

Texas Journal of Literacy Education

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**THEME:
ALL THINGS TEXAS
LITERACY AND SO MUCH
MORE!**

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Texas Journal of Literacy Education

JOURNAL OF THE TEXAS ASSOCIATION FOR LITERACY EDUCATION

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Texas Journal of Literacy Education is the official journal of the Texas Association for Literacy Education (TALE), the Texas affiliate of the International Literacy Association. TJLE is a peer-reviewed journal published twice each year, in the Fall and Spring. We seek original research and practitioner articles related to language and literacy practices, from early childhood through adult, inside and outside of the classroom. We welcome all voices from literacy researchers, classroom teachers, and graduate students.

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***Special Themed Issue:
All Things Texas Literacy and So Much More!***

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Editors' Introduction

Dear TJLE Readers,

This is it—this will be the last issue of the TJLE that will be edited/produced by our team, as we have come to the end of our term. When we took on this task from 2022-2025 we were just coming out of online learning at all education levels, and we tasked ourselves with a fresh start for the TJLE—with a new logo, themed issues, and the plan to give the journal a national presence.

We have been editors on six issues, had guest authors, and added bonus content (book reviews and supplemental resources). This team also created calls for a few specially themed issues:

- Collaboration for Success—Literacy Coaching and Professional Development in Education
- Social Justice Issues in Literacy Education
- Science of Teaching Reading
- All Things Texas Literacy and So Much More

Literacy educators at various levels, coaches, practitioners, researchers and scholars have all had an opportunity to share their work, but most importantly their share their voice in best practices in literacy education.

The work that we have done has allowed our respective universities to shine. East Texas A&M University (ETAMU) now has the TJLE as a journal in their databases in their library. As well as many of our faculty at ETAMU and TWU have had the opportunity to review manuscripts, and have encouraged students, and colleagues from near and far to submit their work. We thank you all for your support during our term, and we wish the new editorial team from Schriener University all the best.

Please continue to support this journal and the next editorial team, by submitting your manuscripts, sharing the journal and its contents (through word of mouth and on social media), and by getting involved with the production of the journal by signing up to review the manuscripts that come through. We cannot be efficient, relevant, and timely without you, and we would love to have your help in being a piece of TALE and TJLE's continued history. It is the hope that this journal continues to make a loud noise in sharing all things Texas literacy education!

Thank You,

Dr. Kamshia Childs, Lead Editor, East Texas A&M University

Dr. Laura Slay, Lead Editor, East Texas A&M University

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USER-CENTERED IMPROVEMENT TO TYPICAL ELEMENTARY LITERACY PRACTICES: A CASE STUDY INTERVENTION

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Abstract

More than twenty years have passed since the National Reading Panel (NRP) (2000) report attempted to answer the question: What works best in reading instruction? According to the National Assessment of Educational Progress (NAEP), reading scores (2022) show that a significant number of fourth and eighth graders are still struggling with reading proficiency despite the guidance provided by the NRP. At the same time, a preponderance of evidence from the sciences continues to distill what works best in reading instruction while states pass legislation to align classroom curricula and programs to the science of reading (SoR). This mixed-methods case study, conducted in a North Texas elementary school, evaluated the benefits and challenges of implementing a syllabication intervention based on SoR principles. The study utilized surveys and interview data from teachers and assessment data from students. Despite 52% of students being predicted to not meet the reading proficiency standards on the State of Texas Assessments of Academic Readiness, or STAAR, findings revealed that intervention had a substantial impact on both student achievement and teacher professional learning. Further, educators acknowledged the value of the intervention in enhancing their teaching methods, particularly in terms of professional growth and instructional awareness. However, challenges also occurred, including the nature of training, a lack of resources, inadequate feedback, and pedagogical alignment. The study highlights the importance of prioritizing users' needs and implementing scientific insights from the perspective of typical literacy practices.

Keywords: elementary, science of reading, literacy, syllabication, intervention

Introduction

In the two decades since the National Reading Panel (NRP) (2000) report, early education's reading instruction that balances the "Big Five" agreed-upon components has yet to improve national, state, and local reading achievement. Instructional interpretation often implements a combination of strategies that balance the five essential components: (1) phonemic awareness, (2) phonics, (3) fluency, (4) vocabulary, and (5) comprehension.

Although policymakers have advanced implementation of reading instruction based on scientifically derived evidence, meaningful application from practitioners lags (Solari et al., 2020). Educators and education systems struggle to balance accountability and the practicalities of implementation in the classroom. As classroom execution of scientifically aligned reading instruction lingers, an unacceptable number of children, specifically those from disadvantaged backgrounds, fail to acquire education's most important foundational skill—reading. Nevertheless, due to consistently poor reading outcomes, the question of how to best teach children to read persists.

To increase the likelihood that every student develops the skills of a proficient reader, teachers must carefully consider how students apply instructional reading strategies. While an accumulation of scientific evidence recommends reading instruction that aligns with the skills of expert readers (Mesmer & Kambach, 2022), well-intentioned practitioners may unwittingly misdirect potential readers by using instructional strategies that represent the unskilled readers' approach to decoding. In fact, Shanahan (2020) suggested that “many instructional routines common in today's classrooms have been drawn from teacher lore, logic, ideology, and tradition rather than from a cold-eyed look at what actually benefits student learning” (p. 119). Further, poor reading performance linked to typical literacy practices persist due to instructional reform initiatives that create inertia among educators and schools, causing teachers to wait for professional development, direction, and resources to improve and provide more equitable and higher-quality learning opportunities. In order to truly advance reading instruction, change must occur through classroom-driven improvement by identifying what works and recognizing and iteratively improving what does not work in typical literacy practices at the user level (Bryk et al., 2015).

Given the quality and scope of the scientific evidence available today, the reading wars should be a historical debate (Castles et al., 2018; Moats, 2020; Shanahan, 2020). Various policy mechanisms direct efforts toward reading reform, particularly in relation to how teachers teach reading, and the outcomes students achieve. However, despite federal and state policy efforts, improving early elementary reading outcomes to achieve grade-level reading proficiency by grade three has seen minimal change at scale. Simultaneously applying multiple levers will likely result in scattered attempts that do not progress towards significant transformation (Woulfin & Gabriel, 2020). Regardless of advances in reading research, without applicable classroom connections, the chasm between research and typical literacy practices will continue to limit the effectiveness of reading instruction.

Literature Review

Typical Literacy Practices

The remnants of typical literacy practices, reinforced by programs and approaches steeped in ill-advised protocols, underscore the challenge of transitioning towards a more scientifically aligned reading practice (Seidenberg et al., 2020). Moreover, reading research has minimized the influence of the education system and school conditions on the quality of reading instruction (Woulfin & Gabriel, 2020). Strict adherence to a prescribed script of teacher-proof curricula has limited teachers' autonomy and capacity to foster student agency (Vaughn et al., 2022). Furthermore, the quality of typical classroom procedures often decontextualizes reading activities and limits motivation and engagement to the behavioral expectations of paper-based seatwork (Duke et al., 2017; Mirra & Garcia, 2020). In addition to complying with a prescribed curriculum, student learning further follows the teacher's instructional priorities, often aligning with the assessment-driven accountability system (Davis & Vehabovic, 2017).

Since “there is no single assessment instrument or procedure that provides a complete account of an individual student's process of reading a text” (Serafini et al., 2020, p. 285), a multi-dimensional or interactive perspective of reading and comprehension demands assessment systems that incorporate diverse assessment types tailored to specific objectives (Wixson, 2017). Consequently, the longer teachers rely on typical literacy assessments as influential guides for future instruction in reading, the more challenging it may be for them to envision alternative methods of reading and teaching (Levine et al., 2022). Nonetheless, a transformative shift is finally enabling education to conceptualize effective approaches, supported by a substantial body of evidence that has taken decades to coalesce.

The Science of Reading

After decades of research across disciplines, the sciences have converged to establish a reading comprehension map known as the science of reading (SoR). Research evidence in favor of SoR is stronger and more comprehensive than the practical application of the science of reading instruction (Vaughn & Fletcher, 2020). Unbeknownst to most educators, basic research (i.e., correlational, descriptive, qualitative) from SoR is implemented impractically as an instructional formula. For example, in his attempt to reveal relevant evidence, Shanahan (2020) cites misrepresentation and misinterpretation of the term—SoR—as a barrier to effective reading instruction. Improving the interpretation of research depends on the practical translation of effective classroom instruction (Seidenberg et al., 2020). By pragmatizing the interpretation of reading research following classroom practices, researchers may simultaneously increase the likelihood of scientifically aligned implementation and mend the cultural disconnect with practitioners (Solari et al., 2020).

Despite the positive probability and potential of learning to read, TLP often adds instructional obstacles because “there is not enough research on how to translate scientific facts into effective practices” (Seidenberg & Borkenhagen, 2022, p. 5). Before answering the question of what instruction aligns with SoR, researchers and policymakers should first consider whether the typical framing of SoR values everything that matters to achieving proficient readers, as the

SoR requires more than a decoding plus comprehension proficiency formula (Aukerman & Chambers Schultd, 2021).

Phonics Decoding

Accounting for the considerable presence of decoding in current reading research, clarifying specific decoding strategies should provide a simple portal to a science-supported reading pedagogy (Kearns & Whaley, 2019). When accurate articulation (i.e., language) and print awareness (i.e., decoding) merge in the classroom, children's cognitive processes demand instructional attention at both the grapho- phonemic (i.e., letter-sound) and semantic (i.e., language comprehension) levels to support reading comprehension (Vadasy & Sanders, 2021). Decades of research have consistently demonstrated that decoding and language comprehension abilities significantly account for the variability observed in reading comprehension scores (Apel, 2021). Phonics, the instructional method for mapping letters (graphemes) to sounds (phonemes) (i.e., grapheme- phoneme correspondences), equips students with the foundational skills necessary for accurate and automatic word reading (Seidenberg, 2018; Ehri, 2020). In consolidating basic phonics skills, students begin drawing on the knowledge of simple sound structures to read monosyllabic words (Toste et al., 2017; Kearns & Whaley, 2018).

Syllabication

The alphabetic transparency of monosyllabic words enables most decoders to establish a foundational footing in phonetic rules (Wang et al., 2019). Once the alphabetic code is sufficiently consolidated, it enables readers to decode unfamiliar multisyllabic words in upper elementary (Ehri, 2020; Ehri, 2022). However, the phonic skills acquired in reading monosyllabic patterns do not accurately transfer to multisyllabic word reading (Kearns, 2015; Toste et al., 2017; Wang et al., 2019).

Syllable division patterns adhere principally to a unit of pronunciation as having a single vowel (V) sound followed by a consonant (C) and/or another vowel (Kearns, 2020). A corresponding vowel sound guides every syllable; therefore, monosyllabic patterns (i.e., VCV, VCe, CCVC, CVCC) generally follow strict letter-sound correspondence (Kearns, 2015; Kearns & Whaley, 2019). Thus, to assemble a detailed sequence of decoding skills, Wang et al. (2019) discovered a baseline threshold for each grade level and carefully examined the threshold for decoding concerning reading comprehension: "Regardless of grade level, a decoding score below the decoding threshold almost always predicts low reading comprehension" (p. 399).

Aim and Research Questions

Incorporating syllabication, as a decoding strategy, may simultaneously enhance basic reading skills, such as monosyllabic word reading, and strengthen vocabulary acquisition through multisyllabic word reading. "We do not believe that instruction in decoding multisyllabic, multimorphemic words is getting enough attention in the elementary classroom as it should" (Mesmer & Kambach, 2022, p. 62). However, there is limited availability of research concerning syllabication as a decoding strategy (Kearns, 2020) and

improving our understanding of what works best in syllabication instruction calls for researchers to reexamine descriptive studies through the implementation challenges practitioners face.

The purpose of this study was to consider the perceived benefits and challenges of implementing a syllabication intervention within daily classroom instruction. Specifically, the following research questions guided this study:

1. How does the implementation of a syllabication intervention support the development of students' reading comprehension skills?
2. What changes in students' decoding skills were observed following the syllabication intervention?
3. What benefits did teachers perceive from implementing the syllabication intervention?
4. What were the perceived challenges to implementing a syllabication intervention?

Methodology

This mixed-methods case study was conducted in the 2021-22 school year at one elementary school in North Texas. According to Creswell (1998), a case study is a “bounded system,” focused on issues illustrated by the case (p. 249). Given that education's motivation for improving reading instruction generally focuses on the quantitative outcomes of student performance, this case study focused on the teachers' perceptions of implementing a new district-wide reading intervention. By focusing on a single case, the researcher was able to delve into the intricacies of the subject matter, uncovering patterns, themes, and underlying mechanisms that may not be readily apparent in larger-scale studies. Prior to data collection, this study was approved by the researchers' university Institutional Review Board [IRB].

Background of the Study

In the 2018-2019 academic year, the State of Texas Assessments of Academic Readiness (STAAR) test revealed notable disparities in reading proficiency among third graders at a middle-class suburban elementary campus in a mid-size independent school district (ISD). Specifically, 65% of these students fell below state reading expectations, while only 34% met or exceeded them. This campus, which followed traditional instructional methods, served 353 students across grades K-5. The ethnic makeup of the student body was diverse: 58% White, 25% Hispanic, 6% Black, 8% identifying as two or more races, and 1% Asian. Reflecting its Title I status, 66% of students were economically disadvantaged and 56% were classified as at-risk. Despite a fourth of the population identified as Hispanic, less than 1% of students received ESL (English as a Second Language) services. Pertinent to the assessment of district and campus reading interventions, approximately 3% of the student body received support for dyslexia.

Context of the Intervention

As a result of more than half of third graders failing to meet the state standard, an evaluation was conducted on the effectiveness of Really Great Reading's Six Syllable Type program. Really Great Reading (RGR) was at the center of the district's initiative to improve reading outcomes in K-3. Theoretically, RGR establishes its approach in the science of reading (SoR). Deriving from SoR, RGR adheres to the Simple View of Reading (SVR), which promotes explicit and systematic instruction in word recognition (i.e., decoding) and language comprehension (i.e., vocabulary).

Fundamentally, RGR leverages syllabication as a decoding strategy. The approach operated as an embedded intervention in teachers' current practice (i.e., Balanced Literacy). Students received 30 minutes of direct syllabication instruction in addition to 90 minutes of literacy reading instruction. This intervention took place in whole or small groups for the entire year and was conducted in accordance with the scope and sequence outlined in the Texas Essential Knowledge and Skills (TEKS) standards, as established by the Texas Education Agency (TEA, 2023).

Demographics of the Participants

The study involved a convenience sample of three female general education teachers, all teaching in the second grade at the same school. These participants were selected based on their attendance at a specialized training workshop focusing on RGR syllabication techniques, which included expert consultation. All participants were White females who represented a complete grade-level team. Each teacher was responsible for a self-contained classroom, catering to the educational needs of 20 students, for a total of $n = 60$ second-grade students. Collectively, the teachers possessed 45 years of instructional experience, with 23 years dedicated specifically to teaching second-grade students. Of the three, two were seasoned second-grade educators, while one had recently transitioned to this grade level, having ten years of prior teaching experience in other grades.

Data Sources

Data was gathered using a combination of quantitative and qualitative measures to assess the impact of the syllabication intervention within an instructional context. The quantitative data was based upon student performance data gathered throughout the academic year from RGR Diagnostic Surveys and Northwest Evaluation Association's (NWEA) Measurement of Academic Progress (MAP) assessments collected at the beginning, middle, and end of the academic school year. The RGR Diagnostic Decoding Surveys were selected for their direct alignment with the syllabication intervention, enabling analysis of effectiveness in developing students' decoding skills. MAP Growth tracked students' reading comprehension, while MAP Fluency evaluated their mastery of foundational decoding skills for proficient oral reading fluency.

Qualitative data was systematically collected through highly structured interviews. Seven questions were posed to the teachers in order to elicit straightforward yes or no answers, thereby ensuring clarity and consistency in the responses obtained. Specifically, the

structured interview questions targeted three key areas: (1) the alignment of the RGR program with teachers' existing instructional practices, (2) the nature of the intervention training (e.g., conceptual understanding), and (3) the feedback provided during classroom implementation.

To enrich the qualitative data, five additional open-ended questions were asked during individual face-to-face interviews. These questions explored teachers' perceptions of the strategy's effectiveness, the challenges they encountered during implementation, and the overall quality of the intervention.

Data Analysis

The data analysis proceeded in two directions: statistical analyses and an additional exploration of the qualitative responses. The quantitative data analysis for the study was based on the examination of decoding, fluency, and comprehension from pre-and post RGR Diagnostic Surveys and NWEA's MAP assessments. Specifically, the study analyzed data from oral reading fluency, phonics decoding, and overall reading comprehension to identify the quantitative outcomes. Student information was protected during data analysis by aggregating data to prevent individual students from being identified.

Before conducting the descriptive statistics, the study examined attrition and initial equivalence across measures (i.e., MAP & RGR Surveys) at each stage (i.e., fall to spring). While the study commenced with data points from 60 students, the final analysis of student progress for overall reading comprehension and foundational skill development was limited to 52 students whose complete data was available from the beginning-of-year (BOY) to the end-of-year (EOY) assessments. Mid-year (MOY) data were excluded from this specific analysis of progress over time due to inconsistencies in student participation across all three assessment points. The study's final data were derived from participants drawn from three distinct second-grade classrooms: Class 2A (n=15), Class 2B (n=19), and Class 2C (n=18).

To examine the effects of the RGR syllabication professional development, a frequency distribution table was created to record responses from highly structured interviews. Each inquiry pertaining to the effects of syllabication professional development was recorded with corresponding 'yes' and 'no' answers. Analysis revealed patterns related to the syllabication professional development and classroom implementation.

Face-to-face interview data were recorded and transcribed verbatim. Analytical notes were composed and analyzed during the transcription and reading of all data. Initial analysis procedures included charting and coding the interview responses to determine teachers' perceptions of the RGR syllabication intervention. These codes were then grouped into emerging themes represented in definitions and participant examples. Reviewing transcriptions alongside the reflective, analytical notes, themes, and categories reflected the teacher's perceived benefits and limitations of the decoding strategy instruction. Variations in responses were acknowledged, identified, and discussed during member-checking triangulation. Personal information was removed from the transcripts to protect the confidentiality and anonymity of each participant in order to prevent their identity from being disclosed.

Results

RQ1. How does the implementation of a syllabication intervention support the development of students' reading comprehension skills?

Quantitative findings present a mixed picture regarding improving students' reading performance. Reading proficiency from Classes 2A and 2C increased from 33% to 53% and 38% to 44%, respectively. However, Class 2B decreased reading proficiency from 42% to 36% (See Table 1). In aggregate, two of the three classes remain below the majority threshold of 50%. Therefore, most students in two of three classes fell below grade-level standards.

Table 1

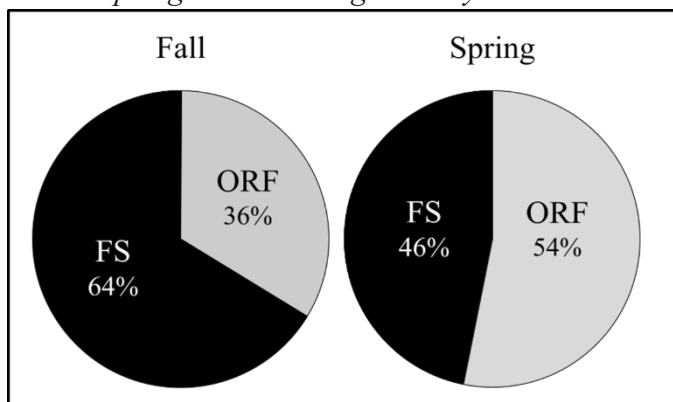
Fall to Spring Overall Reading Performance Measured by NWEA MAP Growth

Class	Fall	Spring
	At or Above Grade Level	At or Above Grade Level
2A	33%	53%
2B	42%	36%
2C	38%	44%

The MAP Fluency assessment tool evaluates students' mastery of foundational skills (FS) required for proficient oral reading fluency. In the fall, only 36% of students were proficient in oral reading fluency, but by spring, this percentage increased to 54%. However, 46% of students were yet to master the foundational skills required to achieve proficiency in oral reading fluency (See Figure 2).

Figure 2

Fall to Spring Oral Reading Fluency Achievement Measured by MAP Fluency



Academic readiness for STAAR reading summative assessment (See Table 2) in Class 2A projected that seven students (47 %) would not meet proficiency standards. In fact, nine students (47%) did not meet proficiency standards in Class 2B. In Class 2C, eleven students (61%) failed to meet proficiency standards. Of the remaining students from Class 2A, five (27%) Approached, one (6%) Met, and three (20%) Mastered grade- level standards. Five (32%) students Approached, two (10.5%) Met, and two (10.5%) Mastered from Class 2B. Remaining students from Class 2C: five (22%) Approached, one (6%) Met, and two (11%) Mastered state reading standards. Aggregately, 27 students (52%) were predicted to not meet proficiency standards in reading on STAAR. Furthermore, of the remaining 25 students (48%), 11 students (22%) Approached, five students (10%) Met, and eight students (16%) Mastered the reading standards.

