cycles during accurate reading, and the gradual release of responsibility. For example, when asked about the benefit of teaching three consecutive lessons, TC-D stated, "I think I really did improve in managing them and I could see them getting it because I connected it again. By the end of it (three lessons) they had the sounds I was teaching" (Interview, March 2020). In addition to the interview, TC-D stated in the surveys before and after each lesson her confidence changed regarding, "How confident are you in your ability to teach phonics, alphabet, letters, and sounds during small group reading instruction and why do you feel that way?" Before even teaching the first lesson she felt quite a bit confident, but then only felt somewhat confident after teaching the first lesson. After lesson 2, however, she continued to feel quite a bit confident, and she felt very confident after the third lesson. She also stated that early on she did not know what she did not know, but things made more sense as the lessons continued. See Table 32 for this TC's survey data regarding teaching three lessons on blends.

Table 32

Teacher Candidate D Confidence from Lesson to Lesson

Lesson	Before Lesson 1	After Lesson 1	After Lesson 2	After Lesson 3
Survey	How confident ar	e you in your abil	ity to teach phoni	cs, alphabet, letters, and
Question	sounds during sm	all group reading	instruction?	
	Quite a bit	Somewhat	Quite a bit	Very
	confident	Confident	confident	confident
Survey	Why do you feel that way about phonics, alphabet, letters, and sounds?			
Question				
	"I've had lots of	"I still don't	"It's starting	"I feel good just need to
	classes on this"	know what I	to make more	make sure I'm not adding
		don't know"	sense"	schwa to the end"

After analyzing the TCs' videos, lesson plans and reflections, surveys before and after each lesson, and interviews after the course, the findings for research question two part A suggest that the four factors that enhanced pre-service teachers' scaffolding during small group reading instruction were the same factors that made them feel more prepared for each additional lesson. In addition, the four factors the inhibited pre-service teachers' scaffolding during small group reading instruction were factors that improved and increased preparedness over the series of three lessons. The next section focuses on the findings for research question 2 part B.

RQ2 Findings Part B

Research question two part B, refers to video evidence of teacher candidates' improved instruction over a series of three teaching cycles. The findings for this research question align with research question two part A, regarding the ways in which TCs felt more prepared for each additional lesson in a series of three lessons. Most of the factors that enhanced and inhibited preservice teachers' scaffolding during small group reading instruction, were the factors that assisted them in feeling more prepared for the next lesson. In addition, there was video evidence

of improved instruction over the series of three lessons. The factors that enhanced scaffolding, (lesson structure, scaffolds and prompts, feedback cycles at error, and lesson repetition), and the factors that inhibited scaffolding (students' literacy development, literacy materials, feedback cycles during accurate reading, and the gradual release of responsibility), were important factors that provided video evidence of TCs' learning to scaffold and continuing to improve scaffolding during small group instruction over a series of three lessons. See Table 33 for a summary of factors that provided video evidence that scaffolded instruction improved.

Table 33

Findings RQ2 Part B: Video Evidence of Improved Instruction

Findings: Lesson Repetition Videos	Video Evidence in Successive Lessons
Continued Use and Experience with	Improved Scaffolded Instruction with
1. Lesson structure	1. Increased practice with lesson structure
2. Scaffolds and prompts	2. Increased practice with scaffolds and prompts
3. Feedback cycles at error	3. Increased practice with feedback at error
4. Lesson repetition	4. Increased practice with lesson connections
5. Literacy development	5. Increased practice with literacy development
6. Literacy materials	6. Increased practice with literacy materials
7. Feedback cycles at accuracy	7. Increased practice with feedback at accuracy
8. Gradual release of responsibility	8. Increased practice with the GRR
- ·	-

In the remainder of this section, I provide examples of one TC's three lessons and how she scaffolded instruction improved over time. The series of three videos for TC-C provides evidence that with each successive lesson, her scaffolded instruction improved. In the three lessons there was evidence that her continued use and experience with the eight factors listed above contributed to her improved scaffolding during small group instruction over three lessons. I chose to look at only one student instead of all five students because this is a strong example of the pattern that I saw across all students in this study. In other words, the factors that enhanced scaffolding continued to enhance more in each lesson, and the factors that inhibited scaffolding

in a single lesson improved scaffolded instruction over a series of three lessons. See Table 34 for TC-C's progress over three lessons based on the eight factors. This table shows change over time across the three lessons, with some factors changing more than others. After this table, I provide three additional tables, one for each lesson, and explain how I coached TC-C during weekly class sessions to improve her small group instruction each week. In the end of this series of lessons, TC-C grew as teaching of small group reading instruction.

Table 34

TC-C's Progress Over Three Lessons

	Lesson 1	Lesson 2	Lesson 3		
Factor 1	Lesson Structure and Lesson Focus				
	Phonemic awareness;	Phonemic awareness;	Phonemic awareness & 1-1;		
	complete lesson plans;	complete lesson plans;	complete lesson plans;		
	taught five lesson parts.	taught five lesson parts.	taught five lesson parts.		
Factor 2	Scaffolds	and Prompts Learned in Me	ethods Course		
	TSL5 Teacher	TSL5 Teacher	TSL5 Teacher		
	Models/Demonstrates	Models/Demonstrates	Models/Demonstrates		
		TSL3 Teacher Talk/	TSL3 Teacher Talk/		
		Nonverbal Actions	Nonverbal Actions		
			TSL2 Teacher Talk Specific		
Factor 3	Feed	lback Cycles at Error during	Reading		
	T affirms student's self-	T points to a word to	The T responded at error		
	correction.	bring attention.	and let the s solve words.		
Factor 4	Le	esson Repetition over Three	Weeks		
	1st Lesson	2nd Lesson	3rd Lesson		
	Knowledge of S	Students' Literacy: Improved	d Over Each Lesson.		
Factor 5	T did not realize that 1-1	Anticipates what might	Anticipates what might be		
	was a difficult skill.	be tricky for the students.			
	Knowledge of I	iteracy Materials: Improved	l Over Each Lesson.		
Factor 6	Book chosen from	Book chosen from	The T wrote her own book:		
	bookroom: Before I Go	Reading A-Z website:	Animals at the Pet Store		
	to School	Big Bad Bat			

Table 34 (Cont'd)

	Feedback Cycles du	ring Accurate Reading: Imp	roved Over Each Lesson.
Factor 7	The text was	This text was	The book had a balance of
	challenging.	challenging.	supports and challenges.
	The Gradual Relea	ase of Responsibility: Impro	ved Over Each Lesson.
Factor 8	The T did most of the	The T lets go of some	The T let the S read on their
	reading work.	control. The T still SCs	own when they could and
		for child at times, instead	prompted to encourage the
		of prompting.	child.

Texts from: *Before I Go to School* (Williams & Richey, 1988), *Big Bad Bat* (Angel & Dinardo, n.d.), *Animals at the Pet Store* (Anonymous, 2019)

Improved Instruction Over Three Lessons

Preparing and teaching lesson 1. Each TC in the literacy methods course reflected on their small group teaching. Analyzing the summary and reflection of the lesson plan and the instruction for TC-C helped me understand her teaching progress over the semester. According to TC-C, "I designed my three mini-lessons based on my students' needs. Before planning these lessons, I analyzed existing student data, retested students, and considered classroom observations before choosing what skills my students would benefit from working on. I then designed my lesson to meet those specific needs. Both of my students, Maddie and Jack, showed in their assessments that they were having problems with some letter sounds, phonological awareness, and decoding words in text. According to Common Core State Standards (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010) kindergarten students need to be able to 'demonstrate understanding of spoken words, syllables, and sounds (phonemes)' (CCSS.ELA-LITERACY.RF.K.2) and then 'know and apply grade-level phonics and word analysis skills in decoding words' (CCSS.ELA-LITERACY.RF.K.3)" (TC-C Lesson Summary and Reflection, 2019). TC-C also stated, "Additionally, The Cognitive Model (McKenna & Stahl, 2015) shows that in the first pathway toward reading comprehension,

automatic word recognition, students need to first develop print concepts and phonological awareness and then decoding and sight word knowledge and fluency in context (p. 8). Therefore, because Maddie and Jack both have yet to master phonological awareness I chose to set my learning goals and objectives to target that skill. I wanted my students to be able to see that phonological awareness and reading are directly related and they can use that skill to decode words in text" (TC-C, Lesson Summary and Reflection, 2019). As she described in this reflection, TC-C had clear goals as she set out to teach the first lesson. She aligned her plans to where students were in their literacy development with the CCSS and McKenna and Stahl's Cognitive Model (2015).

Comparing TC-C's lesson plan 1 with her teaching video showed that she implemented the factors that enhanced scaffolding in the first lesson, including the lesson structure, scaffolds and prompts as learned in the methods course, and feedback cycles at error during reading. To say more, she planned and implemented a lesson on phonemic awareness for her small group of two students and during the lesson she implemented the scaffolds and prompts learned in class. For example, she provided the highest level of support (TSL5), when she modeled how to read the first line of the book for the students. In addition, during the lesson she utilized feedback cycles at error during reading to encourage the students to keep going and check to make sure they were reading the words as written on the page. For example, she repeated the student's self-corrected line of text as a way of recognizing the correct reading by saying, "I eat my breakfast," emphasizing the word "my" that was added back in after being deleted the first time. Since this was the first lesson, the TC did not have the opportunity to implement the fourth factor that enhanced scaffolding, which is lesson repetition. See Table 35 for video evidence of factors that enhance scaffolding during the first lesson.

Table 35

Improved Instruction Over Three Lessons: Lesson 1

Orienting	Excerpts:	Analytic Point:	Analytic Comment:		
Text	Student Reading Book	Factors that	Interpretation of factors that		
Information:	Teacher Responding	improved lessons	improved teaching		
BEFORE I	T: Let's read this one	Lesson structure:	Factors that Enhance —		
GO TO	together	Part four - students	Increased Practice with:		
SCHOOL	T/Ss: Before I go to	read a new book &	1. Lesson structure:		
(Williams &	school, I eat my	implement skill	-Lesson part four		
Richey, 1988)	breakfast (one S leaves		2. Scaffolds/Prompts:		
	out my, but SCs)	Scaffolds/Prompts:	-TSL5 Teacher		
p. 4	T: I eat my breakfast	TSL5 - Most	Models/Demonstrates		
Before I go to	T: Let's read it again	support from	3. Feedback cycles at		
school, I eat	T/Ss: Before I go to	teacher; teacher in	error:		
my breakfast.	school, I eat my	control of problem	-T affirms student's		
	breakfast	solving. The T says:	self-correction		
	T: Good, M, what two	"Let's read this one	4. Lesson repetition:		
	words have the same	together"	-This is lesson 1		
	sound on that page?				
	S2: Points to breakfast	Feedback cycles:			
	T: Breakfast. What	S reads: Before I go			
	sound does it start with?	to school, I eat			
	S2: /b//b//b/	breakfast (one S			
	T: And what other	leaves out my, but			
	word?	SCs). The teacher			
	S1: Rereads the page,	repeats the line: I			
	pointing before I go to	eat my breakfast			
	school	(emphasizing the			
	S2: Before	work that was self-			
	T: Before	corrected)			
	S1: finishing reading I				
	eat my breakfast	Lesson repetition:			
	T: What sound does that	Lesson 1			
	start with, before				
	S2: /b//b//b/				

TC-C Lesson 1; Text from Before I Go to School (Williams & Richey, 1988)

Preparing and teaching lesson 2. After lesson 1, as TC-C reflected on the lesson outcome and how she could make improvements she stated, "In my first lesson we focused on only the beginning sounds. I asked my students to identify the word that doesn't belong, or doesn't start with the same sound and then we read 'Before I go to School' and found words in

the book that began with the same sound" (TC-C, Lesson Summary and Reflection, 2019). In addition, after teaching the lesson she recognized, "After my first lesson I made changes to my plan to better meet the needs of my students. In the first lesson I found that my students were having issues with the difference between b and d, so for my second lesson I changed my making words activity to include a lot of those letters. I did this to open an opportunity to clarify the difference and allow my students more practice with the letters" (TC-C, Lesson Summary and Reflection, 2019). In making that reflection TC-C realized that she needed to make changes to her second lesson based on student learning in lesson 1. To say more, she knew her students needed more support with the names and sounds for the letters b and d, so she adapted her plan to reflect those changes. In addition to TC-C reflecting on her teaching, she also brought those thoughts and concerns to class following the first lesson. At class, inbetween the first and second lesson, I opened up opportunities for TC's to discuss with partners, in small groups, and with the large group lesson components that went well and features they wanted to adjust for the next lesson. During that time, I coached and moved each TC forward to prepare and improve for the next lesson. TCs learned from each other and were able to chime in to the conversation and learn from the coaching I provided.

