"It Opened My Eyes...": The Potential of an Embedded Clinical Experience in Teacher Preparation

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READING HORIZONS

"It opened my eyes…": The potential of an embedded clinical experience in teacher preparation

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──────── Abstract ────────

Teacher candidates (TCs) often feel underprepared for their first teaching positions. Teacher education programs are, at least partially, responsible for the level of readiness of their graduating TCs. Fortunately, teacher educators have the capacity to positively change teacher education, creating a more effective, better prepared teaching force. Embedded clinical experiences connected to university literacy courses are one innovative approach to create more purposeful and engaging learning opportunities for TCs.

TCs in an early childhood and special education program participated in an embedded clinical experience focused on reading and assessment, which allowed them to implement course content directly with elementary students, effectively connecting theory and practice. This qualitative study explored the impacts of an embedded clinical experience on TCs' beliefs, content knowledge, and instructional practices related to reading and assessment. Content analysis was used to analyze data collected through semistructured interviews, participants' reflective journal entries, weekly lesson plans, audio-recorded Socratic seminars, and video-recorded reading lessons. This inquiry revealed an increase in TCs' pedagogical knowledge and confidence. The authors found that implementing an embedded clinical experience working with elementary students in conjunction with university coursework contextualized and meaningfully integrated course content in practical teaching experiences, encouraging TCs to refine their philosophical and pedagogical beliefs.

Keywords: *clinical practice, embedded clinical experience, teacher education, professional development communities, reading assessment, reading instruction*

National and state leaders have taken the view that the education system is failing its students. State accountability systems brought on by No Child Left Behind and performance-related pay policies are becoming a normal part of the educational landscape (Berryhill et al., 2009; Horn & Wilburn, 2013; Kraft et al., 2020; Podgurskey & Springer, 2007). In this context, today's teachers are held accountable for the highest learning standards in history, frequently measured by standardized tests (Berryhill et al., 2009; Haverback & Parault, 2008; Kraft et al., 2020; Levine, 2006). Consequently, the demands and expectations for teachers have drastically increased (American Association of State Colleges and Universities Teacher Preparation Task Force, 2017).

With these increasing demands, researchers (e.g., Levine, 2006; Rust, 2010) claim that teacher candidates (TCs) regularly feel underprepared for their first teaching position. More recent research (du Plessis et al., 2020) has demonstrated that beginning teachers still feel ill equipped for the realities of the classroom.

Principals quoted in Levine's (2006) report, *Educating School Teachers*, claimed that TCs were ill-prepared for their first classrooms. Principals surveyed for this report identified weaknesses in the following areas: integrating technology into their teaching, implementing curriculum, applying performance standards, and using student performance assessment techniques. They further identified other areas of weakness, including working with parents, managing the classroom, and addressing the needs of students with disabilities, limited English proficiency, and diverse cultural backgrounds. The administrators in du Plessis et al.'s (2020) study echoed the claims of the principals in Levine's report.

The shortcomings referenced by the principals in Levine's (2006) report likely contribute to the continued teacher shortage. According to the Learning Policy Institute (2017), more than 40 states reported teacher shortages. Sutcher et al. (2019) indicated that the Learning Policy Institute's report determined that the approximate number of uncertified teachers in the United States during the 2017–2018 school year was 109,000. The American Association of State Colleges and Universities Teacher Preparation Task Force (2017) suggested that the need for PK–12 teachers would increase by 14% between 2010 and 2021. This growing teacher shortage is due in part to inadequate numbers of certified teachers to fill vacancies.

Rust (2010) and others (Greenberg et al., 2013; Levine, 2005, 2006; Maclver et al., 2005; Putnam & Walsh, 2019) argued that higher education is, at least, partially to blame. For example, activities and training in college courses are often disconnected from classroom practices (Zeichner, 2010). Field placements that are isolated from coursework, as well as limited supervision during field placements, also lead to underprepared novice teachers. Finally, brief student teaching placements do not provide the adequate feedback and rehearsal necessary for successful teaching (Bauman et al., 2000; Maclver et al., 2005).

Amid criticisms of higher education, educational researchers (Cochran-Smith, 2003; Cochran-Smith & Zeichner, 2005; Darling-Hammond, 2017; Darling-Hammond & Bransford, 2005; Hiebert et al., 2002; Putnam & Walsh, 2019) agree that teacher educators have the capacity to positively change teacher education, creating a more effective, better prepared teaching force.

School–university partnerships have the potential to create environments that foster instruction and experiences that more effectively prepare TCs for the classroom (American Association of State Colleges and Universities Teacher Preparation Task Force, 2017; Anderson & Freebody, 2012; Darling-Hammond, 2017). Through these partnerships, TCs can apply their training from college courses to working with PK–12

students in the field through practice-based teacher education (Ball & Cohen, 1999) within the Professional Development School (PDS) model. These field placements are likely to last for longer periods of time than the traditional model of teacher education programs (Teitel, 2003). Consequently, they provide greater opportunities for TCs to develop a firm foundation in teaching, resulting in increased likelihood of success and retention. The groundbreaking report from the Blue Ribbon Panel on Clinical Preparation and Partnerships for Improved Student Learning (National Council for Accreditation of Teacher Education [NCATE], 2010) addressed Levine's (2006) report, calling for teacher preparation programs to prioritize clinical practice and embed it in ongoing coursework. Although these NCATE standards are no longer used, this seminal report was a catalyst in teacher education reforms and supported embedded clinical experiences.

This qualitative study explored TCs' participation in an embedded clinical experience integrated into one of their undergraduate teacher education courses. Specifically, we examined the shifts that occurred during TCs' involvement in an embedded clinical experience associated with their literacy assessment course.

Review of Research on Clinical Experiences

Acknowledging the importance of clinical experiences, researchers, accrediting bodies, accountability reformists, and education policymakers have begun to push for a more practice-based approach to teacher preparation (e.g., Benedict et al., 2016; Grossman, 2010; NCATE, 2010). Accordingly, Grossman (2010) pointed out the importance of examining the quality of clinical experiences rather than stressing the number of hours spent in the field. Other recommendations for practice-based approaches to teacher preparation include (a) seamless teacher development across the career span (Blanton & Pugach, 2017; Rock et al., 2016), (b) focus on collaboration on inclusion (Grossman, 2010; Rock et al., 2016), (c) attention to student outcomes (Blanton & Pugach, 2017; Deans for Impact, 2016; NCATE, 2010; Rock et al., 2016), and (d) systems of feedback (Deans for Impact, 2016; Dieker et al., 2014; Grossman, 2010; Rock et al., 2016). For these elements to come together, there must be coherence between the university and clinical setting (Grossman, 2010).

