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Walden University 2023

Abstract

General Education Teacher Perceptions of Challenges Teaching Reading within the

Response to Intervention Framework

by

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MS, Walden University, 2007

BA, Humboldt State University, 2001

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

Walden University

February 2024

Abstract

Improving student outcomes in reading has been in the national spotlight for decades and a plethora of research exists to support instruction rooted in the science of reading through a multi-tiered approach. Despite this extensive body of research, there continues to be high numbers of youth not reading proficiently across the nation. In one California community, the problem grounding this study was that general education teachers in one elementary school struggled to implement reading within the Response to Intervention (RTI) framework in reading. Using qualitative methods, data were collected about the perceptions of the challenges general education teachers encountered when teaching reading within Tier 1 and 2 of RTI as well as their suggestions for addressing these challenges. The results of data analysis, using open and axial coding with thematic analysis, indicated that teachers needed additional training and support to increase their knowledge of the foundational reading skills and transfer that knowledge to classroom practice. The outcome of this study is a four-day professional development on reading foundational skills rooted in the science of reading, accompanied by literacy coaching. This response will improve teacher knowledge, practice, and efficacy, thus improving student reading outcomes.

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Section 1: The Problem

The Local Problem

The local problem was that general education teachers in one elementary school struggled to implement Response to Intervention (RTI), a systematic approach to instruction and intervention to identify students at risk of academic difficulties early and provide targeted support for reading. RTI is data-driven and multi-tiered (California Department of Education, 2022a). General education teachers are most commonly responsible for Tier 1 and Tier 2 of the RTI model (Arias-Gundín & Llamazares, 2021). According to the principal, a teacher, and survey data gathered from the project student site, teachers felt more challenged than ever to teach reading through RTI (personal communications, May 2022 & September 6, 2022).

Although RTI has a significant research base and is viewed optimistically in the education field, there are still significant challenges and limitations associated with it (Bester & Conway, 2021; Gersten et al., 2017; Leonard et al., 2019). Some of these challenges result from poor guidance stemming from federal legislation (Berkeley et al., 2020; Braun et al., 2020; Green et al., 2021; Thomas et al., 2020). The trickle-down effect is that school-level implementation may be impacted by a lack of leadership and coordinated efforts to lift such an initiative as RTI with fidelity. Several studies note that RTI is also limited by a lack of resources and high-quality training with ongoing professional support resulting in highly skilled, knowledgeable teachers (Al Otaiba et al., 2019; Alahmari, 2019; Benedict et al., 2021; Bester & Conway, 2021). Several

authorities point out that a gap exists between RTI research and practices used in the field (Berkeley et al., 2020; Vollmer et al., 2019).

In addition to the challenges associated with implementing RTI, the content must also be considered a contributing factor to the challenges facing teachers, and in this study, the content is reading. Reading is a highly complex skill to learn and teach, but successfully acquiring it is crucial to be an independent, high-functioning individual (Arias-Gundín & Llamazares, 2021; Moats, 2020). The human brain is not pre-disposed for reading, which requires, for most children, highly systematic instruction in beginning reading skills and concepts rooted in evidence-based practices (Cohen et al., 2017; Wolf et al., 2016). Even with this, many children still experience struggles when learning to read due to disability and weak or missed instruction. Literacy instruction is nearly as complex as learning to read (Hudson et al., 2021; Moats, 2020; Paige et al., 2021). Significant debates and shifts in philosophy and pedagogy have occurred over the past several decades in the United States about how reading should be taught, often resulting in classroom practices and teacher knowledge diverging from what the research points to as effective practices (Moats, 2017).

The problem under investigation in this basic qualitative project study was that local elementary general education teachers were required to teach reading within the RTI framework yet struggled to address the wide array of student needs. The teachers' perceptions of challenges with reading instruction within the RTI model had not been examined. Further examination of these perceptions may aid administration and teacher

leaders in knowing how to support or train teachers to respond effectively to the challenges they experience when teaching reading within the RTI framework.

Rationale

The problem of this basic qualitative project study was that general education teachers at one northern California elementary school struggled to address the wide variance of student needs in reading through the RTI framework. I initially observed this during a School Site Council meeting facilitated by the school principal on March 15, 2022, where the team reviewed the school-wide academic data and discussed the site's system and needs. This struggle was further highlighted in later conversations with the school principal and a teacher at the project site (personal communications, May 2022 & September 6, 2022). The teacher indicated the wide range of reading skills and proficiency among students in their classroom was staggering, and the teacher was overwhelmed by the amount and intensity of student needs. The teacher indicated never having had a class with as wide of a range of reading skills and proficiency in the past. More students were entering the class unfamiliar with basic print and text concepts, yet several students were reading above grade level upon entry. The contrasting need within the class poses an ongoing challenge. The teacher expressed being overwhelmed at the amount of and intensity of needs and indicated that several other teachers at the study site had similar experiences.

Despite implementing RTI, the school's academic data substantiated the observations and comments of the teacher and principal. English Language Arts (ELA)

statewide assessment data indicated that anywhere from half to two-thirds of students in the school were not meeting standards on the most recently available statewide achievement tests, as shown in Table 1 below (California Department of Education, n.d). Despite implementing RTI, many students matriculate without having mastered all grade-level reading skills and concepts. Table 1 demonstrates this at the study site. It shows student performance data on statewide summative assessments, focusing on reading-specific standards (California Department of Education, n.d.). According to the California Department of Education (n.d.), the Near Standard Category includes students whose overall performance was at or near the standard, meaning some students in this category met expectations and some did not. As indicated by the Below Standard data, at least one-third of students fail to meet reading standards annually each year. The data shown in Table 1 justifies the school's need for a tiered system of interventions.

Table 1

Area Achievement Level Descriptors for All Study Site Students in Reading

School Year	Above Standard	Near Standard	Below Standard
2021-2022	9.79%	56.95%	33.26%
2018-2019	22.54%	41.62 %	35.84 %
2017-2018	19.55%	48.27%	32.18%
2016-2017	14.44 %	47.07%	38.49%
2015-2016	20%	45%	37%
2014-2015	16%	40%	44 %

Note. Figures in Table 1 may not add to 100% due to rounding. Statewide testing was suspended for 2019-2020 and 2020-2021 due to COVID-19 (California Department of Education, n.d.).

The study site utilizes iReady to assess student progress and inform instructional decisions, including placement in RTI groups. iReady offers diagnostic assessment and personalized computer-based instruction for students (Curriculum Associates, 2022). Table 2 displays data from iReady Reading assessments administered at the study site during the 2021-2022 school year. While the percentage of students two or more academic years below grade level in reading has decreased over the school year, the final figures remained dismal. They indicated that teachers likely struggled to meet all students' needs present in their classrooms. These figures also validated the comments made by the principal and teacher. At the state level, the California Department of Education (2022) reported that the pandemic created additional impacts and challenges on our school system, including widening the achievement gap between student groups.

Table 2Percentage of Students Two or More Academic Years Below Grade Level on iReady Reading, 2021-2022 School Year

Grade Level	Fall	Mid-Year	End of Year
3	51%	43%	42%
4	33%	28%	26%
5	49%	36%	40%
6	52%	35%	31%

In the 2020-2021 school year, the state allowed local education agencies to use statewide assessments or other standards-aligned assessments if the statewide assessments could not be reliably administered because of the pandemic (California Department of Education, 2022). Thus, the Region 15 Comprehensive Center at WestEd, upon the request of the California State Board of Education and the California Department of Education, compiled local assessment data available through three publishers, including iReady. The study site was included in this group. According to the report, there were five different categories for performance distribution ranging from "Three or more years below grade level" to "Mid or above grade level" (Region 15 Comprehensive Center at WestEd, 2022). This means that teachers at the study site can have students from at least five different grade levels in reading within one group.

General education teachers are most often responsible for delivering instruction and intervention under the first two tiers of RTI (Arias-Gundín & Llamazares, 2021; Berkeley et al., 2020). In September 2022, a brief survey of teachers was conducted at the project study site to probe their perceptions of teaching reading at Tier 1 and Tier 2. The

results showed that half of the 25 respondents reported feeling extremely challenged or very challenged providing Tier 1 reading instruction; approximately one third of the respondents reported feeling extremely challenged or challenged providing Tier 2 reading instruction. Nearly all participants saw the value of RTI implementation and reported believing resources, support, or training that would help them teach reading more effectively within the tiers they were responsible for teaching.

The purpose of this qualitative case study was to investigate the perceptions of local elementary general education teachers about the challenges they encountered when teaching reading within Tier 1 and 2 of RTI and obtain their suggestions for ways to address these challenges. Perception data informs program leaders about their program's challenges and strengths, allowing them to identify and address gaps (Meyers et al., 2019). By understanding teacher perceptions of teaching reading through RTI at the project study site, the administration can optimize their site-based efforts and resources to ensure all students benefit from high-quality reading instruction and intervention.

Definition of Terms

Intervention: A general term to describe any additional support provided to a student or students experiencing difficulty in a content area, such as reading (Balu et al., 2015).

Response to Intervention: A multi-tiered service delivery framework centered around high-quality classroom instruction, universal assessment, progress monitoring,

research-based interventions, and fidelity of interventions (Arias-Gundín & Llamazares, 2021).

Significance of the Study

This study is significant in that it addressed a gap in practice happening at the local level related to student reading outcomes. The results of this study can inform educational leaders at the school and district of the challenges general education teachers experience when teaching reading within Tier 1 and 2 of the RTI framework. Educational administrators and teacher leaders will gain insight into what is needed at the site to address these challenges. Thus, they can provide the needed leadership, coordination, resources, or training for teachers to provide high-quality instruction to students in reading through RTI (see Benedict et al., 2021; Thomas et al., 2020).

Research Questions

The following research questions guided this study:

RQ1: What are teacher perceptions of the challenges of teaching reading within Tier 1 and 2 of RTI?

RQ2: What training, support, or resources do teachers suggest for improving their capacity to provide reading instruction within Tier 1 and 2 of RTI?

Review of the Literature

As I began this study, it was important that I synthesized my existing knowledge with the latest research from the field. By conducting a literature review of timely and

relevant research, I was able to establish a foundation with which to further justify and shape this study. The following sections highlight my findings from the literature review.

Conceptual Framework

The conceptual framework for this study is RTI. I used this framework to review related literature and understand the perceptions of one elementary school's general education teachers who teach reading through this model. RTI is a multi-tiered service delivery model or framework focusing on systematic prevention and early intervention in an educational setting (Arias-Gundín & Llamazares, 2021; Bester & Conway, 2021; Gersten et al., 2017; Grapin et al., 2019; Siegel, 2020). The core components of RTI include high-quality instruction, evidence-based practices, universal screening, progress monitoring, and data-based decision-making (Arias-Gundín & Llamazares, 2021; Grapin et al., 2019). Strong leadership and coordinated efforts at the school level are essential for effective RTI implementation (Leonard et al., 2019).

Most commonly, RTI is viewed as a three-tiered model in which students who are non-responsive to the instruction and intervention of one tier may move to the next where they will receive more intensive support. When the core components of RTI are implemented with fidelity, it can be expected that approximately 80-85% of the student population will be successful with Tier 1 alone (Grapin et al., 2019; McKinney & Snead, 2017). This tier contains the core instructional or universal program provided to all students, usually delivered in whole class settings.

However, not all students will succeed with Tier 1 support alone; approximately 15-20% may require Tier 2 or Tier 3 support (McKinney & Snead, 2017). Tier 2, often delivered in small group settings, focuses on strategic interventions designed to fill in student skills or knowledge gaps. Students responsive to Tier 2 interventions move back to Tier 1 support, but unresponsive students move to Tier 3 interventions. Often provided one-on-one or in very small groups, this tier provides the most intensive level of interventions offered in the general education setting (Arias-Gundín & Llamazares, 2021; Bester & Conway, 2021; Grapin et al., 2019; Leonard et al., 2019).

Educators can use RTI as a conceptual framework to plan and implement instruction and intervention that is responsive to the diverse needs of all students. It offers a proactive and timely approach to identifying at-risk students with poor learning outcomes, delivering an evidence-based intervention, monitoring progress, and engaging in data-based decision-making (Gersten et al., 2017). The RTI model does not wait for students to fail but instead uses periodic screening measures to identify at-risk learners for early intervention. The tiers of RTI can also reference how a school or district defines, organizes, and manages its systems, data, and practices. High levels of leadership and coordination are required to ensure the full implementation of RTI (Leonard et al., 2019). According to the American Institutes of Research (2023), the success of a tiered prevention system requires continuous evaluation and continuous improvement. Educational agencies must actively examine local capacity, provide ongoing professional learning, develop, and refine structures and protocols, and engage educational partners.

The RTI framework grounded this project study. The study's research questions were framed around reading instruction through RTI Tier 1 and Tier 2, most often taught by general education teachers. Therefore, this study utilized general education teachers as the primary data source. Interviews were conducted using questions framed through the core elements of RTI as it is associated with reading. They sought to probe some of the common challenges uncovered about RTI through an exhaustive literature review.

Review of the Broader Problem

The focus of this research has been on RTI and reading instruction. RTI has been extensively researched and is a standard educational model to support content-area instruction and intervention. Additionally, I researched reading instruction as it is the content area focus of this project study. While conducting the literature review, I examined challenges faced by teachers related to reading instruction and RTI.