Table 2

Spring STAAR Projected Proficiency Measured by MAP Growth

Class	Achievement Level			
	Did Not Meet	Approaches	Meets	Mastered
2A	47%	27%	6%	20%
2B	47%	32%	10.5%	10.5%
2C	61%	22%	6%	11%

RQ2. What changes in students' decoding skills were observed following the syllabication intervention?

Proximal measures from the RGR Survey were analyzed to examine the effects of direct syllabication instruction on decoding skills. The RGR Survey characterizes readers on a spectrum ranging from Emerging Reader to Strong Decoder. As a cohort, the percentage of Emerging Readers decreased from the beginning (23.9%) to the end (18.8%). However, the number of Strong Decoders also decreased from the beginning (17.9%) to the end (6.9%). Upon further analysis at the class level, Class 2A's Emergent Readers and Strong Decoders decreased from the beginning (33.3%, 20%, respectively) to the end (25.8%, 18.8%). Class 2B also decreased in both Emergent Readers and Strong Decoders from the beginning (28.4%, 5.9%, respectively) to the end (18.7%, 3.2%). In Class 2C, Emergent Readers and Strong Decoders also decreased from the beginning (14.4%, 10.8%, respectively) to the end (13.2%, 5.3%). While all classes decreased the number of Emerging Readers, students failed to sustain proficiency as fluent decoders (See Table 3).

Table 3*Decoding Proficiency of Students Measured by RGR Surveys*

Class	Fall (Beginning)		Spring (End)	
	Emerging Readers	Strong Decoders	Emerging Readers	Strong Decoders
2A	33.3%	20%	25.8%	18.8%
2B	28.4%	5.9%	18.7%	3.2%
2C	14.4%	10.8%	13.2%	5.3%

RQ3. What benefits did teachers perceive from implementing the syllabication intervention?

An analysis of the highly structured and face-to-face interviews responses revealed benefits to implementing the syllabication intervention. In the dichotomous (yes/no) responses, all of the second-grade teachers reported that the newly introduced syllabication intervention was *aligned* with their existing instructional methodologies. Further, all of the teachers highlighted that the training for the intervention was effectively differentiated and structured, facilitating a comprehensive understanding of the underlying concepts. This understanding allowed them to adapt and integrate the concepts into their established teaching practices.

From the five open-ended responses, interviews revealed two unique themes regarding teachers' positive perceptions. Specifically, themes of *professional growth* and *instructional effectiveness* resonated. Regarding professional growth, all teachers reported that the syllabication intervention implementation was favorable for their development as educators. One teacher explained, "I feel like the more I do this, the better that it's going to get."

Moreover, the teachers recognized the practical benefits of the syllabication intervention in improving their *instructional effectiveness* to enhance their students' reading proficiency. For example, one teacher candidly admitted the need for improvement in their explanatory skills yet remained optimistic about the overall intervention: "I feel like it's effective. I feel like even myself; I need to get better at explaining it better to them." Feedback also highlighted the teachers' ability to align and adjust the language to increase effectiveness. This adaptability is illustrated in the following excerpts shared by the teachers: "You're trying to change your mindset about how you're saying something" and "once I started implementing the different techniques, the opening door and the closed, it really bridged some of those gaps." Overall, the essence of teachers' responses expressed a willingness to improve instruction in favor of student needs. This is exemplified by statements such as, "I still think they need to have it broken up into syllables" and "I feel like it's effective."

RQ4: What were the perceived challenges to implementing a syllabication intervention?

After analyzing the highly structured and face-to-face interview responses, teachers explicitly revealed that the implementation of the syllabication intervention had numerous challenges. In regard to the perceived challenges to effective implementation, four themes emerged: (1) Nature of training, a (2) Lack of resources, the (3) Absence of feedback, and (4) Alignment to practice.

Regarding the *nature* of the intervention training, the teachers raised concerns about its modality and timing. For instance, during the interviews, two of the three teachers highlighted the challenges related to these aspects, mentioning they received their training virtually (i.e., via Google Meet) over the summer. One teacher expressed a preference for timing, stating, “I wished we would have gotten it at the beginning of the year instead of at the end of the year.” Additionally, another teacher highlighted, “it was a short training over what we have already been trained on.” Sharing a similar sentiment, another teacher expressed:

It was just a couple of hours of trying to do something, over the internet. And you’re not actually right there. So, you’re not really getting, you know, um, really good training. You’re just kinda getting, like, little bits and pieces of it. So, I think that’s a huge variable that affects your training.

Because some teachers reported they felt “forced into doing something over the internet,” gaps in professional learning may have persisted: “You’re not getting a really good training. You’re just getting, like, little bits and pieces of it.” Overall, teachers expressed the need for “more hands-on” training in a “real-life setting—like doing it in the classroom so that we can become even better at it.”

Even though teachers perceived that the *nature of the training* limited implementation efforts, teachers overwhelmingly agreed that the *lack of resources*, not having RGR student phonics kits, was “the biggest obstacle.” Per the district, each teacher that completed the RGR training was promised enough kits to implement the strategy in small groups. “I only have one kit for 20 students,” and “I thought that maybe we would get like three or four kits that way, we could work with small groups.” Two of the three teachers had received one kit each, but one teacher was left without: “I have no kits.” Because RGR training leverages the syllabication kit for effective implementation, teachers “feel like it could be easy to implement, but we are lacking the resources needed to implement in the classroom.” One teacher even reported, “We didn’t get the actual RGR; we got the science of reading which taught us a little bit.”

After analyzing the highly-structured interviews, some discrepancies emerged in teachers’ responses about the feedback they received during implementation. Two of the three teachers stated that no formal feedback was provided. One teacher, however, initially reported receiving timely and specific feedback that increased her efficiency. During member-checking, she clarified that this feedback came from informal peer conversations and self-reflection, rather than from campus or district administrators. In the end, all three teachers agreed that formal feedback during the implementation of the syllabication intervention was not provided by school or district leaders.

Variabilities also emerged regarding the *alignment of training* to current practice and whether the RGR training required a pedagogical shift. Although all three teachers agreed that the training aligned with their current practice, two teachers indicated that minor shifts were

necessary to implement the decoding strategy. In fact, one teacher remarked that she needed “to reprogram your brain to say it a little bit different.”

Teachers further explained the difference between their current teaching methods and the necessary changes for implementing the syllabication strategy, considering instructional variations and specific language: “Just getting used to some of the terminology like ‘phonemes’, and things like that.” Implementation of the strategy relied on specific language concerning six syllable types (e.g., “open syllable” and “closed syllable”) and gestures/signals for short and long vowels.

Discussion

The quantitative findings of this study revealed that reading progress did occur but also that there were still challenges. For example, Classes 2A and 2C showed an increase in reading proficiency. Yet, this improvement was not uniform across all classes, as evidenced by Class 2B, where reading proficiency declined from 42% to 36%, indicating that a significant proportion of students struggled to meet grade-level standards. And two out of the three classes remained below the 50% threshold in meeting proficiency underscoring that while there are areas of progress, a considerable number of students continue to face challenges in reaching the expected level of reading competence.

The MAP data revealed a positive trend with an increase from 36% proficiency in oral reading fluency in the fall to 54% in the spring. However, nearly half of the students (46%) did not master the foundational skills necessary for proficiency in oral reading fluency, emphasizing a significant area for targeted intervention. Also, looking at results from the STAAR data, in Class 2A, projections indicated that 47% of students would not meet proficiency standards, a prediction that was reflected in actual outcomes. In Class 2B, 47% of students did not meet proficiency, while in Class 2C, the proportion was higher at 61%. When considering the students who did meet the standards, the distribution varied across the classes, with a minority achieving the Met and Mastered levels. Overall, 52% of the students were predicted to not meet the STAAR proficiency standards, and this was closely mirrored in the actual outcomes.

The variability (or differences in skill levels) in proficiency levels across classes suggests that it is essential to explore the specific instructional approaches that facilitated the reading improvement as factors such as differentiated instruction or the integration of the syllabication intervention could have played a role. Across the grade level, there was a noticeable decrease in the percentage of Emerging Readers, from 23.9% at the beginning to 18.8% at the end of the study period. This decline suggests that the syllabication instruction may have contributed to moving students away from the lowest proficiency level in reading. However, the decrease in the number of Strong Decoders, from 17.9% to 6.9%, raises concerns about the effectiveness of the instruction in sustaining and advancing students’ decoding skills to the highest proficiency level. Data revealed a notable dip in students’ decoding performance, potentially linked to variations in instructional rigor. Teachers reported challenges such as limited access to timely feedback and some misalignment between the intervention protocols and their established practices. These factors may have impacted the consistency of implementation and, in turn, student outcomes.

Analyzing the alignment between instructional methods and the unique needs of

each class is crucial for understanding the observed changes. Future discussions should delve into identifying successful practices that led to improvement and addressing potential shortcomings in teaching strategies that may have hindered progress. This assessment lays the foundation for informed decision-making on syllabication

implementation, with progress toward ensuring a practical approach to improving reading proficiency across all classes.

Addressing the decline in both Emerging Readers and Strong Decoders raises fundamental considerations for sustaining proficiency as fluent decoders over time. To address the decrease in performance as rigor increases, it is crucial to support the implementation of interventions with targeted and timely adjustments. The declining performance underscores the dynamic nature of the assessments, revealing that while initial strides are made in increasing proficiency, the subsequent instructional intervals demand a heightened level of instructional awareness and student needs. Direct instruction may benefit from a diagnostic approach that adapts to the real-time needs of students. Recognizing the unique challenges Emerging Readers face and those at risk of regressing from the Strong Decoder category requires a personalized approach to instruction.

Implementing diagnostic teaching methods allows educators to identify specific areas of struggle and tailor interventions accordingly. Furthermore, it is essential to ask: What external factors, such as student engagement, classroom environment, teacher training, or resource availability, might have influenced the observed changes in decoding skills? How can these factors be considered in refining future instructional approaches? By embracing diagnostic teaching strategies and leveraging personalized interventions, educators can create a dynamic and adaptable learning environment that caters to the evolving needs of students, promoting sustained progress in decoding skills.

In articulating a need for professional growth, teachers demonstrated a heightened awareness of their instructional practices, underscoring the positive impact of syllabication intervention implementation on their ongoing professional learning and the potential enhancement of reading instruction and student outcomes. Professional development aimed at fostering a culture of ongoing improvement in the implementation of instructional strategies, including syllabication, must prioritize teachers' valuable input and insights. Recognizing teachers as key stakeholders and experts in their classrooms is essential for the success of any initiative. Incorporating teacher insight and input ensures that professional learning is relevant, responsive, and aligned with the unique challenges and needs observed in real-world instructional settings.

Surveys, focus groups, and regular check-ins allow educators to express their perspectives on the effectiveness of the training, suggest adjustments, and highlight areas that require further support. This iterative feedback loop ensures that professional learning remains responsive to teachers' evolving needs and experiences.

It is worth noting that at the onset of this study, teachers agreed to observations according to specific criteria using a syllabication observation protocol during direct instruction on RGR syllabication strategies. The protocol assessed implementation fidelity by ensuring the instruction was delivered consistently and accurately. The protocol involved examining specific criteria related to syllabication language, instructional components, learning activities, and material resources to assess the instructional quality of the implementation. The observation would have allowed for a detailed and explicit examination of the teaching process to ensure the intervention was implemented as intended. However,

given the perceived challenges, all teachers declined the opportunity to be observed. Given the content knowledge and resources required to implement the syllabication strategy effectively, it is important to consider conditions that impede instructional efficacy.

Educational Implications

Given the recent surge in the science of reading movement in state legislatures, the results of this study hold particular significance. While most of these legislative measures advocate implementing evidence-based teaching methods, specific laws prohibit typical literacy practices that researchers have identified in contrast to current evidence. One example is the new laws targeting a particular instructional approach known as three cueing. In 2023, Texas became the fourth state to ban the three-cueing approach. In the future, research will focus on determining the effectiveness of SoR laws, examining how these laws affect the number of students who perform at grade level, and identifying the policy factors that have the most significant impact.

Despite the nationwide focus on enhancing early elementary reading outcomes, the National Council on Teacher Quality (NCTQ) reports that the long-term sustainability of potential policy actions to improve the implementation of the SoR relies on effective teachers (Holston et al., 2024). The key to achieving lasting progress in student literacy lies in adopting literacy strategies that prioritize the effectiveness of teachers. The NCTQ report recommends five policy actions that include requirements for standardizing teacher preparation programs aligned to SoR, rigorous examination for elementary reading licensure, and most relevant to this study, the ongoing support and professional learning for teacher implementation of SoR aligned programs.

This study highlights the challenges in implementing the syllabication intervention and emphasizes the need to address training, resources, and instructional practices to improve student reading performance. The findings suggest the importance of refining implementation practices, providing ongoing support to teachers, and considering the impact of contextual factors on the effectiveness of interventions. Future research can contribute to a better understanding of the factors that influence instructional efficacy and support the effective implementation of reading interventions by iteratively refining implementation practices in authentic classroom settings. The lack of formal feedback from school or district leaders during implementation suggests a need for more structured support systems. Establishing consistent, formative feedback could strengthen implementation fidelity and teacher confidence.

Conclusion

Implementing an effective program within an ineffective education system can present significant challenges. While it may be possible to achieve some degree of success, the overall impact and sustainability of the program are likely to be limited. An effective program requires alignment with the education system's broader goals, values, and policies. If the system itself is ineffective, characterized by outdated practices, bureaucratic hurdles, or conflicting priorities, it can impede the successful implementation of the program. The program may face resistance, inadequate resources, or inconsistent implementation without a system of support. Improving the system, addressing structural issues, providing ongoing

job-embedded professional learning, and creating supportive policies can increase the chances of successful implementation. For effective programs to have a lasting impact on student learning, structural change is often required to create a sustainable education system.

Nevertheless, developing scalable solutions to reduce variability in reading instruction is a scientific endeavor that warrants urgency and requires an improvement process that continuously challenges traditional assumptions of how to best teach reading. Yet, despite scientific convergence and consensus on research regarding how children learn to read, classroom reading instruction remains resistant to the controlled outcomes of research (Seidenberg et al., 2020). Considering the contrasting approaches of research's rigorous methodology and the confounds of the classroom, how do we develop an iterative process that leverages the knowledge of both educators and researchers to advance reading instruction in favor of students? In the spirit of improvement science, positioning teachers as the primary informants in the research process establishes the classroom as the catalyst for inquiry (Gabriel, 2020). As a result, practitioners prompt research that evaluates practical evidence.

To advance the debate over what works best in reading instruction, a primary objective of educational research is to pinpoint instructional practices grounded in evidence and determine how these practices can improve student outcomes (Capin et al., 2021). By adopting an improvement science approach, researchers and practitioners can create a true partnership rather than a one-way model where practitioners follow researchers' instructions (Troyer, 2022). This approach enables researchers to learn from practitioners, creating a collaborative and mutually beneficial relationship.

In order to overcome the difficulties in putting the syllabication strategy into action, it would be beneficial for future research to investigate the systems and processes that either assist or impede implementation efforts. This could involve studying the role of instructional leadership, reading programs and curriculum, and fidelity to prescriptive instructional approaches within schools to facilitate effective implementation. Understanding the organizational factors that contribute to successful implementation can inform the development of supportive frameworks and guidelines for educators. Without practitioner-informed translation of scientifically aligned decoding instruction, two decades of data from typical literacy practices informed by the NRP reveal the limited likelihood of improving reading performance. Supporting a scientific change process towards a set of comprehensive practices that ensure reading proficiency for all students depends on the classroom contributions of practitioners.

Limitations

This study faced several limitations that are important to consider when interpreting the findings. First, the small sample size, drawn from only three second-grade classrooms within a single elementary school, limited the diversity of participants and did not achieve sufficient saturation. Because the participants shared similar instructional contexts and demographic characteristics, the findings may not be generalizable to broader or more diverse school settings. Additionally, because this study had no control group, it cannot claim causation. The design was descriptive in nature and aimed to explore teacher perceptions and observable patterns rather than establish cause-and-effect relationships. The researcher's presence and preconceived ideas may have further influenced the data collection and analysis process, contributing to potential

observer bias. Future research should consider including larger and more varied samples, along with control or comparison groups, to strengthen external validity and minimize internal threats to the study's conclusions. Further examination is necessary to better understand the relationship between students' use of decoding strategies and teachers' instructional knowledge.

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RACIAL LITERACIES MATTER: THE RELATIONAL CONTEXT OF A PREDOMINANTLY WHITE INSTITUTION

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Abstract

The current political and legal violence against DEI and the Black Lives Matter movement has pushed the debate on racial inequality to include the academic opportunity gap, systemic injustice in schools and classrooms, and racialized gender violence. This article, Racial Literacies Matter, calls us to consider hegemonic practices and [D]discourses that are hindrances to inclusive and equitable educational environments, viewing education as a dialogical and dialectical process in which knowledge is co-constructed in the process of dialogues between educators and learners, and among learners. In this article, one black undergraduate student's narratives illustrate her psychological struggles, sense of self, and persistence in the relational context of whiteness. Her experiences with White Institutional Presence (WIP) led to her psychological disconnection and prevented her from experiencing a sense of community at school. We suggest the creation of the third space, a counter-hegemonic intersubjective relational context that avoids the enactment of "power-over" ethnocentric white monocultural perspectives, and a space with a spirit and sense of community and belonging where Racial Literacies Matter.

Keywords: racial literacy, third space, whiteness, people of color, white monoculturalism

Introduction

The current legal and political attacks on Diversity, Equity and Inclusion (DEI) initiatives and the Black Lives Matter (BLM) movement demand a call to action, compelling us to awaken and respond to the multilayered systemic, structural, and discursive state-sanctioned violence, including anti-Black racism, and broader discrimination against people of color. The media focuses on the struggle against militarized police violence, but the BLM movement, in “building a world where everyone can breathe” (Crenshaw, 2020), has pushed the debate on racial inequality and inequity to include the academic opportunity gap (Ladson-Billings, 2014), systemic injustice in schools and classrooms (Paris & Alim, 2017), and racialized gender violence (Crenshaw, 1989). These structural and systemic injustices call us to investigate those practices, [D]iscourses, policies, and laws that are hindrances to inclusive and equitable environments. To improve educational environments, we must confront the realities shaped by racial inequities that impact our communities—whether in classrooms, institutions, or across the nation. As Crenshaw (July 17, 2020) stated, “Where a problem isn’t fully seen, it cannot be fully solved,” this includes addressing the “racism effect” in education, which refers to the ways in which race and racism explicitly and implicitly impact educational structures, processes, and discourses that affect people of color generally (LatCrit Primer, 2000). Guinier (2004) further advocate for racial literacy, which allows us to analyze “race in its psychological, interpersonal, and structural dimensions” (p. 115). Accordingly, this paper aims to examine the significance of Racial Literacies Matter (RLM) and the need for RLM by analyzing the relational context of whiteness, particularly white monoculturalism, through the lens of one black student’s lived experiences at a Predominantly White Institution (PWI).

Conceptual Framework

Racial Literacies Matter

Literacy education has historically been considered from a computational view of the mind; however, sociocultural approaches to language learning and literacy development question those assumptions. From a critical sociocultural perspective, what “being literate” means varies depending on the socially, culturally, and politically constructed social world, and literacy is inherently multiple and ideological, encompassing more than just academic skills, strategies, and knowledge (Gee, 2004; Street, 2013). The learning of language and literacy depends “in large part on patterns of the distribution of power and knowledge in a society” (Luke & Freebody, 1997). According to Gee (1992, p. 40), “literacy practices are almost fully integrated with, interwoven into, constituted part of, the very texture of wider practices that involve talk, interactions, values, and beliefs”: thus, fully viewing these practices can reshape the literacy education in the interest of diverse marginalized groups of learners. The concept of “literacy practices” illuminates the connections between identities, relationships, and power positions within social and cultural structures (Hull & Schultz, 2002). In a pluralistic society, there is also no neutral literacy (Ferdman, 1990; Street, 2013).

In this regard, scholars collectively shape racial literacy as a framework for understanding and addressing race and racism, with applications in education, psychology, law, and social justice. The term “racial literacy” was introduced by Twine (2010) in her book *A*

White Side of Black Britain: Interracial Intimacy and Racial Literacy for the development of a critical understanding of race and racism to navigate and challenge structural inequalities particularly in interracial families. In the field of society, Guinier (2002) connects racial literacy with civic engagement and transformative change, encouraging society to view racial disparities as indicators of larger structural problems. For the purpose of teacher education, Sealey-Ruiz (2021) emphasizes racial literacy development among teachers and students to address inequities in classrooms by conceptualizing six components of racial literacy development: critical love, critical humility, critical reflection, historical literacy, archaeology of self, and interruption. DiAngelo (2018) emphasizes whites' racial consciousness by confronting privilege and bias and by challenging white defensiveness and encouraging active engagement in racial justice conversations among whites. Tatum (2010) highlights the importance of open discussions and understanding the role of race in identity formation. Similarly, Stevenson (2014) emphasizes the emotional and psychological aspects of racial literacy, particularly in building tools for meaningful and transformative racial dialogues. Their work encourages self-reflection, critical thinking, and proactive engagement with systemic inequalities.