According to a review of the literature related to the benefits of this more authentic context for developing teachers, Haverback and Parault (2008) indicated that preservice teachers in a field-based, hands-on setting report a positive impact on their teaching beliefs, seeing students as individuals, and their understanding of theory and reading strategies. More recently, the International Literacy Association (ILA) and National Council of Teachers of English (NCTE, 2017) noted that given support in an explicitly mentored, authentic field experience, "prospective teachers use what they have learned during their literacy teacher preparation coursework when teaching in PK–12 field placements, and later within their own classrooms, and they teach with competence" (p. 5). In addition, the impact of extensive, high-quality field experience in the teaching of reading extends into the first years of teaching (Boyd et al., 2009; Grisham, 2000; Hoffman et al., 2005; Maloch et al., 2003).

Review of Reading-Based Clinical Experiences

Many teacher education researchers examining reading-based clinical experiences have explored tutoring experiences, early clinical placements, or student teaching internships. There is some research supporting the use of this continuum of supports (e.g., tutoring, early and mid-clinical placements, student teaching) to scaffold teaching experiences for TC development. For example, Buck and colleagues' (1992) review of field-based practices in special education from 1980 to 1991 revealed that tutoring and

early clinical experiences provided scaffolded support for both coursework and student teaching. More recently, Henning et al. (2016) shared their process for developing the Developmental Curriculum for Clinical Experiences, a clinical curriculum intentionally designed to provide scaffolded teaching experiences through early, mid-, and late teacher education.

Tutoring Experiences

Tutoring is one-on-one instruction that supplements classroom teaching (Elbaum et al., 2000) and is often used in early teacher education to connect coursework with real-world application of skills and knowledge (Haverback & Parault, 2008). Opportunities to tutor a student one on one provide scaffolding that prepares a TC for whole-class teaching. Intentional planning beginning with a one-on-one tutoring experience allows novices to move from "simpler to more complex teaching skills, from working with fewer to larger numbers of students, and from requiring less to more planning and decision making" (Henning et al., 2015, p. 151). Tutoring also supports the development of teacher self-efficacy (e.g., Shaw et al., 2007) and the acquisition of content and pedagogical knowledge (Al Otaiba, 2005; Al Otaiba et al., 2012; Elbaum et al., 2000; Shaw et al., 2007; Spear-Swerling, 2009). Importantly, not only does tutoring support the development of TC skills, but the tutee also benefits from this experience (e.g., Elbaum et al., 2000). However, it is important to note that although some researchers (e.g., Al Otaiba, 2005; Spear-Swerling, 2009) speculate that instructor supervision (e.g., support in the tutoring context) influences the gains in TC and student knowledge, the supervisory practices were not described.

Early Clinical Experiences

Unlike tutoring, early clinical experiences provide TCs with opportunities to work alongside a mentor teacher in a classroom. These experiences are often highly structured (Maheady et al., 2007), but TCs receive limited support from university supervisors and the role of mentor teacher in these early experiences is often unclear (Prater & Sileo, 2004). Harlin (1999) described four factors (i.e., influences beyond the classroom, influences from children, influences from other professionals, and influences from teachers' personal and professional development) that impact reading instruction across three stages of the early clinical experience (i.e., entering the field, developing new perceptions, and refining perceptions). Harlin found that although the core literacy concepts described by TCs remained the same across the stages of development, the way the concepts were described, the frequency of appearance, and perceived importance for reading shifted as TCs gained more knowledge about and practice with reading instruction. Similarly, in their examination of influences on special education TCs' appropriation of pedagogical tools for teaching reading to students with high-incidence disabilities, Leko and Brownell (2011) found that TCs' personal qualities, motivation for knowledge assimilation, access to knowledge, and opportunities to use knowledge in practice influenced their adoption of evidence-based practices in reading. Specifically, regarding the clinical placement, the most important factor for reading knowledge acquisition was the mentor teacher. Despite being over a decade apart, both studies recognized the influence of the structure of the experience and the nature of support provided to TCs as critical for developing effective reading instruction.

Student Teaching

Student teaching is often the final requirement for graduation from a teacher education program. Unlike the one-on-one experience of tutoring and the small-group or limited teaching time in early clinical experiences, student teaching is usually the time

when TCs can teach more frequently and with more freedom. During student teaching, the TC spends every day in the mentor teacher's classroom; therefore, the mentor typically has more influence on the TC than the TC's course instructors or clinical supervisors once did. Yet little research has examined how TCs develop their reading instruction during this time.

One study examining the literacy practices of student teachers conducted by Hamman et al. (2007) determined that TCs used instructional practices that were almost identical to their mentor's (e.g., size of groups, frequency of support to students, limited attention to fluency). However, Hamman and colleagues also determined that the quality of support given to students by the TCs was overall lower than that provided by the mentor. In particular, the TCs did not provide as much support to students in the areas of word meaning and word solving as their mentor did. Additionally, an inference the researchers made from their findings was that even experienced and effective mentors have difficulty influencing the quality of TC reading instruction. Moreover, Hamman and colleagues challenged teacher preparation researchers and program developers to find ways to help TCs move beyond imitating what they see their mentors do to provide higher quality reading instruction.

Taken together, the research on reading-based clinical experiences across the development continuum suggests that these experiences are essential to developing TC knowledge and skills for effective reading instruction. These studies also suggest that the type of supervision (e.g., feedback, support) provided to TCs during these experiences may, in part, determine the amount of knowledge gained and the quality of instruction provided. Providing tutoring in early reading-based clinical experiences, embedded in coursework with clearly defined supervisory supports, may be one way to support the acquisition of effective reading instruction.

Theoretical Framework

The theoretical frameworks that informed this inquiry were communities of practice (Lave & Wenger, 1991; Wenger et al., 2002) and situated learning perspective (Bell et al., 2013; Lave & Wenger, 1991; McLellan, 1996). These frameworks guided our research in various ways.

Lave and Wenger (1991) introduced the concepts of communities of practice and legitimate peripheral participation to reflect what occurs as people collectively work to deepen their knowledge and expertise. Members of a community of practice are bound together by the value they find in learning together, sharing their expertise, insights, and advice (Lave & Wenger, 1991; Wenger, 2000; Wenger et al., 2002). The underlying premise of a community of practice is that the learning process occurs in a participation framework (Hanks, 1991).

Members of a community of practice learn through their participation in the group and engagement with shared resources. Each participating member of a community of practice brings different perspectives and levels or areas of expertise, allowing for insightful dialogue and creative problem solving (Lave & Wenger, 1991). Over time, they develop a unique perspective on a body of common knowledge, practices, and approaches. Communities of practice, as a result, become a "living repository of knowledge" (Wenger et al., 2002, p. 9). In the university setting, communities of practice offer TCs the opportunity to engage in professional conversations where they can learn from one another to develop and refine their instructional practices.