The literature review was conducted using peer-reviewed articles and journals searched from Google Scholar, Ebsco, Ed Source, Eric, Taylor and Francis, and SAGE Journals. Keywords utilized in these searches include *challenges or barriers or difficulties or issues or problems or limitations or obstacles, elementary school or primary school or grade school, multi-tiered systems of support or MTSS, qualitative, reading, reading comprehension, and response to intervention or RTI.*

Federal Legislation

Equity and access to education have been the government's long-standing responsibility with several landmark acts of legislation occurring in the early 21st

century. Updating the 1965 Elementary and Secondary Education Act (ESEA), the No Child Left Behind (NCLB) Act of 2001 guided K-12 education from 2002 to 2015 (Klein, 2015; Rinaldi et al., 2011). The legislation was designed to minimize the achievement gap between underperforming student groups and their more affluent and advantaged peers; it also ensured that all students would be proficient by 2014. As such, NCLB targeted students of color, those living in poverty, receiving special education services, and English Language learners through high stakes testing and accountability (Kamenetz, 2014; Klein, 2015; Lee, n.d.).

Until NCLB, the federal government had not held schools accountable for student achievement. Schools were required to achieve specific improvement targets known as adequate yearly progress and were penalized when they did not. Title 1 schools, which were established under ESEA and often serve the most disadvantaged students, were most affected by this legislation and have often faced with state-level intervention (California Department of Education, 2022b; Klein, 2015; Lee, n.d.; Schueler et al., 2022). From 2006 to 2011, the number of our nation's schools labeled as failing increased to nearly 40% (Klein, 2015). By 2014, some states saw up to 50-70% of schools not making adequate yearly progress (Kamenetz, 2014). Despite NCLB's apparent failures, it pushed schools to focus on student achievement and growth, bringing to focus the equity and achievement gap experienced by many disadvantaged student groups.

During the tenure of NCLB, Congress reauthorized the Individuals with Disabilities Education Act (IDEA) in 2004. This federal law guarantees children with disabilities the right to a free and appropriate public education in the least restrictive environment (U.S. Department of Education, n.d.). IDEA was meant to be complementary legislation to NCLB, and arguments were made that all student needs would be met when both were enacted and implemented. One educational element stemming from this legislation was a push to have better service delivery models to support struggling students (Berkeley et al., 2020; Gersten et al., 2017; Rinaldi et al., 2011; Savitz et al., 2018).

In many instances, students were referred to special education simply for failing in the general education setting with no interventions applied (Berkeley et al., 2020; Gersten et al., 2017; Rinaldi et al., 2011). IDEA called for scientific research-based interventions to be employed, of which RTI surfaced to the top across many states. RTI intended to provide high-quality first instruction and interventions matched to student needs, guided by data and progress monitoring, to all students before the student was referred to Special Education. For students with suspected learning disabilities, RTI also served as an alternative process for identification (Berkeley et al., 2020; Rinaldi et al., 2011).

However, IDEA was ambiguous and left much up to interpretation to the state and local levels. For example, the distinctions between tiers or frequency of assessments were not specified in the legislation leading to discrepancies amongst implementers (Wilcox et

al., 2013). This overall lack of guidance and clarity created a more significant opportunity for variation and challenges amongst the school-based implementers whose knowledge and preparedness are most often associated with the ultimate failure or success of an initiative at any level (Berkeley et al., 2020; Braun et al., 2020; Green et al., 2021; Thomas et al., 2020).

The Every Student Succeeds Act (ESSA) of 2015 replaced NCLB. When this occurred, technical changes were made to IDEA to ensure its alignment with ESSA (U.S. Department of Education, 2017). ESSA continues the focus on ensuring access and equity within education but within a less punitive and more flexible framework than its predecessor. Greater responsibility for student achievement and growth was placed at the local and state levels without the federally sanctioned interventions that resulted in limited school turnaround (Schueler et al., 2022). ESSA continues to call for comprehensive, multi-tiered frameworks to promote learning and support for all students but braids both academic and non-academic areas. Often referred to as a Multi-Tiered System of Support (MTSS), RTI is often seen as the academic strand of this larger framework, which may also include support for behavior, social emotional learning, behavioral health, and attendance (Berkeley et al., 2020; Braun et al., 2020; California Department of Education, 2022a; Orange County Department of Education, n.d.).

Reading

Reading in schools has long been scrutinized and debated (Moats & Tolman, 2019; Petrilli, 2020). In 1997, the United States Congress requested convening a National

Reading Panel. The panel conducted an intensive review of over 100,000 research studies. They were to document the most effective evidence-based practices for teaching reading, describe the effective methods of reading instruction, deliver this knowledge to the field, and propose a plan for continued research (National Institute of Child Health and Development, 2019).

Published in their 2000 report, the National Reading Panel marked the broad consensus on how children learn to read and should be taught to read amongst the scientific community (Arias-Gundín & Llamazares, 2021; Hudson et al., 2021; Moats, 2020). The panel detailed five essential components of reading instruction: phonemic awareness, phonics, fluency, vocabulary, and comprehension (Balu et al., 2015). These concepts are often used when discussing the science of reading (Moats, 2020; Paige et al., 2021).

As a result of the National Reading Panel's report, the Reading First Initiative was enacted. This initiative provided funding to states with the intent to improve elementary student reading achievement. To be granted the funding, states applied and guaranteed the funding would be used to provide comprehensive professional development for teachers and classroom curriculum, and instructional materials would be based on scientifically based research as named in the National Reading Panel report (Gamse et al., 2011).

Science of Reading

A mental model to help one think about how these five components impact reading is Gough and Tunmer's model, known as the Simple View of Reading (SVR) (Catts, 2018; Moats & Tolman, 2019). Introduced in 1986 by Gough and Tunmer, the SVR asserts that reading comprehension is the product of word recognition and language comprehension (Catts, 2018; Moats & Tolman, 2019). Catts (2018) asserted that SVR has led to many advancements in reading instruction since its inception. However, its simplistic design may lead to many false impressions of how complex reading acquisition is. In 2001, a reading researcher and developmental psychologist, Hollis Scarborough, introduced a more sophisticated adaptation of the SVR. Known as Scarborough's Reading Rope, this model demonstrates the strands embedded within the SVR's language comprehension and word recognition domains and how they ultimately weave together to lead to skilled reading or reading comprehension (Moats & Tolman, 2019).

Gap Between Research and Practice

Despite the overwhelming evidence rooting the science of reading, there is a marked discrepancy between the research and its transference to practice in the field (Hudson et al., 2021; Moats, 2020; Moats & Tolman, 2019; Paige et al., 2021; Petrilli, 2020). Multiple factors may influence that discrepancy. To that end, teacher preparation and knowledge for reading and reading instruction must be considered.

According to Hudson et al. (2021), research on the efficacy of teacher preparation or preservice programs shows a varied approach to how reading is addressed. Ensuring

that teacher preparation programs are aligned with the science of reading, with a high focus on foundation skills, is essential to closing this gap (Hudson et al., 2021; Moats, 2020). Hudson et al. (2021) conducted a meta-analysis of empirical studies examining teacher preparation programs' impact on teacher knowledge of phonological awareness, phonics, and morphological awareness. The study also examined the most beneficial types of preservice experiences. In their review of 20 studies, they found all studies showed a statistically significant increase in teacher knowledge in the areas above with varying effect sizes. They also asserted that the reviewed research highlights the need for high-quality field-based learning due to the complexity of reading acquisition and instruction.

Field-based experiences offering expert guidance and coaching to preservice educators are critical to their growth as reading teachers (Hudson et al., 2021). Using Hedge's *g*, the authors determined the effect size of preparation programs focused on developing teacher knowledge of phonemic awareness, phonics, and morphological awareness. The authors asserted an effect size of 0.8 of greater was large. One particular study that included a 2-day intensive training, followed up by monthly trainings and intensive mentoring including co-planning and co-teaching, produced effect sizes of 2.56 in teacher knowledge of phonemic awareness and 1.82 in phonics. Another study centered on developing teacher knowledge in phonics through miscue analysis and diagnosis, including watching expert instruction and receiving individualized feedback while proving instruction resulted in an effect size of 55.32 (Hudson et al., 2021).

The theme of the Hudson et al. (2021) findings is echoed in the findings of Meyers et al. (2019) in that preservice field-based learning is invaluable for those entering the teaching profession. The results of the qualitative study examining the perceptions of preservice teachers and teacher educators revealed that they felt their preservice experience was insufficient to prepare them to address the challenges they would encounter as novice teachers. These findings contrasted with the teacher educators' perceptions, who felt students were well prepared. It should also be noted that of the three university programs in the study, the amount of instruction and field-based learning time varied greatly (Meyers et al., 2019). According to Moats (2020), university coursework in reading can range on the low end from six to nine to 12 to 15 hours on the high end, which is insufficient for preservice educators to learn about how one learns to read or how to teach reading.

Finally, it must be considered how teacher preparation and literacy knowledge link with self-efficacy. Self-efficacy affects motivation, effort, and persistence when facing complex tasks such as teaching reading. Results from a study of preservice teachers showed that as field experience increased, so did levels of self-efficacy (Ciampa & Gallagher, 2018). This is an essential consideration for preservice programs and school officials. Teachers with a higher level of self-efficacy are more likely to be more confident in their abilities, have more job satisfaction, less stress, remain in the profession, and have a higher effect on student achievement (Barni et al., 2019; Cansiz & Cansiz, 2019; Jordan et al., 2019).

Teacher Perceptions of RTI

Since general education teachers are most often responsible for Tier 1 and Tier of RTI, exploring their knowledge and perceptions is essential to understand how RTI is perceived and practiced since the success of implementation often is attributed to the knowledge and ability of these teachers (Al Otaiba et al., 2019; Alahmari, 2019, 2019; McKinney & Snead, 2017). Research evidence suggests that many teachers positively perceive RTI as a means to support student achievement (see Bester & Conway, 2021; Braun et al., 2020; Regan et al., 2015; Thomas et al., 2020). The evidence also suggests educators experience many challenges regarding RTI including lack of knowledge and training, support, and resources.

Knowledge and Training

There is a wide range of knowledge surrounding the core components of RTI among different levels of educators. Teacher educators are one of these groups. A 2019 survey of teacher education program directors from accredited colleges or university programs throughout the United States suggests minimal training for preservice teachers on RTI (Vollmer et al., 2019).

This study showed that 44.2% of participants had no or minimal familiarity with RTI. Sadly, many participants did not express RTI as a priority in teacher education. In all, 26.3% of the respondents felt RTI is a Special Education initiative and does not apply to General Education teacher candidates (Vollmer et al., 2019). While participants noted their program may have provided exposure to RTI, depth of training was often lacking, as

shown by the data. Over 20 percent of respondents reported that their programs do not cover RTI due to time or instructor knowledge and support (Vollmer et al., 2019).

While the final sample size of Vollmer et al.'s (2019) study was small compared to the number of individuals invited to participate, the number of preservice teachers affected by each of participant likely ranges from the hundreds to thousands. Vollmer et al.'s (2019) findings are crucial for school and district administrators to consider. They should not assume teachers are entering their schools with the skills or knowledge needed for effective, quality RTI implementation. Ongoing teacher training will be needed to support both novice and experienced teachers.

Studies of novice and experienced teachers indicate surface-level training on RTI may occur with teachers reporting a lack of, and need for, in-depth training on how to implement tiered instruction and when to intensify support (see Al Otaiba et al., 2019; Regan et al., 2015; Thomas et al., 2020). Multiple studies cite the need for teacher training on collaborative, data-based decision-making and ongoing support to connect to actual classroom practice and RTI (see Al Otaiba et al., 2019; Alahmari, 2019; Bester & Conway, 2021; Braun et al., 2020; Thomas et al., 2020). Strategic professional development is needed in RTI that is differentiated by teacher needs, experiences, and levels (McKinney & Snead, 2017). Additional training opportunities may be required to support teachers of specific student populations or needs by content area, instructional strategies, or technology related to RTI (Kressler & Cavendish, 2020).

Support and Resources

RTI requires coordinated efforts and support across a school system (Savitz et al., 2018). An individual teacher may be the first line of defense when serving and supporting their students, but support for the teacher is often overlooked. In a comprehensive literature review of teacher perceptions of RTI, Alahmari (2019) reported that a lack of consistent and coherent support from school and district administration was detrimental to RTI implementation. To this end, additional studies also noted poor administrative support, including a lack of communication surrounding documentation and process, was problematic (Braun et al., 2020; Thomas et al., 2020). Time is also a common element of administrative support educators see as lacking. Educator time is required to provide the intervention and assess, collaborate, and engage in professional learning (Alahmari, 2019; Bester & Conway, 2021; Kressler & Cavendish, 2020; Regan et al., 2015; Thomas et al., 2020).

RTI and Reading Studies

The RTI framework has and can be applied to any content area but is commonly paired with reading. Numerous studies have taken place that explore the application of Reading through RTI. One of the most notable studies was the Evaluation of Responses to Intervention Practices for Elementary School Reading (Balu et al., 2015). Done at the request of the U.S. Department of Education, this evaluation of RTI used a regression continuity design to uncover the impact of RTI. It significantly differed from earlier studies of RTI which examined the overall effectiveness of RTI (Balu et al., 2015;

Gersten et al., 2017). This study compared and described school-based RTI practices across multiple states, how schools provided reading services to different skill levels, and determined the impact on reading outcomes on students slightly below grade level standards using the school-determined standards and cut-offs (Balu et al., 2015; Gersten et al., 2017).