Even though they each brought a variety of concerns to class, they were able to take away bits and pieces from each coaching conversation. In my role as the instructor, I coached each TC to anticipate what might be tricky for the students. In this case, TC-C said the tricky part for her students was distinguishing the minimal differences between the lower-case letters b and d. I was able to share more specific strategies about why this is difficult for students, how to teach the difference, and not to expect mastery in one lesson. More specifically, when a TC looks at the letters b and d they can tell the difference because they know how to read and write. However,

when a kindergartener who is learning to read looks at the letters b and d they see that each letter has a ball and a stick. They have not had years of experience with print to know the difference between these two letters is minimal, or that it matters if the stick is on one side or the other. I had the TCs explore the similarities and difference by stacking two magnetic letters for b and d, and they realized that the similarity was the ball and the difference was where the stick is placed. The TCs were amazed that a feature that was so easy for them could be so difficult for the K-3 students. We explored other letters that had minimal differences, that could also present confusions to students who are learning letters, such as n and r (in r the line stops before going to the baseline), or c and e (in e there is a small extra line). I went on to teach the TCs that when sorting letters or making words with letter tiles or magnetic letters, there should be a balanced of known with unknown letters. In other words, if a child is confused with the letters b and d and you are planning to sort letters in explicit instruction, then make sure to put in many letters that are known well by the students, mixed in with letters that are confusing. TCs wondered how to find out the known letters, and I directed them back to the students' data on letter identification. In this example, I coached TC-C and the rest of the class on how to move forward with planning the second lesson.

Comparing TC-C's lesson plan 2 with her teaching video showed that she implemented the factors that enhanced scaffolding in the second lesson, including the lesson structure, scaffolds and prompts as learned in the methods course, feedback cycles at error during reading, and lesson repetition. To say more, she planned and implemented a lesson on the same focus as lesson 1 and provided scaffolding at error. For example, she provided the highest level of support (TSL5), when she modeled how to read the first line of the book for the students, by saying "Bob did not get the big, bad, bat" (TC-C Lesson 2). Furthermore, she utilized feedback cycles at error

during reading and decreased her scaffolding for a moment. For example, when the child needed redirection, the TC pointed to the word Bob to reorient the student. However, this decrease in support was temporary because the TC increased support again by telling the student the word Bob, instead of prompting to use sounds to read it. After that, the TC self-corrected two words for the student (the word "did not" for "didn't" and the word "a" for "the"). The TC could have used prompts to assist the student in trying to self-correct on her own. The TC implemented lesson repetition, which is the fourth factor that enhanced scaffolding.

In addition to implementing factors that enhanced scaffolding in lesson 2, TC-C also implemented factors that inhibited scaffolding, yet improved as a result of lesson repetition. For example, in the second lesson understanding students' literacy development was a strength because the TC could anticipate what might be tricky for the students, such as recognizing the difference between the lower-case letters b and d. In addition, understanding how to select literacy materials still inhibited scaffolding because the book choice had too many challenges, however teaching a second lesson enabled the TC to try a new book this time. For example, during the first lesson she used a book from the book room, but during the second lesson she chose a book from the website Reading A-Z, which has more controlled skills in the text. Furthermore, feedback cycles during accurate reading did not inhibit the TC in this lesson because there were many challenges in the text that required TC support. Lastly, the use of the GRR inhibited scaffolding in the first lesson. Despite the fact that she shifted control of the reading at times, she did do most of the reading work for the students in this lesson. After lesson 2, TC-C recognized that she did too much work at times during the lesson. For example, she stated in her assignment, "One missed opportunity was in lesson 2 when we were reading 'Big Bad Bat.' I asked my students what the first sound in bat was and Maddie said it was 'd'. I

addressed her misconception but only by telling her that it was a b and not a d. I should have gotten the b and d letters back out and had my student work with those to make the word bat and sound it out" (TC-C, Lesson Summary and Reflection, 2019). See Table 36 for video evidence of factors improved scaffolded instruction during the second lesson.

Table 36

Improved Instruction Over Three Lessons: Lesson 2

Orienting Text Information: BIG BAD BAT (Angel & T: You guys will repeat after me, okay. I'll read a sentence and then you read a sentence, okay? T: Bob did not get the big bod bid not put the bat in a bag not match 1-1 T: Bob did not put the bat in a bag as in ne hear you T: Alright here, start S2: Bob did not put the bat in he/a bag (SCs) T: Your turn J, let me hear you T: Did not S1: hy T chimes in -Bob T: the Student Reading Book Teacher Responding Teacher Responding Improved lessons improved teaching					
Information: Teacher Responding improved lessons improved teaching improved leasons improved teaching improved lessons improved teaching improved leasons improved inactions increased Practice Increased Practice Increased Practice Increased Practice Increased Practice Improved instruction 2. Scaffolds/Prompts: TSL5 Teacher Models/Demonstrates TSL5 Teacher Models/Demonstrates TSL5 Teacher Improved leason TSL5 Teacher Improved leason Tour leason T	_	<u> </u>	•	•	
BIG BAD BAT (Angel & action sentence and then you read a sentence, okay? T: Bob did not get the big bad bat. Bob did not put the bat in a bag not match 1-1 T: Bob did not put the bat in the/a bag (SCS) T: Your turn J, let me hear you T: Did not put S1: /b/ T chimes In Bob T: You guys will repeat after me, okay. I'll read a sentence, okay? T: Bob didnot get the big your turn, follow along. St: Bob did not get the big bad bat. S1: Reads fast and does at bat in the/a bag (SCS) T: Your turn J, let me hear you T: Did not T: Did not T: Howes in and points to the word S1: Bob didn't T: Bob didn't T: Hob S1: Bob didn't T: Did not S1: Put the bat in the		_	Factors that	Interpretation of factors that	
Angel & sentence and then you read a sentence, okay? T: Bob did not get the big your turn, follow along. bad bat. Bob did not big, bad bat. T: Bob did not get the bat in a bag not match 1-1 T: Alright here, start S2: Bob did not put the bat in the/a bag (SCs) T: Your turn J, let me hear you T: Did not S1: /b/ T chimes in - Bob T: Hoves in and points to the words in the book T: Bob didn't S1: Bob didn't S1: Bob didn't S2: Bob didn't S3: Bob didn't S4: Bob didn't S5: Bob didn't S5: Bob didn't S6: Bob didn't S6: Bob didn't S7: Bob sentence and then you read a new book & implement skill S5: Bob didn not get the bimplement skill S5: Scaffolds/Prompts: S5: Saffolds/Prompts: S5: Facher Models/Demonstrates S2: Seedback cycles at error: S2: Bob did not put the bat in the/a bag. S4: Feedback cycles at error: S2: Bob did not put the bat in the/a bag. S5: Bob did not put the bat in the/a bag. S6: Feedback cycles: S6: Feedback cyc	Information:		improved lessons	improved teaching	
(Angel & sentence and then you read a new book & implement skill read a sentence, okay? T: Bob did not get the big bob did not get the big bad bat. Ss: Bob did not get the big bob did not big, bad bat. S1: Reads fast and does a bat in a bag. T: Alright here, start S2: Bob did not put the bat in the/a bag (SCs) T: Your turn J, let me hear you turn J, let me hear you T: Did not S1: // T chimes in - Bob T: Moves in and points to the words in the boat in the website Reading T: Did not S1: Bob didn't T: Did not S1: Put the bat in the	BIG BAD	T: You guys will repeat	Lesson structure:	Factors that Enhance —	
Dinardo, n.d.) The color of the problem solving problem sol	BAT	after me, okay. I'll read a	Part four - students	Increased Practice	
T: Bob did not get the big, bad, bat. T: Go back, now it's get the big your turn, follow along. Bob did not get the big bad bat. Ss: Bob did not get the big your turn, follow along. Bob did not big, bad bat. So: Bob did not get the big your turn, follow along. Shi Reads fast and does a bag not match 1-1 guys will repeat after me. I'll read a bat in a bag. T: Alright here, start S2: Bob did not put the bat in the/a bag (SCs) T: Your turn J, let me hear you T: Did not put hear you T: Did not put he solving S: Did not put S1: /b/ T chimes in - Bob T: Moves in and points to the words in the book T: Bob S1: Bob didn't T: Did not S1: Reads fast and does problem solving. T: Alright here, start you read a sentence and then you read a sentence, okay?" TSL3 New learning introduced; show or teach child new problem solving T: Moves in and points to the word T: Moves in and points to the word S1: Bob didn't T: Bob S1: Bob didn't T: Did not S1: Put the bat in the	(Angel &	sentence and then you	read a new book &	1. Lesson structure:	
p. 3 Bob did not Bob did not get the big bad bat. Ss: Bob did not get the Bob did not put the bat in a bag. T: Alright here, start S2: Bob did not put the bat in the/a bag (SCs) T: Your turn J, let me hear you T: Did not S: Did not put S: D	Dinardo, n.d.)	read a sentence, okay?	implement skill	-Lesson part four	
Bob did not get the big your turn, follow along. Ss: Bob did not big, bad bat. S1: Reads fast and does a bag not match 1-1 T: Bob did not put the bat in a bag. T: Alright here, start S2: Bob did not put the bat in the/a bag (SCs) T: Your turn J, let me hear you T: Did not S1: New learning in roduced; show or hear you T: Did not S1: Above in and T: the T: Moves in and points to the words in the book T: Bob didn't S1: Put the bat in the		T: Bob did not get the		2. Scaffolds/Prompts:	
get the big bad bat. Ss: Bob did not get the big bad bat. Ss: Bob did not get the big, bad bat. problem solving. S1: Reads fast and does a bag not match 1-1 T: Bob did not put the bat in a bag. T: Alright here, start S2: Bob did not put the bat in the/a bag (SCs) T: Your turn J, let me hear you T: Did not S1: Did not put S1: /b/ T chimes in - Bob T: the Tobbe words in the book T: Bob didn't T: Did not S1: Put the bat in the Ss: Bob didn't T: Did not S1: Put the bat in the	p. 3	big, bad, bat.	Scaffolds/Prompts:	-TSL5 Teacher	
bad bat.Ss: Bob did not get the Bob did not big, bad bat.teacher in control of problem solving.Talk/Nonverbal Actionsput the bat in a bagS1: Reads fast and does not match 1-1T: Bob did not put the bat in a bag.The T says: "You after me. I'll read a sentence and then bat in a bag.Tr. Alright here, start you read sentence, okay?"Topoints to a word to bring attentionS2: Bob did not put the bat in the/a bag (SCs)TSL3 New learning introduced; show or hear youTSL3 New learning introduced; show or teach child new problem solvingFactors that Inhibit = Improved instructionT: Did not S1: b/ T chimes in - BobFeedback cycles: min - BobT: Moves in and points to the word to bring attentionT: Woves in and points to the words in the book T: BobT: Moves in and points to the word to bring attentionT: Bob didn't T: Bob S1: Bob didn't T: Did not S1: Put the bat in theLesson repetition: Lesson 2 **Actions** **In Bedback cycles at error: -T points to a word to bring attention ***S1: Bob didn to put the bat in theBob and says BobAnticipates what might be tricky for the students ***Chose a book from the website Reading-Chose a book from the website Reading ***Chose a book from the website ReadingA-Z, instead of a bookroom book ***Chose a book from the website Reading ***Chose a bookr	Bob did not	T: Go back, now it's	TSL5 Most support	Models/Demonstrates	
Bob did not put the bat in a bag not match 1-1 guys will repeat after me. I'll read a bag not match 1-1 guys will repeat after me. I'll read a bag not match 1-1 guys will repeat after me. I'll read a sentence and then T: Alright here, start you read sentence, okay?" Joint turn J, let me hear you teach child new hear you teach child new S1: /b/ T chimes feedback cycles: in - Bob T: Moves in and T: the T says: "You guys will repeat after me. I'll read a sentence and then bring attention bring attention denoted; show or teach child new problem solving solving T: Your turn J, let me hear you teach child new S1: /b/ T chimes feedback cycles: in - Bob T: Moves in and T: the points to the word to bring attention denoted the points of the word sin the book T: Moves in and points to the word to bring attention denoted the points of the word to bring attention denoted the properties. This is lesson 2 4. Lesson repetition: Feetback cycles: might be tricky for the students denoted the students for the students for the website Reading the website Reading the website Reading the points to the word bring attention bring attention denoted to bring attention bring attention denoted the points to a word to bring attention to a sentence, okay?" 4. Lesson repetition: Feetback cycles: might be tricky for the students denoted the students for the website Reading bookroom book to bookroom book solve the word bring attention and the points to a word to bring attention to a sentence, okay?" 5. Students' Inerect the points to a word to bring attention to a sentence, okay?" 5. Students' Inerect the points the website seal and then the students for the website Reading for the students for the website Reading for the students for the students for the website Reading for the students for the website Reading for the students for the website Reading for th	get the big	your turn, follow along.	from teacher;	-TSL3 Teacher	
put the bat in a bag not match 1-1 guys will repeat after me. I'll read a bag not match 1-1 guys will repeat after me. I'll read a bat in a bag. sentence and then you read a sentence, okay?" T: Alright here, start S2: Bob did not put the bat in the/a bag (SCs) TSL3 New learning T: Your turn J, let me hear you teach child new hear you teach child new S1: /b/ T chimes in - Bob T: Moves in and T: the points to the words in the book T: Bob didn't Lesson 2 The T says: "You 3. Feedback cycles at error: -T points to a word to bring attention 4. Lesson repetition: -This is lesson 2 Taltal Inhibit — Improved instruction Factors that Inhibit — Improved instruction Factors that Inhibit — Improved instruction 5. Students' literacy: -Anticipates what might be tricky for the students T: Moves in and points to the word to bring attention 4. Lesson repetition: -This is lesson 2 Factors that Inhibit — Improved instruction 5. Students' literacy: -Anticipates what might be tricky for the students 6. Literacy materials: -Chose a book from the website Reading T: Bob Lesson repetition: -Chose a book from the website Reading A-Z, instead of a bookroom book T: Did not -Chose a bookroom book	bad bat.	Ss: Bob did not get the	teacher in control of	Talk/Nonverbal	
not match 1-1 T: Bob did not put the bat in a bag. T: Alright here, start S2: Bob did not put the bat in the/a bag (SCs) T: Your turn J, let me hear you hear you T: Did not S1: /b/ T chimes T: Moves in and points T: Moves in and points to the words in the book T: Bob S1: Bob didn't T: Bob S1: Put the bat in the	Bob did not	big, bad bat.	problem solving.	Actions	
T: Bob did not put the bat in a bag. T: Alright here, start S2: Bob did not put the bat in the/a bag (SCs) T: Your turn J, let me hear you teach child new sproblem solving T: Did not S1: bob did not put T: Did not S1: bob T: Moves in and points to the words in the book T: Bob T: Bob T: Bob S1: Put the bat in the T: Bob did not put the after me. I'll read a bring attention To points to a word to bring attention To problem solving T: T points to a word to bring attention T: Lesson repetition: T: Lesson repetition: T: Alright here, start you read a sentence, okay?" TSL3 New learning introduced; show or teach child new problem solving Tintroduced; show or teach child new problem solving T: Anticipates what might be tricky for the students T: Moves in and points to the word T: Moves in and points to the word T: Bob Lesson repetition: S1: Bob didn't Lesson 2 To points to a word to bring attention 4. Lesson 2 Factors that Inhibit = Improved instruction 5. Students' literacy: -Anticipates what might be tricky for the students 6. Literacy materials: -Chose a book from the website Reading A-Z, instead of a bookroom book T: Did not S1: Put the bat in the	put the bat in	S1: Reads fast and does	The T says: "You	3. Feedback cycles at	
bat in a bag. T: Alright here, start S2: Bob did not put the bat in the/a bag (SCs) T: Your turn J, let me hear you teach child new Fing attention: T: Did not S1: /b/ T chimes T: Moves in and points T: Moves in and points to the words in the book T: Bob Lesson repetition: A. Lesson repetition: -This is lesson 2 Factors that Inhibit = Improved instruction 5. Students' literacy: -Anticipates what might be tricky for the students 6. Literacy materials: -Chose a book from the website Reading T: Chose a book from the website Reading T: Bob Lesson repetition: A-Z, instead of a bookroom book T: Did not S1: Put the bat in the	a bag	not match 1-1	guys will repeat	error:	
T: Alright here, start S2: Bob did not put the bat in the/a bag (SCs) T: Your turn J, let me hear you teach child new hear you T: Did not S1: /b/ T chimes T: the T: Moves in and points to the words in the book T: Bob T: Did not S1: Bob didn't T: Did not S1: Put the bat in the		T: Bob did not put the	after me. I'll read a	-T points to a word to	
S2: Bob did not put the bat in the/a bag (SCs) TSL3 New learning T: Your turn J, let me hear you teach child new problem solving S: Did not put S1: /b/ T chimes Feedback cycles: in - Bob T: Moves in and points T: Moves in and points to the words in the book T: Bob T: Bob T: Bob T: Bob Lesson repetition: S1: Put the bat in the a sentence, okay?" -This is lesson 2 Factors that Inhibit = Improved instruction 5. Students' literacy: -Anticipates what might be tricky for the students 6. Literacy materials: -Chose a book from the website Reading A-Z, instead of a bookroom book T: Did not S1: Put the bat in the		bat in a bag.	sentence and then	bring attention	
bat in the/a bag (SCs) T: Your turn J, let me hear you T: Did not S1: /b/ T chimes T: Moves in and points to the words in the book T: Bob T: B		T: Alright here, start	you read	4. Lesson repetition:	
T: Your turn J, let me hear you teach child new problem solving T: Did not problem solving S: Did not put S1: /b/ T chimes introduced; show or teach child new problem solving S: Did not put S1: /b/ T chimes in - Bob T: Moves in and points to the word T: Moves in and points to the word to the words in the book T: Bob T: Bob Lesson repetition: S1: Bob didn't Lesson 2 Improved instruction 5. Students' literacy: -Anticipates what might be tricky for the students 6. Literacy materials: -Chose a book from the website Reading A-Z, instead of a bookroom book T: Did not S1: Put the bat in the		S2: Bob did not put the	a sentence, okay?"	-This is lesson 2	
hear you teach child new T: Did not problem solving S: Did not put S1: /b/ T chimes Feedback cycles: might be tricky for in - Bob T: Moves in and T: the points to the word T: Moves in and points to the word to the words in the book T: Bob Lesson repetition: S1: Bob didn't Lesson 2 bookroom book T: Did not S1: Put the bat in the		bat in the/a bag (SCs)	TSL3 New learning		
T: Did not put S: Did not S:		T: Your turn J, let me	introduced; show or	Factors that Inhibit —	
S: Did not put S1: /b/ T chimes Feedback cycles: in - Bob T: Moves in and T: the points to the word to the words in the book T: Bob Lesson repetition: S1: Bob didn't Lesson 2 -Anticipates what might be tricky for the students 6. Literacy materials: -Chose a book from the website Reading A-Z, instead of a bookroom book T: Did not S1: Put the bat in the		hear you	teach child new	Improved instruction	
S1: /b/ T chimes Feedback cycles: might be tricky for in - Bob T: Moves in and the students T: the points to the word 6. Literacy materials: T: Moves in and points Bob and says Bob. to the words in the book T: Bob Lesson repetition: A-Z, instead of a bookroom book T: Did not S1: Put the bat in the		T: Did not	problem solving	5. Students' literacy:	
in - Bob T: Moves in and T: the points to the word T: Moves in and points Bob and says Bob. T: Bob Lesson repetition: S1: Bob didn't Lesson 2 bookroom book T: Did not S1: Put the bat in the		S: Did not put		-Anticipates what	
T: the points to the word T: Moves in and points Bob and says Bob. to the words in the book T: Bob S1: Bob didn't T: Did not S1: Put the bat in the		S1: /b/ T chimes	Feedback cycles:	might be tricky for	
T: Moves in and points Bob and says Bob. -Chose a book from the website Reading T: Bob Lesson repetition: S1: Bob didn't Lesson 2 bookroom book T: Did not S1: Put the bat in the		in - Bob	T: Moves in and	the students	
to the words in the book T: Bob Lesson repetition: S1: Bob didn't Lesson 2 bookroom book T: Did not S1: Put the bat in the		T: the	points to the word	6. Literacy materials:	
T: Bob Lesson repetition: A-Z, instead of a S1: Bob didn't Lesson 2 bookroom book T: Did not S1: Put the bat in the		T: Moves in and points	Bob and says Bob.	-Chose a book from	
S1: Bob didn't Lesson 2 bookroom book T: Did not S1: Put the bat in the		to the words in the book		the website Reading	
T: Did not S1: Put the bat in the			Lesson repetition:	A-Z, instead of a	
S1: Put the bat in the		S1: Bob didn't	Lesson 2	bookroom book	
		T: Did not			
bag		S1: Put the bat in the			
		bag			