The situated learning perspective maintains that learning cannot occur or be understood separate from the context in which it occurs (Bell et al., 2013; Brown et al., 1989; Lave & Wenger, 1991; McLellan, 1996). According to Lave and Wenger (1991), learning is situated in everyday work and practices. Further, Greeno and the Middle-School Mathematics Through Applications Project Group (1997) maintained that the situated perspective considers processes of thinking as participation in communities of practice. In this context, learners interact with each other, the environment, and the activities to create meaning, furthering their development as learners and thinkers. Embedding content into real-life experiences helps participants transfer learning from the classroom to the realm of practice. Brown et al. (1989) explained, "People who use tools actively rather than just acquire them...build an increasingly rich implicit understanding of the world in which they use the tools and of the tools themselves" (p. 33). Accordingly, TCs are more likely to successfully administer literacy assessments, analyze assessment data, and implement responsive literacy instruction when they learn and use these concepts in authentic contexts of teaching and learning. Consequently, our TCs' participation in the embedded clinical experience provided them with a more in-depth understanding of these literacy assessment and instructional practices through opportunities to apply them in elementary school settings.

The purpose of this qualitative research study was to investigate the impacts of TCs' embedded clinical experiences, along with the shifts in their beliefs and attitudes about struggling readers and literacy assessment, as they participated in a literacy assessment course. Additionally, we examined how TCs' understandings about literacy assessment, data analysis, assessment-driven instruction, and instructional practices evolved during the semester. The following research questions guided the study in seeking these understandings:

1. How did an embedded clinical experience focused on reading and assessment impact TCs' beliefs and attitudes about struggling readers?

2. How did an embedded clinical experience focused on reading and assessment impact their understanding of literacy assessment, reading instruction, and their role as a reading teacher?

Method

In this section, we describe the context of the study. Specifically, we address distinct features of our Professional Development School model and the Literacy Assessment course. We describe the context of an embedded clinical experience focused on reading and assessment followed by a description of participants engaged in this study. Last, we recount our procedures for data collection and analysis.

Context

This research was situated in the context of a PDS model, which allowed TCs, in-service teachers, college literacy professors, and elementary students to benefit from an ongoing collaboration. According to Teitel (2003) in The Professional Development Schools Handbook, professional development schools are "innovative types of school-college partnerships designed to... bring about the simultaneous renewal of schools and teacher education programs—restructuring schools for improved student learning and revitalizing the preparation... of... educators at the same time" (p. 2). In this context, stakeholders are committed to working together to provide authentic learning experiences for TCs and elementary school students through their PDS partnership. These learning

experiences are made possible through the PDS partnership's organization and structure.

With respect to the field-based piece of student teaching, PDS partnerships typically involve "clusters of preservice teachers working together as a cohort, placed in a school community, rather than with one individual teacher, and often for longer or more intensive internships" (Teitel, 2003, p. 128). In our case, the PDS partnership provided the opportunity to host our university class in the elementary school. Holding our literacy course in the elementary school made it easier to conduct an embedded clinical experience in which TCs worked with elementary students. These embedded clinical experiences involved authentic opportunities for TCs to implement the pedagogical practices they learned about in our class with elementary students. Additionally, the TCs had the support of their professor as they worked with the elementary students in the event that issues or questions arose.

Literacy Assessment Course

This two-and-a-half-hour literacy assessment course was strategically organized around a consistent and structured weekly schedule. The class time was divided between course content instruction, the embedded clinical experience, written reflection, debriefing through a Socratic seminar, and planning. The time allocation is outlined in Figure 1.
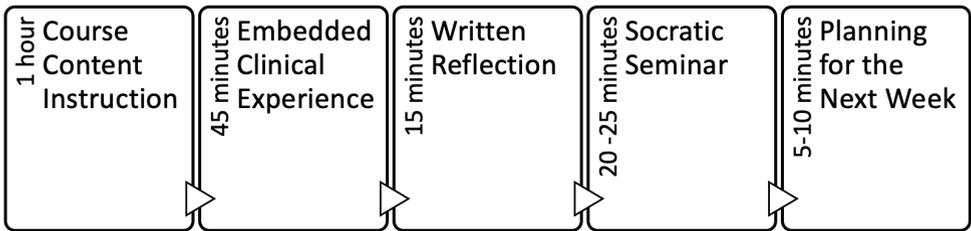

Figure 1.

Time Allocation

In class each week, TCs learned about and practiced a variety of literacy assessments to aid them in identifying their elementary student's strengths and areas for growth and to allow them to create assessment-driven instruction. During content instruction, the professor used interactive teaching methods, encouraging TCs to actively engage with course concepts. For example, discussion protocols from the National School Reform Faculty (2018), School Reform Initiative (2017), and Visible Thinking (Ritchhart et al., 2011) were utilized during the course to encourage TCs to explore the purpose and the short- and long-term value of select literacy assessments. Additionally, TCs viewed video clips of assessment administration while practicing the recording and scoring procedures for the students' responses. The professor then modeled data analysis, looking across assessment results to identify patterns of strength and areas for growth. TCs were also given opportunities during class time to collaboratively plan lessons with peers and to confer individually with the professor on data analysis and lesson planning. The literacy assessments addressed in the course are outlined in Table 1.

Table 1

Literacy Assessments Addressed in the Course

Assessment focus area	Examples of assessments utilized
Emergent literacy	Concepts about print assessment, tests of phonological awareness, Emergent Storybook Reading Scale, Picture Walk Scoring Guide, and retelling evaluation
Spelling and word recognition	Dolch words, Informal Phonics Inventory, Elementary Spelling Inventory, and features guide
Affective factors	Student Interview Protocol, Here's How I Feel About Reading, Interest Inventory, Reading Interest Survey, Writing Interest Survey, Garfield Attitude Survey, and Your Thoughts About School
Running records	Coding system and scoring, analysis
Informal reading inventory	San Diego Quick Word Lists, Reading A to Z Running Records, and Quick Check Comprehension
Fluency	Holistic Oral Reading Fluency Rubric, NAEP Oral Reading Fluency Scale, and Multidimensional Fluency Scale
Comprehension	Observation, comprehension questions, CLOZE, MAZE, and oral retellings

Following the content instruction in the college classroom, TCs participated in a 45-minute embedded clinical experience focused on reading and assessment. The aim of the embedded clinical experience was twofold: to provide TCs with opportunities to administer and analyze literacy assessments in a supportive environment and to provide elementary readers with individualized and responsive reading instruction. Accordingly, TCs planned a reading lesson for their kindergarten or first-grade student. This one-on-one lesson included time for familiar reading, word work, and a new book. The new book experience could take the form of an interactive read-aloud or a guided reading lesson. TCs were responsible for planning these lessons based on the state standards as well as the student's specific strengths and areas for growth identified through the weekly literacy assessments administered in the embedded clinical experience. As part of the 45-minute session, TCs also administered selected literacy assessments that had been introduced and practiced in class. Typically, half of the time in the embedded clinical experience was

spent administering literacy assessments. During this time, the professor was available to answer questions, model assessment procedures, and offer instructional recommendations. A timeline for the weekly embedded clinical experience is presented in Figure 2.