The Balu et al. (2015) study did not produce promising results. While all schools in the study groups utilized a tiered framework for reading instruction and intervention, there were marked differences in the frequency and duration of instruction and intervention, staff allocation, and data-based decision-making. These findings could be attributed to the lack of clarity and guidance of NCLB and IDEA. Further, the student outcome data in reading was bleak. Students in grades 2 and 3 showed no statistically significant gains because of Tier 2 or 3 intervention. Worse, students in grade 1 showed a statistically significant negative effect (Balu et al., 2015). Gersten et al. (2017) asserted that the number of grade 1 students receiving intervention across all the study sites was 41%, exceeding the typical 15-20%. This could indicate a potential issue with core, Tier 1 instruction, or how students are identified with intervention. Balu et al. (2015) stated many schools in the study supplanted core instruction with intervention which is problematic in the RTI model. All students should have participated fully in Tier 1, with Tier 2 and 3 interventions in addition to that instruction.

The response to Balu et al. (2015) from the research community raised much debate. Some felt the study showed RTI as ineffective, and some felt the study design to

be problematic; however, these reviews may have oversimplified the design and misconstrued the results (Gersten et al., 2017; Grapin et al., 2019). Balu et al. (2015) used a regression discontinuity design instead of randomized control trials (RCT), which are considered more rigorous. However, RCT would have required some study sites to implement RTI and some not to implement RTI, essentially discontinuing an established practice (Gersten et al., 2017).

Using RCT as the study design would have been problematic for several reasons. First, it had the potential to violate state and federal legislation. Second, it could frustrate school staff by asking them to discontinue or change relatively new practices. Third, it could create further inequity and a lack of support for students at the sites that would need to discontinue RTI. Given these reasons, a regression continuity design was the best option for the circumstances (Gersten et al., 2017). Whichever side of the argument one stands on regarding the national study, it does indicate that reading instruction and intervention in the United States have room for improvement (Moats, 2017).

Positive Findings

Despite the previously mentioned findings, Balu et al. (2015) asserted, as part of their literature review of 27 other studies, that well-designed and implemented tiered interventions positively impact student reading outcomes. While dated, the Balu study provides a historical perspective in the development and research surrounding RTI. Other studies stemmed from it, with a variety of designs, adding credibility to this assertion in that RTI on student reading (Arias-Gundín & Llamazares, 2021; Coyne et al., 2018; Fien

et al., 2021; Foorman et al., 2018; Gersten et al., 2020; Nilvius & Svensson, 2022; Siegel, 2020; Smith et al., 2016; Stevens et al., 2020). Gersten et al. (2020) conducted a meta-analysis of studies on reading interventions for struggling readers through third grade. Included studies employed either RCT or quasi-experimental designs. Their findings revealed that all interventions had significant positive effects on various reading measures, indicating that students benefit from tiered reading intervention.

In a longitudinal study examining the effects of RTI implementation on reading outcomes in Florida elementary school students, results indicated that RTI positively affected student reading outcomes and noted that results are more significant the earlier intervention begins (Grapin et al., 2019). Early intervention in the RTI model produced students with better reading outcomes who required less intervention as they matriculated (Siegel, 2020; Smith et al., 2016). Fien et al. (2021) conducted a conceptual replication of Smith's (2016) study and produced similar results, reporting that first graders with early intervention experienced improved decoding, word reading, and fluency. Foorman et al. (2018) conducted an RCT study comparing an embedded and stand-alone intervention and found that both interventions increased student reading outcomes. In a recent study by Nilvius and Svensson (2022), second-grade students in an RTI group all demonstrated rapid reading development due to the intervention. Despite the advantages of early intervention in a student's education, RTI is effective for all elementary-age school students (Grapin et al., 2019).

Implications

This study may positively influence educational change at one elementary school by identifying and responding to teachers' challenges in teaching reading through RTI.

Based on the literature review and the data collection for this study, there is a need for additional teacher training on the foundational skills of learning to read and the implications of those within the elementary classroom. They also expressed the need for ongoing teacher support following the training, through a literacy coaching model.

The final result of this study culminated with four-day professional development series, with targeted literacy coaching for teachers focusing on building their knowledge and skills to teach and support foundational reading skills in the elementary classroom.

This response will minimize teachers' challenges when teaching reading through RTI.

Teachers will be better equipped to provide direct instruction and intervention in reading.

Early intervention research indicates more advantageous student outcomes in reading, including the reduced need for RTI later in their educational career (Grapin et al., 2019).

With their challenges addressed, the study site teachers will be able to respond more effectively to the needs of their young readers, reduce their stress, and increase their efficacy. The implication is that improved teacher efficacy will result in better reading outcomes for students, which has the potential to uplift them, and their communities, for many years to come. Literate individuals are more likely to have better quality of life, better physical and mental health, less interactions with the justice system and lower poverty rates (UNESCO, 2023).

Summary

In Section 1 of this study, I summarized the local problem: teachers at one elementary school struggle to teach reading through the RTI framework. The purpose of this qualitative study was to investigate general education teacher perceptions related to teaching reading within RTI Tier 1 and Tier 2. The research questions explored teachers' perceptions of the challenges they faced and their suggestions to improve their capacity for providing reading instruction. The literature review investigated educational legislation and initiatives related to RTI and reading. It also looked at the science of reading, teacher perceptions of RTI, and evaluation of reading RTI.

Next, I explored teachers' perceptions of reading RTI at the study site. Section 2 presents methodology, research design, data analysis, and results of this basic qualitative study. The findings of this study will provide the school and district administration insight and information on better-supporting teachers and increasing their capacity to provide reading instruction through RTI. Professional development, curricular improvements, local policy changes, leadership, or coordination were considered as possible ways to support this change. Section 2 concludes with the methodology, research design, results, and analysis.

In Section 3, I introduce the project for this study, a four-day professional development series with literacy coaching cycles built in between training dates. This professional learning was designed specifically for the general education reading teachers

at the study site. Finally, in Section 4, I speak to my reflections on the process and role of being a researcher, including my thoughts about the project implementation.

Section 2: The Methodology

Research Design and Approach

A well-planned research design is ultimately essential to ensure trustworthy and reliable results. The results of this project study are intended to positively affect change at one California elementary school, which makes it important to have a quality design as the results will undoubtedly impact teachers and students. The problem grounding this study was that general education teachers were struggling to teach reading through RTI. This was reported by the school administrator and one teacher at the study site. Student outcome data confirmed that significant numbers of students at the study site were not meeting grade-level standards. Despite this, a rigorous inquiry into this phenomenon with teachers from the site has not occurred.

Not being a teacher at the study site, the best way to learn more was to go directly to the teachers using qualitative methods. I intended to gather data from general education teachers about the challenges they have teaching reading within RTI and seek their suggestions for addressing these challenges. I anticipated that every teacher would have a unique reality, so a qualitative research design was best suited to this study (Ravitch & Carl, 2021).

Qualitative methods are most suitable when a deep exploration is needed to understand a problem, and those experiencing the problem are considered. Through qualitative inquiry, the researcher focuses on gaining a significant depth of understanding and interacting as a participant and collaborator in the research process (Babbie, 2017).

Qualitative methods allow the researcher "interpret the ways that humans view, approach, and make meaning of their experiences, contexts, and the world" (Ravitch & Carl, 2021, p. 4).

Only very briefly did I consider a quantitative approach for this project study. While numeric data and statistics can be very informative, they can only provide a surface-level look at a problem or issue. Thus, incorrect assumptions can easily be made, and critical questions may be left unasked. Conducting a qualitative study, specifically one using in-depth interviewing, will bring richness and context to the data I gather (Rubin & Rubin, 2012). Not being a teacher at the study site, the qualitative approach also allows me to understand the teachers' lived experiences better.

I did consider using grounded theory, one type of qualitative approach. The grounded theory makes sense as a method if there is a need to identify a theory or possible explanation (Babbie, 2017; Ravitch & Carl, 2021). However, after reflection, I determined it is better to focus on precisely defining the problem and seeking solutions instead of why it exists.

Participants

Selection Criteria and Justification

Participant selection is a critical component of the research process that must be aligned with the research questions. A researcher must have a strong knowledge of the focus population for the study and consider which individuals within would have the knowledge and experiences required to address the research questions (Babbie, 2017;

Ravitch & Carl, 2021). The researcher's decisions about who they will collect data are known as sampling (Ravitch & Carl, 2021). For this study, I used purposeful sampling to initially identify nine general education teachers of reading from the school site as participants for this study. Purposive sampling, or non-probability sampling in which the researcher identifies participants based on the intent of the study, allowed me to intentionally select participants who could provide specific, comprehensive, detailed accounts of teaching reading at the study site (Ravitch & Carl, 2021; Thomas, 2017).

Variables used to define participant selection may be based on demographics, experiences, attitudes, or beliefs (Farrugia, 2019). For this study, selected participants had to be current or recent general education teachers responsible for reading instruction at the study site in kindergarten through 6th grade. Of the participants, eight were current teachers of reading at the school site. One participant was a recent teacher at the school site and had just recently left the classroom to pursue a teacher support role.

Qualitative research traditionally focuses on the depth of understanding rather than the breadth of quantitative research. There are no defined rules for the number of participants, or sample size, within a qualitative study (Farrugia, 2019; Guest et al., 2020; Ravitch & Carl, 2021). Instead, the researcher must consider that the fewer individuals used means that the depth of the inquiry should be more extensive. This ensures that rigorous inquiry can lead to saturation, otherwise known as the point where no new information is forthcoming. In qualitative research, it is possible to reach saturation in as few as nine interviews (Hennink & Kaiser, 2022).

There was the possibility that purposive sampling would not produce enough participants to reach saturation, and so snowball sampling was considered but not needed. Snowball sampling, also a nonprobability sampling type, is when selected participants refer new participants to the researcher (Babbie, 2017). In this case, that could be additional teachers at the study site, but it could also include those who taught reading in the previous school year but may be retired, in a new position, or at a new site in the current year. During the recruitment process, selected participants were asked to refer any other potential participants. Potential participants were contacted by email to inquire about their interest in study participation.

Gaining Access to Participants

At the beginning of prospectus development, I contacted the study site principal and the school district superintendent to discuss the possibility of a study. Both individuals supported this study concept, and the principal assisted with providing school-level data. After receiving approval from the Walden University Institutional Review Board (IRB), I sought formal authorization from the principal and superintendent again before contacting any potential participants.

I contacted all the site teachers via email and through flyers distributed to their school mailbox and a posted flyer in the staff room. Communications provided information about the study, eligibility requirements, how to participate, and the financial incentive to participate. Interested participants were asked to contact me by phone or email. This process ensured teachers were willing to participate and were not unduly

influenced by the school administration. Potential participants recruited via snowball sampling were contacted via email. In addition, the identities of interested and selected participants were kept confidential throughout the study. Each consenting participant was provided with information that included the purpose of the study, the time for each interview that was agreed upon with each participant, and a statement that their participation would be voluntary.

Researcher-Participant Relationship

Developing rapport and establishing positive working relationships with study participants is essential to qualitative research (Ravitch & Carl, 2021). Qualitative research requires a collaborative partnership between the researcher and participants. While I am an educator residing in the same community as the study site, I was not employed by the site, district, or its regional county office, so I did not have a professional relationship with the participants.

This separation, or boundary, benefited me as a researcher because it allowed me to stay open and less biased during data collection. However, this also meant that the participants and I did not have an established rapport. Therefore, it was crucial that all my initial communications with potential participants ensure were authentic, transparent, and respectful. This ensured that participants felt valued and engaged throughout the study.

A researcher must also consider the needs of the potential participants, specifically their social, emotional, and physical well-being, as a result of participation (Ravitch & Carl, 2021). I used informed consent with study participants through verbal

and written measures, which will highlight the voluntary and confidential nature of the study. Informed consent ensures participants know what the scope of participation looks like, how they will be protected from harm, and how they can participate to the extent that they feel comfortable (Rubin & Rubin, 2012).

Informed consent helped me build rapport and engage in a collaborative dialogue with participants (Ravitch & Carl, 2021; Rubin & Rubin, 2012). Before each interview, the participants were provided with an informed consent form via email. Informed consent was reviewed at the start of each interview. This ensured participants were fully aware of their right to opt out of the study at any time. Participant identities were safeguarded using pseudonyms when reporting on the research results and analysis. Additionally, any study related forms and notes are now securely stored on my personal, password-protected computer. After five years, this documentation will be securely discarded.

Data Collection

Following Walden University IRB approval, I updated and requested formal approval from the school site principal and school district superintendent to collect data for this study. Data were collected through semistructured interviews. Common to traditions of qualitative research, interviews provide the researcher an opportunity to "see that which is not generally on view and examine that which is often looked at but seldom seen," (Rubin & Rubin, 2012, p. xv). I used a previously published interview protocol (Okoye, 2017). However, I developed my interview questions based on the themes I

uncovered from the literature review presented in Section 1, along with the guidance and expertise of my committee.

I interviewed eight current and one recent general education teachers of reading from the study site. Interviews were scheduled outside the teacher's workday for approximately one hour and took place virtually through Zoom. Invitations with Zoom links were emailed to the participants after coordination with the participants for their availability.

Each interview was conducted virtually using Zoom, synced with Otter.ai. Otter.ai is an advanced artificial intelligence software that automatically transcribes audio into text. Before each interview, I ensured each participant received and reviewed the informed consent form. I reminded the participants about the details of informed consent and their ability to opt out at any time. I also reviewed the information about the recording of each interview, and how the recordings were to be used and stored, and finally sought their verbal approval before proceeding.

Semistructured interviews utilize questions about a topic prepared by the researcher on a designated topic. Participants were allowed to answer the open-ended questions uniquely and fully express themselves during the semistructured interview. Open-ended questions allowed for free-flowing information from the participant as they were neither narrow nor restrict the response. (Rubin & Rubin, 2012). To be responsive to the interviewer and ensure rich data collection, probes and follow-up questions were asked of the participant as appropriate. However, I attempted to minimize use of these to

create uniformity across all participant interviews (Ravitch & Carl, 2021; Rubin & Rubin, 2012).