Grounded in the aforementioned scholars' work, from a sociocultural and relational perspective, this paper conceptualizes "Racial Literacies Matter" as critical literacy for social change, cultural diversity, economic equity, educational justice, and political enfranchisement, which will be accomplished by reshaping "literacy education in the interests of marginalized groups of learners, who on the basis of gender, cultural and socioeconomic background have been excluded from access to the discourses and texts of dominant economies and cultures" (Luke, 1997, p. 143). RLM emphasizes a reciprocal human system, which is central to individual development. According to Sarason (1974/1988), a sense of community needs to be relationally based and that "the dilution or absence of the psychological sense of community (PSOC) is the most destructive dynamic in the lives of people in our society," leading to "loneliness, alienation, rootlessness, and not belonging" (p. x). Extending Sarason's view, McMillian (1996) includes a greater emphasis on connections with others in a space to authenticate and speak one's truth. Truth, a person's statement about his or her own internal experience, becomes the primary unit of analysis for the spirit of sense of community. In other words, a classroom community needs to be a reciprocal place of emotional safety, where one has faith that he or she will belong and fit in, and the community will respond with acceptance. The spirit of sense of community mirrors what relational-cultural theorists know: that mutual empathy is an "empathic bridge" (Jordan, 1992) that leads to mutual empowerment (Miller & Stiver, 1997; Surrey, 1991), which allows each person to feel seen, heard, known, and respected in a relationship.

Whiteness and White Monoculturalism

It is essential to "see" that Whiteness is a cultural ideology embedded in the language, cultural practices, traditions, conception of time, and notions of good and bad, expressed in multiple ways within a white, social environment (Lewis, 2004). According to Malcolm X, "Whiteness is a state of mind and not complexion" which embraces "a constellation of processes and practices" (Frankenburg, 2001, p. 73). Unfortunately, according to Black (2004), there is an entrenched refusal to recognize in the academy the "sheer weight of Whiteness" (p. 1) that prevents Whites from seeing their philosophical underpinnings that position Whiteness as normative and White educational practices as neutral. Whiteness is not only a cultural location but also a racial discourse (Leonardo, 2002). Yancy (2002) summarizes that "whiteness functions

as an epistemological and ontological anchorage, assuming the authority to marginalize other identities, discourses, narratives, perspectives, and voices [thus creating] a binary relationship of self-Other, subject-object, dominator-dominated, center-margin, universal-particular, white-black.” (p. 567). Thus, the United States is a white country ideologically through the racialized design and marginalization of non-white identities and naturalization and immigration laws (Lipsitz, 2006). When Whiteness becomes a system that stratifies access to positions, resources, and power, as well as sanctioning and promoting a White racial ideology as a standard for normalcy and White superiority (Thompson, 2004), it becomes a problematic verb.

In this article we will use the attribute of monoculturalism in the construct of White Institutional Presence (WIP) to investigate how Whiteness is a problematic verb, generating barriers and acts as an everyday obstacle for black students (Gusa, 2010). Gusa (2009) had suggested in a previous paper that the disparate retention outcomes for black undergraduates are rooted in a chilly or hostile campus environment cultivated by a pattern of behavior, which she refers to as WIP. As a sociocultural framework, WIP centers a critique of the ways that whiteness is advanced through the institutional level policies and practices—focusing on the white normative messages and practices that are exchanged within the academic environment. Monoculturalism reflects a PWI’s white historical legacy. It cuts across all facets of institutional practices and organization (i.e. conducting research and teaching) and has profound ramifications about the perceptions of the world and knowledge dissemination (Christian, 2002). Monoculturalism is exhibited in policy initiatives, course content, research practices, research methods, and teaching pedagogy that are structured by white canonical perceptions, relationships, and worldview. As Gee (2008) posits, the difference between the one’s primary home-based Discourses and the secondary school-based Discourses, which we term White Institutional Presence (WIP), causes students of color and black students to lose their identities as they try to adjust, or resist in response to treatment as an “Others” in the classroom and school, and ultimately effects those students’ academic achievement. Untying the contributor’s narratives to “fully see” his/her difficulties in the relational and social contexts of whiteness, we can unpack the “linkage of literacy and race” (Ladson-Billings, 2016) and build communities of liberation and empowerment.

Method

Data Collection and Analysis

The research participant is Nyela (pseudonym), a black female student. Her participation spans from her senior year of high school through her college graduation in a predominantly white public state college located in the northeastern region of the United States. Data were drawn from six years of data, including two formal interviews, six emails and several phone interviews, and the participant’s writings about her lived experiences in her schooling lives for six years in two PWIs. All the interviews were transcribed verbatim. All the data were analyzed using the method of The Listening Guide (LG) (Gilligan, 1990). LG is a relational, feminist method that is responsive to different voices and foregrounds the relationship between researcher and contributors through complex and multilayered relational experiences within the perspective of race as a sociocultural construction. The Listening Guide method encompasses four sequential listenings: listening for (a) plot or story, with attention to recurrent words and images, metaphors,

stories, contradictions, and shifts in the sound of a voice and its position (1st, 2nd, or 3rd person narration) through the layers of the interviews; (b) hearing the psychological thinking of the participant by listening to the participant's self, the "I" voice or first-person voice, and then "I" poems are constructed including the other voices represented in "we," "you," and "they."; (c) forms of psychological violations that may lead to self-silencing and capitulation to culture norms and values; (d) the sound of her voice until it enters the researcher's psyche.

Findings

"My God is Black": Nyela's Inner Struggles and Self-Determination

Nyela understands what needs to be done to be successful. Nyela states, "You can't separate me from my color." Nyela lives in a world that judges her by her color, and battles every day to show that she is more than the stereotypes placed upon her. She is a person who can "get along with mostly anyone;" however, "racism is always in the back of her mind." There have been times that she has felt uncomfortable telling her truth; however, she will always tell it. Employing literacies as a "social constructions forged in the process of humans pursuing values, goals, and interests, under the conditions where some groups have greater access to structural power than others" (Lankshear & Lawler, 1987, p.79). We can see Nyela's process of pursuing her goals and interests, as she speaks her truth of facing structural and discursive powers of whiteness. One repercussion of monoculturalism and the other attributes of WIP is that the "we" voice may remain silent. Though Nyela's college has a minority recruitment program, her "we" voice, community voice, and voice of belonging are strangely absent. The "we" voice is only used five times in interviews during the six-year duration of the study. According to Robinson and Ward (1991), the self as "we" in the black worldview is the notion of the extended self-connected with others. Does Nyela's lack of "we" illustrate her lack of sense of community in this college community?

The one narrative where Nyela animatedly speaks her truth in the classroom dialogue of why Blacks have broad noses, dark skin, and nappy hair we hear the positive "We" voice. The capacity to learn to "see" the other and to "make oneself know" is a fundamental aspect of learning (Surrey, 1991). According to Surrey (1999), when a person's voice is acknowledged, she feels validated and empowered as a relational being. This relational empowerment creates a sense of moving forward together, developing a sense of community. The next poem shows a classroom that is not inclusive. In this monocultural classroom, whites refuse to see Nyela's point of view. It is a classroom where the "white" answer is the only correct answer. Nyela shares: "Another time we were talking about God and a student said, 'God is white.' I told them that the bible said God is like coal, in the Old Testament, and that's black." When Nyela shares her opinion that God is black, both the students and teacher get upset and disagree. "They," a classroom of whites, refuse to allow her opinion. "The students get real upset and the teacher agreed with them. He was a priest before this." The next voice poem exhibits the bones of the relational dynamics of this situation.

Nyela

White students

Nyela

We've talked

We've talked

We talked

They got upset

I told them [God is Black]

I walked out

I went back

They acted

Nyela's narrative shares a disconnection with her classmates not allowing her vision of a black God. The class and teacher do not want to accept Nyela's perspective that her God is black. This narrative ends abruptly with a critical disconnection, a moment where Nyela experiences the pain and frustration of not being understood. The problem is not just Nyela's difference; rather it is "problematized differences" of subordination and power (Walker & Miller, 2001). Using power-over, the class dominates by naming God's race; refusing to accept Nyela's views, her voice is "drowned out by white noise" (Anzaldúa, 1990, p. xxii). Nyela moves from a "we" voice of connection, to her "I" voice of inner strength in the face of domination. Her "I" voice shows her refusal to accept the dichotomy of "powerful-powerless" and "active-passive" response (Hartling et al., 2004). Her discourse ends abruptly with a critical disconnection, a moment where Nyela experiences the pain and frustration of not being understood. The dismissal or trivialization of Nyela's beliefs is an assault on her humanity and dignity (Jordon, 2002, p.1). Mutuality, "an openness to influence," (Jordan, 1991, p. 82) was not experienced by Nyela. In a room where there was no personal support for her opinions, Nyela walks out. She stated, "You can't change people. It's their problem, not mine." The tone goes from determination to resignation. Unfortunately, this classroom community did not invite reconnection. Nyela returned for the next class where the class "acted like it never happened," but it did. Nyela explained she felt "tension" but thought it could have been just herself. This relational context could prevent progress toward mutuality and authentic connection; however, Nyela stated "I was fine, and I continued to participate." Nyela continues and participates, but it is a question about how many students of color, especially black students would choose not to come back and participate. How can administrators, faculty, and fellow students support the students of color like Nyela on their campuses? Nyela articulates the answer with a strong voice:

See me as an
individual.

See me as a person.

Don't look at me and just see my skin color.

I am a black woman so be careful of what you
say.

Careful what you do.

To "see" Nyela as an "individual" is to hear her words. To create a safe and empowering space for Nyela to grow, one must be aware of what People of Color go through daily – racism. This means, living in a racialized world, educators must be careful with what they, as whites, say and do.

Discussion

Pedagogical practices and research can strengthen and empower diverse students from nondominant communities only when marginalized people's experiences and voices are recognized, understood, and valued. This article demonstrates the psychological struggles, sense of self, and determinations of one black undergraduate student in the relational context of WIP, and how Nyela's ways of being and thinking, i.e., her black literacies, her primary D/discourse – the “initial and often enduring sense of self and sets the foundations of our culturally specific vernacular language and is the way that we use language, feel and think, act and interact, and so forth” (Gee 2008, p. 156) – were devalued and untapped in the relational context of the monocultural WIP. This WIP is used to rationalize, distort, and produce illusion in order to maintain the interests of the dominant group; thus, the WIP functions as cognitive manipulative tools because “people are simultaneously the products and the producers of discourse” (Edley & Wetherell, 1997, p. 206). Just as Marxian false consciousness and Foucault's power/knowledge are examples of power exercised in consensual forms rather than in coercive forms, the whiteness ideology has been imposed in the name of academic achievement, communicative efficiency, and national unity. It is time to rethink what literacies mean and, in particular, what racial literacies mean in the contextual relations of the PWIs.

Socio-cognitive educators, as well as relational-cultural theorists, are concerned with the development of mutual empowerment in a community of learners in order to encourage and sustain productive discourse for literacy learning and development (Langer, 1987; Jordan, 2001). Mutual empowerment, also referred to as “power with,” transpires from “synergistic and nonhierarchical interactions,” which encourages *all* participants to work together in ways that cultivate connections and promote everyone's power (Surrey, 1991). Each student's voice is acknowledged, so that she or he experiences a heightened sense of clarity and feels affirmed and empowered as a relational being (Surrey, 1991, p. 172). Creating and sustaining this relational context leads to increased awareness, understanding, and learning. This is a context where the views of another are connected to one's own knowledge, thus “building new and enlarged understanding of the broader human experience” (Surrey, 1991, p. 171).

To accomplish equality and equity of literacy education, *all* voices and literacies, (e.g., cultural and linguistic practices), especially Racial Literacies (i.e., ways of being, thinking, doing, learning of students of color) need to be valued, heard, and enacted in *thirdspace* (Bhabha, 2004; Gutiérrez, Baquedano-López & Tejeda, 1999; Soja, 1996) in *internally persuasive discourses* (Bakhtin, 1981), with no possessors or authoritative figures to enforce and centralize the dominant white monocultural curricula and views about the world. It is essential to construct hybrid third space in the classroom where the dominant discourses and nondominant discourses converge, i.e., the catalyst and empowering space for change emerge, in order to allow *all* students especially, diverse students of color to develop academic abilities, cultural and socioemotional competence, critical consciousness about self, O/others, and society, and construct positive identities.

Implications

The teacher's classroom practice in Nyela's class represents the Eurocentric whiteness-centered curriculum and practices “to build the esteem of White students while ignoring, marginalizing, and destroying the spirits of Black children” (Wynter-Hoyte & Smith, 2020, p.

426). Thus, most of all, we suggest Tappan's (2006) Freirean model of conscientização, a framework for fostering critical consciousness through a three-step process, to address systemic racial issues within predominantly white academic contexts: (1) uncovering the reality of privilege and its pervasive influence; (2) dismantling and rejecting the myths, narratives, and symbols perpetuated by dominant systems; and (3) replacing these outdated constructs with new narratives, symbols, and ideologies that promote liberation and equity for *all*. In alignment with these three steps, we outline specific strategies for developing "critical capital" among *all*, especially white teachers and students for the development of critical literacies abilities.

First, it is time for white teachers and students to reflect on/in (in)actions to unveil white privilege and then take action to decenter myths and images within each discipline that perpetuates white privilege. This would entail moving marginalized texts, discourses, and identities to the center of one's curriculum, thus, incorporating diverse perspectives, inquiry, and multiple knowledge bases. The academic classroom practices would deal with the "tensions, contradictions, and structural ambiguities" within a learning community by addressing and redressing the multiple forms of oppression as they play out within and among academic communities" (Conyers Jr., 2003, p. 221). One way to redress white privilege can be done using the method of "The Archaeology of Self process." This is an excellent tool for "self-excavation where racism, stereotypes, and bias live" (Price-Dennis & Sealey-Ruiz, 2021, p.26). This work "must be done individually *and* in community for it to have the influence and power needed to bring about the dismantling of racism and move toward recognition and respect for the full and wonderful humanity of people of color" (Price-Dennis & Sealey-Ruiz, 2021, p.27). Another way is to present counter-ideological arguments to each white racial frame that arises in the class (Bonilla-Silva, 2006). This would entail addressing white entitlement reactions openly when data presented disrupts their supposedly race-neutral values of meritocracy or white historical/social understandings. White teachers and students need to value the collective survival and thriving of the class (Schiele, 1994) and facilitate a positive learning environment that promotes an intergroup atmosphere. White students and teachers, as well as the institutions, must acknowledge individual rights for learning and take social responsibility by offering support, encouragement, and help to one another (Schiele, 1994).

Second, *all* teachers, particularly white teachers, must actively recognize and address whom and what is silenced by examining how texts, talks, voices, identities, ideologies, and classroom discourses can derail productive pluralistic dialogue. This awareness cannot be achieved solely through mandates or workshops, but requires cultivating a deeper understanding of how whiteness shapes teachers' practices and beliefs, responding to the diverse needs of their students, and addressing barriers to inclusiveness within their classes. Whiteness is a discourse and a manifestation of systems of power, but white people are not whiteness (Leonardo, 2009). Thus, according to Utt (2016), teachers "face a choice. White teachers have a responsibility to transform their relationship to whiteness to live our lives and enact our pedagogies in ways that are anti-racist – as the alternative is to live in ways that support the racial oppression inherent in whiteness." Teachers need to foster a subjective as well as a cognitive experience of knowledge, where learning is holistic, interdependent, and bidirectional, rather than independent and unidirectional (Schiele, 1994). Teachers and students need to move away from an encapsulated brain paradigm to a more holistic sociocultural and sociopolitical understanding of the worlds in which they live and the worldviews in which they are operated and operate.

Finally, Moos (2003) asserts, "Given the power of environments and the tyranny of the majority, we need to focus more attention on how to nurture individuals who are in the minority"

(p. 8). Therefore, we ask teachers and teacher educators, especially white teachers to consider the need to “reevaluate structures of knowledge, cultural patterns of relationships, and organizing principles of institutional life” (Pewewardy & Frey, 2002, p. 78) by reflecting on the norms and values that arise from a Eurocentric worldview – which might systematically impair students of color’s ability to participate and succeed. Since “human beings learn and grow through interactions with difference and not by reproducing what they know” (Matsuda, 1988). We suggest that educational institutions recognize and value the contribution of people of color as creators and holders of knowledge that challenge and critique mainstream perspectives and traditions (Delgado & Bernal, 2002; Ladson-Billings, 2000). According to Sáenz et al. (2007), opportunities for critical diverse dialogue in class are a significant predictor for positive intergroup relations on campus. As hooks (1994, p.207) eloquently states, “The academy is not paradise. But learning is a place where paradise can be created.” Despite its limitations, the classroom holds transformative potential—it is a space where individuals can strive for freedom by cultivating mind, heart, and the courage to confront reality while collectively envisioning ways to “move beyond boundaries, to transgress.” This vision reflects Racial Literacies Matter as a practice of liberation.

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NO ME VEO: A LACK OF HISPANIC RACIAL REPRESENTATION IN THE TEXAS BLUEBONNET AWARD BOOKS

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Abstract

The purpose of this study was to identify the extent to which the characters in the books on the 2020-2021 Texas Bluebonnet Award Master List (TBAML) reflect the diversity of Texas students in grades 3-6 in terms of race. The researchers used content analysis to collect demographic data about the main characters in the books on the 2020-2021 TBAML. The researchers collected data from the Texas Education Agency (TEA) concerning the racial demographics of Texas students in grades 3-6, who are the readers of the books on the TBAML. The researchers compared the data collected from the books to the data collected from TEA in order to determine whether the racial diversity of the targeted readers was represented by the main characters on the TBAML. The researchers then compared the 2020-2021 data to a previous study entitled, Exploring diversity representation in literature for children: A content analysis of the 2015-2016 Texas Bluebonnet Award Master List (Lee, 2017).

Keywords: Texas Bluebonnet Awards, children's literature, content analysis, racial diversity, main characters

Introduction

The Texas Bluebonnet Award (TBA) was established in 1979 and is sponsored by the Texas Association of School Librarians (TASL) and the Children's Round Table (CRT) of the Texas Library Association (TLA). The mission of the TBA program is to promote reading by children in grades 3-6 with the goals of introducing children to a variety of quality books, thereby helping them develop critical reading skills while honoring and encouraging imaginative authors (TBA Policy and Procedures, 2017).

A Texas Bluebonnet Selection Committee is responsible for selecting the books eligible for the TBAML. The process for identifying books for inclusion on the TBAML considers books recommended by school and public librarians, teachers, parents, students, and any other interested parties. After receiving nominations, the TBA selection committee reads and discusses the nominated books and then selects 20 titles based on two initial criteria. The first criteria states that the author must be a living citizen of the United States or someone who currently resides and publishes in the United States (or has done so in the past). The second criteria states that the titles must have been published within the three years prior to the TBAML release date. The committee also considers student interests, content, any prior journal reviews, and the literary quality of the books. The committee then decides which books will be on the TBAML. After the books on the TBAML are distributed to participating schools, students vote on their favorite book (TBA Policy and Procedures, 2017).

In this content analysis, the researchers examined the TBAML in order to determine the extent to which the racial demographics of the main characters of the chosen books reflect the racial demographics of the readers of the TBAML, which is composed of a majority of Hispanic students. This study also includes a brief comparison of the current study and a portion of a study from 2015-2016 entitled, *Exploring diversity representation in literature for children: A content analysis of the 2015-2016 Texas Bluebonnet Award Master List* (Lee, 2017). This research is significant because studies show that readers from racial or ethnic minority groups who are also English Language Learners and come from low-income backgrounds are more vulnerable to reading difficulties and underrepresentation (Lonigan & Shanahan, 2010). This study also addresses how award lists such as the TBAML should be increasingly inclusive of literature that represents non-White student demographic groups.

The Nation's Report Card (2022) states that 64% of 4th grade students classified as English Language Learners or Emergent Bilinguals, performed below the basic reading achievement level. Forty percent of 4th graders who were eligible for the National School Lunch Program did not meet the basic reading level. More engaged readers statistically exhibit a higher level of reading ability and their growth as readers is positively correlated with their engagement and overall reading success. Therefore, supplying student readers with literature reflective of who they are is important. When readers are able to see themselves in the literature they read, they are more engaged and feel more connected to their school community. Fisher et al. (2014) argued that multiethnic literature has a dual significance, highlighting that minority children often have a higher sense of self-worth after reading such literature. Other researchers have reported on the correlation between reading success and student representation in literature (e.g., Lee & Anderson, 2014; Abacioglu, Volman, & Fischer, 2020). Harris (1992) states, "I became convinced that the literacy achievement of African-American children would improve if they could see themselves in the books they read. I still hold firmly to that belief" (p.

xvi). This sentiment expresses the importance of developing students' cultural competency and understanding in order to optimize their learning experience. Similarly, representation in literature is crucial for Hispanic students, as they constitute a significant proportion of the student population in Texas. It is therefore essential to select literature that is culturally sensitive and inclusive to promote diversity and equity in education for all students. According to research, students from diverse backgrounds who have access to culturally responsive literature have been shown to have a more positive reading experience and improved academic outcomes (Abacioglu et al., 2020; Gay, 2010).