Familiar Reading (5-10 minutes)
Students read familiar books from their classroom.

Word Work (5 minutes)	
Phonemic Awareness	Phonics

New Book (10-20 minutes)	
Interactive Read Aloud	Guided Reading

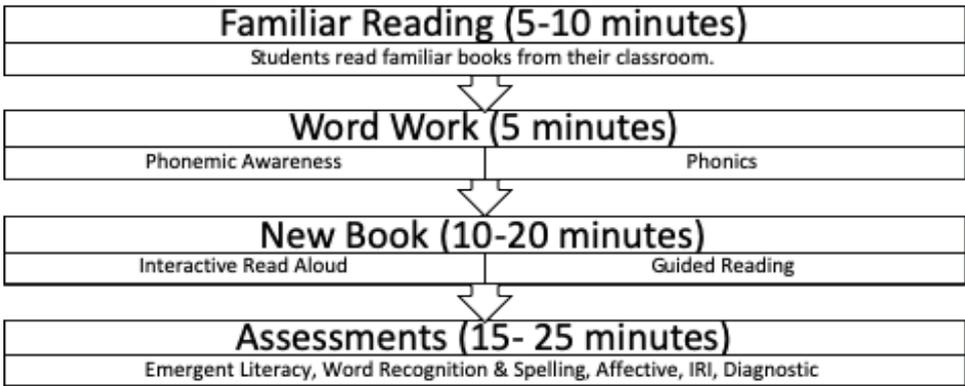| Assessments (15- 25 minutes) |
| --- |
| Emergent Literacy, Word Recognition & Spelling, Affective, IRI, Diagnostic |

Figure 2.

Weekly Timeline for the Embedded Clinical Experience

Self-reflections and Socratic seminars. A time for written and oral reflection followed the embedded clinical experience. TCs first reflected in writing on their performance, questions about the assessments and instruction, and learnings about their elementary student (see Appendix A). After reflecting through writing, the TCs came together as a learning community to share their reflections in the context of a Socratic seminar. A Socratic seminar, according to the National Paideia Center (n.d.), is a "collaborative, intellectual dialogue facilitated with open-ended questions about a text" (para. 1). In a Socratic seminar, participants "listen closely to the comments of others, thinking critically for themselves, and articulate their own thoughts and their responses to the thoughts of others" (Israel, 2002, p. 89). During this time, TCs were invited to share their reflections, ask questions, make connections, and analyze their assessment data, creating a professional learning community. The norms and procedures for the Socratic seminar are found in Appendix B. Additionally, the embedded clinical experience component provided a shared experience for all TCs to ensure this type of dialogue could occur.

Participants

Thirteen undergraduate students voluntarily participated in this study while they were enrolled in their junior year of an early childhood and special education (ECE/SPED) dual-certification program at a university in the southeastern United States. The study was conducted in the spring 2016 semester while they were taking a Literacy Assessment course as part of their ECE/SPED program's plan of study. Convenience sampling was used to recruit participants. All the participating undergraduate students were White females enrolled in their junior year of the program.

Data Collection

We employed qualitative content analytic methods (Cho & Lee, 2014; Krippendorff, 2013; Mayring, 2000) to investigate the impact of TCs' experiences on their beliefs, attitudes, and understanding of assessment practices. The primary data sources chosen for analysis included transcripts of semistructured interviews (n = 5) and coursework, such as participants' reflective journal entries (n = 143) and transcripts of audio recordings of the weekly Socratic seminars (n = 5). The semistructured interviews were conducted at the conclusion of the course. The interview questions can be found in Appendix C. TCs participated in these interviews on a voluntary basis. All interviews were video-recorded and transcribed. Additionally, TCs reflected through writing at the conclusion of each of the 11 embedded clinical experiences using a standard set of questions (see Appendix A for a list of reflection questions). These written reflections facilitated discussions during the Socratic seminar. Each of the five Socratic seminars occurred after the embedded field experience and written reflection. The seminars were audio-recorded and transcribed. All primary data sources were uploaded into Dedoose, an online qualitative data analysis program, for analysis. Secondary sources included weekly lesson plans and video-recorded reading lessons. Secondary sources were used as we established and refined our themes. Table 2 demonstrates how we addressed our research questions through collecting particular data sources during this study.

Table 2

Data Collection Summary

Research Question

Research Question	Data sources addressing questions
How did an embedded clinical experience focused on reading and assessment impact TCs' beliefs and attitudes about struggling readers?	Semistructured interviews
	Reflective journal entries
	Audio recordings of weekly Socratic seminars
	Struggling reader reflection
How did an embedded clinical experience focused on reading and assessment impact their understanding of literacy assessment, reading instruction, and their role as a reading teacher?	Semistructured interviews
	Reflective journal entries
	Weekly lesson plans
	Audio recordings of weekly Socratic seminars
	Video-recorded reading lessons

Data Analysis

We conducted three main phases of coding, as recommended by Mayring (2000). First, we used an inductive approach by completing open coding across all primary data (i.e., transcripts of the interviews and the audio recordings of the Socratic seminar, along with TCs' reflective journals). These primary data sources were analyzed after they were collected and transcribed. During the initial phase of our coding, we used Dedoose to code data line by line and incident to incident. Our codes emerged as we scrutinized the data and attempted to define meanings within the text in order to understand our participants' views and actions from their perspectives. We compared each incident with others in the same category, considering the similarities and differences.

In our second phase of coding, we revised our codes into larger categories (Mayring, 2000). For this phase, we read and reread our coded data to reduce our original list of codes, making our coding and analysis of incidents more selective and focused. In our third phase of coding, we established themes as we confirmed our analysis of our secondary data, including teacher artifacts. Three researchers reviewed the data for each phase of coding. If there was a disagreement regarding a code, the researchers discussed the discrepancy until consensus was achieved (Harry et al., 2005). This approach allowed for 100% agreement across all codes. Table 3 outlines our three identified themes with examples of categories, codes, and excerpts of the data to represent our coding process and to illustrate how excerpts reflected shifts in beliefs and practices.