After each interview, I reflected on the interview using a research journal and ensured the audio recording synced successfully from Zoom to Otter.ai. Next, I used Otter.ai to verify the match of the audio with text, ensured it was attributed to the proper speaker, masked identities, and uploaded any relevant field notes. Once finalized, the individual transcripts were downloaded from Otter.ai into Microsoft Word documents. These documents and the audio files were secured until the data analysis began. All recordings and field notes were also digitally stored on my personal, password-protected computer.

Role of the Researcher

In the qualitative tradition, a researcher serves as both the researcher and the primary instrument for data collection. Thus, every interaction the researcher has with participants has the potential to influence the data collected or the well-being of the participants, whether positive, negative, intentional, or unintentional (Ravitch & Carl, 2021). Going into this study, I knew that what I said and did could impact the rapport I built with gatekeepers and potential participants. This could shape my ability to access participants, collect data, and complete the project portion of this study. Ultimately, this would not serve the teachers, or more importantly, the students, and that would have defeated my intentions in this work.

Because I did not have a past or current professional affiliation with the study site or study site teachers, I was reliant on the site principal and school superintendent to allow me access to the teachers at the study. I was granted initial permission to conduct a doctoral study by each during prospectus development. However, once I obtained Walden University IRB approval, I requested their formal approval to access study site teachers through email and flyers. Teachers interested in volunteering to participate in the study were to contact me directly and be screened for eligibility before joining a semistructured interview.

Professionally, I have served as a teacher, instructional coach, professional developer, and school, county, and state-level administrator. None of these roles have been in the district of the study site. My experience in these roles and my training and education have cemented some of my philosophies as an educator surrounding reading instruction and intervention. This could be perceived as a potential bias if I allowed it to sway or dominate data collection, so I was careful to be aware of and monitor myself during interviews and when interacting with participants. Engaging in the practice of research journaling is one way a researcher can practice reflexivity (Ravitch & Carl, 2021). I kept a research journal to capture my reflections, wonderings, and ideas related to the research process and my role as the researcher.

Data Analysis

The coding process allows the researcher to unpack the data and make meaning from it. Following data collection, the Microsoft Word files of the transcripts were

securely delivered to the data consultant. The consultant codified and categorized using the data analysis software, NVivo. This software allows the researcher an organized, systematic way to code, capture, and organize data to construct meaning (Babbie, 2017; Williams & Moser, 2019).

First, open coding was applied to explore the data and see what surfaced. Open coding serves as a manner to begin unpacking and breaking down the data into smaller, distinct parts. Because this can produce many codes, additional rounds of coding may be needed (Ravitch & Carl, 2021; Saldana, 2021; Williams & Moser, 2019).

A second level of coding is beneficial to begin refining and applying the data present to the elements of this research inquiry (Ravitch & Carl, 2021). Essentially, these broken parts from the first round of coding need to be reassembled to address this study's research questions. Axial coding was used to accomplish this in this study. Axial coding is the process through which the researcher begins to draw connections between the existing codes creating categories and sub-categories (Saldana, 2021; Williams & Moser, 2019). After axial coding, themes were explored and identified.

Evidence, Accuracy, and Credibility

There were steps I took to ensure accuracy and credibility and produce a high-quality, ethical study. First, I employed an experienced qualitative researcher as a consultant to code my data. Despite engaging in reflexive acts, as a qualitative researcher, I must always be aware of the role bias, whether conscious or unconscious, plays in data collection and analysis (Ravitch & Carl, 2021). Adding in this layer ensures I did not

allow preconceived ideas to interfere with the coding of data and that the participants' voices were dominant, not mine. I provided the data consultant with interview transcripts, using pseudonyms to ensure participant confidentiality, to read and re-read. The consultant then applied open and axial coding using NVivo. Finally, they identified themes apparent from the interview data.

Second, I used utilize a validity strategy to ensure that my findings accurately represent the topic of inquiry (Babbie, 2017). Member checking is one strategy employed often in qualitative research to accomplish this. In it, the researcher actively inquires how participants think and feel about a part of the research process. It also allows the participant an opportunity to react, and it allows the researcher an opportunity to review and revise the data-based interpretations accordingly. Member checking ensures trustworthiness and transparency and counterbalances researcher bias (Birt et al., 2016; Ravitch & Carl, 2021)

According to Birt et al. (2016), there are multiple methods of member checking, including participants reviewing transcripts for accuracy and reviewing the researcher's interpretation of the interview. However, they asserted such methods might lead to unintended consequences such as distress to the participants or even withdrawal from the study. They propose a variation on its traditional counterpart, synthesized member checking. In it, participants are provided with a draft of the preliminary findings from across the sample in this five-part process. Participants are asked to review the findings, confirm their own experiences are reflected in the findings and provide additional

information. The researcher then integrates these responses with the existing findings (Birt et al., 2016).

Following the data analysis, I developed a report of findings for the participants to review. I emailed participants a summary of the emerging themes and supporting quotes across all the participant interviews. Participants were asked to review the report and to respond anonymously by a deadline using a Google Form. The Google Form asked participants if they could see their own experiences and beliefs reflected in the themes and provided them a chance to change or add anything. I then reviewed the responses and incorporated any new findings.

Data Analysis Results

Semistructured interviews were conducted with eight current and one recent general education reading teachers from the study site. The data were recorded and transcribed verbatim using Otter.ai software. Transcripts were verified and de-identified by the researcher by listening to the recordings and making changes to the transcripts as necessary. The transcripts were analyzed in NVivo 14 software using a two-cycle open and axial coding procedure. Prior to beginning the first coding cycle, the transcripts were read through to develop a better understanding and contextual awareness of the participant responses. Open coding began with breaking down the participants' responses into chunks of text, each consisting of a phrase or group of consecutive phrases, that each expressed a single idea relevant to addressing a research question. Once the data were broken down in this way, each chunk of text was assigned to an initial, open code. When

different chunks of text had similar meanings, they were assigned to the same code, and in this way, excerpts from the data that had similar meanings were clustered, and codes were formed inductively based on patterns of meaning the researcher identified in the data itself.

In the second, axial coding phase, related initial codes were clustered. The purpose of clustering the initial codes was to identify for each group of related initial codes a central or "axial" concept around which they revolved, so that they could be grouped inductively into a smaller number of broader categories that indicated the overarching patterns of meaning in the data. Similar or related open codes were therefore grouped to form the second-order axial codes, which were identified as the major themes in the study.

Following the data analysis, participants were presented with a summary of the themes and subthemes, by research question. Using the synthesized member checking, participants were voluntarily asked to review these findings and reflect on them considering their experience. Using an anonymous Google Form, participants had the opportunity to state whether they felt their responses were reflected in the findings and if they had any additional information to provide. Two participants completed the Google form. Both indicated that they could see their responses reflected in the findings and had no additional information to provide.

This presentation of the data analysis results is organized by research question.

Under the heading for each question, the themes used to address the question are

presented in detail. Direct quotes from the data are presented as evidence for all findings so the reader can assess the confirmability of the analysis independently.

Research Question One

What are teacher perceptions of the challenges of teaching reading within Tier 1 and 2 of RTI? Two themes were used to address this research question, as follows:

(Theme 1) Tier 1 challenges, and (Theme 2) Tier 2 challenges. Discussion of these themes follows.

Theme 1: Tier 1 Challenges

All the participants contributed data to this theme. This theme was formed by grouping five open codes, which were also identified as sub-themes. Table 3 is a preliminary overview of the open codes (sub-themes) associated with the theme Tier 1 challenges. Discussion of each open code follows.

Table 3

Tier 1 Challenges Open Codes

Theme Open code (sub-theme) grouped to form theme	<i>n</i> of participants contributing data (<i>N</i> =9)	n of data excerpts assigned to code or theme
Theme 1: Tier 1 challenges	9	24
Differentiation	6	6
Students struggling with foundational skills	4	4
Lack of cultural relevance	3	4
Curriculum not meeting needs of students	3	4
Materials not engaging	3	6

Sub-Theme: Differentiation. Six participants indicated that differentiating instruction effectively when they had a large class size, with students reading at a wide range of different grade levels, was a significant Tier 1 challenge. P3 described the challenge of having a classroom of 32 students whose reading levels spanned eight grade levels:

The challenge I experience is that kids come in at such a broad range of reading ability. This year, for example, which is also characteristic of years past, I've had students come in at a kindergarten level, all the way to above grade level, even I think the last STAR reading assessment, I had a student at a seventh-grade reading level. So, it's definitely challenging to address all the needs of sometimes 32 students with just Tier 1 strategies.

P4 provided corroborating data, reporting that she experienced the same challenge teaching at the Grade 5 level. P4 described trying to provide effective differentiation for students whose reading levels spanned more than 10 grade levels as her most significant challenge in Tier 1 implementation:

I'd say the biggest challenge is the fact that you have such a wide range of reading levels, and in a fifth-grade room, I've had students that are pre-primmer, to students that read at a tenth-grade level. And so, the challenge becomes making sure it's accessible for everybody without slowing it down too much, so that you're not losing either.

Thus, P4's concern was that if she provided accelerated instruction appropriate for students who were reading at higher grade levels, the students who were still struggling with foundational skills would not be adequately served, while if she slowed instruction to focus on foundational skills for students at the pre-primmer level, she would fail to engage the students who were reading at higher grade levels. P8 also discussed the challenge of differentiation in terms of student engagement:

It is difficult because there are so many different levels of learning in the classroom. You have kids that are two or more grade levels behind, you have kids that are two levels ahead. So, doing Tier 1 is for everybody. And it's difficult because you have to make sure that you are keeping everybody engaged. And the ones that are struggling are tuning out, and the ones that are above grade level are also tuning out. So, you have to make sure that you are engaging everybody, and that's difficult.

While P4 indicated that meeting the needs of accelerated students meant that students who were struggling with foundational skills would become disengaged, and vice versa, P8 indicated that targeting instruction at the classroom's grade level would cause students at both lower and higher levels to become disengaged. Thus, there was no level of instruction at which the teacher could engage the entire class at once, so differentiation was necessary, and the size and composition of the class made it challenging.

Subtheme 2: Students Struggling with Foundational Skills. Four participants indicated that student struggling with foundational skills was a Tier 1 challenge. P1 described students who were still struggling with foundational skills as being two or three years below grade level. P1 described this as the most significant challenge, saying that she worked with these students after school two or three times per week:

The challenge has been the kids who are still two or more years below grade level ... [This is a challenge] because of the gap [between] what I'm supposed to be teaching at the grade-level standard and what they are able to do. That's been the biggest challenge, I think, is trying to move them along.

P9 said that one of the most significant challenges faced in Tier 1 implementation was, "There are some [students] that need basic reading comprehension skills and decoding." P3 provided a response that was representative of statements made by other participants in this study (as will be discussed in further detail under Theme 3), saying that she did not feel equipped, as an upper-level elementary teacher, to address gaps in foundational reading skills:

As a fourth-grade teacher for all these years, I don't feel confident in my ability to really address the needs of students that are severely below grade level. I feel like I'm not teaching reading. They're reading to learn, right? They're not learning to read.

Subtheme 3: Lack of Cultural Relevance. Three participants reported that lack of representation of their students' demographics in the characters in the stories and

articles in their reading materials contributed to a lack of student engagement. P2 found that her Hispanic students were more engaged by materials that reflected their culture: "I do find that my students like when we read a book that has more Spanish influences on it ... like when it's more cultural, the kids are more interested in it." P9 indicated that the lack of cultural representation was not because of a racial or ethnic disparity between the characters represented in the reading materials and the students in her classroom, but because the stories in the books were set decades ago, and her students connected almost exclusively with stories with contemporary settings: "Most of the stories, they don't connect with, not necessarily because they don't see themselves represented, but more I think because it's not a current story." P4 provided corroborating data, describing how her Black students did not connect with Black characters in a story that took place 70 or 80 years ago:

It's older things that they can't relate to as much. So for an example, there's one story in there about a couple of African American girls, and it's about them in a small town and it's a mystery going on, but it's from back in the 40s or 50s and for these kids, there's no connection with that.

Subtheme 4: Curriculum Not Meeting Needs of Students. Three participants indicated that the RTI Tier 1 curriculum did not meet their students' needs. P8 said, "I looked at the curriculum. I used it as a starting point, but I usually went way away from it, because it did not give me what I needed to teach the skills." P9 specified that the curriculum was sometimes either too difficult or not engaging:

For the tier one reading instruction, whole class, I try to follow the curriculum that we have adopted to focus on the standards. There are times when I do not use the curriculum, because it's either the content is very difficult for the students or not engaging.

P2 used the Wonders curriculum and agreed that it was too challenging. She explained why it was too challenging for her kindergarteners:

The student example is almost a paragraph long. I teach kindergarten. It should go in steps, like hey, let's first draw a picture. Then let's try to label our picture. But no, our student example is like three sentences long. So, for a student who doesn't know their sounds and letters, that's a little challenging.

Subtheme 5: Materials Not Engaging. Three participants indicated that the Tier 1 materials were not sufficiently engaging for their students. P4 believed that her students would be more engaged by current events than by historical events:

Some of the text is really heavy, and it's about older events. So, we've started our first unit, and it's about civil rights and the freedoms we have. It's got some very rich text, but it's not something they can relate to as much, because there's one speech from Thurgood Marshall, who's a wonderful person to study in history, but it's talking about things that happened 20-plus years ago that they have no clue about, right? So, I would prefer if there was some more current types of text.