The United States is a country founded by immigrants (Cowan & Taxel, 2011) and still comprised of a vastly immigrant population. According to the 1950 census, the population of the United States was 85.4% non-Hispanic White and 3.2% Hispanic, 10.5% Black, .3% Native American, and .5% Asian. The demographics of the United States' population in 2018 were 60.22% non-Hispanic White, 11.97% Hispanic, 12.72% Black, 5.63% Asian, and the remaining percent was made up of American Indian, Native Hawaiian, and people of more than one race. According to Noe-Bustamante, Lopez, & Krogstad (2020), the Hispanic population reached nearly 61 million in the United States in 2019. That is up from 9.6 million in 1970. The population of the United States has increased by a large amount during the course of the last decade, showing an increase of 18.9 million people (U.S. Census Bureau, 2020). This growth is mostly attributed to the Hispanic population, who accounted for more than half (52%) of this increase, according to a Pew Research Center analysis (Krogstad, 2020). The composition of American classrooms has changed substantially as a result of this demographic upheaval, which has far-reaching consequences for the country's educational system. The student population is today more diversified than ever before in terms of their backgrounds, experiences, and educational expectations (Noe-Bustamante et al., 2020). This demographic transition is most noticeable in states that share a border with Mexico, such as Texas, New Mexico, Arizona, and California, according to research (Ramsey, 2015). This is because there is a disproportionately large number of students of Hispanic heritage in these states. The major demographic changes that have occurred as a result of the rapid increase of the Hispanic population across the United States is particularly noticeable in states like Texas (Olguin-Phillips, 2021).

The shared border between Texas and Mexico has had a significant impact on the racial demographics of Texas public school students, resulting in a high proportion of Hispanic students (Miller, 2003). According to the Texas Education Agency (TEA), more than 50% of students in grades 3-6 are Hispanic. In addition, Texas schools have become much more diverse in recent years, with the number of Hispanic pupils increasing by 6.1% and the number of White students declining by 7.6% between 2006 and 2016. In order for the Texas education system to properly serve its student population, it is vital that school literature represent the range of student backgrounds, particularly in terms of the state's racial demographic composition. According to Lee (2017), "To assimilate various people into our public education system, all pupils must be able to connect to the curriculum and the instruments used to teach it, such as the books they read in school" (p. 195). Culturally responsive literature that reflects the diversity of the student population has been found to improve academic achievement, increase student engagement, and foster self-esteem and cultural identification (Abacioglu et al., 2020; Gay, 2010). Therefore, educators and policymakers must take into account the particular needs and experiences of these students in order to achieve educational justice and success. Gay (2010) asserts that culturally responsive teaching is an effective strategy for meeting the requirements of a diverse student population, which involves providing students with access to

culturally relevant literature and materials.

Research has proven that it is imperative for children to see oneself- one's history, culture, and experiences in the books they read. "Seeing people from different backgrounds in children's books should be the norm, not the exception" (Koss, 2015, p. 39). As the student population in American classrooms becomes increasingly diverse, it is essential that the literature used as a teaching tool reflects this diversity in order to serve all students effectively. Research has also shown that multiethnic literature can play a powerful role in promoting self-worth and mutual appreciation among people of different backgrounds (Fisher, Reynolds, Hsu, Barnes, & Tyler, 2014). Furthermore, it can foster mutual appreciation among people of different backgrounds, promoting understanding and empathy towards other cultures and experiences. According to Steiner, Nash, & Chase (2008), multicultural literature is a powerful tool for teaching empathy because it helps children to understand and appreciate the experiences of people who are different from themselves. Minority children had a higher sense of self- worth after reading multiethnic literature. It also fosters mutual appreciation amongst people of different backgrounds. According to Bishop (1990):

It is true, of course, that good literature reaches across cultural and ethnic borders to touch us all as humans...however, for those children who historically had been ignored – or worse, ridiculed – in children's books, seeing themselves portrayed visually and textually as realistically human was essential to letting them know that they are valued in the social context in which they are growing up... My assessment was that historically, children from parallel cultures had been offered mainly books as windows into lives that were different from their own, and children from the dominant culture had been offered mainly fiction that mirrored their own lives. All children need both. (p. ix-xi)

It is important to note that representation in literature is not only about including characters from diverse backgrounds, but also about the way these characters are represented and the stories that are told about them. As Ladson-Billings (1994) states, "It is not enough to simply have diverse books available; the way in which diverse students are portrayed in literature is also critical" (p. 465). Therefore, it is important to critically examine literature for its representation of diverse groups in order to ensure that it is promoting positive, accurate and inclusive narratives. Historically the majority of children's novels have predominantly featured white, upper-middle-class, able-bodied, English-speaking, and male characters (Feagin, 2016). Books such as *Charlotte's Web* in which the main character is representative of a white, middle-class girl living on a farm in a small country town, in a two parent home, may have represented the majority of students with whom it was shared in the classroom 70 years ago, but would not be wholistically representative in today's classroom (Fisher et al., 2014). Considering that the world depicted in children's books has been historically overwhelmingly White (Feagan, 2016), the depiction of many identities and experiences in children's literature is critical for creating a more inclusive and equitable school atmosphere (Ladson- Billings, 1994). The Cooperative Children's Book Center (CCBC) at the University of Wisconsin-Madison annually reports on the number of multicultural titles in print, and their findings indicate that the representation of diverse identities in children's literature remains low (Cai, 2002). Horning discovered that just 7.9% of 3,400 titles were about African-Americans, 1.2% were about Asian-Pacific Americans, 3.3% were about U.S.

Hispanics and Latinos, and 2.4% were about Native Americans. This lack of representation is especially troubling in modern classrooms, as student demographics are becoming increasingly varied (Ramsey, 2015; Olguin-Phillips, 2021). Further, there is significance in including all types of diversity in books, including, but not limited to race and people of color (Feagin, 2016). They should also include non-heterosexuals, gender diversity, people with disabilities, and ethnic, cultural, and religious minorities (We Need Diverse Books, 2015).

From this study, the conclusion can be drawn that more Hispanic representation is needed in the TBAML and in all literature for children. Despite the expanding Hispanic/Latino population in the United States, the literature presented to these students does not appropriately reflect their culture and experiences (Galda et al., 2013; Musu-Gillette, McFarland, Kewalramani, Zhang, & Wilkinson-Flicker, 2016). Children benefit from seeing themselves mirrored in the novels they read, since it fosters a sense of self-worth and mutual understanding amongst diverse groups (Galda, Sipe, Liang, & Cullinan, 2013; Koss, 2015). Those who support the growth of diversity representation in literature for children and seek to influence change should “interrogate the power structures that discriminate against certain groups and privilege others. Beyond this, as a society, we must confront race, class, and gender relations, the impact of history, and other social issues” (Botelho & Rudman, 2009, p. 9). Through literature, students can see how their cultures contribute to society and gain a sense of belonging. This sense of belonging begins in schools, namely, in the literature to which children are exposed, and carries over into the adult lives of students, as they come to comprehend their roles as members of society and their place in the world.

Materials

In order to complete this content analysis, the researcher purchased the 20 books nominated for the 2020-2021 TBAML. Below is the 2020-2021 TBAML in alphabetical order organized by the author’s last name.

Auxier, J. (2018) *Sweep: The Story of a Girl and Her Monster*. Puffin Canada.

Blakemore, M. F. (2019) *Frankie Sparks & the Class Pet*. Aladdin.

Barton, C. (2018) *What Do You Do With a Voice Like That? The Story of Extraordinary Congresswoman Barbara Jordan*. Beach Lane Books.

Bowels, D. (2018) *They Call Me Güero: A Border Kids Poems*. Kokila.

Brown, D. (2019) *Rocket to the Moon (Big Ideas that Changed the World)*. Abrams Fanfare.

Calejo, R. (2018) *Charlie Hernandez and the League of Shadows*. Aladdin.

Craft, J. (2019) *New Kid*. Quill Tree Books.

Dekeyser, S. (2018) *The Rhino in Left Field*. Margaret K. McElderry Books.

- Haddix, M. P. (2019) Greystone Secrets #1: The Strangers. Katherine Tegen Books.
- Lenz, N. (2019) Bernice Buttman, Model Citizen. Random House.
- McDunn, G. (2019) Caterpillar Summer. Bloomsbury Children's Books.
- Miller, R. (2019) No More Poems! A Book in Verse that Just Gets Worse. Little, Brown Books for Young Readers.
- Parry, R. (2019) A Wolf Called Wonder. Greenwillow Books.
- Pinkney, J. (2019) A Place to Land: Martin Luther King Jr. and the Speech that Inspired a Nation. Neal Porter Books.
- Pyron, B. (2019) Stay. Katherine Tegen Books.
- Sichol, L. B. (2019) From an Idea to Disney: How Imagination Built a World of Magic. Clarion Books.
- Stone, T. L. (2018) Pass Go and Collect \$200: The Real Story of How Monopoly Was Invented. Henry Holt & Co.
- White, J. A. (2018) Nightbooks. Katherine Tegen Books.
- Van Dusen, C. (2019) If I Built a School. Rocky Pond Books.
- Venkatraman P. (2019) The Bridge Home. Nancy Paulsen Books.

Methodology

This content analysis is a five-year follow-up study of a portion of the dissertation entitled, *Exploring diversity representation in literature for children: A content analysis of the 2015-2016 Texas Bluebonnet Award Master List* (Lee, 2017) which reported on the racial representation of characters on the 2015-2016 TBAML. The 2016 study revealed that the characters in the Texas Bluebonnet Award Books did not proportionally represent the readers of those books. Hispanic students, which represented the largest racial category of students enrolled in 3rd through 6th grades in Texas schools during the 2015-2016 school year (834,745 or 52.5%), were grossly underrepresented with only 8.7% of the main characters being Hispanic. According to TEA (2022), during the 2020-2021 school year, Hispanic students in grades 3-6 made up 827,081 or 52.5% of the total student population in Texas, the same percentage as in the previous study (Lee, 2017). The present study is designed to compare the category of racial representation of the main characters on the 2020-2021 TBAML with the

racial makeup of students enrolled in grades 3-6 during the 2020-2021 school year to see if the characters in the selected books more accurately match the racial diversity in Texas schools in present day.

To ensure the accuracy of the data collected for this study, the researchers took a systematic approach in determining the socio-demographic characteristics of the main characters from the books selected on the TBAML. The researchers determined the total number of main characters that would be used from the 20 books on the TBAML for the data calculations. Of the 20 books, 18 of them had one main character. There were two books where the main character was classified as undetermined. These books included *No More Poems! A Book in Verse that Just Gets Worse* by Rhett Miller. This is a book of poems that included representations of multiple races, however, one main character for the book could not be determined. Further, the book entitled, *A Wolf Called Wonder* by Rosanne Parry included a wolf as the main character, therefore, race could not be applied. These two books were eliminated from all calculations because the information concerning the characters presented in the book was found to skew the set of data collected from the books. After determining the total number of main characters, the researchers determined the race of each of the main characters using details provided within the text of the book.

Next, the researchers compared the data with the corresponding data percentages calculated using reports released by the TEA. The total number of Texas students in grades 3-6 was used to calculate percentages from TEA Public Information Record (PIR, 2020-2021) reports. For example, there were a total of 1,576,505 students in grades 3-6 during the 2020-2021 school year. Among them, 827,081 students in grades 3-6 were Hispanic, which is 52.46% of the total population of students, a number totaling more than half of the population. In order to derive a percentage that could be compared to the data percentages calculated for the main characters on the TBAML, the researchers calculated the percentage of main characters found to be Hispanic out of the 18 books. For example, since 2 of the 18 characters in the books were identified as Hispanic, the percentage of Hispanic representation was found to be 11.11%. This process of comparing percentages from the data sets was repeated for each subdivision of the seven racial categories included on the TEA PIR report. These percentages conveyed the extent to which diversity representation, according to race, was present in the books on the 2020-2021 TBAML, and how well that representation mirrored the demographics of the readers of the books.

Results

According to TEA, during the 2020-2021 school year, Hispanic students made up 52.46% of the total student population in grades 3-6. The findings of this study show a need for more Hispanic representation among the main characters in the literature accessible to Texas students, particularly those in grades 3-6, who are the readers of the TBAML.

Data was collected from the 2020-2021 Texas Bluebonnet Award Books concerning the race of the main characters in the books. In the 2020-2021 PIR released by the TEA entitled “Enrollment by Grade and Race/Ethnicity” race was organized into seven categories including African-American, American Indian, Asian, Hispanic, Pacific Islander, White, or Multiracial. Table 1 illustrates a comparison of the racial makeup of the main characters in the books to the racial makeup of Texas students in grades 3-6.

Table 1.

*Racial Makeup of Texas Students in Grades 3-6 During the 2020-2021 School Year
Compared to the Racial Makeup of the Main Characters in the 2020-2021 TBAML*

	African Am.	Am. Indian	Asian	Hisp.	Pacific Islander	White	Multi - racial	Total
Grades 3-6	12.68%	0.39%	4.85%	52.46%	.16%	26.68%	2.78%	100%
Main Characters 2020-2021	22.22%	0.00%	5.55%	11.11%	0.0%	55.55%	5.55%	100%

Table 2.

*Racial Makeup of Texas Students in Grades 3-6 During the 2015-2016 School Year
Compared to the Racial Makeup of the Main Characters in the 2015-16 TBAML*

	African Am.	Am. Indian	Asian	Hisp.	Pacific Islander	White	Multi - racial	Total
Grades 3-6	12.5%	.4%	4.1%	52.5%	0.1%	28.4%	2.1%	100%
Main Characters 2015-2016	4.3%	0.0%	4.3%	8.7%	0.0%	78.3%	4.3%	100%

During the 2020- 2021 school year, Texas students in grades 3-6 were found to be 12.68% African-American, 0.39% American Indian, .85% Asian, 52.46% Hispanic,

0.16% Pacific Islander, 26.68% White, and 2.78% Multi-racial. Of the main characters in the books on the TBAML, (22.22%) of the main characters were African American, Asian, or Multi-racial. Further, (11.11%) of the main characters were Hispanic, and (55.55%) were White. No Pacific Islander or American Indian characters were represented.

During the 2015-2016 school year, Texas students in grades 3-6 were found to be 12.5% African American, 0.4% American Indian, 4.1% Asian, 52.2% Hispanic, 0.1% Pacific Islander, 28.4% White, and 2.1% Multi-racial. Of the main characters in the books on the TBAML, one out of twenty-three (4.3%) of the main characters was African American, Asian, or Multi-racial. Further, two out of twenty-three (8.7%) of the main characters were Hispanic, and eighteen out of twenty-three (78.3%) were White. No Pacific Islander or American Indian characters were represented.

Accordingly, this study showed that the main characters in the books on the TBAML underrepresented the Hispanic demographic population by 43.8%, the African- American

demographic population by 8.2%, the American Indian demographic population by .4%, and the Pacific Islander or American Indian demographic population by .1%. Further, the main characters in the books on the TBAML overrepresented the White demographic population by 49.9%, which is almost three times as much, and doubled the multi-racial demographic with an overrepresentation of 2.2%. The Asian demographic population was about equally represented with a difference in representation of only 0.1%. Finally, the difference between Hispanic representation in 2015-2016 and 2020-2021 was 8.7% and 11.11%, respectively, and in both years the Hispanic student population of students in grades 3-6 was over half of the student population.

Discussion

Literature that is provided to students in schools ultimately sets a solid foundation for how students see themselves as part of society. Texas classrooms now represent more racial diversity than has ever before ever existed in the history of the state.

Therefore, literature such as the Texas Bluebonnet Award books should represent this growing racial diversity. Literature must be a teaching tool that weaves a common bond so that all students feel included as they progress through the Texas school system.

At 52.5%, more than half the students in grades 3-6 are Hispanic while only 8.7% of the characters in the Texas Bluebonnet Award books are Hispanic, a percentage that has remained stagnant since the 2015-2016 study. Conversely, 78.3% of the characters in the TBA books are White, while only 28.4% of students in these grades make up that racial demographic. The disproportionate representation of White characters and a lack of representation of other races has been documented for decades. Barry (1998) raised important questions regarding cultural representation in children and young adult's literature, including the consequences and reasons for this underrepresentation and potential solutions. "Given that there is poor representation of Hispanics in children's and young adult (YA) literature, what are the true ramifications? How exactly does this situation affect our students? What are the reasons for this poor representation? What can be done about it?". The answers to these questions asked 25 years ago lie not only in adding literature representative of the student population in classroom libraries and using it to teach lessons, it also lies in making sure it makes award list nominations such as the TBAML.

There are numerous strategies to ensure that the literature chosen for the TBAML include books that are inclusive and culturally sensitive to the large population of Hispanic students in Texas schools. As this research outlines and mostly notably, the selection committee can search for literature with Hispanic characters and themes.

However, inclusion may also mean that the selection committee seeks out works authored by Hispanic writers. Additionally, the selection committee can search for novels released by publishing houses controlled by Hispanics. It is also essential to consider the subject matter of the chosen books, particularly with respect to the titles having positive depictions of Hispanic culture and people. The committee may also search for works that address pertinent Hispanic community concerns, such as immigration, prejudice, poverty, and the different experiences and opinions of Hispanic people. Choosing a higher percentage of books of this nature for the TBAML will result in a more inclusive and culturally sensitive literary environment for a majority of students in Texas schools who are the readers of the TBAML, and who are also

Hispanic. In a state that shares a border with Mexico, Hispanic representation in literature presented to students in school is a necessity and should be a top priority for those involved with choosing books for the TBAML which in turn, are used to educate Texas students.

Declaration of Interest

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PHONEMIC AWARENESS AND AI: EVALUATING CHATGPT PLUS FOR STRUCTURED LESSON DEVELOPMENT

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Abstract

Effective phonemic awareness instruction is essential for early literacy development, yet teachers often seek additional support in designing structured, engaging, and standards-aligned lesson plans. Generative AI (GenAI), such as ChatGPT Plus, is a promising tool for assisting educators with lesson creation. This study explores the effectiveness of ChatGPT Plus in generating phonemic awareness lesson plans that align with learning objectives, the Gradual Release of Responsibility (GRR) model, and the Science of Teaching Reading (STR) instructional practices. The study evaluated and refined three ChatGPT Plus-generated lesson plans using a design-based research methodology. The initial output lacked student engagement, formative strategies, and explicit teacher feedback and needed multiple refinements. The final output indicates that ChatGPT Plus successfully created lessons using the GRR model, incorporated STR instructional practices, and aligned them with lesson objectives. This study highlights the potential of GenAI in lesson planning but emphasizes the need for teacher experience in using detailed prompts and critical evaluation of GenAI lesson plans. While ChatGPT Plus can streamline lesson planning, teacher oversight remains essential to ensure pedagogical and instructional effects.

Keywords: PA, generative AI, ChatGPT, Science of Teaching Reading, lesson planning

Introduction

Lesson planning is an instructional tool that helps teachers develop a framework to deliver content and structure learning activities (Li, 2024; Shen et al., 2007). Teachers should design lesson plans to be engaging (Behizadeh, 2015; Dorovolomo et al., 2010; Marchand et al., 2021), align their teaching with the learning objectives (Reed, 2012; Wiggins & McTighe, 2001), and support student needs (Li, 2024). Lesson plans should maintain student interest and motivation (Behizadeh, 2015; Marchand, 2021) and provide a clear direction for effectively teaching and assessing student progress (Li, 2024). The quality of the lesson plan directly influences instructional delivery and the students' learning experiences (Li et al., 2009).

Teachers often find that the time allocated for lesson planning during the school day is insufficient to develop high-quality instructional plans (Hixson, 2013; Rentner, Kober, & Frizzell, 2016; Shen et al., 2007). Teachers ranked needing more planning time as the most important issue supporting them with their day-to-day teaching (Rentner, Kober, & Frizzell, 2016). In addition to the lack of adequate time to plan, studies have shown that teachers face difficulties in lesson planning due to designing lessons that meet the learning objectives (Antari, 2021; Fadoli, 2022a) and are engaging and relevant to students (Behizadeh, 2015). Furthermore, teachers often lack the content knowledge regarding effective reading instruction and the necessary understanding of the Science of Teaching Reading (STR) needed to develop lesson plans (Cheesman et al., 2009; Moats, 2020). Effective reading instruction is based on an understanding of Gough and Tunmer's (1986) "simple view of reading" that both word recognition and language comprehension help develop readers. Learning to recognize words accurately depends on developing phonemic awareness (PA), which helps students understand how sounds combine to form words (Boyer & Ehri, 2011; Hulme et al., 2002). Many teachers possess limited knowledge of PA (Cheesman et al., 2009; Cunningham et al., 2004; Moats & Foorman, 2003), affecting their ability to design effective lesson plans that include research-based instructional practices (Ramanair et al., 2020). Teachers also face insufficient resources to create PA lesson plans, exacerbating the difficulties (Choi et al., 2024).