Table 3

Qualitative Content Analysis: Examples of Data, Codes, Categories, and Themes

Theme	Category	Code	Exemplar quote
Shifts in instruction	Responsiveness	Adjusting instruction	She had expected him to not do well so she had to rethink her plan for instruction.
		Assistance/scaffolding	I utilize thinking aloud and breaking down big steps.
		Additional codes: differentiation, guided instruction, individualized instruction, student interest	
	Planning	Importance of planning	I have to plan for everything and be ready for the unexpected.
		Importance of modeling	This just goes to show how modeling and repetition ultimately helped K develop her reading abilities.
		Additional codes: adjusting planning, prior knowledge, student interaction, strategic planning, text selection, using strengths	

Shifts in beliefs about assessment	Purpose	Assessment to learn about knowledge	Assessment is when you grade students on their knowledge of a given topic.
		Assessment to learn about strengths and weaknesses	Assessment is an educational tool to find your students' strengths and weaknesses.
		Additional codes: diagnosing student needs, differentiation, guided instruction, individualized instruction, meeting student needs, targeted instruction	
	Analyzing results	Data analysis	Then I started making the chart [IRI data chart] which was very good, very helpful seeing what to work on from them.
		Diagnosing student needs	Diagnosing student needs
		Additional codes: analyzing results, patterns in data, student reading behaviors	
Shifts in beliefs about readers	Beliefs about struggling readers	Beliefs about good readers	Reading comprehension is so much more than being a good reader.
		Beliefs about struggling readers	Struggling readers are readers that have difficulty with comprehension, mastery of a text and the words within it, fluency, and retelling.
		Additional codes: experience with readers, experience in classrooms, shifts for lab student, struggling reader—negative opinions	

Findings

Our results demonstrate three major shifts in the areas of knowledge, beliefs, and practices for our TCs. In particular, their knowledge of and beliefs about the purpose and types of assessment, as well as data analysis, changed. The TCs' knowledge regarding planning and implementing lessons also shifted into a more strategic approach. Ultimately, their instruction moved from teacher centered to student centered, given that the planning and implementation were responsive to students' needs. Furthermore, their participation in the embedded clinical experience helped shape their identity as teachers.

Struggling Readers

As a result of their participation and engagement in the embedded clinical experience focused on reading and assessment, TCs expanded their definition of struggling readers and their role as teachers in supporting these students. Prior to their involvement in the embedded clinical experience, TCs' definition of struggling readers was quite narrow. Many of the TCs acknowledged that their initial definitions centered primarily on a student's ability to decode words in text or on a student's text level. Molly defined a struggling reader as "a child who is reading below grade level and struggles with learning the basic skills of reading" (Reflection, 4/19). Hailey agreed, sharing that she thought "students … struggl[ing] to read [was] due only to phonics" (Final Reflection). Others also equated a struggling reader with an inability to read (Addison, Interview; Elana, Reflection 4/19; Heather, Reflection 4/19; Kara, Reflection 4/19).

The combination of theoretical and practical instruction of the course content and the embedded clinical experience encouraged TCs to reconceptualize what it means to be a struggling reader. Heather attributed her shift in thinking to her participation in the embedded clinical experience: "My time in reading lab allowed me the opportunity to work with a student who showed me a different type of struggling reader" (Final Reflection). By the end of the semester, TCs expanded their definition of struggling readers beyond a phonics level. Kara noted this shift in thinking in her Final Reflection:

> Before this experience, when I heard the word "struggling," I just took it at face value and assumed that meant that the child could not read as well as other children. After this experience and taking this class, I now see that a reading level is not the only thing that is affected by a child who is a struggling reader.

As TCs learned about and administered a wide variety of literacy assessments ranging from concepts about print to fluency to comprehension, they recognized that students struggle with reading in many different ways. They came to understand that generalizing students' struggles may not benefit the teacher or the student. With this insight came significant shifts in their definitions of struggling readers. TCs' definitions broadened to include a range of factors, including automatic word recognition, language comprehension, and strategic knowledge (McKenna & Stahl, 2015). Specifically, TCs mentioned phonological awareness, book handling knowledge, fluency, comprehension, word recognition, vocabulary, and word-solving strategies (Elana, Final Reflection, Final Seminar; Hailey, Final Reflection; Jessica, Reflection 2; Kelsey, Final Reflection; Molly, Final Reflection).

TCs also began to consider affective as well as cognitive factors that influence a student's reading ability. Recognizing the role of noneducational factors (Opitz & Erekson, 2015)/contextual factors (McKenna & Stahl, 2015) in learning to read, TCs recognized the child's home life, confidence level, motivation, attitudes, self-concept, and English language proficiency in their definitions of struggling readers (Addison, Final Reflection; Angela, Final Reflection; Elana, Final Reflection; Hailey, Final Reflection; Jessica, Reflection 2; Kara, Final Reflection; Kimberly, Final Reflection).

The student's lack of confidence and motivation was another factor frequently mentioned by TCs in (Elana, Final Reflection; Hailey, Final Reflection; Molly, Final Reflection). Molly said, "The biggest challenge when working with a struggling reader, I feel, is that they are too often giving up on themselves" (Final Reflection).

TCs also began to consider the impact of instruction on students' ability to read. They acknowledged that a student's reading struggles could be attributed, at least partially, to the mismatch between instruction at school and the student's learning needs or style. Additionally, TCs recognized the effect teaching methods and/or materials could have on a student's reading ability. In particular, they noted that teachers might not provide the accommodations that students needed to be successful. Molly acknowledged the role of instruction in her new definition of struggling readers: "To add to the definition I had before, I think a student may struggle with reading because they have not been accommodated to and they have just been in a reading group and not had any one-on-one instruction" (Final Reflection).

One TC gained an experiential understanding of the cognitive reading model (McKenna & Stahl, 2015), realizing that it is not one factor alone that impacts a student's ability to read, but rather it is a combination of factors. Addison grappled with this new understanding in her Final Reflection as she defined a struggling reader:

> I would define a struggling reader as one who does not have the ability to silently and orally read fluently with appropriate speed, relative accuracy, and proper expression. Struggling readers sound choppy because of their inability to decode words and smoothly transition within their reading possibly due to lack of comprehension or confidence with the text. This, in turn, affects the students' overall attitude, interest, value, and self-concept of reading as a whole. Students who struggle with reading due to the lack of proper instruction and guidance begin to acquire feelings about reading that predispose them to avoid or dislike reading altogether. These students then lose sight of the most crucial value of reading. Many struggling readers view the value of reading as a means by which to attain a good grade or receive praise for doing the "task." This affects the students' motivation to read; however, because the students are so focused on achieving a reward, they lose sight of reading to learn or to be entertained.

As TCs' conceptualization of struggling readers evolved over the course of the semester, they came to recognize that all readers, regardless of their age or reading level, have strengths and areas for growth. Kara highlighted this shift in thinking: "After taking this course and having this experience with my child during reading lab, I have learned that even the best readers can still be considered struggling readers" (Final Reflection). Throughout written reflections and Socratic seminars, TCs shifted how they viewed struggling readers from students needing significant interventions to recognizing that all students have areas for continued improvement that can be supported with responsive instruction.

Because TCs were expected to create assessment-driven instruction for their students, they began to identify students' strengths, areas for growth, and glimmers (partially correct responses) for students of all ability levels. This practice of analyzing assessment data helped TCs understand that all readers can benefit from intentional reading instruction.