P5 perceived the Wonders phonics program as insufficiently engaging: "I don't feel that the phonics program as a standalone program is effective enough. So I've

supplemented with my own strategies, which I use Secret Stories to supplement Wonders." P5 described the Secret Stories as engaging, in contrast to the Wonders curriculum, because, "It's a program where they use little stories to explain why the phonemes, whatever, those vowel patterns make the sounds they do." P9 described the novel excerpts the students read as not engaging because they were not complete stories:

The fiction was not [engaging] because a lot of it was just pulled from the middle of a book. So, they [the students] have zero background knowledge of what's going on, they don't care about the characters. And then it would just sort of end with no real ending, it wasn't like a beginning, middle, end type of story. And so, they weren't interested, they weren't invested in it.

Thus, these participants believed that students needed contemporary events in nonfiction and complete stories in fiction for the curriculum materials to fully engage them.

Theme 2: Tier 2 Challenges

All the participants contributed data to this theme. This theme was formed by grouping three open codes, which were also identified as sub-themes. Table 4 is a preliminary overview of the open codes (sub-themes) associated with the theme Tier 2 challenges. Discussion of each open code follows.

Table 4

Tier 2 Challenges Open Codes

Theme Open code (sub-theme) grouped to form theme	<i>n</i> of participants contributing data (<i>N</i> =9)	n of data excerpts assigned to code or theme
Theme 2: Tier 2 challenges	9	12
Motivation	3	3
Reading comprehension	3	5
Writing	3	4

Subtheme 1: Motivation. Three participants indicated that mustering student motivation was a challenge in Tier 2 implementation. P3 reported that student motivation to engage in class discussions was often lacking: "I think the challenges with that Tier 2 instruction is sometimes the student motivation just to engage in class and participate in the discussions. Sometimes that can be a challenge." P3 added that student motivation or willingness to write at the Tier 2 level was sometimes a challenge: "They're also at different writing levels, so their willingness to write about a certain subject is sometimes problematic." P5 indicated that in a large group, some students lacked the motivation to stay focused on reading: "Some kids are distracted, and they can't be like put your eyes on the book, pay attention, keep going. They have to have a little intrinsic motivation to be focused." P5 added that when students lacked the motivation to stay focused, she assigned them to smaller groups where they could get "extra prodding." P6 associated students' lack of motivation with disengagement due to "dry" Wonders ELD curriculum:

We're using Wonders, but their ELD component—absolutely atrocious, dry, scripted, nothing good comes out of scripting. With kids, it's not human. And they see right through it, and they're just rolling their eyes. So, already just saying or showing the book or having it there, they're gone. You've lost them. So that was really challenging.

Subtheme 2: Reading Comprehension. Three participants indicated that reading comprehension was a Tier 2 challenge. P1 said that her most significant challenge with Tier 2 implementation was,

The reading comprehension, just the basic skills, like self-checking to make sure you're understanding, rereading it to make sure you're understanding, looking, unfamiliar phrases, like sometimes there's figurative language that they don't know, when they might just skim over it, and then that affects their understanding of what they're reading.

P9 said that a challenge was, "You had that same range of kids who are still learning to read, the ones who were reading much below grade level." P8 also said, "Some of the crucial reading stuff that they needed, they didn't always get, and the program is set up so that you're working on vocabulary and comprehension."

Subtheme 3: Writing. Three participants indicated that a Tier 2 implementation challenge was writing. P4 said that in Tier 2, "There was a real lack of writing skills . . . Our lowest group tended to be our struggling writers." P5 described writing as the most significant Tier 2 challenge: "There's definitely some kids that need a lot more support in

writing. They're able to decode and comprehend really well, but writing responses are a little bit harder . . . writing would be the biggest challenge." P9 described her Tier 2 class as having a middle group that needed writing support: "They need to work on writing more, expanding, even what the genre means, like how to add in for narrative, how to add in dialogue, how to add in figurative language." P9 also described her Tier 2 class as having a small group that was taught by an intervention teacher, of which she said, "That would be more of like, what you might consider tier three, where they really needed a strong focus because they were just writing maybe a sentence or two."

Research Question Two

What training, support, or resources do teachers suggest for improving their capacity to provide reading instruction within Tier 1 and 2 of RTI? One theme was used to address this question, as follows:

Theme 3: Additional Support and Resources to Improve RTI Implementation

All the participants contributed data to this theme. This theme was formed by grouping five open codes, which were also identified as sub-themes. Table 5 is a preliminary overview of the open codes (sub-themes) associated with the theme Additional Support and Resources. Discussion of each open code follows.

Table 5Additional Support and Resources Open Codes

Theme Open code (sub-theme) grouped to form theme	<i>n</i> of participants contributing data (<i>N</i> =9)	n of data excerpts assigned to code or theme
Theme 3: Additional Support and Resources to	9	19
Improve RTI Implementation		
Teaching foundational skills below grade level	6	7
Additional instructional materials	4	4
Collaborative planning time	3	4
Additional personnel	2	2
Science of reading support	2	2

Subtheme 1: Teaching Foundational Skills Below Grade Level. Six

participants indicated that RTI implementation would be improved if they could obtain training and support to teach foundational reading skills below the grade level at which they taught, tailored for the age of the students they taught. Thus, if they taught 10-year-old students who were reading at a kindergarten level, they needed training and support to teach kindergarten-level foundational reading skills in a manner tailored to engage 10-year-olds. P1 explained why support and training for foundational skills was a need for upper-level elementary teachers, saying that they only received support for instruction at grade level, not for teaching the skills from lower grade levels that many of their students were lacking:

Everything we receive is to teach kids that are at grade level. That's what all our training is, right? . . . But we don't have access to anything below sixth [grade].

So, if we wanted to teach some of those third-grade skills that the kids might be missing, we don't have that. We don't have the resources; those aren't provided to us. And also, we don't have the same recent training that third-grade teachers have received on how to teach kids at third-grade level. And so, I think that would be beneficial . . . that's what, as the sixth-grade team, we struggle with: we sometimes feel like we don't have the background or the training to be able to teach a student that's reading at a second-grade level.

P3 agreed, adding that training in how to supply foundational skills from previous grade levels should be tailored to the grade level at which those skills were being taught: "It would be helpful to have professional development specific to grade levels, as far as some expert saying in fourth grade, this is what you do for students that are struggling with reading, who currently are at kindergarten level." P9 expressed a similar need, saying, "I don't have experience teaching lower grades' reading, so some type of knowledge there, some professional learning, because you could use those skills in the four through six classrooms." P6 said of whether she felt she would benefit from training and support to teach the foundational reading skills from lower grade levels, "I think it would be extremely helpful. I would love it, to be honest, because I always joke around that I don't know how to teach kids how to read, I know how to teach them to love reading."

Subtheme 2: Additional Instructional Materials. Four participants indicated that they needed additional instructional materials. P2 mentioned that she needed to

purchase additional instructional materials out of her own pocket. P6 reported that she needed to make her own instructional materials. Related to the previous theme about needing support to teach foundational skills from lower grade levels, P4 noted that she also lacked materials for teaching foundational skills from lower grade levels:

One of the biggest things I don't feel prepared with for the RTI and the reading is often the lack of materials. So, when I have those real struggling readers, to find materials to work with those kids that are at that pre-primmer to probably third-grade level. When you're a fifth-grade teacher, there's not a lot out there for that. They have stuff that's for fourth grade-level readers, right, but that doesn't go low enough for those kids that are really struggling.

Subtheme 3: Collaborative Planning Time. Three participants indicated that they needed collaborative planning time with other teachers in their grade level to make RTI implementation more effective. P4 described collaborative planning time as her greatest need: "I think probably the biggest thing would be collaboration time with my grade-level team. Whether it's there's new teachers on it or experienced teachers, I think that co-planning together can really enrich the classroom." P5 reported that there was time in the schedule for collaborative planning, but that she and her colleagues were unable to take advantage of it because they had no one to cover their classes:

I think that in the past, we had a lot of opportunities for collaboration, which I think is part of the support that we could use, a lot more time to collaborate. We would have academic conferences to sit down to talk about things. And those

things are still in our schedule, but they're not happening, because we don't have subs to cover.

P9 described collaborative planning time as more important to her than trainings, saying, "I rely so much on other teachers these days, and looking at what works for them, and then trying what is working for them, as opposed to specific trainings." Accordingly, P9 said that her greatest support need was for, "Time to collaborate. That we have maybe once a month, that we can get together with our grade level. We need time to collaborate and analyze."

Subtheme 4: Additional Personnel. Two participants reported that they would benefit from additional personnel support in the classroom. P1 said, "I don't know if it'd be considered a push-in teacher, or extra support in the classroom. So that when I'm working with the Tier 2 students, there could be another person that is helping to support the other kids." P5 described her grade's current staffing and how more staffing would result in students receiving more individualized attention and differentiated instruction:

It would be nice to have [additional staff]. There's the four general ed teachers, and our aide has a very small group of four kids or five kids. And then there's the ELD teacher who pulls them, so there's really only five people that have divided our class. And I've worked in schools where during the target time, they had a lot more people, and they were able to divide it into even smaller groups, because I'm pretty sure our ELLs, even though they have 20 in there, which is much smaller, they still deserve a lot more individualized attention and could be divided

out even more. Of course, staffing is always a concern, you know, money. [But] there definitely could be more groups and more specific, individualized groups, tailored to what their needs are.

Subtheme 5: Science of Reading Support. Two participants indicated that they wanted support with science of reading (SOR). P2 mentioned that she had sought but been unable to find SOR training: "Right now, the whole science of reading, it's blowing up my Instagram. And I've tried to search for science of reading conferences, but none of them are here local." P5 also indicated a desire for training in SOR: "I am super interested in the different SOR, science of reading programs, that are coming out, I think, programs, or I guess it's more of a methodology."

Section 3: The Project

Introduction

The purpose of this study was to investigate teacher perceptions of the challenges of teaching reading within Tier 1 and 2 of RTI and to uncover the training, support, and resources teachers felt were needed to improve their capacity as teachers of reading. The project is a professional development series of at least three days, combined with literacy coaching on foundational reading skills for teachers. I developed the professional development days based on the themes that emerged revealing the challenges and suggestions uncovered during the semistructured interviews and rooted in the science of reading research presented in Section 1. This project aimed to increase teacher knowledge surrounding foundational reading skills and increase the teacher's application of this knowledge in practice through literacy coaching.

Rationale

The problem of this qualitative study was that general education teachers in one elementary school were struggling to implement RTI for reading. I conducted semistructured interviews with current or recent teachers of reading from the site and used the findings to inform this project. The findings indicate that teachers struggle to provide differentiated support to students with gaps in their foundational reading skills. Subsequent findings indicate that the teachers also perceive the adopted curriculum as not meeting their or their students' needs, that students are unmotivated, and that students struggle with reading and writing. These subsequent findings may be related to missing

foundational skills that teachers struggle to support as students matriculate. The teachers expressed a desire to increase their knowledge and pedagogy in the foundational skills of reading as rooted in the science of reading. They felt that collaborative planning time and additional personnel may also increase their capacity to affect student outcomes.

As I reflected on the interviews and the data, it became clear that the teachers would benefit from professional learning in the form of professional development sessions to increase their knowledge. A review of the literature related to foundational skills instruction also revealed that while professional development can impact teacher knowledge, it may not be enough to improve classroom practice. Research has shown that literacy coaching can bridge this and help teachers improve their classroom practice (Benedict et al., 2021; Folsom et al., 2017; Hudson et al., 2021; Pomerantz & Pierce, 2019). Coaching can allow each teacher the differentiated support and application of the knowledge they glean from the training. Therefore, literacy coaching will also be an essential component of this project.

Review of the Literature

The data collection process of this study revealed that teachers would benefit from professional development on foundational reading skills and support as they applied their new knowledge to practice. Grounding this literature review in the research about reading from my Literature Review in Section 1, I searched peer-reviewed articles from Ed Source, Eric, Taylor & Francis Online, and Google Scholar. Keywords and phrases utilized in these searches include *Language Essentials for Teachers of Reading and*

Spelling (LETRS), teacher professional learning or development, literacy coaching, foundational skills in reading, and teacher knowledge. This section will introduce the highlights from this research, establishing the type and content of the professional learning for this project.

Teacher Knowledge and Practice

The human brain is not pre-dispositioned to the act of reading, as it is the act of speaking. Reading is a complex task that requires much of one's mental and neural capacities to engage and, for most individuals, requires systematic code-related instruction to learn to do (Tortorelli et al., 2021). An extensive amount of research has been done on how one acquires the ability to read, and the consensus is that the general population can learn to read successfully (Moats, 2020; Seidenberg et al., 2020).

To be an effective teacher of reading requires a teacher to have extensive specialized knowledge and skillset, including educational pedagogy, child development, language and literacy concepts, and brain research (Davis et al., 2022). However, despite this plethora of research, there appears to be a disconnect between the research and application in educational practice across the nation (Flanigan et al., 2022; Moats, 2017, 2020; Seidenberg et al., 2020). Therefore, it is imperative that educators continuously engage in professional learning throughout their careers and avoid becoming over-reliant on old reports, research, and practices or trends (Seidenberg et al., 2020).

One example of an older report is the Report of the National Reading Panel (2000). While foundational to the science of reading, this report is over 20 years old and

no longer represents the most current, relevant research available today. Additionally, the report focuses only on what should be included in a reading curriculum. Still, it fails to address how instruction and intervention should be mapped to youth's skill and development levels.