Designing PA lesson plans that meet learning objectives and engage learners can be time-consuming, and teachers can benefit from time-saving measures. According to the 2024 State of the American Teacher survey, 76% of teachers reported working between 41–60 hours per week, and 12% of teachers reported working more than 60 hours per week planning, teaching, and grading (Steiner et al., 2024). Additionally, 60% of teachers reported feeling burned out. (Doan et al., 2024). The introduction of Generative AI (GenAI) presents an opportunity to support lesson planning and reduce teacher workload and burnout.

GenAI refers to artificial intelligence systems that can create forms of media based on user input (Sengar et al., 2024). One widely used form of GenAI is ChatGPT, developed by OpenAI. This study specifically used the paid version of ChatGPT Plus to access the most advanced model available at the time. In this study, the term ChatGPT Plus is used when referring to the specific tool tested, and GenAI is used when discussing the broader implications of the tool. GenAI use in education is still emerging, but early studies show ChatGPT can help teachers create lesson plans, assessments, and other curriculum materials (Cooper, 2023; Lo, 2023; van den Berg & du Plessis, 2023). However, some studies have shown that ChatGPT has not performed satisfactorily in different subject areas (Lo, 2023). Zhang & Tur's (2024) systematic literature review identified only 13 peer-reviewed studies on ChatGPT use in K-12 education, with most focusing on student use in middle and high school in math, science, and

language arts. ChatGPT has been shown to assist teachers in creating engaging instructional ideas and strategies (Zhang & Tur, 2024). None of the reviewed studies explored ChatGPT's abilities in creating literacy lesson plans for early elementary students.

This study addresses the gap in research on how ChatGPT Plus can support the design of PA lesson plans. The purpose of this article is to explore the potential and limitations of how ChatGPT Plus can support teachers with creating PA lesson plans that align with educational learning objectives, use the Gradual Release of Responsibility (GRR) model to support student independence, generate engaging activities, and support STR instructional practice. The following research questions were used to guide the study:

1. How effectively can ChatGPT Plus create lesson plans aligned with learning objectives?
2. How effectively can ChatGPT Plus create PA lesson plans that align with the (GRR) model?
3. How effectively can ChatGPT Plus create lesson plans that use (STR) instructional practices?

Methodology

Research Design and Data Collection

My study employed a Design-Based Research (DBR) methodology framework to test ChatGPT Plus's ability to create PA plans. DBR addresses the limitations of traditional research by situating studies in real-world settings to improve practice and theory (Armstrong et al., 2020; Barab & Squire, 2004; Brown, 1992; Collins, 1990). A review by Tinoca et al.(2022) of 162 DBR studies in K-12 and teacher education confirms DBR's effectiveness in bridging the gap between theory and practice and shows how DBR can effectively guide the development and testing of GenAI-enhanced instructional tools in educational settings.

DBR was chosen for this study because it allows for repeated cycles of development, evaluation, and refinements through a four-phase process: identify a challenge to be addressed, create a potential solution, collect data on its effectiveness, and then analyze and refine it (Armstrong et al., 2020; McKenny & Reeves, 2019). This study followed the cycle by identifying the challenge of supporting teachers in designing effective PA lesson plans that align with learning objectives, the GRR model, and STR principles.

I crafted the initial prompt to simulate a teacher's process when working with ChatGPT Plus to design a PA lesson plan. This prompt tested whether ChatGPT Plus would generate the entire lesson by only stating the grade level, the targeted skill and prompting using the GRR model. Each output was evaluated for alignment with the established criteria. Following each output, the lesson output was assessed for alignment with crafting lesson plan objectives that align with the TEKS, the use of the GRR model, and STR instructional strategies. The second prompt addressed the misalignments a teacher would need to make after reviewing the initial output to be more specific by adding the TEK, asking for a script, and adjusting the time to meet the teacher's allotted time in a typical day to teach PA. The third and final prompt was designed to mimic changes a teacher would make to use only one type of manipulative, ensuring students could complete the independent practice after seeing it modeled. The lesson plan outputs were not used with students but served as data for analyzing how ChatGPT Plus can assist teachers in designing PA lesson plans.

Data Analysis

I performed a design evaluation to evaluate, compare, and refine the lesson plans generated by ChatGPT Plus to systematically assess their alignment with lesson objectives, GRR model, and STR principles. This process involved a qualitative analysis of the structure, content, and instructional strategies embedded in the lesson plan to evaluate the alignment and refine the input prompts accordingly. This part of the DRB process helps the researcher analyze and adapt to enhance the potential solution (Momand et al., 2022). The analysis was performed to systematically examine and interpret the lesson plans generated by ChatGPT Plus to gain insights into GenAI's ability and limitations to create a PA lesson plan for a first-grade classroom.

For learning objectives, I assessed whether the lesson objective aligned with Marzano's Taxonomy (2006) expectations that the nouns and verbs align with the TEKS and match the expectation of the PA skill. GRR alignment was evaluated by identifying whether all three phases of the GRR model, including affirmative and corrective feedback, were used effectively. The STR-aligned instruction was analyzed to check if a single skill was taught, if manipulatives were incorporated, and whether the lesson was auditory or included using letters.

Conceptual Framework

This section will discuss the conceptual frameworks that informed the analysis of the ChatGPT Plus outputs. Each lesson output was analyzed to evaluate its alignment with educational learning objectives, the GRR model, and PA within the STR framework.

Lesson Objectives

Lesson objectives are part of the instructional sequence when explicit instruction is provided (Archer & Hughes, 2011). Stating the learning objective at the beginning of the lesson helps clarify the goal for students and ensures the lesson is designed to assess mastery (Wiggins & McTighe, 2011). Maintaining a focus on the learning objective may increase student engagement by clarifying the purpose of the activity (Reed, 2012). Marzano's New Taxonomy of Educational Objectives (2006) builds on Bloom's Taxonomy to provide a detailed procedure for designing educational objectives. Marzano adopts the idea that it is important to specify the type of knowledge and the mental process into a framework to design objectives to promote higher-order thinking and align instruction with clear goals. To create a learning objective, teachers should identify the type of knowledge, specify the mental process, and use a consistent structure of "The student (or students) will be able to..., plus a verb phrase and an object of the phrase," (Marzano, 2006, p. 118) to present objectives. To accomplish this, teachers must unpack the standard to identify what the students will know and be able to do (Marzano & Haystead, 2008) so they can align the lesson objective to the verbs and nouns in the standards (Wiggins & McTighe, 2011), create summative and formative assessments, and design meaningful activities (Drost & Levine, 2017).

Gradual Release of Responsibility Model

Instructional frameworks guide teaching and learning by providing intentional, clear expectations for effective instruction (Fisher & Frey, 2021). Instructional frameworks support teachers with designing lessons and selecting strategies. The GRR model was developed by P. David Pearson and Margaret C. Gallagher in 1983 as a framework that transitions the cognitive load from teacher to student from the teacher modeling, guided practice, to independent practice. Pearson and Gallagher's (1983) framework begins with the "I do," where the teacher establishes the purpose for learning and models and explains the cognitive process and metacognitive needed to learn the skill. The "I do" is followed by the "We do," in which the students practice with support and feedback on errors and misconceptions from the teacher. Last is the "You do it" stage, where students work to apply what they have learned. Fisher and Frey (2021) expanded the GRR and the importance of affirmative and corrective feedback to address misconceptions and to guide students to an accurate understanding.

Table 1
Gradual Release of Responsibility Framework

GRR Phase	Teacher Actions	Student Actions
I Do	<ul style="list-style-type: none"> • Describe learning intentions and success criteria • Think aloud, model strategies, or deliver direct instruction 	<ul style="list-style-type: none"> • Listen and make connections • Take notes • Reflect on modeled behavior
We Do	<ul style="list-style-type: none"> • Guide practice and prompt thinking • Ask questions to check understanding • Provide affirmative and corrective feedback 	<ul style="list-style-type: none"> • Participate in guided practice • Respond to teacher prompts • Clarify understanding
You Do	<ul style="list-style-type: none"> • Assign independent tasks • Observe student performance • Provide feedback on mastery and next steps 	<ul style="list-style-type: none"> • Apply skills independently • Demonstrate understanding • Reflect and revise as needed

Phonemic Awareness within STR Framework

The "simple view of reading" is a theoretical framework proposed by Gough and Tunmer in 1986 to describe reading comprehension as a product of decoding and language comprehension. Decoding is recognizing words in print and translating them into spoken language, and language comprehension is the ability to derive meaning from spoken words (Gough & Tunmer, 1986). Both components are necessary to support proficient reading (Moats, 2020). STR research has identified effective, evidence-based instructional methods for supporting both decoding and language comprehension, including PA, phonics, fluency, vocabulary, and reading comprehension (Foorman et al., 2016; NRP, 2000).

The National Reading Panel (2000) found that PA, systematic phonics, and reading fluency help children identify words accurately and fluently. PA is the ability to identify, focus on, and manipulate the smallest units of sounds, known as phonemes, through blending,

segmenting, and modifying sounds to create new words (Ehri et al., 2001). When students learn that phonemes correspond to written words' letters through PA instruction, they begin to decode accurately (Erbeli et al., 2018; Ehri et al., 2001; National Reading Panel, 2000). PA instruction supports students in understanding the alphabetic principle to make meaningful progress in early reading (Ehri et al., 2001; Gough & Tunmer, 1986; Moats, 2023).

The National Reading Panel (2000) meta-analysis shows that PA instruction has a strong effect on PA and a moderate effect on reading and spelling. The findings suggest that instruction is most effective when combined with letter knowledge, taught in small groups, and targets one or two skills at a time over 5 to 18 hours. Longer PA instruction did not yield additional benefits, implying that shorter sessions are more advantageous for teaching PA. Furthermore, the study reveals that PA instruction supports a diverse range of learners, including those with reading difficulties and disabilities. The National Reading Panel's (2000) study provides solid evidence that PA instruction is critical to early literacy instruction.

Teachers recognize the importance of PA instruction but lack knowledge of PA and its instructional components (Bos et al., 2001; Cheesman et al., 2009b; Foorman et al., 2003; Hudson et al., 2021). Teachers deliver PA instruction through a curriculum program, teacher-developed lessons, or a combination of both (Mathes et al., 2003). Both PA programs and teacher-created lesson plans have strengths and limitations. Curriculum-developed programs provide teachers with systematic, research-based routines that use modeling and sequencing of PA skills from easy to hard (Santi et al., 2004). However, research has found that programs lack specific feedback techniques and do not provide opportunities for individualized instruction to meet the needs of at-risk students (Santi et al., 2004; Wanzek et al., 2000). Alternatively, teacher-created plans allow customization to meet individual student needs (Santi et al., 2004; Wanzek et al., 2000). The effectiveness of teacher-developed lessons depends on the teacher's knowledge of phonological development (Cheesman et al., 2009b; Moats, 2009).

Effective literacy lessons align the learning objectives with explicit and systematic instruction (Antari, 2021; Fadoli, 2022; Marzano, 2006). Research highlights that PA includes teacher modeling and several opportunities for students to practice the skill and incorporate interactive and engaging instructional techniques (Cunningham, 1990; Ehri et al., 2001; Foorman & Torgesen, 2001; Honig et al., 2000)

Outputs from ChatGPT Plus and Rationale for Revisions

The first prompt told Chat GPT Plus, "You are a first-grade teacher in the state of Texas, and you need to create a lesson plan to teach your students PA where students learn for the first time how to manipulate the initial sound in a word by deleting a sound and inserting a new sound. Please create a lesson that uses the "I do," "We do," and "You do" format." This prompt tested whether ChatGPT Plus would generate the entire lesson, including the learning objective. The resulting output from the first prompt is presented below in Table 2.

Table 2.*First Prompt ChatGPT Phonemic Awareness Lesson Plan: Manipulating Initial Sounds*

Component	Description
Time	20-30 minutes
Objective	Students will be able to delete the initial sound of a word and insert a new sound to form a new word.
Materials	Picture cards of simple words (e.g., hat, cat, bat, mat, rat, pat); whiteboard and markers; magnetic letters (optional).
Introduction (5 minutes)	Set the Purpose: "Today, we are going to play with sounds in words!"
Component	Description
Introduction (5 minutes)	<p>We'll learn how changing the beginning sound of a word can create a whole new word."</p> <p>Review: Briefly remind students what a beginning sound is by showing a few example words and identifying their initial sounds (e.g., hat starts with /h/, cat starts with /k/).</p>
I Do (Teacher modeling) 5-10 minutes	<p>Model Sound Deletion and Insertion:</p> <ul style="list-style-type: none"> Start with the word "cat." Say, "Listen carefully to the word: /c/ /a/ /t/. I'm going to take away the /c/ sound and replace it with the /h/ sound." Demonstrate slowly: "/h/ /a/ /t/." "What's the new word?" (hat) Write "cat" and "hat" on the board to visually show the change. <p>Emphasize Process: "First, I listened to the sounds in cat. Then, I removed the /c/ sound. Finally, I added the /h/ sound, which gave me a new word: hat!"</p>
You Do (Independent practice) 5-10 minutes	<p>Partner Activity: Give each pair of students a set of picture cards and ask them to practice changing the initial sound on their own.</p> <ul style="list-style-type: none"> For example, they might start with "rat" and change it to "pat" by replacing the /r/ sound with /p/. Encourage students to say the words out loud to each other and check if they formed a new word. <p>Observe and Support: Walk around the room to monitor and assist pairs as they work through the words. Ask guiding questions if they need help.</p>
Closing (3-5 minutes)	<p>Review and Reflect: Bring students back together and review a few examples as a class.</p> <p>Celebrate learning: "You did a great job changing sounds to make new words! You've just learned a new reading superpower called sound manipulation!"</p> <p>Preview: Let students know they will keep practicing this skill with more words in future lessons.</p>

A teacher could use this lesson output to teach first-grade students to delete the initial sound to create a new word. The lesson states the lesson objective and has the essential elements of the

GRR model research-based instructional practices, along with expected times in each section of the teacher modeling, guided practice, independent practice, and closing. It could use further refinement to engage students, monitor all students during the guided practice, and provide students with more support in creating words during the independent practice.

A second prompt asked, “Revise to meet this criterion. You are a first-grade teacher in the state of Texas, and you need to create a lesson plan to teach your students PA, where students learn for the first time how to manipulate the initial sound in a word by deleting a sound and inserting a new sound. Here is the *TEKS (2) Developing and sustaining foundational language skills: listening, speaking, reading, writing, and thinking--beginning reading and writing. (A.vi) The student develops word structure knowledge through phonological awareness, print concepts, phonics, and morphology to communicate, decode, and spell.* The student is expected to manipulate phonemes within base words. Please create a lesson that uses the “I do,” “We do,” and “You do” format. The lesson needs to be scripted to what I would say and how I would model. The lesson should not last longer than 15 minutes. Please make the lesson multi-sensory.” The resulting output from the second prompt is presented below in Table 3.

Table 3.

Second Prompt ChatGPT Phonemic Awareness Lesson Plan: Manipulating Initial Sounds

Component	Description
Time	15 minutes
TEKS	ELA 1.2. A.vi Developing and sustaining foundational language skills: The student develops word structure knowledge through phonological awareness, print concepts, phonics, and morphology to communicate, decode, and spell. The student is expected to manipulate phonemes within base words.
Objective	Students will learn to delete the initial sound in a word and replace it with a new sound to create a new word, using multi-sensory strategies to enhance PA.
Materials	Picture cards with simple CVC words (e.g., a cat, a hat, a bat, a mat,
Component	Description
Materials	a rat, a sat) Sand trays or small tubs with rice (for tracing) Playdough or clay for shaping sounds Small objects (like buttons or counters) for each sound in a word
Introduction (2 minutes)	Teacher: “Today, we’re going to use different senses—like touch, sight, and hearing—to help us hear sounds in words and even change the sounds to make new words! This is going to be fun, and it will make us strong readers and spellers.” Example Introduction: “Let’s start by looking at this picture of a cat. I’m going to say the sounds I hear: /c/ /a/ /t/. Today, I’ll show you how to change the first sound to make a new word, and we’ll use some fun tools to help us!”

I Do (Teacher modeling) 3 minutes

Model Sound Deletion and Replacement (Using Picture of a Cat):

Teacher:

"Here's our picture of a cat. I'm going to say the sounds: /c/ /a/ /t/. Now, I'm going to change the first sound, /c/, to a new sound, /m/, and make a new word: /m/ /a/ /t/."

Tactile Activity with Sand Trays:

"I'll write the first sound, /c/, in the sand tray with my finger. Now, I'm going to erase it and write a new sound, /m/, in the sand. This helps me see how changing sounds can make new words."

Teacher:

"Now my new word is /m/ /a/ /t/, which makes 'mat.' I started with 'cat' and changed it to 'mat' by changing just the first sound!"

We Do (Guided Practice) 5 minutes

Practice Together with a Picture of a Hat:

Teacher:

"Now, let's try one together! Here's a picture of a hat. Let's say the sounds: /h/ /a/ /t/. Great! Now, let's change the first sound, /h/, to /b/. What new word do we make?"

Using Small Objects to Represent Sounds:

"Let's use these buttons to show each sound. We'll place one button for each sound: /h/ /a/ /t/."

(Students place three buttons in front of them to represent the sounds in "hat.")

"Now, let's take away the first button for /h/ and replace it with a new button for /b/. What sounds do we have now?"

(Guide students to say: /b/ /a/ /t/ – "bat")

Teacher:

"Good job! By changing the first sound from /h/ to /b/, we made a new word: 'bat'!"

Additional Example with Playdough:

Using another picture, such as "rat," guide students in forming the sounds with playdough letters or shapes.

Component	Description
We Do (Guided Practice) 5 minutes	<p>Teacher:</p> <p>"Here's a picture of a rat. Let's say the sounds together: /r/ /a/ /t/. Now, let's change the /r/ sound to /s/. What new sounds do we have?"</p> <p>(Guide students to say: /s/ /a/ /t/ – "sat")</p>
You Do (Independent practice) 4 minutes	<p>Partner Activity with Multi-sensory Tools:</p> <p>Teacher:</p> <p>"Now it's your turn to try with a partner! I'm going to give each of you a picture. Start by saying the sounds you hear in that word, then take turns changing the first sound to make a new word. You can use the sand trays, buttons, or playdough to help you with each sound."</p> <ul style="list-style-type: none"> • Example words: "cat" (change to "bat"), "sat" (change to "mat") • sound and blend the new word aloud.

Closing (1 minute)	<p>Teacher Support: Walk around to monitor and assist as students practice changing the beginning sounds in their words. Ask guiding questions if they need help (e.g., "What sound are you changing? What's your new sound?").</p> <p>Review as a Group:</p> <p>Teacher:</p> <p>"Let's share one or two new words you created with your partner. Who would like to share?"</p> <p>Reinforce Learning:</p> <p>Teacher:</p> <p>"Great work! Today, you used listening, touch, and sight to change sounds and create new words. You're becoming amazing readers and spellers!"</p>
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The lesson generated by ChatGPT Plus added three different methods of multi-sensory instruction that changed for each section of the lesson plan. To keep the lesson structured around one method of multi-sensory instruction, a third and final prompt asked, "Please revise this lesson only to use manipulatives in the teacher model, guided practice, and independent practice to delete the initial sound of a word and insert a new sound. The resulting output from the third prompt is presented below in Table 4.