Accordingly, TCs began to see the importance of their role as a reading teacher. Kelsey, in her final reflection, recognized that she needed to gather and analyze assessment data to make informed instructional decisions: "I learned that before jumping to a premature conclusion, we must find the root cause for the struggle. Do they struggle with just vocabulary or with letter sounds?"

Many TCs took increased ownership of students' learning, acknowledging that it was their responsibility as the reading teacher to be responsive to students' needs by creating the assessment-driven, student-centered instruction. Molly explained that although this was not an easy task, it was essential to the success of struggling readers: "I believe that helping these children learn to read or improve their reading skills is challenging, but with the right help and support, they will overcome their struggles" (Final Reflection). Addison similarly embraced her role as a reading teacher to match instructional strategies to students' needs and preferences, sharing her belief "that if a student is struggling with reading, that they should be taught effective strategies and techniques on how to improve their reading skills, rather than simply being told that it is the inappropriate way to read" (Final Reflection).

Assessment

TCs participating in the embedded clinical experience also underwent shifts regarding their beliefs about assessment. Initially, many of them voiced negative perceptions of assessment based on their personal experiences. Of main concern to the TCs was the high-stakes, high-pressure nature of summative and standardized tests. Kimberly talked about her anxiety related to these types of assessments: "Tests, like huge standardized tests, cause me to have extreme test anxiety and make it hard for me to concentrate, because I'm constantly watching the clock and thinking about how I might do poorly" (Reflection 1/12). Similarly, Veronica noted the impact high-pressure assessments had had on her as a learner:

> I never liked pop quizzes. I have always been an honors student and like to score my best on every assignment. Not knowing in advance to study stressed me out. These quizzes never helped me as a learner; instead, it just negatively affected my class average. (Reflection 1/12)

Kara claimed that many formalized assessments had developed a negative connotation for her given that they could be "sporadic, high-pressured graded assessments" (Reflection 1/12). Consequently, she, as well as other students, struggled with undue stress and anxiety at the pure mention of the word *assessment*.

Entering the course with such negative assessment experiences, many TCs held strong beliefs about assessment and its purpose in the educational setting. A majority of them believed that assessments were always formal and were used for the sole purpose of giving a grade and were, as a result, "scary and intimidating" (Samantha, Reflection 4/19).

Other TCs added that these types of formal assessments were often used to evaluate students' knowledge, usually at the end of a unit. For example, Kimberly shared that she believed "assessments were only used at the end of a section or unit to determine what the students learned" (Reflection 4/19). Samantha reiterated the evaluative nature of assessment: "Assessment is a way to gauge what the students know or don't know in a school setting" (Reflection 1/12). Addison agreed that assessments evaluate a student's knowledge of a subject but can be used before or after learning. In her reflection journal (1/12), Addison explained, "Assessment is a method of accumulating all of a student's prior and acquired knowledge about a specific subject or topic in order to evaluate how much the student knows regarding such topics." Initially, there was a general consensus among TCs that assessments were formal evaluations of students' content knowledge for the purpose of assigning a grade.

TCs underwent dramatic shifts in their beliefs about assessment due to the trifecta

of the course content, embedded clinical experience, and written and oral reflection. Most TCs' beliefs about the purpose of assessment changed. Whereas previously they believed the sole purpose of assessment was to assign a grade, they began to understand the important connection between assessment and instruction.

Link Between Assessment and Instruction

As TCs received instruction on data analysis and were asked to analyze their student's assessment data, they began to use this information to identify the student's strengths and areas for growth. Angela noted the importance of analyzing students' assessment data, thinking not just about the "whats," but also about the "whys": "Analyze, analyze, analyze the student data to see why they answered how they did" (Reflection 4/19). Jessica explained the importance of analyzing assessment data: "Now I know that you can use assessments with purpose. Assessments are a tool to use to understand specifics of what a child is struggling with or what they are good at" (Final Reflection).

TCs learned to look across assessments for patterns to identify areas of focus in their instruction. Both Addison and Jessica acknowledged this shift. Addison explained, "I now know how to look for her strengths, weaknesses, and glimmers and can determine where my instruction needs to fall depending on her weaknesses, and if there is an overlap in assessments that provide evidence of those weaknesses" (Reflection 3/1). Jessica noted the importance of looking for patterns in the assessment results: "Assessments give you information to think critically about and to look for patterns over several assessments and be able to meet that student's needs" (Final Reflection).

As TCs analyzed their assessment data and planned individualized reading instruction for their kindergarten and first-grade students, they began to understand the value of using assessment data to guide their instruction. Consequently, the way they characterized assessments changed. TCs came to view assessments as a "guidance tool for my lessons" (Kelsey, Reflection 4/12), a "good tool to gauge how much children know so you can tailor your lessons based on the knowledge they need most" (Kara, Reflection 4/12), and a tool to "teach you about the students" (Kimberly, Reflection 4/12). As a result, TCs learned to "use assessments with purpose" (Jessica, Final Reflection) and found assessments to be "incredibly useful when planning what to work on with students" (Samantha, Reflection 4/12). Heather exemplified her understanding in saying, "I now know that assessments should be given with the purpose of guiding further instruction" (Reflection 4/19).

With this realization, TCs used their analysis to guide their reading instruction. Kelsey emphasized the importance of analyzing assessments to make important instructional decisions: "I use the assessments to narrow down my results into their weaknesses, glimmers, and strengths and then use this data to inform my lesson planning process" (Reflection 4/19). As this quote demonstrates, once TCs analyzed students' performance across assessments, they found they made substantial positive adjustments in their lesson planning. Addison recognized this shift: "Being able to provide those assessments and then break each one down for analysis has dramatically changed the way I plan my lessons" (Reflection 3/1).

Through the direct implementation of informal assessment tools, time spent analyzing assessment data, development of assessment-driven reading lesson plans, and professional conversations, TCs developed an appreciation of the pivotal role of assessment in reading instruction in the embedded clinical experience and in their future classrooms. Kelsey captured this shift best in her Final Reflection: "It [the embedded

clinical experience] opened my eyes to the power of a teacher that assesses and plans with a purpose and how I can change a child's life."

Our analysis revealed how valuable the embedded clinical experience was in terms of developing TCs' identities as teachers. They came to understand the importance of the teacher's role in planning and student learning to ensure the student's specific needs are addressed. Their beliefs about struggling readers shifted in that they realized there is no one way to describe a struggling reader or provide the necessary instruction. In the end, TCs were more confident in their abilities, practices, and beliefs regarding literacy assessment, data analysis, and instruction.