What Teachers of Reading Must Know

Dilgard et al. (2022) asserted that the shift to the Common Core State Standards may have inadvertently led to a decrease in code-related instruction, hindering many young learners. This is further evidence of the disconnect between research and practice. While the standards may have shifted, the reading research remained clear. Reading skill development is a hierarchy, and as readers become more fluent in recognizing words, they can shift their cognitive and mental focus to higher-level tasks, such as comprehension (Datchuk & Hier, 2019; Jordan & Bratsch-Hines, 2020). This means an emphasis on foundational reading skills must be prioritized.

Dilgard et al. (2022) substantiate this in their synthesis of code-related instruction centering on the introduction of the Common Core State Standards. The authors found that some reading skills are correlational, and some are foundational to others. Therefore, more than a reading program alone, explicit code-related instruction, and strong teacher knowledge of reading are essential to positive student outcomes (Dilgard et al., 2022).

The components of reading articulated in the Simple View of Reading, introduced in Section 1, align with too much of the research located for this literature review.

Successful reading is the product of word recognition and language comprehension.

Teachers must have a comprehensive knowledge of the subcomponents within each of these areas and understand the developmental nature of their development, starting with the foundational skills of the word recognition strand.

Because the human brain must start with speech before moving to print, teachers must understand the difference between phonemic awareness and phonics (Carruth & Bustos, 2019; Ehri, 2022; Mesmer & Kambach, 2022). Written words are stored in one's memory by connecting the graphemes to the phonemes or orthographic mapping (Ehri, 2020). Therefore, the teacher must first focus instruction on the sounds of language and the student's ability to isolate and manipulate those sounds (phonemic awareness) before they attach a written symbol or letter. If teachers reverse this or move instruction faster than the student is ready, it can lead to error and confusion for students. Struggles with phonemic awareness can indicate struggles in later reading skills and multiple in scope as students move into language comprehension strands of reading (Carruth & Bustos, 2019). Teachers need to be knowledgeable and aware of the various phases of learning students undergo as they begin to develop a sight vocabulary. These phases of word development are incumbent upon the reader's phonemic awareness and orthographic mapping abilities and progress from no letter-sound awareness or decoding ability to mastery of letter sounds, the ability to decode multisyllabic words, and awareness of word structures and morphology (Ehri, 2020; Moats & Tolman, 2019).

A literature review conducted by Tortorelli et al. (2021) found that preservice teachers needed higher levels of support with phonemic awareness, segmenting and

blending phonemes, and morphology. This substantiates other research supporting the complexity of teaching reading may be under-focused on in teacher preparation and professional learning throughout one's career; ongoing professional learning is needed to positively impact student outcomes in reading (Didion et al., 2020; Dilgard et al., 2022; Hudson et al., 2021; Moats, 2020; Paige et al., 2021).

Professional Learning

Student outcomes can increase as reading teachers increase their knowledge through professional learning opportunities (Benedict et al., 2021; Dennis & Hemmings, 2019; Hudson et al., 2021; Jordan & Bratsch-Hines, 2020). Professional learning can take many different forms. Through the literature review, Didion et al. (2020) noted that multiple randomized control trials of teachers of all stages of experience showed that student outcomes in code-focused and meaning-focused concepts, or word recognition and language comprehension, significantly improved.

Professional learning can occur formally and informally. Effective formal or structured professional learning is marked by being content-focused with opportunities for reflection and feedback, utilizes active learning and creates space for collaboration, models effective practice with coaching and expert support, and occurs over time to provide participants a chance to learn new content or skills and incorporate into their practice (Darling-Hammond et al., 2017; Morgan et al., 2019; Sims & Fletcher-Wood, 2021).

While workshop-style professional development may help support teacher knowledge development, it may not be enough to help them bridge their new knowledge to practice. Literacy coaching is a job-embedded professional development for teachers. It can offer this support and has been evidenced as a supported, effective professional learning practice that deepens teacher knowledge and skills, as well as positively impacts student outcomes in the classroom (Folsom et al., 2017; Hudson et al., 2021; Hunt, 2019; Ippolito et al., 2021; Pomerantz & Pierce, 2019; Woodward & Thoma, 2021, 2021).

Literacy Coaching

Because every teacher has a different knowledge base and skill set, literacy coaching is a form of differentiated adult learning that moves away from traditional workshop-style professional learning (Hunt, 2019; Morgan et al., 2019). Just as being a reading teacher is complex, so is the role of the literacy coach. An effective literacy coach must have a strong command of how one acquires the skills to read and teach reading, but they must couple that with the knowledge and skills needed to support adult learners.

Literacy coaching is so powerful because it serves as a bridge. In a direct instruction lesson, a teacher presents new materials, followed by structured opportunities for practice with feedback and scaffolding, known as guided practice, before letting the students work independently. Literacy coaching can be analogous to guided practice, where the literacy coach takes on the role of the teacher or facilitator of learning (Pomerantz & Pierce, 2019). The extensive training and scaffolded support offered

through literacy coaching have been shown to impact teacher knowledge and practice (Benedict et al., 2021; Folsom et al., 2017; Hudson et al., 2021; Morgan et al., 2019). Studies conducted by Benedict et al. (2021), Morgan et al. (2019), and Dennis and Peters (2019) demonstrated that teacher knowledge about reading evolved while spent working with a coach, but that their wonderings and decisions became more profound and more balanced. Their dispositions started as teacher-centered and shifted to student-centered.

Because of the literacy coach's flexible position, it is easy for literacy coaches to be pulled in to support clerical or administrative functions. Frequently, literacy coaches are certificated positions, like classroom teachers, and when the coach is pulled into administrative functions, their role and responsibilities become nontransparent, relationships are weakened, and power imbalances are created (Hunt, 2019; Morgan et al., 2019; Steiner et al., 2022; Woodward & Thoma, 2021). However, effective coaches must clearly define and articulate their role and maintain professional boundaries when encountering such challenges.

An effective coach strives to build positive relationships with educators and administrators and approach their work as supporting the ongoing teaching and learning process within a school system (Woodward & Thoma, 2021). They pay attention to the local context and adapt their actions non-evaluatively, ensuring that the adult learners always drive the support needs (Hunt, 2019; Peters, 2022; Woodward & Thoma, 2021). Demonstrated through a micro ethnographic approach to discourse analysis, Hunt (2019)

asserted that one pitfall of some literacy coaches is that they see their role as one that linearly imparts knowledge from coach to teacher.

Hunt (2019) explained the coaches see themselves as experts and are unwilling to see themselves as someone who can learn with or from the individual they are coaching. The problem with this thinking is it can stagnate the teacher's growth and damage the relationship between the coach and the teacher. Teachers want a highly skilled and knowledgeable coach but balanced in their approach and feedback (Sims & Fletcher-Wood, 2021). Coaches who approach their work from a flexible lens of mutual learning from one another tend to be more successful (Hunt, 2019; Steiner et al., 2022). These kinds of coaches are skilled at balancing positive praise with feedback that is specific, precise, and actionable (Morgan et al., 2019).

Reading Professional Development and Literacy Coaching

Several local and state educational agencies are now seeing the value of combined reading professional development rooted in the science of reading and literacy coaching. In 2017, the Chicago Public Schools began a multiyear initiative that provided intensive literacy training to K-2 educators and literacy coaching. Interviews with teachers and administrators noted the value of professional development and the opportunity to receive instructional coaching (Berg et al., 2021).

One such state gaining recognition for similar efforts is Mississippi. Mississippi legislation enacted in 2013 called for comprehensive statewide efforts to provide teacher training and literacy coaching in the lowest-performing schools. These efforts are

attributed to an 11 percent increase in Mississippi fourth graders' National Assessment of Educational Progress scores in just six years (Doss Helms, 2021). In her charge as the State Literacy Director at the Mississippi Department of Education, Dr. Burk (2022) led the rigorous search effort to select a teaching training program that would help Mississippi teachers approach their learning with a common language rooted in the science of reading. The state ultimately adopted Language Essentials for Teachers of Reading and Spelling (LETRS), authored by Moats and Tolmon.

A randomized controlled trial commissioned by the U.S. Department of Education found that participants in LETRS training did increase their knowledge of reading instruction techniques (Garet et al., 2008). A subsequent study, commissioned by the U.S. Department of Education, examined Mississippi educator outcomes due to the 2013 legislation calling for statewide teacher training in LETRS combined with instructional coaching. The authors found that as a result of participating in LETRS, educator knowledge increased by eleven percentile points as measured by the Teacher Knowledge of Early Literacy Skills survey, and participating teachers in target school had significantly higher levels of instructional quality, student engagement, and teacher competencies (Folsom et al., 2017).

The International Dyslexia Association has accredited LETRS as a comprehensive, standards-based teacher training program in reading and many states are providing funding for educators to participate in LETRS training (International Dyslexia Association, 2023; Lexia Learning, 2023). In 2020, California passed Assembly Bill 77,

the Education Omnibus Trailer Bill, which appropriated \$4 million to establish the California Dyslexia Initiative. The goals of this initiative were to increase the capacity of local education agencies throughout the state to provide early intervention support for students and provide professional development focused on evidence-based instruction and strategies (California Department of Education, 2023). Among the professional development being offered are statewide communities of practice in which educational leads and leaders come together in cohorts to participate in a two-year-long blended learning series of synchronous and asynchronous professional learning (Sacramento County Office of Education, 2023)

Project Description

This professional development will take place over one school year. Teachers from the study site will participate in four one-day professional development sessions rooted in foundational reading skills based upon Language Essentials for Teachers of Reading and SpellingThe daily sessions will occur at least 6-8 weeks apart, with an instructional coaching cycle after each session. Participating teachers would need to be willing to engage in training and coaching and the related tasks and activities, such as writing reflections or preparing for a lesson using their new learning. While the scope of this research pertained specifically to general education teachers, project participation would be open to any teacher on the school campus who supports literacy in their daily practice.

Ideally, the training and coaching are offered by the same individual who has completed a rigorous LETRS course of study and is an experienced literacy coach. I meet both criteria and could offer this support at no additional cost to the site. To start, the site will need to provide funding to support compensating teachers for time outside of their workday or to provide substitutes should the training be conducted during an instructional day. I will need to work directly with the site principal to estimate totals and establish a plan for obtaining the funding. Site discretionary or federal Title 1 funds could be used to support this work. If federal funding is used, it may require an amendment to the School Plan for Student Achievement, an annual requirement for schools receiving federal funding, requiring presentation to and approval from the School Site Council.

Because participation is likely to involve time outside of the teacher's workday, it will be imperative teachers volunteer to participate. However, in the interest of sustainability, the site or district may wish to invest their resources in an individual who could support this past the initial project and extend it to other roles on campus or teachers across the district. This may require time and funding to train the most qualified individual. Because this professional development will not include the full scope of the LETRS professional learning series, they may wish to direct funds to have the program publishers run a complete series with a cohort of teachers.

Site administration will be invited to attend the professional development sessions to increase their knowledge but will not partake in the coaching cycles. Site administration will also be strongly encouraged to connect their instructional leadership

to the content being focused on and make it a priority improvement area across the school. Site administration will be tasked with encouraging teacher participation, scheduling and coordinating a training space, and ensuring coverage or compensation for teachers.

The current school administrator is dedicated to ensuring high-quality professional learning for the site, so administrative support is not anticipated as a barrier. One potential barrier is locating a suitable training space for this event, as the site has added classrooms and may be space-impacted depending on when the session is offered. One possible workaround is to meet in a community space, such as a library or district office meeting room, or to use the Zoom platform to meet virtually. Another potential barrier is finding time for the coach and teacher to meet for coaching cycles. However, technology may be a way to mitigate this, as teachers can video themselves conducting a lesson that the coach could view later, or the teacher and coach can virtually meet to prepare or debrief for a lesson.

Project Evaluation Plan

Project evaluation is an essential component of any educational endeavor. This project will contain both summative and formative evaluation opportunities. Summative evaluation will be assessed using data collected from a validated survey, the *Teacher Knowledge of Early Literacy Skills* (Folsom et al., 2017). Raw scores from pre- and post-assessments will be collected to measure teacher knowledge growth. The purpose of this summative assessment is to gauge the overall effect of this endeavor. However, there also

needs to be an evaluation put in place to guide the project and adjust the course as needed during the project implementation.

Formative evaluation will occur following each professional development day to ensure participants' needs and learning targets are met. The trainer and coach will use this information to adjust the course of study or the coaching. Participants will be asked to describe their impressions, questions, and concerns surrounding the day. The trainer can use this information to target coaching support, provide additional resources, and revise future training sessions. Following each coaching cycle, teachers will be asked to reflect on the experience, including how it impacted their classroom practice.

Project Implications

Participation in this professional development can directly enhance the teachers' knowledge and skills in supporting student literacy. Participating in the coaching cycles can translate their new or enhanced knowledge into their daily practice in the classroom. Teachers may benefit and feel empowered to continue their learning or coaching due to their participation. Administrators may also experience benefits as the knowledge and model can inspire their instructional leadership and conversations with teachers. The feedback and discourse they engage teachers in may become more specific and actionable. Ultimately, students may benefit as a result of higher-quality instruction and intervention. Reading success is tied to lifelong success, so investing in this project will serve the community extended past its initial implementation.

Section 4: Reflections and Conclusions

Project Strengths and Limitations

I developed this project to increase elementary school teacher knowledge and application of foundational reading skills rooted in the science of reading, or code-based instruction (Ehri, 2020, 2022; Tortorelli et al., 2021). This professional development will help teachers provide direct instruction and intervention to young readers more effectively. In Section 3, I presented the research surrounding teacher professional development and introduced the project plan focused on the science of reading at the foundational level. This was done as a direct result of the challenges and suggestions for support and resources uncovered during the data collection phase of this project study. Being responsive to the needs and suggestions of stakeholders increases buy-in and support for school initiatives is another strength of this project.