Table 4.
Third Prompt ChatGPT Phonemic Awareness Lesson Plan: Manipulating Initial Sounds

Component	Description
Time	15 minutes
TEKS	<p>ELA 1.2. A.vi Developing and sustaining foundational language skills:</p> <p>The student develops word structure knowledge through phonological awareness, print concepts, phonics, and morphology to communicate, decode, and spell. The student is expected to manipulate phonemes within base words.</p>
Objective	Students will delete the initial sound in a word and replace it with a new sound to create a new word by using manipulatives to represent sounds.
Materials	<p>Picture cards with simple CVC words (e.g., cat, hat, bat, mat, rat, sat)</p> <p>Small objects (e.g., counters, buttons, or small blocks) to represent each sound in a word</p>
Introduction (2 min)	<p>Teacher:</p> <p>"Today, we're going to use our hands and our voices to practice a new skill that helps us with reading and spelling. We'll listen closely to the sounds in words and learn how changing the beginning sound can create a new word!"</p> <p>Example Introduction:</p> <p>"Look at this picture of a cat. When I say 'cat,' I hear the sounds /c/ /a/ /t/. We're going to use these small counters to show each sound and learn how to switch the first sound to form a different word!"</p>

I Do (Teacher modeling) 3 minutes	<p>Model Sound Deletion and Replacement (Using Picture of a Cat):</p> <p>Teacher:</p> <p>“Here’s a picture of a ‘cat,’ I have three counters here, one for each sound: /c/ /a/ /t/.”</p> <p>Place three counters in a row to represent each phoneme.</p> <p>Teacher:</p> <p>“Now, I’m going to take away the first counter that stands for /c/ and replace it with a new one for /m/. Let’s say the new sounds: /m/ /a/ /t/. What word did we make?”</p> <p>(Pause for students: “mat”)</p> <p>Teacher Explanation:</p> <p>“I started with /c/ /a/ /t/ for ‘cat.’ Then, I removed /c/, replaced it with /m/, and made /m/ /a/ /t/—‘mat.’ We created a new word by changing just the first sound!”</p>
We Do (Guided Practice) 5 minutes	<p>Practice Together with a Picture of a Hat (Using Manipulatives):</p> <p>Teacher:</p> <p>“Now, let’s do one together! Here’s a picture of a ‘hat.’ I have three counters, one for each sound: /h/ /a/ /t/. Let’s place them out and say each sound.”</p>

Component	Description
We Do (Guided Practice) 5 minutes	<p>Practice Together with a Picture of a Hat (Using Manipulatives):</p> <p>Teacher:</p> <p>“Now, let’s do one together! Here’s a picture of a ‘hat.’ I have three counters, one for each sound: /h/ /a/ /t/. Let’s place them out and say each sound.”</p> <p>Students repeat: “/h/ /a/ /t/” as they touch each counter.</p> <p>Teacher:</p> <p>“Now, let’s change the /h/ sound to /b/. Take away the first counter and replace it with a new one for /b/.”</p> <p>Students replace the first counter and say the new sounds: “/b/ /a/ /t/.”</p> <p>Teacher:</p> <p>“Great job! What word did we make?”</p> <p>(Students respond: “bat.”)</p> <p>Practice Together with a Picture of a Hat (Using Manipulatives):</p> <p>Teacher:</p> <p>“Now, let’s do one together! Here’s a picture of a ‘hat.’ I have three counters, one for each sound: /h/ /a/ /t/. Let’s place them out and say each sound.”</p> <p>Students repeat: “/h/ /a/ /t/” as they touch each counter.</p> <p>Teacher:</p> <p>“Now, let’s change the /h/ sound to /b/. Take away the first counter and replace it with a new one for /b/.”</p> <p>Students replace the first counter and say the new sounds: “/b/ /a/ /t/.”</p>

You Do (Independent practice) 4 minutes	<p>Teacher: "Great job! What word did we make?" (Students respond: "bat.") Additional Example With "Rat": Teacher: "Let's try another picture. Here's 'rat.' We have three counters for /r/ /a/ /t/. Now, change the /r/ to /s/. Replace the first counter, then say the new sounds." Students say: "/s/ /a/ /t/" ("sat"). Check for Understanding: Teacher: "Which sound did we remove? Which new sound did we add? Excellent! Changing just the first sound made a brand-new word." Teacher: "Now it's your turn! I'll give each pair a picture. Use your counters to show the sounds in the word, then switch the first sound for a new one to create a different word."</p>
Component	Description
You Do (Independent practice) 4 minutes	<p>Teacher: "Now it's your turn! I'll give each pair a picture. Use your counters to show the sounds in the word, then switch the first sound for a new one to create a different word." Example words: "cat" → change /c/ to /b/ = "bat" "sat" → change /s/ to /m/ = "mat" Students work together, saying each sound as they place or remove counters. Teacher Support: Walk around to monitor and assist. Ask questions like, "Which sound are you removing? What new sound are you adding?"</p>
Closing (1 minute)	<p>Review and Celebrate: Teacher: "Let's share one or two words you created with your partner. Who would like to share their new word?" Encourage Reflection: Teacher: "You did an amazing job using counters to change the first sound in words. This skill helps you become better readers and spellers!"</p>

The third lesson output meets the instructional criteria of alignment with the TEKS and lesson plan objective, appropriate GRR model use, and implementation of STR-aligned practices. It did not require any immediate revisions, and a detailed evaluation is provided in the analysis section.

Insights Gained from the Process

This section analyzes ChatGPT Plus-generated lesson plans to highlight the strengths and weaknesses in aligning with learning objectives, applying the GRR model, and supporting STR instructional practices. This section is organized into three parts: the initial attempt, evaluating and improving lesson quality with targeted revisions, and implications of using GenAI to create PA lesson plans.

Initial Attempt

One key component in lesson planning is clearly defining the learning objectives for students and directly teaching (Antari, 2021; Fadoli, 2022; Marzano, 2006). The initial lesson states the lesson objective, “Students will be able to delete the initial sound of a word and insert a new sound to form a new word,” which aligns with the goal of the lesson and uses the lesson objective language consistent with Marzano’s (2006) objective stem, but the exact learning standard was not used in the initial prompt to ensure the objective was aligned to the nouns and verbs of the TEKS (Marzano & Haystead, 2008). The instructional activities and formative checkpoints in the guided and independent sections of the GRR model lesson plan assess students’ understanding of the lesson objective.

The teacher begins the GRR lesson with a five-minute introduction and a five-to-ten-minute teacher model to explain and provide an explicit demonstration of how to change the beginning sound of a word to create a whole new word to support students in learning how to substitute the initial sound of a word to create new words. The teacher models that sound substitution orally with a simple CVC (consonant, vowel, consonant) word cat to model removing the /c/ speed auditory and replacing it with the /h/ sound to create a new word. The teacher writes cat and hat on the board to show the new word, which aligns with using letters to support children’s reading proficiency (National Reading Panel, 2000). PA requires students to work at the auditory level, but research shows that students benefit from practicing with letters (Boyer & Ehri, 2011; Piasta & Wagner, 2010). The first prompt did not set the boundaries of whether to treat PA as only an auditory task or to integrate letters, the inclusion of writing the words on the board could be used, but a teacher will need to decide if they want to include the STR instructional practice of orthographic mapping to help students connect phonemes and graphemes or if they would like the lesson to be auditory only.

The lesson provides three new words for students to complete in guided practice, and the prompt “What’s the new word?” to check for understanding and ask students to explain how they arrived at the answer. The lesson plan targets one skill of manipulating the initial sound of a word but could use further refinement to engage students and encourage active participation to foster deeper understanding and retention of literacy skills in guided and independent practice. The initial attempt only requires listening and repeating sounds as a whole class and lacks monitoring of all students during the guided practice. Incorporating more interactive and collaborative elements during this phase of the GRR model would allow students to engage in collaborative learning to support a deeper understanding of the content (Fisher & Frey, 2011). Additionally, the guided practice should enable the teacher to provide immediate feedback during the guided practice to help correct student misunderstandings and refine their understanding (Fisher & Frey, 2011), which is a missed opportunity in the initial attempt since all students are answering at the same time. Moving into the independent practice section, while

the students have discussions during the independent practice, the lesson plan needs to provide students with clear instructions on creating words during independent practice. The teacher could model how to change the initial sound, ask the partner to give feedback, and then ask students to repeat the instructions before the students begin.

The initial lesson plan uses the GRR model and could teach first-grade students to delete the initial sound to create a new word using STR instructional practices. While prompt one created an output using the GRR model, it lacks adequate student engagement and support during independent practice. These observations, along with using the exact verbiage of the first-grade TEKS, informed the changes in prompt two.

Improving Lesson Quality with Targeted Revisions

Prompt Two

The second prompt was designed to incorporate the language used in the first-grade TEKS (2) *Developing and sustaining foundational language skills: listening, speaking, reading, writing, and thinking--beginning reading and writing: the student develops word structure knowledge through phonological awareness, print concepts, phonics, and morphology to communicate, decode, and spell. (A.vi) The student is expected to manipulate phonemes within base words.* The prompt asked for a 15-minute scripted multi-sensory lesson that uses the I do, we do, and you do format from the GRR model to ensure the lesson was developmentally appropriate and engaging for students and provide guidance to the teacher on how to present the lesson.

The lesson objective, “Students will learn to delete the initial sound in a word and replace it with a new sound to create a new word, using multi-sensory strategies to enhance PA,” in attempt two matches the learning standard of students deleting the initial sound in a word to create new words using Marzano’s (2006) lesson objective stem. By focusing on teaching students to manipulate the initial sound, the objective aligns with the nouns of the standard: phonemes, base words, sound manipulation, and verb manipulation.

Furthermore, the lesson met the requirement of using the GRR model in a 15-minute lesson to explicitly teach deleting the initial sound of a word and inserting a new sound to form a new word. The second prompt provides the teacher with the script of how to instruct and think aloud to support manipulating phonemes within base words. The lesson plan includes instructional activities during all phases of the GRR model lesson plan by including multi-sensory tools to represent and manipulate the sounds, along with formative check-ins during the guided and independent practice to ensure students understand the objective.

Think-alouds support learners in understanding the thinking process (Pratt & Hodges, 2022), and the script provided by ChatGPT Plus provides the teacher with language to use to think-aloud to support students in becoming more proficient. The introduction of multi-sensory learning in the second lesson plan output supports hands-on learning and engagement and supports students using letters with phonemes to develop reading skills (Farrell & White, 2011). However, during the teacher modeling, the teacher is instructed to model writing the first sound in a sand tray, but then two new multi-sensory methods, playdough and buttons, were used in the guided practice. The teacher model section of the gradual release model should provide an explicit and intentional model of how to perform the task so students do not need to infer how to

complete the skill in independent practice (Fisher & Frey, 2011), and changing multi-sensory methods could impact students' success in applying the skill of manipulating phonemes.

The second attempt improved the guided practice from attempt one by using a STR instructional practice to engage students and encourage active participation by having the students use concrete manipulatives to show how one sound is deleted and a new sound is added (Yopp & Yopp, 2000). This also allows the teacher to provide affirmative and constructive feedback while observing each student's use of manipulatives to delete and insert a new sound instead of listening to the whole class's answers in the initial lesson plan.

The independent practice instructions were more explicit on the steps the students would take when taking turns to make new words, allowing the students to hear and support each other. The closing asks students to share the words created and then reminds them of what they learned in the lesson as another attempt to check on student learning. While prompt two improved the instructional practices in the GRR model, a third prompt was created to ask ChatGPT Plus only to use manipulatives throughout the lesson to substitute sounds.

Prompt Three

Prompt three asked ChatGPT Plus to "Please revise this lesson only to use manipulatives in the teacher model, guided practice, and independent practice to delete the initial sound of a word and insert a new sound." The lesson objective is written in Marzano's (2007) lesson objective stem and is aligned with the standard by teaching students how to delete and replace initial sounds in words, which aligns with the nouns, manipulation, and phonemes, and the verb, manipulation.

The resulting lesson streamlines the GRR model of instruction to slowly shift from the teacher modeling to the application by the student (Frey & Fisher, 2011). The teacher model now provides an explicit and intentional model of how to change the initial sound using counters to form a new word, which aligns with the student STR instructional practices used during the guided and independent practices, so the students no longer need to infer how to complete the skill in independent practice (Fisher & Frey, 2011). The scripted lesson uses the STR instructional practices of concrete manipulatives throughout the lesson plan to actively engage students using multi-sensory instruction to support student independence in learning to manipulate the first sound in a word to form a new word. The teacher checks for understanding in the guided practice by asking students to identify the sound being removed and add the new sound. The independent practice instructions are explicit on the steps and expectations of the partners to practice manipulating phonemes in base words. In addition, the teacher monitors students' progress during independent practice and is instructed to provide feedback and support. The closing provides another checking in on student learning when the teacher asks students to share the words created and then follows up with a reminder of what they learned to do and how it will support them with being readers and writers.

ChatGPT Plus's Potential and Limitations

To address the research questions guiding this study, the following section will present an analysis of ChatGPT Plus's potential and limitations of PA lesson plans.

Research Question 1: How effectively can ChatGPT Plus create lesson plans aligned with learning objectives?

The ChatGPT Plus demonstrated high effectiveness in aligning lesson objectives with the standards and instructional activities without prompting exact phrasing or support for formulating an educational objective in all three outputs. The nouns in the standard identified what the students were expected to know, and the verb matched what the students were expected to do to align with Marzano's (2006) Taxonomy of Educational Objective framework to design educational objectives. The instructional activities and formative assignments were specific and designed to help monitor student progress.

Research Question 2: How effectively can ChatGPT Plus create PA lesson plans that align with the GRR model?

ChatGPT Plus can effectively use Pearson and Gallagher's (1983) GRR model to create the "I do," "We do," and "You do" when it is prompted. All three attempts begin with the "I do," where the teacher establishes the purpose for learning and models sound deletion and replacement. The "We do" follows the "I do," in which all attempts required the students to practice deleting the initial sound and replacing it with support from the teacher. The first output did not provide the teacher with ways to provide affirmative or constructive feedback, but attempts two and three provided the teacher with a script to provide only affirmative feedback. Attempts two and three may have added affirmative feedback due to the revisions to prompt two, asking for a scripted lesson. None of the lessons provided feedback on errors and misconceptions from the teacher. In the "You do" stage, students work to apply what they have learned by working with partners to view a picture, and then they practice switching the first sound for a new one to create a different word. When prompting ChatGPT Plus, a teacher would need to include the expectations of a script that includes not only affirmative feedback but also corrective feedback.

Research Question 3: How effectively can ChatGPT Plus create lesson plans that use STR instructional practices?

The analysis found that ChatGPT Plus could partially generate STR-aligned practices for phonemic instruction. PA is often defined as hearing, recognizing, and manipulating phonemes in spoken language (Flett & Conderman, 2002; Yopp & Yopp, 2000). Songs, rhymes, wordplay, and riddles are researched instructional practices used to support understanding of the sound structure of language (Yopp & Yopp, 2000), and often, these activities do not explicitly state the use of letters, which can lead to strictly auditory instruction. The National Reading Panel (2000) noted "that when PA is taught with letters, it qualifies as phonics instruction," indicating that PA and phonics instruction intersect. The National Reading Panel (2000) found that PA instruction significantly impacted reading acquisition when students used letters to manipulate phonemes. ChatGPT Plus suggested using letters in lesson plans one and two but not in lesson three. When using the ChatGPT Plus PA lesson plan outputs, teachers must make instructional decisions based on student's knowledge of the PA continuum to select which STR instructional practices

to include, and if they should include letters instead of concrete manipulatives or create auditory-only lessons.

Teachers should use structured multi-sensory strategies to support students with learning to understand phonemes, graphemes, and letter knowledge throughout the GRR lesson plan. “Simultaneous multi-sensory instruction purposefully integrates visual, auditory, and kinesthetic-motor (for speech and writing) pathways to support memory and learning of both oral and written language skills” (Farrel & White, 2011, p. 48). Kilpatrick (2016) emphasizes incorporating phonics into PA lessons to reinforce the oral activities students engage in visually. Teachers can also use manipulatives to support phoneme deletion and substitution as a way of representing sounds so students connect abstract concepts with representations (Kilpatrick, 2016; National Reading Panel, 2000). When using GenAI to create PA lesson plans, teachers will need to prompt, review, and revise outputs to purposely incorporate selected activities to support memory and language skills (Farrel & White, 2011) due to ChatGPT Plus using multiple types of activities in one lesson or only creating auditory lessons.

Prompting and Evaluating

AI prompting represents a new form of digital skill (Korzynski et al., 2023), and non-experts often struggle to understand and create effective prompts when using GenAI (Zamfirescu-Pereira et al., 2023). While prompting GenAI seems easy and effortless, effective prompting directly impacts the outputs (Zamfirescu-Pereira et al., 2023). Creating PA lesson plans requires specifics of lesson plan design and instructional-based practices to be used in the prompting. The more detail and specifics used in the prompt led to better alignment between the GRR model and STR instructional activities. The teacher’s knowledge of PA, lesson planning, GenAI prompt design, and instructional activities influences the effectiveness of the ChatGPT Plus outputs. The analysis of the three outputs in this study showcases the need for teachers to analyze and evaluate lesson plans generated by GenAI. When using GenAI to create PA lesson plans, teachers must examine the outputs to align with the educational learning objective and standard, the GRR model to support student independence, and support STR instructional practice.

Continued Exploration and Research

Further research could test the lesson plans created by GenAI in real classrooms and gather data on their effectiveness and teacher perceptions of the lessons to meet the learning objectives. Additionally, research could be done to study different GenAI generators, specifically ones designed for education, to understand the potential and limitations of lesson plan design to align with the GRR model and STR principles. Furthermore, a study could be conducted by interviewing teachers from various subjects and grade levels to understand their experiences leveraging GenAI for lesson planning. Another approach could be to conduct studies on GenAI’s ability to create other forms of “simple view of reading” word recognition lesson plans to support teachers with teaching accurate letter names and sounds, phonological awareness, phonics and decoding, automatic word recognition, and reading irregular words (Gough & Tunmer, 1986).

Conclusion

The application of GenAI in lesson planning has the potential to support teachers in creating and improving the lesson-planning process and time constraints. The lesson plans generated by ChatGPT Plus demonstrated potential in designing PA lesson plans that align with standards that deliberately target the student learning outcomes, helping the teacher align the lesson plan to provide opportunities for the students to practice and demonstrate their learning. Another major strength was designing lesson plans that use the GRR instructional model based on the specific criteria created in the prompt. The lesson plan outputs successfully created the teacher model and structured the lesson to guide the students with formative check-ins before completing the work in partners. Furthermore, with specific prompting of explicit, systematic, and engaging instructional STR practices, ChatGPT Plus was able to create a PA lesson plan.

One of the primary limitations of teachers using GenAI is teachers having the knowledge to create effective and detailed prompts (Zamfirescu-Pereira et al., 2023) that create comprehensive lessons that meet the needs of their students. Additionally, teachers lack confidence in using their knowledge to evaluate and review the outputs with instructional practices (Kaplan-Rakowski et al., 2023). To address this, the teacher should provide follow-up prompts after reviewing the lesson plan to make adjustments to the specifics needed to improve the output created by GenAI (Karpouzis et al., 2024). This evaluation and revision process is especially important because while ChatGPT Plus was able to include STR instructional practices, the teacher will need to provide specific guidance in their prompts to ensure the output effectively uses instructional practices.

Using GenAI to create lesson plans could help teachers plan explicit, systematic lessons if the teacher provides detailed prompting and examines the outputs to adjust and refine the lesson plan to meet students' expectations and individual needs. Teachers should maintain a role in evaluating and ensuring that GenAI complies with their students' educational needs.

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FINDING HARMONY IN TIMES OF DISCORD: HELPING LITERACY PROFESSIONALS UNPACK THE CURRENT READING INSTRUCTION MOVEMENT

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Abstract

In the past few years, certain labels for how we frame literacy teaching have become triggers for heated debates in various venues, such as media, social media, journal articles, blogs, and professional organization conference sessions. In this article, we aim to find common ground between proponents of balanced literacy and proponents of a phonics-based/phonics-forward and first approach. We first present and unpack reading instruction vocabulary that has been frequently used in the discourse of educators and media who ascribe to one of the two mentioned approaches. Then, we provide resources and advice to literacy professionals and administrators who work directly with teachers so that they might find balance and harmony amidst the information that is prevalent in both literacy journals and the media.

Keywords: science of teaching reading; literacy professionals; balanced literacy definitions

The most recent iteration of the “reading wars” becomes more heated as time goes on. The war metaphor, as discussed in depth by MacPhee et al. (2021), has created sides in the form of winners and losers. The question Tierney and Pearson (2024) and Bommarito (2022) have proposed is, what if we reframe this latest iteration into one of harmony and accord, where we can find commonalities in the approaches suggested in service of providing the best teaching for all readers?

In the past few years, certain labels for how we frame literacy teaching have become triggers for heated debates in various venues, such as media, social media, journal articles, blogs, and professional organization conference sessions. Just the mere mention of a term such as “balanced literacy” can spark arguments as well as mean-spirited words. Much of this is grounded in the ways definitions for literacy concepts are interpreted. Indeed, “nuanced differences in how people understand specific terms can often stoke debates where none are necessary” (Gabriel, 2020, p. 13). Additionally, these debates have spurred changes in many states’ education codes, the likes of which have never been seen, such as in Texas, where a house bill was passed to eliminate the use of the misunderstood and incorrectly defined “three-cueing system” (House Bill [HB] 1605, 88th Texas Legislature, Regular Session, 2023).

Therefore, in this article, we aim to present and unpack several terms commonly seen and heard in early literacy education discourse. This is vocabulary that has been frequently used in the context of debates between educators and media who ascribe to one of two mentioned approaches: balanced literacy and phonics-forward. While many reading this article may find some terms and concepts familiar, we also consider the novice literacy educator who may have little exposure to previous reading movements and who could benefit from this unpacking of the literacy education lexicon. As we present these terms, we provide resources grounded in research. At the end of the article, we provide a framework, in the form of questions, for literacy professionals and administrators who work directly with teachers.

Process of Selecting Terms from the Discourse in Literacy Education

We met as a writing team several times to discuss the terms that we were reading and hearing frequently in the various milieus in which we work: universities, K12 schools, academic and professional conferences, academic and practitioner journals, professional organization websites (e.g., International Literacy Association, International Dyslexia Association), state house bills, social media circles, podcasts, blogs, and editorial pieces on news sites such as Education Week or in newspapers. For a deeper analysis, we each then selected one or two of these sources to review more closely to determine which topics we should address. We met again and agreed on the following terms: *balanced literacy*; *guided reading*; *running records*; *cueing systems*; *decodable*, *leveled*, and *predictable text*; and *approaches to phonics instruction*.