Discussion and Limitations

Teacher education is "replete with examples of modeling, in which the teacher educator models classroom routines or activities for student teachers, such approaches generally keep student teachers in the role of students" (Grossman et al., 2009, p. 283). However, this passive approach makes it difficult for TCs to easily connect theory and practice, because they do not have the opportunity to apply what they have learned in class to working with elementary students in real-life settings. As recommended by the Blue Ribbon Panel on Clinical Preparation and Partnerships for Improved Student Learning (NCATE, 2010), teacher education needs to shift to a "clinically based preparation" (p. 8) model in order to generate educators prepared to teach in the 21st century.

The marriage of the embedded clinical experience, interactive teaching methods, and debriefing through Socratic seminar in our study situated learning in an authentic, clinically based context of teaching and learning. This model encouraged TCs to connect theory and practice as well as learn in and through practice. Content learning regarding literacy assessments and literacy instructional approaches and activities became contextualized and meaningfully integrated into the ongoing work of the embedded clinical experience. Through this model, we followed NCATE's (2010) recommendation to "revamp curricula to integrate coursework with embedded clinical experience and extended embedded school experiences and better educate teachers to use measures of student learning" (p. 19).

In this embedded clinical experience, we found that TCs' developing beliefs and practices were scaffolded. The TCs were invited to use previously learned instructional strategies, such as interactive read-alouds and guided reading, while simultaneously experimenting with ways to individualize their reading instruction to their student's specific capabilities. In this setting, TCs were freed up to focus on particular pedagogical moves without being overwhelmed by the intricacies of the classroom environment. Hence, the embedded clinical experience created a "sheltered opportunity… to engage in targeted practice of clinical skills," allowing TCs to engage and embrace "approximations of practice" (Grossman, 2010, pp. 2–3). TCs engaged in approximations of practice when they had the opportunity to experiment with and practice a small set of core practices that they will likely use in their future PK–12 classrooms.

The embedded clinical experience setting also scaffolded TCs' developing understanding of the relationship between assessment and instruction. While administering these assessments, TCs received just-in-time support from their professor related to addressing confusion, modeling procedures, and analyzing results (Hoffman et al., 2005). TCs appreciated the risk-free, comfortable environment, because it allowed them to assume the primary role of teacher as they worked with their students. They could receive instructional recommendations from their instructor and peers that were based on their

student's specific capabilities and were given immediate instructor feedback, when needed, while administering a new literacy assessment. Grossman et al. (2009) supported the need to provide TCs with constructive, substantive feedback:

> The more embedded clinical experience-like settings provide the chance for novices to get immediate, targeted feedback on their early efforts to enact components of practice (cf. Grossman et al., 2009; Lampert & Graziani, 2005), which can help them hone their practice before entering the more authentic, but also more complex, setting of the K–12 classroom. (p. 284)

The written reflection and reflective discussions in the Socratic seminar became the vehicle for TCs to puzzle through and define their beliefs and practices related to struggling readers, assessment, and assessment-driven literacy activities and approaches. The embedded clinical experience component provided a shared opportunity for all TCs to ensure this type of dialogue could occur, thus creating a community of practice (Lave & Wenger, 1991). The informal, collaborative discussions during the Socratic seminar made learning a collective endeavor in which TCs were learning from one another, capitalizing on the group's existing capabilities, and enriching their learning opportunities. In this context, TCs engaged in critical and thoughtful talk about their instructional practices, beliefs, and educational theories. Discussions, situated in the concrete tasks and artifacts of learning, enabled TCs to clarify their needs, receive constructive, substantive feedback, and collaboratively problem solve. Analyzing patterns of learning and brainstorming ideas about their instructional next steps encouraged TCs to refine their craft, adapting their instructional decisions to meet the needs of the student they worked with in the embedded clinical experience.

These ongoing, reflective discussions encouraged TCs to explore and refine their philosophical and pedagogical beliefs and prepared them for the reflective, adaptive, and responsive aspects of teaching and learning. Literature supports that when TCs participate in a community of practice that is focused on the particulars of teaching, learning, subject matter, and students, they "can deepen [their] knowledge of subject matter and curriculum, refine their instructional repertoire, hone their inquiry skills, and become critical colleagues" (Feiman-Nemser, 2001, p. 1042).

Limitations

This study demonstrated the impacts of an embedded clinical experience in teacher education coursework. The embedded clinical experience created a context and opportunity for relevant and responsive learning to occur, allowing TCs to more easily and naturally connect theory and praxis. As a result, they shifted their beliefs and practices.

However, there were limitations of this study. First, this study used convenience sampling, which limited the diversity and number of participating TCs. All 13 participants were White females enrolled in their junior year in the ECE/SPED program. All were traditional students, with ages ranging from 20 to 24. This sampling is not widely representative of TCs across the United States. Additionally, the embedded clinical experience was situated in a rural, Title I elementary school that comprised primarily White students. Again, this student population is not racially representative of the larger demographics of U.S. schools. A more diverse sampling of TCs in a wider variety of embedded clinical experience settings with a more diverse student population could enhance findings, improving the generalizability.

Further, our study examined how TCs' participation in the embedded clinical

experience impacted their beliefs, attitudes, and understanding about struggling readers, literacy assessment, and reading instruction. Although classroom teachers shared that their elementary students benefited from individualized reading instruction, we did not specifically investigate the socioemotional or academic benefits to the elementary students. Additional research could address the impacts that an embedded clinical experience approach has on both TCs and their students.

Additionally, like all qualitative researchers, we acted as a research instrument when conducting a research study. In doing so, all data and subsequent interpretations were value laden (Yilmaz, 2013). In an effort to represent the participating TCs' feelings, experiences, and perspectives accurately and objectively, we transcribed interviews and Socratic seminars verbatim. Verbatim transcription allowed us to use participating TCs' own words to support our findings that emerged during data collection and the analysis processes and to provide factual, accurate, and detailed descriptions of people, activities, interactions, and settings (Yilmaz, 2013). Bogdan and Biklen (2003) noted that a reputable qualitative paper "is well documented with description taken from the data to illustrate and substantiate the assertions made" (p. 193).

Future Research

Ball and Forzani (2009) and others (e.g., Grossman et al., 2009) have argued that centering teacher education in practice would elevate the professionalism of teaching and teacher education, helping to create better prepared teachers. A shift to practice-based curriculum, according to Grossman and colleagues (2009), would require the integration of "pedagogies of enactment" through the use of "approximations of practice" (p. 283). Designed settings, including embedded clinical experiences, create "ways to teach and learn practice...in which practice can be tried out, corrected, refined, and mastered" (Ball & Forzani, 2009, p. 504). NCATE (2010) agreed that embedded clinical experiences, in clinically based teacher preparation programs, help TCs "develop both the knowledge base and skills of professional practice" (p. 9).