The project is a 4-day professional development series based on word recognition content from the most recent edition of Language Essentials for Teachers of Reading and Spelling combined with literacy coaching (Moats & Tolman, 2019). A strength of this project is the use of this highly regarded resource, as evidenced by the literature and national usage presented in Section 3, making it ideal to use as the content base for this professional development series (see Folsom et al., 2017; Savitz et al., 2018). As I delved further into the literature study, it became clear that along with helping teachers increase their knowledge about the foundational skills of reading, there was also a need to ensure teachers had ongoing learning support as they began to apply their new knowledge.

Because each teacher has unique experiences and knowledge, coaching is differentiated adult professional learning (Darling-Hammond et al., 2017; Ippolito et al., 2021; Morgan et al., 2019; Woodward & Thoma, 2021). Therefore, the project plan adds six to eight weeks between each professional development day for literacy coaching sessions with each participant, which is another strength of this project.

However, a limitation of this project is that it requires a highly qualified and experienced trainer with a deep knowledge of evidence-based reading practices and literacy coaching. The individual must also complete the two-year-long LETRS course provided by the publisher to access the information and books. Another limitation of this project may be the time and funding required to see it through. Teacher participation is voluntary and is time in addition to their regular workday. Thus, implementation would require a school site to allocate funding for teaching time.

Recommendations for Alternative Approaches

The local problem grounding this study was that reading teachers at one Northern California elementary school struggled to support the vast array of student needs at the Tier 1 and 2 levels. I explored the teacher's perceptions of these challenges in this project study. I also inquired about their suggestions for support and resources to increase their capacity to address the student's needs in reading. During the second literature review, I explored research on effective teacher professional development, leading to a four-day professional development series with literacy coaching cycles running between each day.

The training and coaching would be provided directly by me at no additional cost to the participants or the school, outside of paying for teacher attendance.

This problem may have been resolved by having teachers take the entire two-year-long LETRS course available from the publisher. While this is a worthy course of action, it requires a more substantial investment of teacher time, which could prevent teachers from volunteering. It would also not include embedded literacy coaching. Additionally, the related costs for the school site would substantially increase as participating teachers would require more paid work hours beyond their duty day, and there are likely registration and material costs associated with the publisher training. If time and funding were unavailable or limited, this could hamper the implementation and improvement process, preventing teachers from getting the needed training and support.

Scholarship, Project Development and Evaluation, and Leadership and Change

Scholarly research is intense, time-consuming, and iterative. While this can be challenging for an individual such as myself who prides themselves on being fast and efficient, it has taught me to slow down and trust the process. By doing this, I improved my ability to do a well-rounded literature review and have gained comfort with the structure and language of scholarly articles. Before this experience, I would have said it was daunting to locate and read research, but now I feel confident in my abilities.

I have also increased my skills and abilities around qualitative research methods, such as developing interview protocols, interview questions, and interview techniques to ensure a rich experience for both the researcher and the participant. Taking the time to

listen helped me avoid jumping to conclusions about how participants felt or what they saw was needed. It was also fascinating to see how participants reacted when they felt genuinely listened to and heard. Several participants commented on such, and I can see how this would extend to their buy-in of participating in the training and coaching. This will help me initiate systems change as a site or district administrator.

Finally, the literature review and development of the project study helped me solidify my knowledge of supporting adult learners and foundational reading instruction. Thinking about how I would explain and convey information about teaching and learning to read to adult learners is different than with children. I spent a considerable amount of time thinking about how I could engage and motivate the adult audience and honor the experience, preferences, and knowledge they bring to the space. This awareness is crucial as I continue developing and providing professional development to adults.

If the learning context puts off an adult learner, it may jeopardize the more considerable outcomes being targeted and impair growth or improvement. One particular research article by Hunt (2019) resonated with me as I approached the literacy coaching component of this course. The author highlighted the importance of not seeing the act of coaching as a linear transmission of knowledge from coach to teacher, but instead, to focus and value the shared learning the experience creates and honor the teacher's perspectives (Hunt, 2019). Again, thinking about the greater goal of social change, my approach to working with individuals or groups matters. I must pay heed to establishing

authentic and meaningful experiences if I want to achieve my end goal of improving teacher knowledge, skills, and student outcomes.

Reflection on the Importance of the Work

The findings of this study support and contribute to existing literature surrounding teacher professional learning and reading instruction through an RTI framework.

However, my goal was to impact the teachers in my local community school positively. These dedicated teachers pour countless hours and tireless effort into supporting the students of my community, and yet they and the data report that the students still are not reaching the expected outcomes in reading. This project study focused on viewing the teachers as experts in their school and engaging them in discussions to promote change. What they revealed became the basis for the professional development and coaching that will support their knowledge and skills to support young readers, hopefully for many years.

As the researcher behind this study, I have learned much about scholarly research and myself as a scholar, researcher, and practitioner working in K-12 public schools. The most important lesson I am taking away from this experience is the value of asking teachers about their experiences and deeply listening. Often, in education, even with good intentions, administrators make decisions that impact teachers. Still, these decisions may not be taking place with teacher input, which can negatively impact an initiative's buy-in, implementation, and long-term success. By creating space for conversations, administrators can learn and positively shape outcomes for teachers and students.

Implications, Applications, and Directions for Future Research

The data collected from this study informed me about what teachers of reading in one elementary school perceived as challenges when teaching readings, as well as what they saw as potential resources and support to assist them in mitigating these challenges. The key findings from this research study led to the development of a four-day professional development series on foundational reading with literacy coaching for participants. The implementation of this project has the potential to create social change at the study site.

Participation in this professional development and coaching can shape the knowledge practices of individual teachers and strengthen their ability, along with the school's collective ability, to respond when students are struggling in reading. For teachers, participation in a project such as this may also positively impact their feelings of self-efficacy. Teachers with higher levels of self-efficacy are more likely to have higher levels of motivation, effort, and persistence; they are more likely to be adaptable to change and willing to invest time and effort in seeking that change (Bernadowski, 2017; Cansiz & Cansiz, 2019; Ciampa & Gallagher, 2018). Students will benefit by having more knowledgeable, engaged, and supportive teachers. As a result, they may experience less stress and better academic outcomes.

Looking ahead, the research questions for this study were rooted in teaching reading through the RTI model for instruction, which employs a multi-tiered framework focusing on systematic prevention and early intervention (Arias-Gundín & Llamazares,

2021; Bester & Conway, 2021; Gersten et al., 2017; Grapin et al., 2019; Siegel, 2020). The project study is intended to support high-quality instruction in reading foundational skills, one of five core components of well-implemented RTI. Therefore, additional research examining the other core components of RTI at the school site is recommended: evidence-based practices, universal screening, progress monitoring, and data-based decision-making are the remaining practices to be examined (Arias-Gundín & Llamazares, 2021; Grapin et al., 2019).

Conclusion

For this project study, I examined teacher perceptions of the challenges they were experiencing teaching reading through the RTI model at a California elementary school and inquired about the resources and support the teachers felt would help them address those challenges. Data were collected through semistructured interviews, and the findings centered around themes and sub-themes. Woven through all the themes was that teachers desired more training and support in teaching foundational reading skills.

This finding led to the development of a four-day professional development series for reading teachers at the study site. Sessions are focused on the science of reading and are followed with individual literacy coaching for each participant. This project increases each educator's knowledge and capacity to support their students. By investing in teachers, we invest in our youth and communities for the future. Students with better outcomes in reading experience lifelong benefits.

As a practitioner, I am grateful for the opportunity to have engaged in this study. Not only have I learned extensively about how to approach and apply scholarly research, but I have also developed the intrapersonal and interpersonal skills needed to be an effective education administrator in today's world, serving students, teachers, and communities. It has solidified and inspired my continued commitment to continuously better myself to serve others.

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Appendix A: The Project Plan

The project culminating from this basic qualitative study is a four-day professional development training for teachers of reading and school administrators at one Northern California elementary school. Data analysis indicated teachers needed more knowledge and skills surrounding the teaching and learning of foundational reading skills.

The data analysis and the subsequent literature review also indicated that the teachers would benefit from job-embedded support as they translate their new knowledge into practice. Thus, a literacy coaching element has been included. The professional development days will be spaced six to eight weeks apart to allow for individual coaching sessions to occur rooted in the content of the training. Teachers will be able to select their preference for the coaching format from a menu (listed below) and work with the literacy coach to:

- Pre-planning/goal-setting meeting
- Actions to implement and monitor the plan
- Debrief, post-reflection meeting to discuss the impact

Purpose:

- Increase teacher knowledge of the science of reading, specifically foundational reading skills.
- Build teacher capacity to support all students, especially those at risk of poor reading outcomes.

 Strengthen teacher application of knowledge into practice through the use of literacy coaching.

Target Audience: Elementary school teachers and administrators.

Learning Goals: Vary by professional development day and included with daily agendas below.

Coaching Menu:

- Demonstration lesson: The coach teaches strategy/lesson while the teacher observes.
- Peer observation: The teacher teaches strategy/lesson while the coach observes.
- Co-plan a lesson or unit.
- Co-plan and co-teach a lesson or series of lessons.
- Whisper coaching: The coach arranges for and accompanies the teacher to observe another teacher. During observation, the coach points out highlights during the lesson.
- Coach supports or facilitates a Professional Learning Community meeting.
- Exploration: Coach and teacher explore technology resources or another instructional tool together.
- Data discussion: Coach and teacher preview student data and discuss the next steps.
- Informal discussion and brainstorming on the topic of teacher choice.

Evaluation:

Teacher reflection and feedback using Google Forms at the end of professional

development days and following coaching cycles.

• Pre- and post-administration of the Teacher Knowledge of Early Literacy Skills

(Folsom et al., 2017).

Materials Needed:

Audio and video projection system

• Chart paper and markers

• Pens, pencils, note paper

Snacks and beverages for all days

• LETRS Volume 1 for instructor reference only

Series Title: Foundations of Reading for Teaching and Learning

Professional Development Day 1

Learning Goals:

• Explain the Simple View of Reading and Scarborough's Reading Rope as well as

their implications for the classroom

• Understand the progression of speech to print

• Describe the roles of the significant processing systems of the brain and how the

brain achieves automaticity

• Explain the progression of word reading development in youth and its

implications in the classroom

Table 6

Development Plan Day 1

Time	Content and Activities
8:30	Welcome, review norms, acknowledgments, and introduce daily
	learning goals
	Community Building Activity
	 What book or author was memorable or influential to you as a youth?
	 Acknowledge and credit LETRS.
	• Be sure to express that this is not an accredited LETRS course,
	but the content for these professional development days is
	curated upon it. Professional developments are a chance to
	increase knowledge and develop a shared language to engage in
	job-embedded professional learning or coaching. Coaching is
	highly differentiated by the needs and choices of the adult
	learner. Participants are highly encouraged to take a more in-
	depth course of instruction, such as the entire two-year LETRS
	course.
	 Overall program purpose/goals:
	■ To increase teacher knowledge of the science of
	reading, specific to foundational reading skills.
	■ To build teacher capacity to support all students,
	especially those at risk of poor reading outcomes.
	 To strengthen teacher application of knowledge
	into practice through literacy coaching.
9:30	 Administer the pretest version (Form A) of the Teacher
	Knowledge of Early Literacy Skills (Folsom et al., 2017)
	 Have participants take a break upon completion
10:15	 Essential question: Speech to Print or Print to Speech?
	 Small groups discuss what describes human evolution as
	readers, how we should approach reading instruction, and
	why.
	Instructor Presentation
	 Introduce the science of reading
	 Development of writing systems, types of writing
	systems, and the evolution of the English writing system
	 Introduce Gough and Tunmer's Simple View of Reading

Time			Content and Activities
			(SVR) and Scarborough's Reading Rope
			■ Have participants watch the video What does it
			mean to be a skilled reader? and using the
			companion document for notes
		0	Language abilities impact reading abilities
			 Review of oral language development in small
			children
			■ The connection between language and literacy
11:30	Lu	nch	
12:15	•	Partne	r activity on Scarborough's Reading Rope
		0	Activity: Pairs will have cards with sub-strands of
			reading rope on them and sort them according to the
			strand of the rope
		0	Discussion: What happens if our curriculum does not
			attend to one of the sub-strands or strands of the reading
			rope or we make an instructional decision not to cover
			one area of the reading rope?
	•	Instruc	ctor Presentation
		0	Reading brain and brain research
		0	The Four-Part Processing Model
		0	Three Cueing Systems Model v. Cognitive Science
			Model
		0	Ehri's Phases of Word-Reading Development
			 Activity: Pairs will preview cards with tasks or
			writing samples and identify which phase it
			coincides with
			Discussion: Why is knowing Ehri's phases
			important as a reading teacher?
2:00	Break		
2:15	•	Instruc	ctor Presentation
		0	The benefits of solid instruction, early assessment and
			intervention, and connections to RTI.
			 Review of three types of reading difficulties
		0	Questions to ask when determining support for students.
			(See pages 78-79 in LETRS Volume 1)
		0	Introduce the progression of the word study chart to
			introduce the following session content.
3:15	•	Closin	g Activities
		0	Explain the coaching cycle and coaching menu
			■ Teachers select their focus for the first coaching
			cycle and schedule their pre-planning/goal-setting

Time	Content and Activities
	meeting.
	 Participants complete Google Form for reflection and
	feedback on the day.