Table 36 (Cont'd)

T: a	bag (T SC the/a)	Students' literacy	7.	Feedback cycles
T: C	Good job	Teacher points to a		accurate reading:
T: P	oint to this word,	word because she		-This text was
this	word right here	knows 1-1 is		challenging
T: V	What's the beginning	developing	8.	The GRR:
sour	nd in that word?			-The T lets go of
S2: /	/b/ /b/	The GRR		some control
		Teacher SC the for		-The T still SCs for
		a, instead of		child at times, instead
		prompting		of prompting
				1 1 0

TC-C Lesson 2; Text from *Big Bad Bat* (Angel & Dinardo, n.d.)

Preparing and teaching lesson 3. After lesson 2, as TC-C reflected on the lesson outcome and how she could make improvements she stated, "In the second lesson we did a making words activity and changed the beginning, middle, and end sound in words to make new ones. After that we read "Big Bad Bat" and pointed out the beginning, middle, and end sound of words on each page" (TC-C, Lesson Summary and Reflection, 2019). In reflection, after teaching the second lesson she recognized, "After my second lesson I made changes to my plan to better meet the needs of my students" (TC-C, Lesson Summary and Reflection, 2019). TC-C described one student as being overwhelmed with the new book by stating, "She was overwhelmed by a lot of text she didn't know and instead of looking at each word and trying to decode it she was just guessing. To address this, I changed my last lesson to focus on seeing that sentences are made up of individual words that can be decoded" (TC-C, Lesson Summary and Reflection, 2019). In making that reflection TC-C realized that she needed to make changes to her third lesson based on student learning in the end of lesson 2. To say more, she realized that providing a text filled with the letters b and d, the very thing she was confused about, was too challenging. We talked about backing up instruction to an early literacy skill that was not yet understood, which was pointing one-to-one at words in text. As with the class session the week

before, the TCs brought their thoughts and concerns to class following the second lesson. We continued to discuss and move forward with aspects of the second lesson that needed to change before teaching lesson 3. During that time, I coached each TC to prepare and improve for the next lesson. Again, the TCs learned from me and from each other about the problems of practice that were brought up in class. The TCs used the coaching sessions to adapt their lesson plans to move forward with the third lesson.

Again, in my role as the instructor I coached TC-C to prepare for the third lesson. She came to this class session already anticipating what was tricky for her students, which was pointing one-to-one at words while reading. The problem was that she did not know how to teach that skill! I was able to share more specific strategies about why this is difficult for students, how to teach this, and not to expect mastery in one lesson. To say it another way, when a TC looks at a page of text they know that each group of letters makes a word, that the space inbetween separates the words, and that there is a form of punctuation at the end of the sentence. However, when a kindergartener who is learning to read looks at a line of text on a page they look at a sea of print with round shapes, sticks, curvy lines, spaces between some shapes, and a dot at the end. As with the b and d scenario, students look at the sea of print with a few known features and many unknown features. I taught TC-C and the rest of the class a strategy for teaching students one-to-one matching, by writing a simple sentence on a strip of paper, reading it with the students, cutting up each word in front of the students, rearranging the words on the table, and instructing the students to reassemble the sentence with spaces while "reading" it out loud. The TCs were amazed that a feature that was so easy for them could be so difficult for the K-3 students. As a result, TC-C decided to rework her third lesson plan by creating a cut-up sentence activity for the explicit instruction part of the lesson and then writing her own book with the

same text on one page in the book for part four of the lesson where students read on their own using the new skill. In this case, the skill was one-to-one matching and the cut-up sentence was "I can see the dog." As a side note, these skills are written in the CCSS for Kindergarten (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010) under the heading "Print Concepts" and are defined as follows, "Follow words from left to right, top to bottom, and page by page" (CCSS.ELA-LITERACY.RF.K.1.A), "recognize that spoken words are represented in written language by specific sequences of letters" (CCSS.ELA-LITERACY.RF.K.1.B), and "understand that words are separated by spaces in print" (CCSS.ELA-LITERACY.RF.K.1.C). Many teachers gloss over this step of instruction until they realize later that students do not know these skills. This strategy was beneficial to all the TCs in class because they would have a student who needed instruction with one-to-one matching in their future work with elementary students, even if it was not with this particular group. In this example, I coached TC-C and the rest of the class on how to move forward with planning the third lesson.

Comparing TC-C's lesson plan with her teaching video showed that she implemented the factors that enhanced scaffolding in the third lesson, including the lesson structure, scaffolds and prompts, feedback cycles at error during reading, and lesson repetition. To say more, she planned and implemented a lesson that focused on the next step in learning for this group of students and provided scaffolding at error. For example, she provided the highest level of support (TSL5) at the beginning of the lesson when she had the students repeat the title page with her by saying, "This is called Animals at the Pet Store. Read it with me. Animals at the Pet Store. Put your finger underneath (the first word)," and then they read the title together (TC-C Lesson 3).