Although teacher educators have experimented with a variety of designed settings, Ball and Forzani (2009) claim that "few of these settings have been systematically incorporated into contemporary teacher education" (p. 504). Here lies the gap in literature. Research has proven the need for practice-focused teacher education programs (e.g., Darling-Hammond & Bransford, 2005; NCATE, 2010), but there is little research on the systematic integration of embedded field experience beyond field internships. Therefore, there is an increased need for research that explores the ways teacher education can become practice centered. Further, research should focus on ways teacher preparation programs can be revamped to integrate coursework with embedded clinical experiences or other designed settings to allow TCs continuous opportunities to work directly with students as they are studying theory, content, and the pedagogy of teaching. To adopt a clinically based approach to teacher education that includes extensive embedded field experience, further research is needed on the partnership between academic faculty, teacher education faculty, and school and community partners.

Conclusions

Few would argue with the idea that teachers are key to student learning and success. Unfortunately, there is inconsistency in student learning across the country. This could be attributed, at least in part, to the fact that teachers are entering their first classrooms underprepared (du Plessis et al., 2020; Levine, 2006). Many have appealed for a "complete overhaul" (NCATE, 2010, p. 2) of teacher education programs, demanding

that programs be dismantled and redesigned. Historically, teacher preparation programs are often segmented between university coursework and field placements, accentuating a theory–practice divide and perpetuating the shortcomings of TCs. The answer lies, in part, in a clinically based approach (Ball & Cohen, 1999; Benedict et al., 2016; Grossman, 2010; Haverback & Parault, 2008; ILA & NCTE, 2017; NCATE, 2010). NCATE (2010) argued that "prospective teachers must be prepared to become expert practitioners who know how to use the knowledge of their profession to advance student learning and how to build their professional knowledge through practice" (p. 2).

To achieve this aim, teacher preparation programs can reposition practice as central. This involves abandoning traditional paradigms of teacher education and redesigning teacher education programs to include "a deliberate seamless curriculum that spirally integrates coursework and laboratory experience with extended embedded school experiences" (NCATE, 2010, p. 19). Integrating more practice-based methodologies, such as embedded clinical experiences, provides a means to authentic, practical learning and varied levels of scaffolding for TCs. Within these sheltered experiences, professors, as mentors, can offer increased levels of support; provide feedback that is responsive, ongoing, and specific; apprentice TCs as they develop and refine their teaching craft; and guide them in becoming critical practitioners.

In this context, TCs have the time, space, and support to engage and embrace their "approximations of practice" (Grossman, 2010, pp. 2–3), helping them learn, implement, and refine a new and targeted practice. When given this time to develop complex analytic and practical skills in a supervised, embedded clinical experience setting and a collaborative Socratic seminar, TCs are more likely to deepen their knowledge, solidify their beliefs about teaching and learning, and transfer their learning from their coursework to the realm of practice. This practice-based work (Ball & Forzani, 2009; Grossman et al., 2009; NCATE, 2010) has the potential to transform teacher education, alleviate the concerns regarding quality teacher education (du Plessis et al., 2020; Kraft et al., 2020; Levine, 2006; Rust, 2010), and develop TCs into literacy teachers who are better prepared to teach in the 21st century.

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APPENDIX A

Questions to Guide Weekly Self-Reflections

1. What worked well today during your lesson?

2. What did not go well in your lesson and/or what improvements would you like to make in future sessions or lessons?

3. As you were teaching your lesson, did you make any modifications in your instruction for the students?

4. What would you still like to learn that might help you better meet the diverse needs of the students?

5. What shifts have you experienced in your beliefs and practices as related to reading and writing instruction?

APPENDIX B

Socratic Seminar Information

Purpose: Deepen our understanding of the ideas and values in a text/experience.

Background:

The participants carry the burden of responsibility for the quality of the discussion.

The discussion is not about right answers; it is not a debate.

There is time to think out loud and to exchange ideas openly while examining ideas in a rigorous, thoughtful, manner.

Norms

- Don't raise hands.
- Listen carefully.
- Address one another respectfully.
- Base any opinions on the text or experience with your student.
- Address comments to the group (no side conversations).
- Use sensitivity to take turns and not interrupt others.
- Monitor "air time."
- Be courageous in presenting your own thoughts and reasoning, but be flexible and willing to change your mind in the face of new and compelling evidence.

Fish Bowl Procedures

- Class will be divided in half.

- Inner circle: Participate in the Socratic Seminar.

- Outer circle: Take notes on partners' participation using a checklist; take notes of things they are thinking about as a result of the conversation.

- Debrief: 2-minute debrief with their partner.

- Switch roles.

Quotes for Socratic Seminars

"Appropriate instruction stems from and is interwoven with accurate and pertinent diagnostic information for all learners. Teachers are continually gathering this information and are constantly making hunches along the way to determine what readers might need to learn. Teachers look for a pattern of behavior across different reading experiences and assessments to inform and confirm their hunches. They then design instruction to play out their hunches" (Opitz & Erekson, 2015, p. 5)

"The primary purpose of assessment is to gather data to inform teaching. If assessment does not result in improved teaching, then its value in school diminishes greatly. Assessment allows us to see the results of our teaching and allow us to make valid judgements about students' literacy" (Fountas & Pinnell, 1996, p. 73).

"As teachers we have theories about learning and teaching that we refine and revise every day in our work with children. Our theories our incomplete in that we are continually testing them against our observations of and interactions with individual children" (Fountas & Pinnell, 1996, pp. 73–74).

"If you hope to influence students' attitudes toward reading in a truly substantial way, you must first know something about your children. How positive are their attitudes? What are their likes and dislikes? How do their friends and family feel about reading? How much do they value the ability to read? Do they view themselves as readers?" (McKenna & Stahl, 2015, p. 239).

"Remember that the purpose of selecting and using the assessment tools is to discover information about students that can then be used to design purposeful, targeted instruction" (Opitz & Erekson, 2015, p. 78). How can I use what I discover?

Children who are proficient readers

- attempt to make what they read sound like language and make sense;

- monitor what they read to make sure that it is making sense and that it is coherent;

- construct meaning using the text, their purpose for reading, and their background knowledge;

- flexibly use a variety of strategies such as rereading, substituting words that make sense, decoding, and using text aids when meaning is disrupted;

- sample print selectively using both visual and nonvisual information;

- vary their rate of reading depending on the purpose for reading;

- correct miscues more often than not;

- correct miscues that disrupt the meaning of the text they are reading;
- read in chunks rather than letter by letter.

(Opitz & Erekson, 2015, p. 273)

APPENDIX C
Semi-structured Interview Protocol

1. Describe some of the positive experiences you had while participating in the reading lab.
2. Describe any negative experiences you had while participating in the lab.
3. What kinds of things did you learn about reading and writing instruction while participating in the reading lab?
4. Have you utilized what you learned in the reading lab in your current placement classroom, and if so, how?
5. Will you continue to use some of the instructional strategies you learned about in the lab in your classroom in the future? Why or why not?
6. What suggestions do you have for improving the reading lab for future students?
7. What suggestions do you have for improving this course for future students?