Professional Development Day 2

Learning Goals:

- Explain the difference between phonemic awareness and phonological awareness and the implications of knowing this difference in the classroom
- Understand the differences in the three levels of skill of phonological awareness
- Understand the role of the mouth and articulation as it relates to consonant and vowel phonemes
- Explain the organization of consonant and vowel phoneme charts and how they can inform instruction

Table 7Development Plan Day 2

Time	Content and Activities
8:30	Welcome, review norms, acknowledgments, and introduce daily
	learning goals
	 Content review from the last session
	 Station Rotations: Pairs or trios will move through a series of stations, spending 5-7 minutes at each station. Each station w have a concept or visual presented on Day 1, and the group will explain what they recall about the concept or complete a matching activity.
	 Explaining tasks: SVR, Reading Rope, Three Cueing Systems Model v. Cognitive Science Model, Four-Part Processing Model
	Sorting Tasks: Example of student work by Ehri's
	Phases, Oral language development activities
	 Whole group discussion on questions or "Aha's" since the
	last session.
9:30	Quick write
7.20	What is the difference between phonemic awareness and
	phonological awareness?
	Instructor Presentation
	 Review of the Phonological Processing System from Day 1
	and lead the group through a few tasks using this system
	(see LETRS Volume 1, page 88 for examples)
	 Introduce the four functions of phonological processing
	 Emphasize the teacher's role in ensuring connections
	between sound, spelling, meaning, and context.
	 How phonemic awareness and phonological awareness
	differ
	 Introduce the Hourglass Figure created by Dr. Tolman
10:15	• Introduce the activities below and allow 30 minutes for participants
	to work independently. Encourage participants to take a break as
	needed since formal time will not be allotted for a break this
	morning.
	 Quick Practice Activities
	 Individuals visit different stations of phonological

Time		Content and Activities
		awareness activities organized by the unit of speech. At each station, they review a written definition of the unit of speech and engage in the sample activity (see LETRS Volume 2, page 94 for examples) Ouick write review
		 Participants review their quick write from the morning and add or revise their responses.
10:45	•	Discussion
10.13	·	 Introduce the reading pyramid or reading cake visual to anchor the discussion. Discuss what could happen if there is a skill gap in phonological awareness. Why do we need to know how it develops in students?
	•	Instructor Presentation
		 Introduce three levels of skill development in phonological awareness
		Early phonological awareness
		Basic phonemic awareness
		■ Advanced phonemic awareness
		Have participants review the Levels of Phonemic
		Awareness table and o Introduce why phonemic awareness is essential, the
		alphabetic principle, and the link to phonics
11:30	Lunch	
12:15	•	Cloze activity: Provide participants with a written summary of content from the morning, with a work bank provided, and complete a cloze activity with it.
	•	Instructor Presentation
		 Introduce consonant phonemes, challenges associated with them, manner of articulation, and features of articulation. Have participants complete a blank consonant chart showing place and manner of articulation as the presentation continues (see example in LETRS Volume 1, page 110). Emphasize how the chart is organized and why teachers should know this information.
	•	Practice Activity
		 Give participants a series of words to identify the initial and final consonants. Encourage them to use their mouth and the chart, not the word's spelling (examples in LETRS Volume 1, page 118).

Time		Content and Activities
2:00	Break	
2:15	•	Instructor Presentation Introduce the vowel phonemes and mouth position of vowel articulation Provide participants with a visual chart of the vowel phonemes figure (like one shown on page 120 of LETRS Volume 1) and have them take notes on the paper. The instructor may want to have a large one on chart paper and model notes on it while presenting
		 Ensure clarification of long and short vowels by mouth position and the influence of the "bossy" r Practice Activity Give participants a series of words to identify the vowel sound and write the vowel phoneme down. Encourage them to use their mouth and the chart, not
		the word's spelling (examples in LETRS Volume 1, page 123).
3:15	•	Closing Activities Explain that coaching this cycle will focus on phonemic or phonological awareness lessons, using small-group or whole-group lessons. Teachers select their focus for the first coaching cycle and schedule their pre-planning/goal-setting meeting. Participants complete Google Form for reflection and feedback on the day.

Professional Development Day 3

Learning Goals:

- Identify and support errors from students who are English language learners or speak English using a regional dialect
- Understand allophonic variation and how to teach common errors

- Develop a bank of activities to support phonemic awareness and phonological skills
- Understand how to administer and score a phonological skill assessment

Table 8Development Plan Day 3

Time	Content and Activities
8:30	 Welcome, review norms, acknowledgments, and introduce daily learning goals Content review from the last session Group discussion about challenges, questions, and Aha's from the last session.
9:00	 Pair Share What has your experience been with teaching ELLs and children with regional dialects? Do you correct their errors? If so, how? Instructor Presentation Have participants help brainstorm pronunciations of words that are commonly said a certain way depending on the part of the country you are in (i.e., Boston drops the /r/). Introduce and define dialects, the concept that we aren't trying to change the student but help them be conscious and teach them to code switch as needed. No dialect is better than another, but each is needed at different times. Review two common dialects: African-American English and English influenced by Spanish:

Time	Content and Activities
	discuss:
	https://www.aft.org/ae/summer2021/washington_seidenberg
	Partner Talk
	 Partners preview the Four-Part Processing Model graphic and
	explain it to each other.
9:20	Break
	 Instructor Presentation/Small Group
	 The four-part processing system directs the mouth to say the sounds in a word. Introduce coarticulation: When we speak, we do not always say each sound in isolation; our mouths may do something different than when we say a sound in isolation. Slight alteration is an allophone. Often, these are unconscious and predictable in youth.
	 Some students have a challenge because they rely on the mouth for phonetic spelling; if they can't hear or identify the individual sound/spelling, this can lead to future errors. Teachers need to be familiar with some of the more common ones that support instruction. Small groups of participants will rotate through stations. Each station will have info cards with common errors and how to respond instructionally. Give participants a graphic organizer to take notes as they travel the stations. Aspirated and unaspirated stop consonants Vowel nasalization before a nasal consonant The flapping of the /t/ and /d/ in medial position
11:30	■ Affrication of /t/ or /d/ before /r/ or /y/ Lunch
12:15	Group Work
12.10	 After stations are complete, groups can do a matching activity (student spelling error to the type of error) and then identify how they would teach the error.
12:45	 Instructor Presentation Introduce considerations when teaching phonemic awareness and review the progression of phonological skill development from Day 1 Provide participants with a handout of activities by level (Could pull from the instructional program or reference LETRS, Volume 1, page 142). Have participants take turns leading the group through

Time		Content and Activities
	•	one activity. The instructor may wish to model ones that could be more challenging (such as chaining). Partner Discussion O Preview your current instructional program/curriculum and discuss strengths and areas teachers may need to add more
		layers, support, or practice. Tip: upper-grade teachers may not have this built into their program, but they can support it in just a few minutes daily with whole-class games or small-group
		interventions.
2:00	Break	
2:15	•	Discussion: What do you do if you have a student you suspect may have a phonological awareness gap or issue?
	•	If there is an identified screener for the district, refer to it or the instructor to introduce David Kilpatrick's Phonological Awareness Screening Test (PAST) O Watch and have participants take notes on a copy of the PAST: Administering the P.A.S.T tutorial or PAST Administration.
3:15	•	Closing Activities
		 Explain that coaching this cycle will focus on phonemic awareness or phonological awareness lessons or assessments (such as the PAST) Teachers select their focus for the first coaching cycle and schedule their pre-planning/goal-setting meeting. Have participants select one student from their classroom to administer the PAST with and bring results to the fourth session.
		 Participants complete Google Form for reflection and feedback on the day.

Professional Development Day 4

Learning Goals:

- Understand what phonics instruction is and its implications for instruction
- Understand the typical patterns of English orthography

- Learn and conduct routines to support phoneme-grapheme correspondence, decoding, and spelling
- Understand how to administer and score a phonics survey

Table 9Development Plan Day 4

Time	Content and Activities
8:30	Welcome, review norms, acknowledgments, and introduce daily learning goals
	 Review of the PAST assessment assigned on Day 3
	 Small groups of participants share their experience giving
	the PAST, what they notice about the student's errors, and
	where they feel the student needs instructional support.
	 Wrap with a whole group discussion about general questions on the PAST.
9:00	Small group activity
	 Read aloud the middle verses of Lewis Carrol's "Jabberwocky."
	 Discuss if there were any words they disagreed with how
	they were read, how they knew how to pronounce the words, and why.
	 Assign groups each a word from the story to describe to the group why they read it the way they did (instructor may wish to model saying each word incorrectly as they are assigned) Vorpal
	■ Uffish
	■ Frumious
	Instructor Presentation
	 Introduce and define decoding and its connections to
	graphemes and orthography.
	 Emphasize letters matter (past/passed, dragon/dragging,
	sax/sacks)
	 What research says about phonics or code-related instruction
	and how it differs from meaning-related instruction (not
	recommended)

Time	Content and Activities
10:00	Break
10:15	 Brief discussion: Do you think English is a predictable language or not?
	Instructor Presentation
	 Instructor Tresentation Introduce English orthography with a video: What Is
	Orthography: Orthography Meaning Explained.
	 Returning to the initial question, English may not be as
	simple to spell as other languages, but it is more predictable
	than most think.
	Sound spelling correspondence rules can spell 50%
	of words
	■ 36% of words can be spelled by sound spelling
	correspondence except for one sound in the word,
	usually a vowel
	 Introduce a grapheme, demonstrate with a chart of words
	represented by phonemes and graphemes to emphasize the
	contrast
	 Demonstrate with the sound spelling cards as part of the
	adopted instructional materials (http://mrsjensen.com/wp-
	content/uploads/2017/11/Sound-Spelling-Card-Mat.pdf)
	 Review types of consonant graphemes and vowel graphemes (See LETRS, Volume 1, pages 171 and 176)
	 Share the frequency of graphemes for phonemes and vowels
	and connect to why the sound spelling cards don't have
	every possible grapheme combination (See LETS Volume 1,
	pages 175 and 177)
	■ Participants do a sorting activity with word examples
	to sort by the grapheme type they represent
	 Discuss why it is essential for teachers to know and use these
	cards in their classroom
	 Card Practice: Use the names of the cards to reveal a
	mystery word for participants to identify. For
	example, "What word is camel-apple-turtle?"
	■ Review position-based spelling
	• Final Double Consonant (Floss) rule
	• -Ck rule • Ai and ay for long a
	Ai and ay for long aPoint out cues on the sound spelling cards for
	position-based spelling
	 Review the routine for introducing or using
	the card (name-sound-spellings)

Time	Content and Activities
11:30	Lunch
12:15	 Partner Practice Instructor to demonstrate each routine using what is outlined in LETRS on page 198 or the adopted instructional program. After the demonstration, partners will be given a list of words to "teach" to their partner using each routine. Sound-by-sound blending Whole word blending
1:00	Instructor Presentation
	 Introduce the idea that reading and spelling are connected and that spelling is often its own component in a reading program as students matriculate. Ask participants to connect back to what spelling instruction looked like when they were kids (weekly list of words) and ask if they learned every single word in the dictionary. Likely not; focusing on the graphemes and phonemes is one way to support better spelling. Connect back to current spelling lessons in the adopted instructional program and ask what participants notice (usually a theme among the words). Partner practice Introduce sound-by-sound and whole-word dictation routines and have participants practice teaching with a partner. Whole group discussion: When a student struggles with a word or spelling, how will you use the sound spelling cards to support them? The instructor provides examples for the group to walk through Ex. Reading the long vowel as a short vowel in lame Ex. Spelling the /k/ in duck as c or k alone
2:00	Break
2:15	 Instructor presentation Introduce syllable types and the odd or schwa-based syllables to chunk more significant bits of text for decoding. Demonstrate routines to support decoding multisyllabic words. Use routines specific to the adopted instructional program or LETS Volume 1, page 265. Basic Procedure for Reading Big Words Syllabification
2:45	Instructor Presentation

Time	Content and Activities
	 Connect to the PAST for phonological awareness and introduce phonics/word recognition surveys.
	Can use a district-adopted assessment or the LETRS
	Phonics and Word-Reading Survey
	Participants review the survey and directions for
	administration
	 Video also available as demonstration:
	https://www.youtube.com/watch?v=IOf6nniu
	gsĨ
	Demonstrate how it can be used to support
	intervention and instruction at the individual or small
	group level using a sample student screener and a
	group of student screeners recorded in an Excel
	document.
3:15	Final reflections group discussion
	Closing Activities
	 Explain that coaching this cycle will focus on the routines
	introduced today.
	■ Teachers select their focus routine for the coaching
	cycle and schedule their pre-planning/goal-setting
	meeting.
	Participants complete Google Form for reflection and feedback on the day.
	feedback on the day.
	 Ask participants to complete and return the post-test version (Form B) of the Teacher Knowledge of Early Literacy Skills
	(Folsom et al., 2017) by (establish a date 6-8 weeks
	following this session).
	Tonowing uns session).

Appendix B: Interview Protocol

The following questions were asked during the semistructured interviews:

- 1. Describe Tier 1 reading instruction in your current position. What challenges do you encounter?
- 2. Describe Tier 2 reading instruction in your current position. What challenges do you encounter?
- Describe the preparation and ongoing professional learning you have received for RTI and reading.
- 4. What protocols, procedures, and materials are used to screen and progress monitor students in reading at Tier 1? And Tier 2?
- 5. Describe how decisions are made when moving students between and within tiers.
- 6. Are there additional training, support, or resources do you feel would help improve as an educator? Please elaborate.