Furthermore, she utilized feedback cycles at error during reading and decreased her scaffolding

more often in the third lesson. For example, she provided a combination of verbal and non-verbal support (TSL3) when one student pointed to the words on the letter tiles instead of the text in the new book (the text on the letter tiles and the book were the same). Moreover, she provided a low level of support (TSL2) to both students when they went ahead of the teacher to read on their own or asked if they could. For example, the TC kept the learning moving forward with a reminder and no new teaching by saying, "Go ahead, do it together," and the students read the next page. Finally, the TC implemented lesson repetition, which is the fourth factor that enhanced scaffolding.

In addition to implementing factors that enhanced scaffolding in lesson 3, TC-C also implemented factors that inhibited scaffolding, yet improved as a result of lesson repetition. For example, in the third lesson, understanding students' literacy development continued to be a strength because the TC had already worked with these students for two previous lessons, and she treated this lesson as a continuation of the first two lessons. In addition, understanding how to select literacy materials became a factor that enhanced scaffolding during this lesson because she decided to write her own book that had the skills she was teaching, including linking phonemes to letter sounds and one-to-one matching in print. At the end of three lessons, TC-C tried out three types of books to use during small group lessons, including books from the bookroom, books printed from an online website, and writing her own book. Furthermore, feedback cycles during accurate reading did not inhibit during this lesson because there was a balance of what the students needed support with and what they could do on their own. Lastly, the use of the GRR became a strength by the third lesson because the TC finally let go of some of the control that she held on to in the first two lessons. In this lesson the students were able to

keep reading and the teacher did not hold them back. See Table 37 for video evidence of factors that improved scaffolded instruction during the third lesson.

Table 37

Improved Instruction Over Three Lessons: Lesson 3

Orienting	Evernter	Analytic Doint	Analytic Comment:
Orienting Text	Excerpts: Student Reading Book	Analytic Point: Factors that	Analytic Comment: Interpretation of factors that
			-
Information:	Teacher Responding	improved lessons	improved teaching
ANIMALS	T: This is called	Lesson structure:	Factors that Enhance –
AT THE	Animals at the Pet Store	Part four - students	Increased Practice
PET STORE	T: Read it with me	read a new book	1. Lesson structure
(Anonymous,	T: Animals at the Pet	implementing the	-Lesson part four
2019)	Store	skill learned.	2. Scaffolds/Prompts
	T: Put your finger		-TSL5 Teacher
	underneath	Scaffolds/Prompts:	Models/Demonstrates
p. 2	T/Ss: Read the title	TSL5 Most support	-TSL3 Teacher
I can see the	together	from teacher;	Talk/Nonverbal
dog.	T: Now turn to the first	teacher in control of	Actions
	page	problem solving.	-TSL2 Teacher Talk
p. 3	T: I'll read it first and	The T says: "This is	Specific
I can see the	you follow	call Animals at the	3. Feedback cycles at
cat.	S1: Pointing and reading	pet Store, read it	error
	from the cut-up sentence	with me, Animals at	-The T responded at
p. 4	activity, "I can see the	the Pet Store"	error and let the s
I can see the	dog"	TSL3 New learning	solve words.
rat.	S2: She reads it first,	introduced; show or	4. Lesson repetition
~	before the teacher.	teach child new	-This is lesson 3
p. 5	T: I can see the dog.	problem solving.	
I can see the	S1: Points at cut up	The T points at the	Factors that Inhibit —
fish.	sentence	book to show where	Improved instruction
C	T: Read it here (points	to read.	5. Students' literacy
p. 6	to the book)	TSL2 Keep learning	-Anticipates what
I can see the	S1: I can see the dog.	moving forward;	might be tricky for
pig	T: Good, now turn the	prompts/ reminders;	the students
	page	no new teaching.	6. Literacy materials
	S2: I can see the dog.	The teacher says,	-The T wrote her own
	S2: I can see the cat.	"go ahead, do it	book
	T: Go ahead do it	together"	7. Feedback cycles
	together	<i>G</i>	accurate reading
	S1: I can see the cat	Feedback cycles:	-The book had a
	(pointing at book this	T responded to S	balance of supports
	time)	reading at error	and challenges.
	·············/	Trading at Onto	and entailenges.

Table 37 (Cont'd)

T: Good turn the page	Students' literacy	8.	The GRR
S1: I want to read this	development		-The T let the S read
one by myself.	TC connected the		on their own when
S2: I can see the rat (as	explicit instruction		they could, and
fast as he can before T)	directly to the text		prompted to
S2: Can I read the other	-		encourage the child.
page?	The GRR		-
T: Yes, you can.	The T let the S read		
•	ahead if they could.		
	She released control.		

TC-C Lesson 3; Text from *Animals at the Pet Store* (Anonymous, 2019)

After lesson 3, as TC-C reflected on the lesson outcome and how she could make improvements she stated, "Finally in my last lesson we looked at a sentence written down on a strip of paper, read it and followed along with our finger. Then I cut it into individual words, we mixed up the words, and my students recreated the sentence. After that we read "Animals at the Pet Store" and practiced looking at each word while reading and following along with our finger. Throughout my lesson I saw my students responded well to the activities. They stayed engaged throughout the entire lesson and were actively trying to follow directions and read correctly (TC-C, Lesson Summary and Reflection, 2019). In addition, after teaching the lesson she recognized, "My lesson had many successful moments. One successful moment was in my third lesson. As my student was reading the "Animals at the Pet Store" she read the page with one-to-one correspondence. The sentence was "I can see the fish." and she followed along with her finger and read it, but she said "I can see the goldfish". She then self-corrected goldfish to fish. When I asked how she knew it was fish she explained that it started with "f". The other student added that he knew because the picture wasn't gold either" (TC-C, Lesson Summary and Reflection, 2019). In making that reflection TC-C realized that changes she made to her third lesson provided the right amount of supports and challenges that these two students needed to

progress in their reading. In summary, our weekly class sessions informed and improved TC-C's planning and instruction over three lessons. After analyzing the TC's videos, lesson plans and reflections, surveys before and after each lesson, and interviews after the course, the findings for research question two part B suggest that the eight factors that enhanced and inhibited preservice teachers' scaffolding during small group reading instruction were factors that also provided evidence of improvement over a series of three teaching cycles and therefore helped pre-service teachers feel more prepared for the next lesson.

Summary of Findings: Research Question 2

The second part of this chapter analyzed the findings for the second research question, "As pre-service teachers go through the three teaching cycles, (a) do they feel more prepared for the next lesson, and (b) is there evidence in their videos that their scaffolded instruction improves?" The findings for this research question were divided into part A, do TCs feel more prepared after the series of three lessons, and part B, is there video evidence of improvement? In summary, for research question 2 part A, I found that the four factors that enhanced scaffolding, including the five part lesson structure, the scaffolds and prompts learned in the literacy methods course, the feedback cycles at error during reading as students read independently and TCs provided feedback, and lesson repetition, as well as the four factors that inhibited scaffolding, including TCs' understanding and experience with students' literacy development, literacy materials, feedback cycles during accurate reading, and the gradual release of responsibility, were all contributing factors to building TC's confidence and preparedness. In addition, for research question 2 part B, the combined eight factors that enhanced and inhibited scaffolding over a series of three lessons provided video evidence of improvement. Implications for these findings suggest that these are important components to include in literacy methods courses at

TCs learn to differentiate reading instruction. The next chapter provides a discussion of the findings with the conceptual framework and the literature on scaffolding and learning to teach.

CHAPTER 5 – DISCUSSION, IMPLICATIONS, AND CONCLUSIONS

Discussion

Understanding factors that enhance and inhibit pre-service teachers' scaffolding during small group reading instruction is important because teaching children to read is complex and involves careful observation, enactment, and reflection to lead to success for both teacher candidates and elementary students. In addition, understanding if pre-service teachers feel more prepared to teach the next lesson, and if there is evidence that their scaffolded instruction improves over a series of three lessons is important because pre-service teachers are often considered to be underprepared to teach children how to read (Washburn, Joshi, & Cantrell, 2011). Therefore, analyzing how to prepare pre-service teachers to scaffold students during small group reading instruction is critical for both teacher candidates' success and students' reading achievement.

For research question one, to determine the factors that enhanced pre-service teachers' scaffolding during small group reading, I analyzed the TCs' written lesson plans and three videos of their teaching. I found four factors that enhanced scaffolding, including lesson structure, scaffolds and prompts learned in the methods course, feedback cycles at error during reading, and lesson repetition. In continuation of research question one, to determine the factors that inhibited pre-service teachers' scaffolding, I analyzed the TCs' written lesson plans and three videos of their teaching. I found four factors that inhibited scaffolding, including teacher candidates' understanding of students' literacy development, understanding of literacy instructional materials, feedback cycles during accurate reading, and the gradual release of responsibility. Accordingly, I recommend two themes from the research question one findings:

that the factors that enhanced scaffolding should continue to be taught, and the factors that inhibited scaffolding should increase in the instruction in literacy methods courses.

For research question two, to determine if pre-service teachers felt more prepared to teach the next lesson over a series of three lessons, I analyzed the TCs' three teaching videos, surveys before and after each lesson, and interviews during their yearlong internship. I found that the same factors that enhanced scaffolding during small group reading instruction, including lesson structure, scaffolds and prompts, feedback cycles at error, and lesson repetition, were the factors that helped TCs feel more prepared to teach the next lesson. In addition, the factors that inhibited scaffolding, including knowledge of students' literacy development, understanding literacy instructional materials, feedback cycles during accurate reading, and the gradual release of responsibility, were factors that helped TCs feel more prepared over time. In continuation of research question two, to determine if there was evidence in pre-service teachers' videos that their scaffolded instruction improved over a series of three lessons, I analyzed the TCs' three teaching videos, surveys before and after each lesson, and interviews during their yearlong internship. I observed evidence in videos that TCs' continued use and experience with the factors that enhanced and inhibited scaffolding in successive lessons also helped improve their scaffolded instruction over the series of three lessons. Therefore, I recommend an additional theme from the findings from research question two, which includes more teaching practice. Specifically, more practice with explicit instructional techniques and more practice with small groups of students, beyond one to two students.

Future Iterations of the Course

As a design-based research study, lesson repetition during the semester provided opportunities for TCs to improve their planning and instruction over three weeks (Bradley &

Reinking, 2011). To begin this study, I made three major changes in the design of this course which were different from the other eight sections of TE 405. The first change was frontloading the new content for teaching small group reading instruction from Essential 3 of the Essential Instructional Practices in Early Literacy, Grades K-3 (Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force, 2016). The findings for this study show that the components from that module on small group instruction, including the lesson format, the importance of students' actual reading and writing, research-based reading prompts, developing fluency, explicit instruction methods, and reading for meaning, where taken up by TCs in the three lesson iterations and were factors that improved scaffolding over the course. The second change was expanding the typical assignment on small group reading instruction from TCs teaching one lesson to a small group, to teaching three lessons with the same small group of students. The findings for this study show that providing opportunities for TCs to do more teaching, strengthened their scaffolding over time. Lastly, the third change was planning for iterative cycles of lesson feedback and improvement over the series of three lessons taught over three weeks, including coaching and moving TCs forward in improving their planning and instruction to support students' literacy development. The findings for this study show that those ongoing opportunities for feedback improved scaffolding after three lessons.

Moving forward, an important part of design-based research is using data analysis to inform future iterations of design. Based on the three themes I recommended from the findings for this study I would change the architecture of this class for future iterations. More specifically, I would expand the three original changes and implement the three recommendations listed at the beginning of this discussion. To expand the original changes to the course, I would continue

teaching the module on small group instruction, continue providing more teaching opportunities for TCs, and continue building in coaching cycles of continuous improvement. In order to make this change, I would increase the teaching opportunities and coaching cycles from teaching three lessons to teaching 7-10 lessons with the same group of students over the semester. In making those changes, I would be able to build in the three recommendations from the findings. In other words, teaching 7-10 lessons would help TCs carry out the lesson structure, scaffolds and prompts, feedback cycles at error, and lesson repetition, which is the first theme and includes the factors that enhanced scaffolding. In addition, teaching 7-10 lessons would help TCs learn more about literacy development, literacy materials, feedback during accurate reading, and the gradual release of responsibility, which is the second theme and includes the factors that inhibited scaffolding. Furthermore, teaching 7-10 lessons would provide opportunities for the third theme, which is more teaching practice with explicit instructional materials and more experience with small groups of students. Finally, teaching 7-10 lessons with coaching and feedback would establish a time for weekly practice-based teacher education techniques, with frequent opportunities for TCs to see representations of more literacy practices, decompose those practices for planning, and approximate practice with peers (Grossman et al., 2009). The next sections describe these changes, including practices to keep teaching in literacy methods courses, practices to teach more intentionally during literacy methods classes, and ways to include more teaching opportunities with explicit instructional materials and with small groups of students. I believe that these three changes can be accomplished by increasing the small group lesson instruction from three lessons to 7-10 lessons over the course of the semester.