Here, we provide definitions of these terms that may help literacy professionals provide the best instruction for all students, regardless of where they align themselves on the continuum between balanced literacy and phonics-forward instruction. Included for each term are definitions taken from several sources and examples of how the term can be useful to proponents of the approaches to teaching children to read.

Balanced Literacy: An Approach, Not a Program

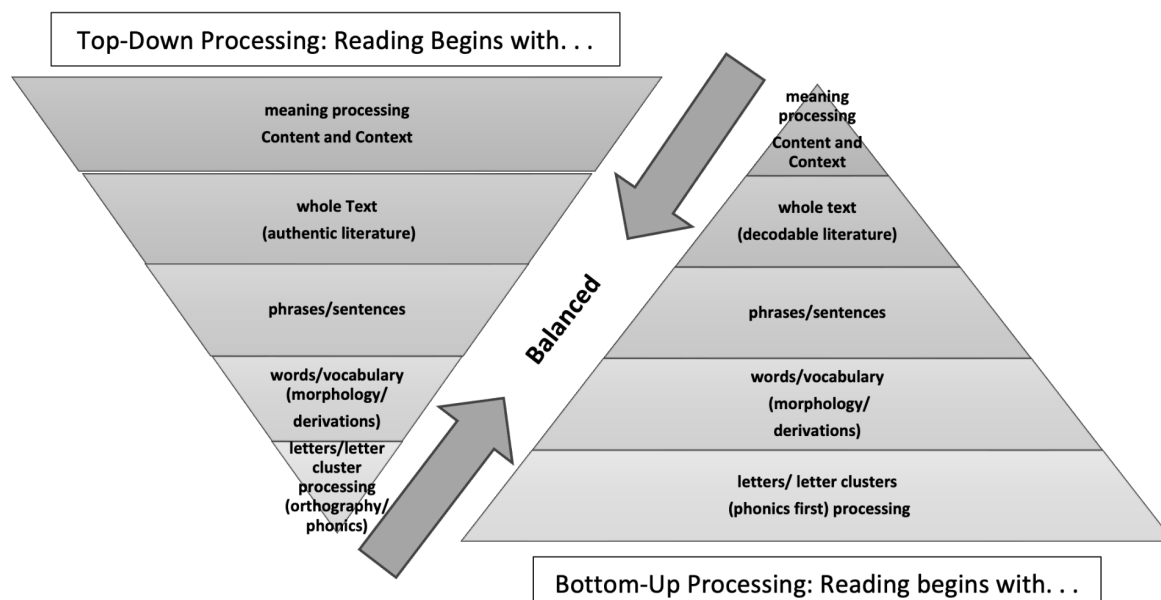
Since the mid-1990s there have been several definitions of *balanced literacy*. In response to low test scores in California, where the California literacy framework grounded in some of the concepts of Whole Language was implemented, Honig (1996), the State Education Commissioner, requested a more balanced literacy approach, “one that combines the language and literature rich activities associated with the whole language with explicit teaching of the skills needed to develop fluency with print, including the automatic recognition of a growing number of words and the ability to decode new words” (p. 2). Wharton-McDonald and colleagues (1997), in a study of highly effective literacy practices conducted with 89 regular education teachers and 34 special education teachers, stated, “highly effective teachers reported using both immersion in authentic literacy-related experiences and extensive explicit teaching through modeling, explanation, and minilesson re-explanations, especially with respect to decoding and other skills” (p. 519).

During the same time, *The Report of the National Reading Panel* (2000, NRP) set out to answer questions related to components of effective reading instruction. Of the many findings presented in the report, clear caution was given related to phonics instruction – synthetic or analytic, as the NRP found both to be valid – and the need to find balance in reading programs.

It is important to emphasize that systematic phonics instruction should be integrated with other reading instruction to create a balanced reading program. Phonics instruction is never a total reading program . . . Phonics should not become the dominant component in a reading program, neither in the amount of time devoted to it nor in the significance attached. It is important to evaluate children’s reading competence in many ways, not only by their phonics skills but also by their interest in books and their ability to understand information that is read to them. By emphasizing all of the processes that contribute to growth in reading, teachers will have the best chance of making every child a reader. (NRP, 2000, p. 2-136)

From this cautionary tale, finding balance within a reading program was given validation by the National Reading Panel. This “meeting in the middle” approach allows for flexibility in selecting reading components but clearly identifies where that balance is found, as visualized in Figure 1. Pearson (2002) asserted, “A balanced approach will privilege authentic texts and tasks, with a heavy emphasis on writing, literature, response, and comprehension, but it will also call for an ambitious program of explicit instruction for phonics, word identification, comprehension, spelling, and writing” (p. 459).

Figure 1. Visual of ‘Balance’



For a classroom to be balanced, in this sense of the term, educators must ensure they are teaching all literacy components and using high-quality instructional methodology. The National Reading Panel held public hearings across the United States to help inform and establish a set of topics to be addressed (2000). Based on the public hearings and published research, the following topics were targeted for further study.

- Phonemic awareness: Part of phonological awareness, it is the understanding and manipulating the phoneme (smallest unit of sound) in spoken words (NRP, 2000).
- Phonics instruction: A method used to teach children about the relationship between sounds and letters. There are multiple approaches to teaching phonics, “synthetic, analytic, analogy, spelling-based, and embedded” (NRP, 2000, p. 2-123).
- Fluency: Ability to “read text with speed, accuracy, and proper expression” (NRP, 2000, p. 3-1).
- Vocabulary: Oral vocabulary words are “recognized in speaking or listening” (NRP, 2000, p. 4-16); reading vocabulary “refers to words that are used or recognized in print” (NRP, 2000, p. 4-16).
- Comprehension: Readers’ ability to make meaning of what they have “viewed, read, or heard” (ILA, 2023).

NRP noted that, because of the vast amount of research, not all topics were addressed. It should not be inferred that these topics were not of importance (NRP, 2000). In addition to the topics outlined by the NRP for further study, teachers should incorporate opportunities for writing within the classroom. Children need time to respond to texts, engage in the writing process, and share. Furthermore, the affective dimension of reading is important in a balanced literacy classroom where teachers “nurture students’ love of reading and writing” (Rasinski & Padak, 2004, p. 96).

Fisher and colleagues (2019) define balanced literacy as including the following: informational and narrative texts, the use of both direct and dialogic instruction, whole and small

grouping, and “skills and knowledge, including literacy processes such as oral language, phonemic awareness, phonics, fluency, vocabulary, comprehension, and writing” (p. 15). Some classrooms may use a readers’ and writers’ workshop model which includes a mini-lesson, time to read and write independently, conferences with students, and opportunities to share. What must be noted here is that contrary to what is often reported in the media, balanced literacy proponents believe in the teaching of systematic phonemic awareness and phonics, although the approach may be observed in both embedded and discrete approaches to delivery.

Guided Reading

Emerging out of the resurgence of the constructivism learning theory, by the mid-1990s, *guided reading* shifted the focus from the strategies and skills presented in lockstep fashion in the basal text to the needs of the reader (Pearson, 2002). By 2000, the National Reading Panel report authors found guided reading and repeated reading to be unequivocally effective - “The analysis of guided oral reading procedures led to the conclusion that such procedures had a consistent, and positive impact on word recognition, fluency, and comprehension as measured by a variety of test instruments and at a range of grade levels” (p. 3).

A key outcome of guided reading instruction is for readers to successfully engage with continuous authentic texts independently for a sustained period. The framework of guided reading instruction incorporates the pedagogical concepts of scaffolding and releasing control of instruction to lay a foundation for processing through the act of reading (see Table 1). Instruction focuses on readers’ needs identified through formal and informal assessment with a variety of tools. From the assessment data, teachers intentionally select an instructional focus that introduces or reinforces aspects of the reading process, such as concepts about print, decoding, orthography, prosody, text structure, metacognitive reading skills, and/or comprehension elements (Fountas & Pinnell, 2017).

Table 1. *Guided Instruction Framework (whole class to small group)*

Level of Scaffolding	Role of Teacher and Student	Instructional Approach
Modeling	Teacher demonstrates/ Students watch/listen	Instructional read aloud with think aloud/instructional focus using a mentor text and related to reading/metacognitive skills or strategies
Direct Teach	Teacher instructs/ Students watch/listen	Mini-lesson via anchor chart connected to instructional focus skill or strategy
Shared Practice	Teacher leads/ Students apprentice	Shared reading practice related to the instructional think aloud and instructional focus skill or strategy

Guided Practice	Students demonstrate/ Teacher assists	Guided reading: small groups (3-6) for guiding learner towards mastery of accuracy and fluency of selected texts/Focus is on learner-identified needs related to phonics, word study, and fluency
		Guided comprehension: small groups (3-6) for guiding learner towards mastery of comprehension of selected texts/Focus is on learner-identified needs related to vocabulary, text structures, and metacognition strategies
Independent Practice	Students practice/ Teacher observes and assesses independent practice activities	Sustained independent reading/writing extension activities such as literature or discover/inquiry circles

Guided reading instruction is a cognitive approach wherein teachers demonstrate the ways readers should identify and use a variety of strategies, including word-solving using phonics skills, to problem-solve when decoding and comprehending print. Teachers select appropriate texts for readers, matching these to their instructional needs and interests. Teachers also gradually increase the level of difficulty of the text using a text gradient.

A key component of guided reading instruction is that the instruction occurs in a small group setting. Teachers meet with guided reading groups (3-6 students) three to five times a week for 10-20 minutes, depending on the age group. The teacher has a variety of grouping options such as flexible grouping based on assessments (e.g., running records, miscue analysis, anecdotal records) and grouping by strategy and skill need (e.g., studying story elements). This type of dynamic grouping allows for change in reading groups based on ongoing assessment and skills of individual students rather than on fixed reading level groups and/or whole class instruction that utilizes a one-size-fits-all method of reading instruction.

During the guided reading lesson, the teacher follows a structured order of procedures; however, what occurs during these procedures varies from group to group and from lesson to lesson, based on the students' strengths and growth areas. First, the teacher introduces the text, where the teacher and children discuss possibilities of what the text is about, make connections to the text, discover and practice unfamiliar language structures and vocabulary, and locate some known and new words (Fountas & Pinnell, 2017). The children then read the text as the teacher closely monitors their reading and steps in to teach, prompt, and reinforce new and recently learned strategies. After the reading, the children and the teacher discuss and revisit the text. Finally, the teacher provides a succinct, explicit teaching point based on what the children in the group need at that moment in time.

Contrary to the narrative that has been presented in some media venues, phonemic awareness and phonics instruction are utilized throughout the guided reading lesson. Approaches to increase decoding skills for word recognition and accuracy include using methods of phonics instruction through orthography or the study of the sequence of the letter/sound patterns in words. Orthography requires learners to study words to reveal the "logic and consistencies within our written language system, and to help students achieve mastery in recognizing, spelling, and defining specific words" (Bear et al., 2011, p. 4). Phonics taught through the orthographic

approach and used within the guided reading framework responds to the National Reading Panel's cautionary tale as it provides the learner the opportunity to apply decoding skills in the context of the reading activity.

Programs that focus too much on the teaching of letter-sounds relations and not enough on putting them to use are unlikely to be very effective. In implementing systematic phonics instruction, educators must keep the *end* in mind and ensure that children understand the purpose of learning letter-sounds and are able to apply their skills in their daily reading and writing activities. (NRP, 2000, pp. 2-135)

Running Records and the Cueing Systems

Teachers who have been properly trained to use *running records* and *cueing systems* to teach children to read are not being given “credit” for their procedural and pedagogical knowledge (Davis et al., 2021). Davis and colleagues (2021) asserted that the “flaws identified in critiques of the cueing systems are merely flaws in some applications of the model and are not inherent in the model itself” (p. 303), which calls to attention the possible lack of training for teachers. The ways in which the media has presented cueing are partly to blame for several states’ House Bills that have outlawed the use of the cueing systems, and subsequently, running records.

A running record is a “systematic way to record and compare the sources of information that students use and ignore when reading aloud” (Barone et al., 2019, p. 525). Clay (2019) asserted that children’s progress in learning to read is often viewed in terms of known letters, sounds, and words; however, children must apply this knowledge to read continuous text, hence the need for a method to record and analyze students’ oral reading. Teachers can take a running record with any text or part of a text on blank paper. Running records are easy to administer with some practice with standard coding (Dougherty Stahl et al., 2019; Reutzel & Cooter, 2019). After the teacher takes the running record, they engage in a quantitative and qualitative analysis of the child’s errors to determine progress in terms of what sources of information (cues) the student uses at points of difficulty. In this regard, errors are always viewed as “partially correct” (Fountas & Pinnell, 2017, p. 263). Running records are most useful up to about grade three, at which time much of the reading work of the student becomes covert (Reutzel & Cooter, 2019).

Listening to an emergent, early, or even transitional reader read a text aloud is an effective way of gauging how the child is using letter to sound correspondences in the context of continuous text. For example, the teacher may notice that every time a child comes to a word with a blend at the beginning of a word the child only sounds the first letter. The teacher can note this pattern and provide immediate feedback to the child. This in-the-moment teaching can be more powerful than relying on the teaching of discrete skills alone (Cabell et al., 2022; Duke & Cartwright, 2021; Graham et al., 2018; Schwartz, 2019).

The running record also serves as an informal embedded assessment teachers can use to determine what texts are easy, instructional, and difficult for students (Barone et al., 2019; Clay, 2019; Reutzel & Cooter, 2019). It is also a tool to help the teacher decide what to teach next (Barone et al., 2019). The teacher uses the information from the running record to identify teaching points the reader needs rather than waiting until a later time when the collected data’s shelf life is nearing an end (Barone et al., 2019; Clay, 2019). This process also helps teachers

differentiate the teaching of reading behaviors, such as monitoring for meaning, rereading, and self-correcting (Barone et al., 2019; Fried, 2013) within authentic text rather than in isolation.

The use of running records aligns with the phonics forward approach related to the science of reading because teachers can use this assessment to determine how students are using phonics skills to accurately read text. In a study of the use of easy, instructional, and difficult texts, Rodgers and colleagues (2018) determined that students who read books at a level of difficulty (less than 90% accuracy) scored significantly lower on the Observation Survey of Literacy Achievement than did students who read texts at their instructional level (90-95% accuracy). Beginning readers require texts that are at their current Zone of Proximal Development (Vygotsky, 1978) to have just enough challenges that they do not “interfere with progress” (Rodgers et al., 2018, p. 152). In other words, if we want children to be able to use and grow their phonics knowledge, they need to read texts in which they can use the skills currently available to them.

In a study of running record use, Ross (2004) found that teachers who taught in effective schools are “more likely than teachers in ineffective schools to use...running records to diagnose student needs and monitor progress” (p. 186). Ross also asserted that using running records had a more positive effect on reading achievement than not using them. Recently, Rodgers et al. (2021) contended that more training is needed for teachers to use running records to their full potential. More specifically, they suggested focused professional development and simulation exercises related to “providing rationales alongside rules” and explaining what children’s word-solving attempts mean (p. 25).

To match texts to students, it is imperative that teachers attain each child’s easy, instructional, and difficult reading level. In two separate studies involving the analysis of teachers using running records to record students’ reading levels, the researchers found that, although the levels were accurate according to inter-rater reliability, it took several texts to determine those levels (D’Agostino et al., 2021; Fawson et al., 2006). D’Agostino et al. (2021) and Fawson et al. (2006) both found that using only one reading selection to gauge a student’s text level might not yield reliable and accurate results. They suggested teachers invite each student to read at least three selections and average the score of the three; however, they did mention that this process presents issues of feasibility in the classroom.

Although there have been many questions raised related to running records and the three cueing systems presented in the media (Barone et al., 2019; NCTQ, 2023), there are researchers who have made suggestions that should be taken into consideration when analyzing students’ miscues and using them to inform instruction. The major claim presented in recent podcasts and editorial articles is that teachers are focusing children’s attention on using the text’s meaning (including the meaning found in the illustrations) instead of using letter-sound correspondences to aid in the production of accurate reading. A closer look into the writings of contemporary researchers reveals that, especially for emergent and early readers, both cueing systems are important (Scanlon & Anderson, 2020).

Davis and colleagues (2021) and McKenna and Picard (2006) wrote that the original works of Clay and Goodman in the 1960s gave “equal footing” (McKenna & Picard, 2006, p. 379) to meaning, structure, and visual cueing systems that are used to analyze reading errors on running records. They argued that early readers need to rely on contextual information to read print, but that as they transition into more difficult text, teachers need to support them by placing more value on using visual information. Similarly, Scanlon and Anderson (2020) argued that

young readers need to use semantic information to figure out words while they are learning other word-solving skills, but this does not mean semantics is central during instruction.

Recently, Tierney and Pearson (2024) noted that most theoretical reading models (e.g., Rumelhart's Interactive Model, 1977) include semantic and syntactic processing, not just orthographic processing. Adams (1998) explained that the cueing systems are helpful tools that can be used to describe how early readers use print and illustrations to make meaning. In a blog post at the start of the latest reading "war," Schwartz (2019) wrote that beginning readers rely more on meaning and structure cues and check their attempts against visual information. This approach requires less effort for a reader at this stage than does sounding words letter by letter. Children should be flexible and use both "code- and meaning-based strategies" (Scanlon & Anderson, 2020, p. S20). Stouffer (2021) added that only using meaning cues may "lead to inaccurate guesses at words," but that "fixating on...letter-sound relations (e.g., after being prompted to 'sound it out') could also be frustrating" (p. 775).

Support for the process of using cueing systems can be found in research that refers to the concept of Set for Variability (SfV) - how children in grades two through six use "phonological cleanup" to correct a mispronounced decoded word by using context (Steady et al., 2022). This work follows other studies (see Savage et al., 2018; Tunmer & Chapman, 2012), and SfV has been found to "play an important role in the development of word recognition skills" (Tunmer & Chapman, 2012, p. 138). Additional studies of SfV may help to clarify the cueing systems and their usage during the reading of connected text.

So, how can literacy professionals negotiate this information and use running records and the cueing systems in ways that help children become strategic and proficient decoders while still making meaning of text? First, teachers should continue to use running records to yield students' approximate instructional text levels (McKenna & Picard, 2006). This will help teachers match books to students for small group instruction. Second, the running record is an effective tool for teachers to determine the progress students are making in the area of decoding print and how they are using sources of information "more globally" (Stouffer, 2021, p. 778), although readers eventually do need to rely more on visual information and confirm their attempts with meaning cues (Davis et al., 2021; McKenna & Picard, 2006).

Teachers can ask themselves questions such as these while analyzing a student's running record: "Did this reader over-rely on any particular cueing system?" and "What does this evidence indicate in terms of providing targeted instruction?" (Gillett & Ellingson, 2017, p. 140). Also, when teachers pay attention to miscues that affect the meaning of the text, they can notice and address comprehension issues (Afflerbach, 2022). Finally, D'Agostino et al. (2021) and Harmey and Kabuto (2018) suggest teachers should use other assessment tools in addition to running records to make important decisions about students' strengths and growth areas.

Explicit and Systematic Instruction

Research and scholars in the field largely agree that all five reading components (e.g., phonemic awareness, phonics, fluency, vocabulary, and comprehension) identified by the National Reading Panel Report (2000) impact student literacy learning. The research in the report indicated that an *explicit and systematic* approach to phonics instruction has more impact on student learning than approaches that do not include phonics instruction. The report specifically states that phonics instruction is most effective in early literacy instruction and that the impact of phonics instruction decreases throughout the grade levels. Specifically, the NRP

(2000) states, “Teaching students to decode words using systematic and explicit phonics instruction results in improved word-decoding skills” (p. S271). Interestingly, the report indicates that for readers who struggle, phonics instruction had minimal impact on learning to spell. Nevertheless, phonics is a necessary component of learning to read. The NRP directly stated, “teaching students phonological awareness and letter knowledge, particularly when combined, results in improved word-decoding skills” (p. S271). Further, reviewed research in the report indicates that while phonics instruction does positively impact decoding, it does not stand alone as an isolated pathway to reading. Instead, phonics instruction must be a part of a comprehensive reading program that includes phonemic awareness, fluency, vocabulary, and comprehension, particularly for emergent and early readers and those who struggle with reading tasks. As the NRP Report (2000) suggests, teaching students’ phonics does not interfere with their comprehension of text; rather, it supports students’ reading and understanding of texts. This indicates that including phonics instruction in a reading program is necessary; however, it should not be the sole instructional focus (Tierney & Pearson, 2024). The degree to which phonics is needed and how it is taught is more nuanced across conversations. Shanahan (2005) argued that the NRP report found that synthetic and analytic phonics methods could be taught systematically. Bowers (2020) pushed further by suggesting that if the field focused on teaching methods that included both phonology and morphology, students would be better equipped to decode and generate meaning from text.