Theme 1: Literacy methods to keep teaching. The findings for research question one, for this design-based research study on factors that enhance and inhibit pre-service teachers'

scaffolding during small group reading instruction, are meaningful and important because there is little research on scaffolding in small group settings (Parsons et al., 2013; Pentimonti, 2010; Pentimonti & Justice, 2011; Rodgers 2004; Rodgers et al., 2016; Tomlinson, 2008). It is important to note that each factor that enhanced scaffolding (lesson structure, scaffolds and prompts, feedback cycles at error, and lesson repetition), was a key component that I taught to TCs during the literacy methods course. After analyzing the data and determining factors that enhanced TCs' scaffolding, and connecting those finding to the literature on scaffolding and learning to teach, I determined that the first theme is to continue teaching these components in literacy methods courses.

Lesson structure. The structured lesson plan was an important component of the literacy methods course and an essential factor in enhancing TCs' scaffolding during small group reading instruction. It is important to point out that even though this dissertation study focused on microlevel scaffolding, it was important to teach TCs the components of macro-level scaffolding in order to begin the conceptual, planning, and organizational levels of preparing for small group instruction. This component is important to teach, because according to the research, teachers group students together, but do not change how they respond and adapt while teaching (Parsons et al., 2013; Tomlinson, 2008). When preparing TCs to plan their small group lessons, they were taught the content from the K-3 Literacy Essential Practice 3 on teaching using the five-part lesson structure recommended in Literacy Essential 3 (Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force, 2016). The five-part lesson structure provided a guide for TCs to plan their own lessons (see Appendix A for the lesson components).

Learning the lesson structure as a novice teacher could be overwhelming because it included a lot of nuanced information. Therefore, I broke down the components of the lesson structure across several weeks and taught those components using a variety of methods, including the Literacy Essentials materials, exemplar video lessons, sample explicit instruction lessons, exploration of bookroom materials, as well as opportunities to observe and notice practice. More specifically, TCs spent time noticing how expert teachers implemented practices by watching Literacy Essential exemplar videos, noting specific practices, and then trying out some of the specific moves represented in those videos. For instance, the TCs used a video observation protocol to note how an exemplar teacher introduced a lesson by explaining why the group was created, what the students do well, what the students will work on, and how that work will help them become better readers (see Appendix H for the video observation protocol). Observing the video with a focus on the lesson introduction created a representation of that practice. After that, TCs used that representation of the lesson instruction to decompose the practice and write their own lesson introduction. Next, the decomposition was used to write a step-by-step lesson instruction for their own small group lesson. Lastly, the TCs approximated practice of their lesson introduction by rehearing it with their peers (Grossman et al., 2009).

Scaffolds and prompts. The framework for scaffolds and prompts was a key component of the literacy methods course and an essential factor in enhancing TCs' scaffolding during small group reading instruction. It is important to point out that learning scaffolds and prompts was a prerequisite for TCs to engage in feedback cycles during micro-level scaffolding, which is the contingent and responsive features of scaffolding (Parsons et al., 2013; Tomlinson, 2008).

According to Ankrum and Bean (2013, 2014), highly effective teachers "weave scaffolds" into small group literacy instruction (p. 40). TCs needed to learn the contingent and responsive

components of scaffolding and prompting before they could incorporate them in to lessons. Scaffolds and prompts were broken down and taught to TCs across several weeks of instruction and were used by TCs when they implemented part four of the small group lesson, when listening, coaching, and prompting students during reading. When preparing TCs to learn how to use scaffolds and prompts, they were taught the content from the K-3 Literacy Essential 3, Bullet 2 on reading prompts (Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force, 2016).

As with learning the lesson structure, learning scaffolds and prompts was overwhelming because it was new content and it was difficult to plan ahead of time (see Appendix C for the prompts). Accordingly, I broke down the components of the scaffolds and prompts across several weeks and taught those components using a variety of methods, including the Literacy Essentials materials, exemplar video lessons, modeling how to use the scaffolds and prompts, as well as opportunities to observe and notice practice. As with the lesson structure, the TCs were given opportunities to watch exemplar videos for prompting and scaffolding; however, even though TCs could see representations and take apart decompositions of scaffolding and prompting, it was challenging to approximate authentic rehearsals outside of the actual small group lesson. According to Grossman et al. (2009), approximations should happen outside of the real setting, however, scaffolding and prompting depend on students' actual reading and feedback during reading, which was difficult to rehearse. Parsons et al. (2013) encouraged researchers to look closely at what happens during teaching, because this portion has been under researched. In this dissertation study, video evidence of scaffolding and prompting over a series of three lessons attended to the gap in the research regarding what this looks like. Each TCs' video was coded for use of scaffolds and prompts when students read independently during the lesson (see Appendix O, P, and Q for the coding schemes for scaffolds and prompts).

Feedback cycles at error. The structure for feedback cycles at error was a pivotal component of the literacy methods course and an essential factor in enhancing TCs' scaffolding during small group reading instruction. It is important to point out that learning feedback cycles at error was at the heart of this dissertation study because of the focus on micro-level scaffolding, which is the contingent and responsive features of scaffolding (Parsons et al., 2013; Tomlinson, 2008). Despite the fact that it was the pivotal component of the small group lesson, it was the most difficult to teach because the planning portion was represented by an empty box on the lesson plan and it looked different in every exemplar video we watched. According to Lose (2007), this type of instruction ignites a student's "strategic control over literacy processing while encouraging his independence and without doing for the child what he can manage for himself" (p. 17). In other words, TCs needed to learn the contingent and responsive components of scaffolding in the mist of feedback cycles during actual student reading. It was challenging for TCs to try this out before their lessons with their students. Feedback cycles was the component that TCs had to experience for the first time during the first lessons, and then reflect on their practice by watching their video to figure out what worked and what did not work, for their students to continue reading at error. When preparing TCs to learn how to use the gradual release of responsibility and the zone of proximal development during reading, they were taught the scale of help from least support to most support, which was the central component of the theoretical framework for this study (Vygotsky, 1978; Pearson & Gallagher, 1983; Duke, Pearson, Strachan, & Billman, 2011; Wood et al., 1976; & Lose, 2007). The scale of help is

complex and requires many opportunities to work with students at error during reading (see Table 10 for the instructional levels of support).

In addition, TCs were taught the content from the K-3 Literacy Essential 3, Bullet 3 on developing fluency, to learn about the GRR, the ZPD, and the scale of help (Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force, 2016). The content of Bullet 3 on developing fluency presented structures and practices to use during part four of the lesson that included repeated reading, echo reading, and partner reading. These research-based practices for developing reading fluency were helpful for TCs to learn and there was video evidence that some TCs implemented those practices to scaffold during the reading portion of the lesson (see Appendix D). The main feature of learning how to move back and forth during feedback cycles at error during reading was to learn to expect the unexpected. Parsons et al. (2013) explained, "Teachers must be able to be responsive to unanticipated issues that arise when their differentiated plans are put into action" (p. 40). In this dissertation study, TCs were provided three opportunities to be responsive to unanticipated issues during teaching reading and then reflect on their own lesson videos as representations of practice (Grossman et al., 2009). They were expected to do this with tentative knowledge of new concepts, including the ZPD, the GRR, and the scale of help (Wood et al., 1976; Lose, 2007). The term "instructional scaffolding" explains the instructional relationship between a child and an expert other when the child is on the cusp of learning something new. This dissertation study attended to the literature that children need scaffolding in small groups when learning to read, and teachers need to learn how to do that work.

Lesson repetition. Repeating three lessons over three weeks was an essential component of this study and an essential factor in enhancing TCs' scaffolding during small group reading

structure. As a design-based research study, lesson repetition provided opportunities for TCs to improve over time (Bradley & Reinking, 2011). Combining and repeating the first three factors that enhanced scaffolding (lesson structure, scaffolds and prompts, and feedback cycles), all came together when lessons were repeated. The design for this study was intentional so that TCs would engage in iterative cycles of improvement. According to Parsons et al. (2013), in order to be adaptive, teachers must be reflected in two ways: by applying "reflection-on-action" once the lesson is taught, and "reflection-in-action" while actually teaching the lesson (p. 41). In this dissertation study, TCs were given opportunities to not only reflect after one lesson, but also reflect while the next lesson was happening, and so on. Both types of reflection are necessary for adaptive, responsive teaching. This dissertation study built on my practicum study that analyzed scaffolding moves of expert teachers who have years of experience working with students in small groups for reading. Teaching three lessons over time launched TCs to begin accumulating those teaching experiences. In summary, it is worthwhile to continue teaching, in literacy methods courses, the four factors that enhanced TCs' scaffolding because it provided opportunities for TCs to build their scaffolding practices with students during small group reading instruction. The next section addresses theme two, the constructs on which literacy methods courses should increase focus.

Theme 2: Literacy methods to increase. In contrast to the constructs that were the focus of instruction for the literacy methods course and that enhanced scaffolding, the second theme is paying attention to what needs to be taught more intentionally in future courses. It is important to note that the factors that inhibited scaffolding were not taught as explicitly as the enhance factors to the entire group of TCs in the literacy methods course. In other words, upon further analysis of the factors that inhibited TCs' scaffolding during small group reading instruction (understanding

of students' literacy development, understanding of literacy instructional materials, feedback cycles during accurate reading, and the gradual release of responsibility), it was evident that these factors were unique to each TCs' planning for their own small group of students, and were not as explicitly taught in the methods course as the factors that enhanced scaffolding. Therefore, after analyzing the data and connecting those finding to the literature on scaffolding and learning to teach, I suggest that a second theme is to begin teaching these components more intentionally in methods courses.

Students' literacy development. Inhibit factor one, understanding students' literacy development (skills, strategies, and knowledge), was a continuation of content from a course that TCs took a year earlier on literacy assessment and instruction. In the first assignment, TCs worked with their mentor teachers to analyze existing literacy data and administer an additional assessment to plan for a series of three small group literacy lessons. In the findings chapter, I provided examples regarding how TCs' understanding of students' literacy development (skills, strategies, and knowledge) and how much scaffolding was required for different literacy tasks continued to develop over time for novice teacher. I also provided evidence that this was not automatic for TCs in the moment by moment decision making during the three lessons, as defined by the research on adaptive and contingent scaffolding (Wood et al., 1976; Lose, 2007).

In the literacy methods course that proceeded TE 405, on literacy assessment and instruction, TCs learned about students' literacy development in terms of their skills, strategies, and knowledge. Furthermore, this was represented in part 1 of the conceptual framework for this dissertation study, understanding of literacy development and instructional practices (see Figure 1 for the conceptual framework). I included that component in the conceptual framework knowing that TCs learned about literacy assessments and standards used to understand literacy

development and instructional practices for teaching in TE 301. That course included content from course materials and the CCSS (McKenna & Stahl, 2015; Leslie & Caldwell, 2010; and Council of Chief School Officers, 2010, Foundational Skills Introduction for K-5). TE 405 was designed to build on the content of that course, and from this dissertation study it is evident that TCs need continued instruction and experience with students' literacy development.

Literacy instructional materials. In addition, upon further examination of inhibit factor two, understanding literacy instructional materials, it was evident that this deserves greater attention in literacy methods courses. To say more, the data revealed that TCs would benefit from preparation on how to choose materials for small group reading instruction. In assignment two TCs chose reading materials to use during each lesson and were instructed to choose materials that included the strategy or skill they would teach earlier in the lesson. To find appropriate materials, TCs worked with their mentor teachers to explore options, learned how to use the school's bookroom during our methods course, used resources or online materials that they learned about in other education classes, and a few students even wrote their own small books. Locating effective materials, however, was often difficult. TCs spend a lot of time looking in the bookroom and online finding texts that matched their explicit instructional topic. In the findings chapter, I provided examples of the ways in which TCs' lack of understanding of choosing and using literacy instructional materials affected their students' success in reading. In addition, when planning each lesson, the TCs were instructed to verbalize a brief one to two sentence introduction of the book, with the gist of the story, and then read the title. It was evident from the videos that the TCs who did not provide a book introduction had more difficultly engaging the students in the reading. Another issue with materials was evident when analyzing the videos of students reading the books chosen from the bookroom, as many of the books were

over 20 years old and contained words, phrases, and content that was outside of the students' background knowledge. Moreover, some of the books that TCs found from online websites were often filled with contrived language that did not carry rich meaning.

According to Snow (2002), adaptive and responsive teaching for meaning is contingent on many aspects of the lesson including the learner, the text, the activity, and the socio-cultural context. As defined in the RAND Reading Study (Snow, 2002), each of these four components require attention when planning, implementing, and reflecting on teaching reading. In this dissertation study, I addressed the needs of the learner, the activity, and the context in the course assignments on data analysis, planning the small group lesson, and situating the teaching in a local urban school. In analyzing the findings for factors that inhibited scaffolding, however, the text is a factor that should be addressed in literacy methods courses moving forward.

Considering text as a factor that impacts reading for meaning is a point that stands out in the findings. Throughout this dissertation study, I addressed the fact that teachers not only need systematic and explicit plans for differentiated instruction, but they also must learn how to be responsive and adaptive during the lesson enactment. In staying with that focus on the learner and the teacher, I neglected the importance of text selection.

To say more about literacy materials, in an effort to vary the ways that TCs were instructed to form their small groups, they were discouraged from placing students together based on reading level. In moving away from reading levels, I might have reduced the importance of text selection. More specifically, Bullet 1 on actual reading and writing from Literacy Essential 3, focused on the importance of varying the ways students are grouped for reading (see Appendix B for the guide). When teaching Bullet 1, on actual reading and writing, I highlighted the point that students should spend most of their time engaged in reading and

writing, instead of watching the teacher explain the lesson. In making that point, I explained that current classrooms teachers often group students primarily by reading level, instead of varying how they organize students from small groups, such as needs-based, interest-based, paired, and random groupings, in addition to level-based grouping (Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force, 2016). In the course I focused on teaching TCs to organize students for small groups that moved beyond placing them based on their reading levels, and possibly reduced the importance of text selection, because most of the books they had access to were grouped by level.

Feedback cycles during accurate reading. Next, upon further inspection of inhibit factor three, feedback cycles during accurate reading, it was clear that some of the materials chosen by the TCs might have been too easy and not rigorous enough to promote scaffolding in feedback cycles during reading. In other words, when there were segments of text that required no support from the teacher, then the text lacked opportunities for productive struggle from the students. In the findings chapter, I provided examples of feedback cycles during accurate reading that displayed instances when students had segments of successful reading without the need for teacher feedback. Despite the fact that successful reading is the goal, too much easy reading provided little opportunity for TCs to scaffold and brought into question whether the text was challenging enough for the students to problem solve words in text. This finding is important because it connects back to the need for more instruction for TCs on the supports and challenges of literacy instructional materials, and how to choose texts for small group instruction.

The gradual release of responsibility. Lastly, upon further exploration of inhibit factor four, the gradual release of responsibility, it was noticeable that operationalizing the GRR (Pearson & Gallagher, 1983; Duke, Pearson, Strachan, & Billman, 2011) took more practice than

TCs had in this course. The GRR is meant to help TCs understand the process of scaffolding. According to Pearson and Gallagher (1983), the concepts of transferring control from teacher to students, as well and increasing or decreasing support between the teacher and student, are meant to be operationalized while teaching. The representation of the GRR, the rectangle divided by a diagonal line that shows the increase or decrease in support between the teacher and student, is a common visual. However, in analyzing the TCs' video data, many TCs tended to stay at one end of support or the other. In other words, some TC stayed on the end of the GRR visual where the teacher does all the work, and some TCs stayed on the other end of the GRR visual where the student does all the work (see Figure 2 for the GRR). According to Lose (2007), it is important to leave "space for the learner to do what he can to problem solve, inhibiting the inclination to do for the child what he can do for himself" (Lose, p. 21).

The problem was that TCs often did more reading work for the students, work that students could have done for themselves. In addition, some TCs expected the students to do all of the reading work, even when it was too difficult, which caused some students to stop working all together. The space in the middle of the GRR visual represents the increase and decrease of support between teacher and student, which is a factor that inhibited scaffolding. According to Parsons (2013), teachers are already good at modeling and allowing for independent practice, which are at the extreme ends of the GRR, however they do not know how to precisely release control along the guided part of the continuum. To say more, the GRR requires orchestration of many complex practices, including knowledge of students' literacy development, use of literacy instructional materials, understanding students' responses during reading, as well as teaching more than one student at one time. Moreover, this all happens during part four of the small group lesson, the part for which TCs could not plan. Lastly, some TCs had difficulty providing each

student with the appropriate levels of scaffolding on the GRR, when the individual students in their small groups read at a different rates, had success on different pages, and needed support at different parts of the book. In the next section, I address the topic of TCs' needing more practice with explicit instruction and more practice teaching more than one or two students at a time.

Theme 3: Literacy methods to practice. The findings for research question two for this design-based research study on pre-service teachers' preparedness for the next lesson and on video evidence of their improved scaffolded instruction are meaningful and important because improvement over time is the purpose of a designed-based research study. In other words, this research was constructed to analyze the ways in which TCs felt more prepared over time and if there was evidence of improved scaffolded instruction over three lessons. It is important to note that the factors that enhanced scaffolding (lesson structure, scaffolds and prompts, feedback cycles at error, and lesson repetition), were the factors that enhanced scaffolding even more with each additional lesson, and propelled TCs forward in feeling more prepared for the next lesson. Furthermore, the factors that inhibited scaffolding (knowledge of students' literacy development, understanding of literacy instructional materials, feedback cycles during accurate reading, and the gradual release of responsibility), were factors that inhibited less with each additional lesson, and launched TCs in feeling more prepared for the next lesson. The common theme is that more practice is necessary.

More practice with explicit instruction. Based on the analysis, TCs would benefit from more practice in planning and delivering explicit instruction to elementary students in the areas of foundational skills and comprehension. In the analysis of the survey and interview data, it was clear that TCs understood how to plan and teach the one specific topic that they chose for their small group lesson focus, over a series of three weeks, however, many TCs left this course

unprepared to teach other literacy skills. For example, one TC wrote, "I also need to learn how to do explicit instruction on multiple topics and not just sight words" (Lesson Reflection, 2019). Another TC wrote, "I would like to know more about how to help students who are just learning their letters and sounds. I would also like to know more about teaching phonological awareness to students" (Lesson Reflection, 2019). In addition, a third TC noted, "I could learn more ways to verbalize rules in reading to help students understand, for example if I was more comfortable and confident in my way of explaining the difference between b and d my students might understand it better" (Lesson Reflection, 2019). Lastly, a fourth TC claimed, "I want to learn more strategies on other concepts like comprehension and fluency. I do not know these very well. I have learned a lot about letter-sound comprehension but not much else" (Lesson Reflection, 2019). In looking back on these comments from the reflection of the three lessons at the end of the course, I realized we have more work to do in this area of our literacy methods courses.

When preparing TCs to plan their small group lessons, they were taught the content from the Literacy Essential Practice 3, Bullet 4, on explicit instruction. In that module, TCs learned the importance of choosing a lesson focus based on students' data, aligning that focus to the CCSS, choosing a research-based lesson as a guide to plan for explicit instruction, and pitfalls to avoid (Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force, 2016). In addition, part two of the lesson plan on explicit instruction is meant to be a succinct portion of the lesson because students should spend most of their time in small groups actually reading and writing (see Appendix A for the lesson components). Explicit instruction was taught using the same methods as other modules from Literacy Essential 3, by noticing representations in exemplar videos, decomposing the explicit instruction portion of the lesson by writing their own explicit instruction sequence, and then

approximating practice by rehearsing that sequence with peers in TE 405 (Grossman, et al. 2009). Planning explicit instruction for the series of three small group lessons was a beginning exercise in providing TCs with "opportunities to learn" (Cochran-Smith & Lytle's, 1999), as well as providing them with opportunities to observe and notice (Grossman et al., 2009), however more practice with this is necessary. In addition to more practice with explicit instruction, I suggest that TCs need more practice with teaching small groups.

More practice with small groups. Based on the analysis, TCs would benefit from more practice in planning and delivering lesson plans in small groups, with more than one or two students in the group. In the analysis of the written assignments, videos, survey, and interview data, it was clear that TCs were beginning to understand how to plan and work with a small group of students, however, many TCs left this undergraduate experience lacking sustained teaching practice. For example, one TC commented that attending to both students in the group was challenging, "Many times throughout my lessons when I asked a question one student would immediately answer, and then I would have to ask the other student for their answer. In this situation it is hard to tell if the second student knew or if they just repeated the first students answer" (Lesson Reflection, 2019). Another TC noted that continued work with her students would have been beneficial, "If I had the opportunity to continue meeting with these students my next lesson would have Maddie and Jack practice more with the letters b and d. I think that I could use the skills they developed in my first lesson to create opportunities to practice hearing the difference between b and d and recognizing the difference between the letters in text" (Lesson Reflection, 2019). In looking back on these comments from the reflection of the three lessons at the end of the course, I realized we have more work to do in this area of our literacy methods courses.

This dissertation study provided TCs with opportunities to unpack knowledge and practice, however more teaching opportunities would be helpful. According to Cochran-Smith and Lytle's (1999) there are three components of knowledge and practice in teacher education. The first component of practice, knowledge-for-practice, is the declarative and procedural knowledge needed for teaching. In TE 405, TCs learned the knowledge-for-practice in the formal knowledge used to plan and the procedural knowledge used to implement small groups scaffolded instruction. The second component of practice, knowledge-in-practice, is the observable and assessable practices teachers carry out in teaching. The TCs had opportunities to learn knowledge-in-practice because they had "opportunities to examine and reflect on the knowledge that is implicit in good practice" (Cochran-Smith & Lytle, 1999, p. 262). The third component of practice, knowledge-of-practice, are the "habits of professional action and moral commitments" (Council of Chief School Officers, 2013, p. 6) that teachers need in teaching, that guides decision making. The TCs had beginning opportunities to implement knowledge-ofpractice, because our class was situated in a local school community where we learned together in a community of practice (Cochran-Smith & Lytle, 1999). In this 16-week learning community, TCs began learning critical habits and commitments to teach all children to read and to build on students' strengths when learning about them as people and teaching them something new. In this course, TCs were beginning to learn how to balance students and subject matter through practice in small group instruction. More small group practice would assist them in continuing to learn these teaching practices.

Considerations and Limitations

There are two important considerations and two limitations for this dissertation study. First, of the five TCs who participated in this design-based research study, four of them were

majoring in special education, which means they had coursework in elementary education and special education. This consideration can inform practices in the ways that additional coursework in special education might have impacted or added to the TCs' background in scaffolding during small group reading instruction. Further investigation into the coursework and experiences in teaching small reading groups could help educators learn components of other courses in the special education major. Future iterations of this class could highlight the strengths of special education majors, especially in the areas of explicit instruction and choice of materials. For example, some of the TCs with a special education background had access to research-based activities for the explicit instruction portion of the lesson, and two of the TCs with a background in special education had access to online reading materials to use during the independent reading portion of the lesson.

The second consideration is that all five of the TC were members of an urban or global cohort programs. This consideration is important in the ways that TCs took up practices for teaching in diverse contexts. In Cochran-Smith and Lytle (1999) third component of practice, knowledge-for-practice, TCs are encouraged to become members of a community of practice, which we did in this course. In the literature review I called this knowledge-of-literacy practice, which is critical knowledge for differentiated, small group reading instruction. I suggest that TCs with backgrounds in urban and global education include might have the disposition for the "habits of professional action" and "moral commitments" to teaching and learning that are necessary for teaching reading (Council of Chief School Officers, 2013, p. 6). Educators can learn if the urban and global preparation of TCs affected the ways that they think critically about commitments to teaching all children to read. In future iterations of this of class it would be

important to build on the strengths of urban and global educators and uplift the strengths of all students and communities.

A limitation of this study is that the data can only be analyzed for patterns and themes and cannot be generalized. Design-based methodology is a strong place to begin to learn factors that enhanced and inhibited TCs' scaffolding during small group literacy instruction; however, the results cannot apply to other contexts. In other words, while I sought to understand, explain, and describe factors that enhanced and inhibited scaffolding during small group reading instruction, and determine if there was evidence of improved preparedness and improved scaffolding over three lessons, I cannot make broad claims about the findings. The findings from this study will be used to promote further research on factors that enhance and inhibit TCs' scaffolding when teaching small groups.

Finally, a limitation is that I only collected data during one semester of a TCs' literacy preparation coursework, and I only collected data from five TCs in the course. Conducting a design-based research study on one semester of a literacy methods course on the topic of small group instruction provided a small window into the ongoing differentiated, small group instruction that TCs will deliver during their yearlong internships and in their future careers as teachers. In addition, having only five participants in this study presented a small data set to analyze to understand the research questions. Even with limitations, this study does offer significance and implications to both research and practice. These contributions are in the next section.

Significance and Implications

This study is important for educational research and practice because it uncovered possible factors that enhanced and inhibited TCs' scaffolding during small group reading

instruction. In addition, this study analyzed teacher preparation and improvement over a series of three lessons. The findings from this study might inform important ways that TCs learn to implement scaffolded, small group instruction for students in literacy, because teachers are key participants in the teaching and learning process. More specifically, this study might inform the ways that literacy methods courses are organized and delivered. Furthermore, this study sought to collect, analyze, and interpret data about what we currently know and what we need to know next about how TCs learn to teach small groups.

As stated in the review of the literature, the research on scaffolding during small group literacy instruction is limited. According to Rodgers et al. (2016), more research needs to be conducted on instructional, temporal, and domain scaffolding. Some of the early research focused on one-to-one tutoring, and there is limited research on scaffolding for English language learners and for scaffolding during content area instruction. However, there is limited research on micro-level scaffolding in small group instruction, as much of the previous research looked at how teachers scaffolded on a macro-level to organize and plan for instruction. The purpose of this study was to determine the nuances in how TCs plan, enact, and reflect on the specific steps of small groups instruction, and to pay close attention to step four, during the listening, coaching, prompting, and scaffolding phase of the small group instruction. This study might inform future research on TCs' learning to scaffold during small group literacy instruction, which is the key component of differentiated instruction.

Conclusions

The purpose of this study was to determine factors that enhanced and inhibited preservice teachers' scaffolding over a series of three lessons, and determine if they felt more prepared and if there was evidence in their videos of improved scaffolding. I found four factors that enhanced scaffolding, four factors that inhibited scaffolding, and eight factors (enhance and inhibit combined) that assisted TCs in feeling more prepared for the next lesson. The findings for research questions one and two, as discussed above, were found by conducting this design-based research study. In the analysis of data, three themes were identified, including continuing to teach the factors that enhanced scaffolding, focusing more instruction on factors that inhibited scaffolding, and providing more opportunities for teaching practice with explicit instruction, as well as teaching more than one or two students at a time during a small group lesson. These findings are important and contribute to scholarship on pre-service teachers' scaffolding during small group literacy instruction, and might inform important features of teacher preparation in the area of differentiated literacy instruction.

APPENDICES

Essential 3: Introduction Content Presentation

"Small Group and Individual Instruction, using a variety of grouping strategies, most often with flexible groups formed and instruction targeted to children's observed and assessed needs in specific areas of literacy development"

neec	is in spe	cific areas of ineracy development
Key Ideas to remember:	1.	Research on small group instruction
What are the important	2.	Types of small group instruction
points to remember from		a. Level-based
this presentation?		b. Needs-based
		c. Interest-based
	_	d. Paired
Resources / Quotes:		e. Random
Note any resources or	3.	Why expand beyond level-based groups?
quotes that you want to		a. Levels are approximate
remember from this bullet.		b. Students at the same level for different reasons
		c. Students who are reading below grade levels never
	-	get to grapple with grade level texts
Questions I have:		d. Research studies question whether it is always
What questions do you		necessary to match text level with readers
still have about this bullet?		e. Only using level-based grouping can possibly
		introduce negative self-perceptions for students
	_ 4.	Definitions
Practices to Implement:		a. Flexible groups
What are some practices		b. Instruction targeted to observed/assessed needs
from this bullet that you	_	c. Specific areas of literacy development
want to start in your		Planning for small groups
classroom?	6.	Structure of small groups (Five Part Lesson Plan Format)
Stop and Ponder:	Think	about
Write down your answers		
to the Stop and Ponder		

Adapted by Ann Castle from:

prompt(s)

Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force (2016). *Essential instructional practices in early literacy: K to 3.* Lansing, MI: Authors.

Appendix B – Participation Guide 2

Essential 3: Bullet 1 – Actual Reading/Writing

"The teacher ensures that children use most of their time actually reading or writing (or working toward this goal in kindergarten and early first grade)"

Key Ideas to remember: What are the important points to remember from this presentation?

1. Time well spent, eyes on print or pencil on paper

Resources / Quotes:

Note any resources or quotes that you want to remember from this bullet. 1. Small group time analysis

2. Picture walks can take too much time

Questions I have:

What questions do you still have about this bullet?

3. Activating background knowledge can get kids off track

Practices to Implement:

What are some practices from this bullet that you want to start in your classroom?

4. What else could a teacher do to activate background knowledge?

Stop and Ponder:

Write down your answers to the Stop and Ponder prompt(s)

Think about a new text that children in your class will encounter.

- Consider whether this will require building background knowledge.
- How will you support children to activate their background knowledge?
- What questions might you ask or what texts might you read?
- Will you need to read aloud some books on that topic

Adapted by Ann Castle from:

Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force (2016). *Essential instructional practices in early literacy: K to 3.* Lansing, MI: Authors.

Essential 3: Bullet 2 – Reading Prompts

"The teacher coaches children as they engage in reading and writing, with reading prompts focusing primarily on a) monitoring for meaning, b) letters and groups of letters in words, c) rereading"

Key Ideas to remember:

What are the important points to remember from this presentation?

Resources / Quotes:

Note any resources or quotes that you want to remember from this bullet.

Questions I have:

What questions do you still have about this bullet?

Practices to Implement:

What are some practices from this bullet that you want to start in your classroom?

- 1. Prompts that focus on these three areas
 - a. monitoring for meaning
 - b. letters and groups of letters in words
 - c. Rereading
- 2. Decisions about Prompts
 - a. The reader's development
 - b. The reader's profile
 - c. The text and situation
- 3. Reasons for prompts
- 4. Teaching with prompts
 - a. If a child misreads a word
 - b. If the child does not self-correct
 - c. If the child is stuck
 - i. Look at the word, Slide through each word
 - ii. Look for parts you know, Break word apart
 - iii. Try a different sound, Reread
 - iv. Think about what would make sense
 - v. Check the picture (sparingly)
- 5. What Works Clearinghouse Practice Guide
 - a. Less Advanced Readers. More Advanced Readers
- 6. Which prompts to use?
 - a. The reader's development, reader's profile, text and situation
- 7. Ultimate goal: to develop independence

Stop and Ponder:

Write down your answers to the Stop and Ponder prompt(s)

As you consider this information about most effective prompts for coaching readers.

- How do you and/or will you include these in practice?
- What supports might you need in your prompting?

Adapted by Ann Castle from:

Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force (2016). *Essential instructional practices in early literacy: K to 3.* Lansing, MI: Authors.

Appendix D – Participation Guide 4

Essential 3: Bullet 3 – Develop Fluency

"The teacher employs practices for developing reading fluency, such as repeated reading, echo reading, paired and partner reading."

Key Ideas to remember:

What are the important points to remember from this presentation?

1. Developing reading fluency in

- a. small group
- b. paired

Resources / Quotes:

Note any resources or quotes that you want to remember from this bullet.

c. individual instruction

- 2. Practices for developing reading fluency
 - a. Repeated reading

Questions I have:

What questions do you still have about this bullet?

- b. Echo reading
- c. Partner reading (AKA paired reading, budding reading, or dyad reading)
- **Practices to Implement:**

What are some practices from this bullet that you want to start in your classroom?

d. Wide reading

Stop and Ponder:

Write down your answers to the Stop and Ponder prompt(s)

Consider the four research strategies outlined in bullet 3 and your classroom composition,

- Which strategy or strategies do you use or will you try first: repeated, echo, paired or partner reading?
- What resources or supports do you or will you need to implement the strategy?

Adapted by Ann Castle from:

Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force (2016). *Essential instructional practices in early literacy: K to 3.* Lansing, MI: Authors.

Essential 3: Bullet 4 – Explicit Instruction

"The teacher includes explicit instruction, <u>as needed</u>, in word recognition strategies, including multisyllabic word decoding, text structure, comprehension strategies, and writing strategies"

Key Ideas to remember: What are the important points to remember from

this presentation?

Resources / Quotes:

Note any resources or quotes that you want to remember from this bullet.

Questions I have:

What questions do you still have about this bullet?

Practices to Implement:

What are some practices from this bullet that you want to start in your classroom?

- 1. Targets of Instruction
 - a. Word recognition strategy use
 - b. Text structure knowledge
 - c. Comprehension strategy use
 - d. Writing strategy use
- 2. Nell Duke on small group reading instruction
 - a. Where is the teaching
 - b. Explicit instruction is
 - c. Pitfalls of explicit instruction
- 3. Connections
 - a. To other essentials and to comprehension strategies
- 4. Resource for Improving Reading Comprehension in Kindergarten through 3rd Grade: IES Practice Guide.
 - a. Recommendation 1. Recommendation 2
- 5. Pitfalls with in strategy instruction
 - a. General pitfall #1, General pitfall #2
- 6. TP and EI should be based on what children need from
 - a. Assessment, Observation, Our knowledge of standards
- 7. Standards, Students, Instructional Plan (SSI)
 - a. S: What standards are being addressed?
 - b. S: What do we know about standards in relation to that standard?
 - c. I: What instruction should we plan as a result

Stop and Ponder:

Write down your answers to the Stop and Ponder prompt(s)

- How do you and /or why do you determine what to explicitly teach during small group instruction?
- What improvements to your explicit instruction might you make?

Adapted by Ann Castle from:

Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force (2016). *Essential instructional practices in early literacy: K to 3.* Lansing, MI: Authors.

Appendix F – Participation Guide 6

Essential 3: Bullet 5 – Instruction with Meaning Making Focus

"The teacher is deliberate in providing quality instruction to children in all groups, with meaning-making the ultimate goal of each group's work"

Key Ideas to remember:

What are the important points to remember from this presentation?

1. All students deserve high-quality instruction

Resources / Quotes:

Note any resources or quotes that you want to remember from this bullet.

2. Meaning making is the ultimate goal of all small group lessons

Ouestions I have:

What questions do you still have about this bullet?

Practices to Implement:

What are some practices from this bullet that you want to start in your classroom?

3. Opportunities that engage and motivate

Stop and Ponder:

Write down your answers to the Stop and Ponder prompt(s)

- What do or will you do to make meaning the ultimate goal of every small-group session?
- What are some approaches that you use to engage children in higher order thinking?

Adapted by Ann Castle from:

Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force (2016). *Essential instructional practices in early literacy: K to 3.* Lansing, MI: Authors.

Appendix G – Exit Ticket

- What do you know now/understand about teaching small group reading that you didn't know before today?
- What questions do you still have about collecting data about your small group of students?
- What questions do you still have about planning for you small group reading lessons?
- Anything else?

$Appendix \ H-Video \ Observation \ Protocol$

Small Group Instruction Plan	Notes: TEACHER moves	Notes:
T: Teacher S: Students	T: Teacher S: Students	STUDENTS
First: T Brings Together Small Group of Ss	T Begins Small Group	
 Explain why group was created 	T brought Ss together in this	
 Explain what the S do well 	small group because	
 Explain what the S can work on 	 S are doing well at 	
 Explain how this work will help them 	S need to work on	
become better readers	• This will help S	
Second: T Provides Explicit Instruction	T Explicit Instruction	
Select Instructional Technique that addresses	 T chose instructional 	
the needs of the specific small group and is a	technique	
research tested instructional technique.	• Because	
 Teaching point/ strategy/ skills 	T Teach Technique	
What are your steps?	• 1st	
What are you trying to teach kids?	• 2nd	
• Teaching point is a game or a strategy	• 3rd	
Third: Ss Read after Explicit Instruction	S Read and Implement	
We always want to apply instruction in small	 Books T chose for the 	
groups to actual reading and writing.	students to choose	
 Set of books related to class topic 	from	
• Ss don't all have to read same book	 Topic of interest 	
• S don't have to be at same level	• What T will listen for,	
• T circulates and listen in while Ss read	the target of my	
 T provides coaching and prompting 	explicit instruction	
Fourth: T Listens, Coaches, and Prompts	T Listens, Coaches, Prompts	
(reinforces reason S brought together)	Book topic	
T will coach, about targeted skill	Notes on students	
• S will read on topics of interest	Targeted skill	
Fifth: T Brings Group Back Together	T Brings Back Together	
1) S talk about topic they read about.	• S talk about what they	
2) T asks the S for an example of a word	learned about the topic	
they read with the targeted skill	 S give example of a 	
,	word with the skill	

Adapted from: Michigan Association of Intermediate School Administrators General Education Leadership Network Early Literacy Task Force (2016)

Assignment 1 Overview: Small Group Reading Assessments

In TE 301 you learned to use assessments to understand one student's literacy development over the course of the semester. The goal for this assignment and the small group reading instruction assignment is for you to practice assessing a few students and then implementing instruction based on the outcome of those assessments. You and your Mentor Teacher should decide on two students for you to focus on for your assessments. Your mentor teacher will share with you the information that she has about those students' instructional needs. Then you will further fine tune your knowledge of both students' reading skills by administering a few (2-3), targeted assessments to each student. For the following assignment you will then design and implement instruction for a small group of students based on one of these students' instructional needs. As a classroom teacher, you would create small reading groups based on assessment data in order to target instruction to meet the needs of groups of students.

This assignment is worth 25 points of your final grade and is due February 4, 2019. All parts of the assignment, including your rationale for assessment, all assessment data, and data interpretation should be turned in together on one Google Doc (or on D2L). Use headers to clearly define the various parts of the assignment.

We will use a google doc for this assignment. We will create it in class on 1/21/19. If your instructor is using Google Docs, please create a Google Doc for sharing each section of this assignment. *Use pseudonyms for students' names in your written work*. The Google Doc should be named as follows: LastName_405_SmallGroupAssessments Example: Castle_405_SmallGroupAssessments

Important intermediate dates to keep up with the assignment Part I:

- Talk with mentor teacher about 2 students/collect information: Bring to class 1/21/19
- Rationale for assessments: (Begin writing rationale for assessments in class 1/21/19, due 1/28/19)

Part II:

- Administer assessments during the week of 1/21/19. Bring results to class on 1/28/19
- Data from assessments: Begin data analysis in class 1/28/19

Part III:

• Interpret data during the week of 2/4/19, begin to think about small group lessons, based on that data. You will plan and teach three lessons.

You will use this data and assignment to plan three small group lessons to share with your instructor and mentor teacher; you will teach one lesson each week for three weeks. You will need the first lesson plan by 2/11/19.

Completed Assessment Assignment Due: 2/11/19

Assignment 1 Overview: Small Group Reading Instruction

This assignment is an extension of the Small Group Reading Assessment assignment. You have now assessed two students. Your task for this assignment is to create an instructional sequence of three lessons plans for those students. You will create three lesson plans, that provides clear differentiation to meet the needs of those students. You will ask your mentor teacher if any other students (2-3 more students, to make a small group) would benefit from that targeted lesson sequence. In the end, you will implement three lesson plans to a small group of students. This process of assessing students, discovering the instruction they need, and delivering that instruction is an integral part in the daily life of a teacher. This assignment is designed to give you a sense of what that is like.

During your teaching, you will video record your lessons. Then you will view each recording to reflect on your teaching and identify what your students learned, and how you might improve your instruction for that group of students for the next lesson. You will work with that group for three weeks in a row.

This assignment is worth 25 points of your final grade and is due instructor on Monday, March 11, 2019 (Week 9). All parts of the assignment, including your lesson plans and reflection should be turned in together on one Google Doc or on D2L (Check with your instructor). Use headers to clearly define the various parts of the assignment.

If your instructor is using Google Docs, please create a Google Doc for sharing each section of this assignment. *Use pseudonyms for students' names in your written work*. The Google Doc should be named as follows: LastName_405_Assignment2 Example: Castle_405_Assignment2

Important intermediate dates to keep up with the assignment

Part I: Planning to teach:

- Draft of first lessons due Monday, February 11, 2019 (we will revise in class)
- Final lessons shared with MT and Instructor before you teach each lesson.

Part II: Teaching/Video of lesson during Weeks 6, 7, and 8

- Lesson 1 week of February 11, 2019
- Lesson 2 week of February 18, 2019
- Lesson 3 week of February 25, 2019

Part III: Reflection on teaching:

- You will plan and teach a series of three small group lessons
- You will reflect after each lesson to improve instruction and student learning
- Final Assignment and Reflection Due Week 9 Monday, March 11, 2019

$Appendix \ K-Teacher \ Candidate \ Survey \ Part \ I$

1.1 Ba	ckground			
1.	What is your gender? ☐ Female ☐ Male			
2.	In what year were you born? 19			
3.	Check ALL the categories that best describe your race or ethnicity:			
	☐ Black or African American			
	☐ Arab American			
	☐ Hispanic or Latino/a			
	☐ Asian or Pacific Islander			
	☐ White or European American			
	☐ Multiracial:			
	☐ Other – please specify:			
4.	Is English your first language?			
	□ Yes			
	☐ No If no, what is your first language?			
-	ofessional Preparation			
5.	What is your college major? <i>Check one</i>			
	☐ Elementary Education			
	☐ Special Education			
	☐ Child Development			
6.	What is your teaching major? Check one			
	☐ English Language Arts			
	☐ Mathematics			
	☐ Science			
	☐ Social Studies			
7.	. What is your teaching minor? <i>Check one</i>			
	☐ English Language Arts			
	☐ Mathematics			
	☐ Science			
	☐ Social Studies			
	☐ TESOL			
	☐ ZS Early Childhood Education			
	□ None			
8.	1 6			
	□ UECP			
	□ GECP			
9.	What grades you want to teach for your internship?			
	□ K-1			
	\Box 2-3			
	□ 4-5			
	☐ any grade level			

Appendix K (Cont'd)

10. What geographic area do you want to teach in?			
☐ Urban			
1.3 Setting Description			
1. What grade are you placed in for TE 405?			
☐ Kindergarten			
☐ First			
□ Second			
☐ Third			
2. How many of the children in your small group belong to each of the following groups?			
a. Black or African American			
b. Middle Eastern / Arab			
c. Hispanic or Latino/a			
d. Asian or Pacific Islander			
e. White or European American			
f. Biracial or Multiethnic			
g. Other race or ethnicity			
3. How many of the children in your small group have a documented special need or			
learning disability? Number of children with special needs			
4. How many children in your small group are English language learners (learning			
English as a second language)? Number of English language learners			

Appendix L – Teacher Candidate Survey Part II

1.4 Preparedness to Teach Reading before first small group lesson Please use the scale below to answer the following questions. Very confident Not at all A little bit Somewhat Ouite a bit confident confident confident confident (2) (3) (5) (1)**(4)** 1. How confident are you in your knowledge of teaching (1) (2) (3) (4)(5) elementary students during small group instruction? (2) (4)2. How confident do you feel to implement step one of (1) (3) (5) small group instruction - The teacher brings group together? 3. Why do you feel that way about step one? (1) (2)(3) (4)(5) 4. How confident do you feel to implement step two of small group instruction - The teacher gives explicit *instruction, teaching point?* 5. Why do you feel that way about step two? (2) (3) (4)(5) 6. How confident do you feel to implement step three of (1) small group instruction - Students actually read implementing the teaching point? 7. Why do you feel that way about step three? <u>(4)</u> (2) (5) 8. How confident do you feel to implement step four of (1) (3) small group instruction - Teachers listen, coach, prompt, and scaffold? 9. Why do you feel that way about step four? 10. How confident do you feel to implement step five of (1)(2) (3) (4)(5) small group instruction - Teacher brings group back together and makes two points (meaning and teaching point)? 11. Why do you feel that way about step five? (2)(3) (4)(5) (1) 12. How confident are you in your own knowledge of phonological awareness? (1) $\overline{(2)}$ (3) $\overline{(4)}$ (5) 13. How confident are you in your ability to teach phonological awareness during small group reading instruction? 14. Why do you feel that way about phonological awareness? (2) **(4)** (5) How confident are you in your own knowledge of (1) (3) phonics/alphabet/letters and sounds?

Appendix L (Cont'd)

16. How confident are you in your ability to teach phonics, alphabet, letters, and sounds during small group reading instruction?	1	2	3	4	5
17. Why do you feel that way about phonics, alphabet, let	ters, and	d sound	s?		
18. How confident are you in your own knowledge of decoding?	1	2	3	4	5
19. How confident are you in your ability to teach decoding during small group reading instruction?	1	2	3	4	(5)
20. Why do you feel that way about decoding?					
21. How confident are you in your own knowledge of reading sight words and fluency?	1	2	3	4	5
22. How confident are you in your ability to teach sight words and fluency during small group reading instruction?	1	2	3	4	5
23. Why do you feel that way about sight words and fluence	cy?				
24. How confident are you in your own knowledge of vocabulary and word meanings?	1	2	3	4	(5)
25. How confident are you in your ability to teach vocabulary and word meanings during small group reading instruction?	1	2	3	4	5
26. Why do you feel that way about vocabulary and word	meaning	gs?			
27. How confident are you in your own comprehension of texts?	1	2	3	4	5
28. How confident are you in your ability to teach comprehension of texts during small group reading instruction?	1	2	3	4	(5)
29. Why do you feel that way about comprehension of text	ts?				
30. How confident are you in your own knowledge of handwriting and written expression?	1	2	3	4	5
31. How confident are you in your ability to teach handwriting and written expression during small group reading instruction?	1	2	3	4	5
32. Why do you feel that way about handwriting and writt	en expr	ession?			

Adapted from SOLID Start Teacher Survey 2014

Appendix M – Teacher Candidate Interviews

Interview Protocol

- 1. How do plan for small group reading instruction for this group of students?
- 2. How do you use literacy data to plan your instruction, for this group of students?
- 3. How do you choose materials to use with this group of students?
- 4. How do you scaffold students to read on their own, to decode, at an unknown word?
- 5. How do you scaffold students' decoding when reading continuous text, during small group reading instruction?
- 6. Give a scenario, what would you do?
- 7. How do you balance three to four students' reading in a small reading group?
- 8. How do you balance the work you do and the work the students do in small reading groups?
- 9. Let's look at this clip (audio or video)...
- 10. You said ______, what was your reason for that comment?
- 11. You did this _____ scaffolding move that enabled the student to do _____. How did you make that move to gradually release responsibility?
- 12. Why did you make _____ move (scaffolding decision) when assisting students to decode in continuous text?
- 13. How do you decide whether to prompt with general or specific comments, offer less support?
- 14. How do you decide whether to use non-verbals, give choices, or demonstrate, offer greater support?

Other Question Stems

- Based on what you have learned so far what do you think is required
- What do you feel
- What do you understand
- Why do you think
- Ask things behind the ape
- Why,
- Self-efficacy
- Follow up once they are in their internship
- Interview in their internship how prepared they are...
- Could track and see in the fall IRB
- Make sure the question in the RQ immediate interview and then a follow-up

 $Appendix \ N-Codebook: Initial \ Codes \ Pertaining \ to \ Structure \ of \ a \ Small \ Group \ Lesson$

Code	Small Group Step	Small Group Step Description
SGS1	Small Group Step 1	First, teacher brings small group together
SGS2	Small Group Step 2	Second, teacher provides explicit instruction
SGS3	Small Group Step 3	Third, students read and implement the teaching point
SGS4	Small Group Step 4	Fourth, teachers listen, coach, prompt, & scaffold, students read
SGS5	Small Group Step 5	Teacher brings group back together and makes two points (meaning and teaching point)

Appendix O – Codebook: Initial Codes Pertaining to Teacher Scaffolding Levels

Code	Level of Support	Teacher Scaffolding Level Description
TSL1	Teacher Talk General	Least support from teacher, child in control of problem solving
TSL2	Teacher Talk Specific	Keep learning moving forward; prompts/reminders; no new teaching
TSL3	Teacher Talk/Nonverbal Actions	New learning introduced; show or teach child new problem solving
TSL4	Teacher Higher Support	Add more support to problem solve
TSL5	Teacher Models/	Most support from teacher; teacher in control of problem
	Demonstrates	solving
	10 777 1 1 1050 7	2005

Adapted from Wood et al., 1976, Lose, 2007

Appendix P – Codebook: Initial Codes Pertaining to Prompting at Difficulty

Code	Prompt Language	Teacher Prompt Description
TP1	Look at the word	Prompt for letters and sounds, at the word level
TP2	Slide through each sound	Prompt for letters and sounds, to blend word parts
TP3	Look for parts you know	Prompt for letters and sounds, to connect with known parts
TP4	Break the work apart	Prompt for letters and sounds, to segment word parts
TP5	Try a different sound	Prompt for letters and sounds with flexibility in looking at letters and sounds
TP6	Reread	Prompt to reread for fluency and meaning
TP7	Think about what would make sense	Prompt for meaning
TP8	Check the picture	Prompt for meaning
TP9	Other	Other prompts that teacher candidates used

Adapted from Duke and Schutz (2017)

Appendix Q – Codebook: Revised Codes Pertaining to Teacher Scaffolding Levels

Code	Level of Support	Teacher Scaffolding Level Description
TSL0	Teacher Listens	Does not coach and prompt
TSL1	Teacher Talk General	Least support from teacher, child in control of problem solving
TSL2	Teacher Talk Specific	Keep learning moving forward; prompts/reminders; no new teaching
TSL3	Teacher Talk/Nonverbal Actions	New learning introduced; show or teach child new problem solving
TSL4	Teacher Higher Support	Add more support to problem solve
TSL5	Teacher Models/ Demonstrates	Most support from teacher; teacher in control of problem solving

TSL0 is a new addition to the scale of help (Wood et al., 1976, Lose, 2007)

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