Given the information the NRP Report (2000) provided about phonics, we chose to look closely at the phrase explicit and systematic. This phrase can be heard across the educational landscape from school-based practitioners to legislators and is usually included in discussions related to phonics instruction. Much like other terms, it seems that these descriptors are used by all participants of the current reading conflict. We wanted to take a closer look at how these terms are defined to illustrate similarities and differences in conceptualizations and school-based applications.

The International Literacy Association (ILA) and the International Dyslexia Association (IDA) have been vocal in their stances on how to provide effective literacy instruction for all readers. Since both organizations have published position pieces and responses to engage in this conversation, we felt it important to visit their websites to gain firsthand information about how they define explicit and systematic.

The International Literacy Association defines systematic instruction as, “a plan of instruction (e.g., scope and sequence) that takes students through an explicit sequence of learning activities” (ILA Glossary, 2023); however, ILA does not provide a specific definition for the term explicit instruction. Upon further review of ILA’s website, the Dyslexia Research Advisory (2023) addresses explicit and systematic phonics instruction as a method to teach graphemes, phonemes, and morphemes to support students who struggle to read words and spell.

The term structured literacy is often brought into the conversation along with the terms explicit and systematic. The International Dyslexia Association used the term structured language teaching in their 2010 standards document, and the 2018 version states that this approach can support students with and without disabilities. In both the 2010 and 2018 IDA publications, the standards are presented in two distinct sections:

Section I addresses foundation concepts, knowledge of language structure, knowledge of dyslexia and other learning disorders, administration and interpretation of assessments, the principles of structured language teaching, and ethical standards for the profession. Section II addresses skills to be demonstrated in supervised practice. (p. 4)

The terms explicit and systematic can be found throughout the standards in both categories of Content Knowledge and Observable Competencies for Teaching Students with Dyslexia and Related Difficulties.

In 2015, IDA published a guide called *Just the Facts*. This guide outlines three main elements of the structured literacy approach for students with dyslexia. These elements are systematic and cumulative, explicit instruction, and diagnostic teaching. Below are the IDA definitions of each element.

- **Systematic and Cumulative.** Systematic means that the organization of material follows the logical order of the language. The sequence must begin with the easiest and most basic concepts and elements and progress methodically to more difficult concepts and elements. Cumulative means each step must be based on concepts previously learned.
- **Explicit Instruction.** Structured Literacy instruction requires the deliberate teaching of all concepts with continuous student-teacher interaction. It is not assumed that students will naturally deduce these concepts on their own.
- **Diagnostic Teaching.** The teacher must be adept at individualized instruction. The instruction is based on careful and continuous assessment, both informally (e.g., observation) and formally (e.g., with standardized measures). The content presented must be mastered to the degree of automaticity.

Along with definitions of explicit and systematic, IDA's *Fact Sheet* (2020) on structured literacy (2020) further explains that structured literacy must include "hands-on, engaging, multimodal methods and be diagnostic and responsive" (p. 3).

After reviewing the definitions from both organizations, the terms explicit and systematic are being used in similar ways. Given how ILA and IDA are defining and using these terms, we suggest that these terms not be used with a deficit model lens (i.e., one side stating that the other is not providing explicit and systematic work). Instead, we suggest both sides come together and recognize that our use and understanding of these terms is more similar than it is different. The effective use of phonics instruction in the classroom lies with the teacher's ability to be responsive to student needs. When interpreting these terms, it is important literacy professionals understand that "explicit instruction is not the same as narrow synthetic phonics; it means that children need well-planned teaching of reading that includes phonics and other vital elements" (Wyse & Hacking, 2024, p. 17).

Text Types for Reading Instruction

The debates over which type of book is best to use to teach children how to read continues. Should children read *decodable books*, *predictable books*, or *leveled books*? Each type of book will be defined and discussed in its relation to its use in the classroom.

Decodable books are appropriate when young children are first learning the alphabetic principle and letter-sound associations. These books use specific phonics patterns that are progressively sequenced, such as short vowels, long vowels, blends, and digraphs to build students' decoding skills (ILA, 2018, 2023; Kearns & Hiebert, 2023; Stark, 2020). Proponents of a phonics-forward approach would argue that decodable books help beginning readers to first sound out letters or clusters of letters and then blend the sounds into words (Cheatham & Allor, 2012; Ehri, 2020). However, as readers move up in text that is more complex, "they are more likely to benefit from challenging and meaningful literature" (Beverly et al., 2009, pg. 191) because decodable texts are not designed to support comprehension (Pennell et al., 2024, p. 675).

It must also be noted that there is very little research that supports using only decodable books to teach children how to read (Mesmer, 2001; National Reading Panel, 2000). We support the use of decodable books to build students' letter-sound and word recognition skills, especially at the emergent stage of word learning; however, we do not advocate for the sole use of decodable books in teaching children how to read and comprehend.

Predictable books support students through repetitive text and predictable patterns (Dahl-Leonard et al., 2024; Pennell et al., 2024), such as those found in *Brown Bear, Brown Bear What do you see?* (Martin & Carle, 1970). The predictability of words across the pages allows students to see and rehearse phrases multiple times, which in turn also supports fluency development. Unlike decodable books, predictable books include illustrations or photos that more explicitly support the text. The picture usually corresponds to more complex words outside of the patterned text. For example, in the text, "*Brown Bear, Brown Bear, What do you see? I see a _____ looking at me*" (Martin & Carle, 1970), the more complex words would be *red* and *bird*. A picture of a red bird supports the child's decoding of the words. It is for this reason that "predictable texts are the most appropriate for children who have little to no alphabet knowledge and who are not yet applying letter-sound relationships to decode words" (Pennell et al., 2024, p. 675). Proponents of a phonics-forward approach to teaching reading would argue that the child is not reading but rather is memorizing the predictable pattern of words and repeating them (Burkins & Yates, 2021). However, predictable phrases, along with the contextual clues, support beginning readers' attempts at recognizing words (Cunningham et al., 2005, Pennell et al., 2024). More specifically, for "emergent readers who are still developing alphabet knowledge, predictable texts can provide a useful context for developing their understanding of print concepts, including concept of word and beginning automatic word recognition" (Pennell et al., 2024, p. 677). Rehearsing the repetitive text in predictable books and reading the more complex words, such as *red* and *bird*, may also increase the child's oral language acquisition skills. We support the use of predictable books to build students' word recognition skills and boost feelings of reading success.

Leveled texts are assigned levels that correspond to a text gradient, starting from least complex and gradually moving toward more complex. As the level increases, the text structures, vocabulary, and decoding demands increase in complexity as well (Fountas & Pinnell, 2012). Teachers carefully select leveled texts depending on each student's instructional reading level, word solving skills, reading strategy use, reading strengths, and reading needs. It must be noted that each book within a certain level holds its own supports and challenges.

Advocates of a phonics-first approach to reading instruction might contend that leveled texts include uncontrolled vocabulary, potentially encouraging poor reading habits like guessing words or skipping over unfamiliar words during independent reading. Specifically, Cunningham et al. (2005) stated, "the way Reading Recovery© books are leveled provides no support for instruction in recognizing words by their orthography or decoding them by their phonology" (p. 425). However, even decodable books increase in difficulty as more phonics skills are added. We support the use of leveled books to build students' reading strategy use, fluency, and comprehension of text, and that "[b]y matching appropriately leveled texts to readers, teachers can control the level of difficulty of the texts used for instructional purposes" (Ankrum, 2022, p. 609).

Kearns and Hiebert (2023) and Price-Mohr and Price (2019) contend that, while using decodable texts increases scores on measures of the alphabetic principle, non-decodable books have significant effects on foundational skills as well as effects on comprehension and fluency

measures. Children need decodable books to build their phonics skills, they need predictable books to build word recognition, specifically irregular words, and they need leveled books to orchestrate skills and strategies they are learning to read and comprehend books at increasingly difficult levels. The goal for teachers is to create lifelong readers - this may or may not be accomplished by using decodable and predictable texts alone. Additionally, students should engage with authentic high-quality literature, such as poetry, fantasy, folktales, realistic fiction, science fiction, historical fiction, nonfiction, biographies, autobiographies, and graphic novels.

A Framework for Practice

Now we shift to discussing the ways in which literacy professionals might use this information to facilitate professional learning events, professional learning communities, grade level planning meetings, and individual coaching conversations with teachers. What follow are research-supported observation tasks and questions literacy professionals might consider as they negotiate the influx of content related to the science of reading and reading instruction.

Balanced Literacy

Observation task: Spend long stretches of time in classrooms at different points throughout the day to take a pulse on the types of literacy components.

Questions to consider: Are teachers providing students with ample opportunities to read and write with the teacher, with other students, on their own? Is phonemic awareness, phonics, vocabulary, fluency, and comprehension instruction connected to authentic text reading and writing?

Guided Reading

Observation task: Spend time in classrooms to take a pulse on the ways in which small group instruction is implemented.

Questions to consider: Are teachers working with small groups of students every day, a couple days a week, or not at all? When they do work with students, what is the exact nature of this work? Are teachers working on the same concepts and skills with small groups, or are they differentiating the work depending upon the needs of the learners? Are concepts and skills taught discretely or are they also embedded in authentic reading and writing tasks?

Running Records

Observation task: During grade level or professional learning community meetings, explore how teachers are using running records to get to know their children as readers.

Questions to consider: Do teachers know the difference between formal and informal running records? Do they understand how to analyze children's errors and how to use this information for instruction in phonemic awareness, phonics, fluency, vocabulary, and comprehension? Do they use running records in conjunction with other assessments to gain a "whole picture" of the child's literacy?

Cueing Systems

Observation task: Observe teachers while they work with children during whole group shared reading instruction and small group guided reading instruction.

Questions to consider: Do teachers encourage children to check their responses against the meaning and syntax of the text after they use visual information to solve a word? Do teachers prompt them to do so? Are children provided with opportunities to discuss texts before, during, and after reading so that they are making meaning from the text?

Explicit and Systematic Phonics Instruction

Observation task: Spend ample time with teachers while they consider formal and informal reading assessment data to plan phonics instruction so that there is a focus on phonology and morphology.

Questions to consider: Which students need intensive small group intervention and what instructional methods (synthetic, analytical, analogy-based) will serve them best? Which students need a smaller dose of phonics? Which students only need minimal phonics instruction? How are teachers making sure there is a transfer of phonics skills to authentic reading and writing tasks? How are teachers providing instruction that has students decode words (phonology) and capture meaning (morphology)?

Text Types

Observation task: Conduct a thorough evaluation of the texts used during daily classroom instruction.

Questions to consider: Are students given ample opportunities to listen to and read, through shared and guided experiences, high-quality children's literature (i.e., motivating, diverse, meaningful storylines)? Are there books available to teachers to use for small-group instruction (i.e., predictable texts, leveled texts, and decodable texts)?

Conclusion

Our purpose for writing this article is to help literacy professionals further find accord amongst several of the terms and phrases that have been used widely in recent podcasts, blogs, website articles, and even state house bills. As we have engaged with others in our professional circles, we have experienced frustrations of how these terms are misunderstood and misrepresented. Reading interventionists, literacy coaches, and other literacy professionals should guide teachers to use current and relevant research and their knowledge of students as readers and writers to plan literacy instruction.

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Navigating the New Terrain: Preparing Texas Teacher Candidates for the Science of Teaching Reading Constructed Response

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Abstract

The Texas State Board for Educator Certification (SBEC) has implemented new certification requirements, significantly affecting the path for aspiring Pre-K through 8th-grade educators. As of 2022, candidates must pass three exams: the pedagogy and professional responsibility (PPR) exam, a Core Subjects exam, and the newly mandated Science of Teaching Reading (STR) exam. Effective January 1, 2021, the STR exam includes a constructed response component alongside traditional multiple-choice questions, raising proficiency standards by assessing both content knowledge and writing skills. This heightened focus on writing proficiency may pose a distinct challenge for prospective teachers. The current article offers guidance on preparing for the STR exam's constructed response segment, analyzing its requirements, and providing recommendations to develop the necessary skills. The goal is to equip teacher candidates to navigate this demanding aspect of the certification process successfully.

Keywords: teacher certification, science of teaching reading, undergraduate writing, teacher candidates

A pivotal shift has emerged for teacher certification in the State of Texas, and it is reshaping the journey for those aspiring to educate students in grades Pre-K through 8. Mandated by the Texas State Board for Educator Certification (SBEC) in 2022, prospective Pre-K-6th and 4th-8th educators are now required to pass three certification exams: the pedagogy and professional responsibility (PPR) exam, a Core Subjects exam for their specific certification area, and the most recently mandated Science of Teaching Reading (STR) exam. Implemented January 1, 2021, the STR places priority on different theoretical models than previously tested, such as the Simple View of Reading (Gough & Turnmer, 1986) and Scarborough's Reading Rope (Scarborough, 2001), thus placing a larger focus on explicit systematic phonics instruction. Notably, this exam also heightens the proficiency standards for aspiring teachers by introducing a constructed response component alongside the conventional multiple-choice format, or selected-response format (TEA, 2022b), thereby amplifying not only the assessment of candidates' content knowledge but also the assessment of candidates' writing skills. This heightened focus on writing proficiency may pose a distinct challenge for prospective teachers. In this article, our primary objective is to offer guidance on preparing teacher candidates for the constructed response segment of the STR exam. Initially, we examine the specific requirements of the constructed response, shedding light on the essential content knowledge and writing skills necessary for success. Subsequently, we present recommendations for fostering the requisite content knowledge and writing skills, aiming to empower teacher candidates to navigate this challenging aspect of the certification process.

Literature Review

This section provides insights into the constructed response requirements of the TExES STR exam. The information was extracted from TEA's (2022a) online preparation manual for the exam. According to that document, "The TExES [STR] (293) exam is designed to assess whether an examinee has the requisite knowledge and skills that an entry-level educator in this field in Texas public schools must possess" (TEA, 2022a, p. 2). The exam consists of 90 selected-response questions and one constructed-response question, and TEA shares that those questions are based on the STR Exam Framework. Furthermore, the content of the exam is organized into four broad areas of content called domains. Those domains are reading pedagogy (Domain 1), reading development/foundational skills (Domain 2), reading development/comprehension (Domain 3), and analysis and response (Domain 4). Within each domain, the content is further defined by a set of competencies consisting of two parts. The first part is the competency statement that "broadly defines what an entry-level educator in this field in Texas public schools should know and be able to do" and the second part is "the descriptive statements, which describe in greater detail the knowledge and skills eligible for testing" (p. 3 & 4). Domains 1 through 3 are assessed by the selected-response and clustered questions, while Domain 4 is assessed with the constructed response—the primary focus of this article.

The Constructed Response

The constructed response offers candidates an avenue to demonstrate their expertise in analysis and response. Other certification exams, such as Praxis, include written responses as well. On the STR exam, this is specifically within Domain 4, by providing a detailed written response. Final responses are evaluated for how well candidates address the exam prompt, with

scores ranging from 1 to 4 and designations of “B” for missing responses and “U” for unscorable. The exam, administered on a computer, incorporates four simulated exhibits of assessment data derived from a fictional student. These exhibits include a range of assessments, such as word list readings, short passage readings, and fluency assessments, each providing insights into the student’s abilities (see TEA, 2002a).

The task requires candidates to identify key reading skill needs, both in foundational reading skills and comprehension, evidenced by the student’s performance in the provided exhibits. Subsequently, candidates must propose instructional strategies to address these needs, ensuring alignment with grade-level standards outlined in the TEKS for ELAR. The importance of integrating knowledge of reading pedagogy and understanding the developmental progress of foundational reading skills is emphasized, highlighting the comprehensive nature of the assessment.

Completing the constructed response requires candidates to be proficient in both content knowledge and effective writing skills. This dual proficiency is crucial for identifying, addressing, and justifying instructional strategies aligned with grade-level standards, showcasing a comprehensive understanding of reading pedagogy with the TEKS for ELAR. The subsequent sections delve into the necessary content knowledge and writing skills.

Content Knowledge

TEA (2022a) emphasizes that to excel in the constructed response section of the STR exam, candidates must possess specialized content knowledge. A strong response demonstrates a precise application of relevant content knowledge and skills, including a nuanced understanding of data interpretation and tailored instructional strategies. Conversely, a weak response reveals a partially accurate and limited application of such knowledge. The candidate may overlook crucial elements, repeat information without completing data interpretations, and demonstrate a weak grasp of reading pedagogy and TEKS alignment.

To identify the necessary specialized content knowledge, we consulted TEA’s preparation manual for the STR exam (TEA, 2022a) to review the specific requirements outlined for successful performance. According to the manual (TEA, 2022a), a score of “4” is indicative of a candidate’s comprehensive understanding of the relevant content and skills. Such a response should address all facets of the assignment cohesively, showcasing a highly effective application of knowledge with robust evidence, concrete examples, and well-reasoned explanations. Conversely, a score of “2” denotes a limited understanding and application of relevant content knowledge and skills. This weaker response may only partially address the assignment, providing scant evidence and offering explanations that are either vague, unsupported or grounded more in general pedagogy than specific reading principles.

In navigating the requirements for a strong response, candidates need to focus on meticulous completion of all tasks, addressing foundational reading skills and comprehension needs. This includes adeptly using developmentally appropriate instructional strategies and demonstrating professional knowledge and evidence-based support. A precise application of content knowledge is crucial, reflecting a nuanced understanding of data interpretation and the crafting of tailored instructional strategies. Therefore, as candidates prepare for the STR exam, a thorough review of TEA’s guidelines and an emphasis on the comprehensive application of specialized content knowledge will be key to achieving success in the constructed response section.

TEA (2022a) outlines that the STR exam assesses candidates' knowledge of reading development across ten areas: oral language development, print awareness and alphabetic knowledge, phonological and phonemic awareness, phonics (decoding and encoding), reading fluency, vocabulary development, syllabication and morphemic analysis, comprehension of literary text, and comprehension of informational text. Another item, beginning strategies and reading comprehension skills, is included in this list in the STR Exam Preparation Manual; however, we do not include this in our discussion because it is already addressed under several other items. Regarding reading pedagogy, TEA (2022a) specifies that candidates are tested on their knowledge of providing explicit, systematic instruction; implementing both formal and informal assessments; designing and implementing standards-driven instruction reflecting evidence-based best practices; and analyzing and using background information to engage all students, including those with exceptional needs and emergent multilingual learners. Further insights into preparing candidates with this specialized knowledge are in our *recommended supports* subsection that follows later.

Writing Skills

To succeed in the constructed response section of the STR exam, candidates must also demonstrate effective writing skills. A strong written response goes beyond mere regurgitation of facts; it requires the ability to articulate ideas clearly, coherently, and persuasively. The candidate's writing should reflect a command of language, an organized structure, and an ability to convey complex concepts in a reader-friendly manner.

TEA (2022a) emphasizes that in a strong response, candidates showcase their writing skills by presenting a precise application of relevant content knowledge. This involves not only conveying accurate information but also expressing it in a way that is engaging and comprehensible. Additionally, a nuanced understanding of data interpretation and the incorporation of tailored instructional strategies should be communicated with clarity. This requires the skill of translating technical information into accessible language, making the response more impactful.

Conversely, a weak written response may need more clarity and coherence. It might exhibit a limited ability to convey ideas effectively, resulting in a response that is disjointed or difficult to follow. Poor writing skills can hinder the candidate's ability to present a well-structured argument, leading to vague or unsupported explanations. Mason and Atkin (2021) found, in their study, that adult writers struggled with academic writing conventions, merging theory and practice, and using a writing style that conveyed authority. Hodges and colleagues (2021) specifically point to the need for extensive writing practice in order for preservice teachers to enhance their writing skills.

In preparation for the STR exam, candidates should focus not only on content knowledge but also on developing their writing skills. Practice in crafting well-organized, articulate responses is crucial. Understanding the nuances of language and effective communication will enhance the candidate's ability to clearly express complex ideas. Additionally, educator preparation programs (EPPs) should emphasize the importance of constructing responses that are not only accurate but also compelling, showcasing the candidate's proficiency in both content knowledge and effective written communication. In essence, effective writing skills are integral to success in the STR exam's constructed response section. Candidates should strive to present their knowledge in a manner that is not only accurate but also engaging, clear, and well-

structured. Through diligent preparation and practice, candidates can enhance their ability to articulate their understanding of foundational reading skills, comprehension needs, and evidence-based reading strategies in written form. In light of the importance of effective writing skills, we provide recommendations in our *recommended supports* subsection. Through these recommended supports, we seek to reinforce the connection between strong writing skills and success in the STR exam's constructed response section, emphasizing the significance of both content knowledge and effective written communication.

Recommended Supports

This section is structured to include two subsections: content knowledge support and writing support. The selected supports in both subsections were derived from the reviewed literature, as well as the practices of the four authors—two of which are faculty members in university-based EPPs and two who are practicing classroom teachers, one in elementary and one in high school.

Content Knowledge Support

The research on preservice teacher knowledge of foundational reading concepts is discouraging. According to several studies, preservice teachers have difficulty identifying and segmenting phonemes in words (Cheesman et al., 2009), answering questions about language structure items (Bos et al., 2001), understanding the purpose of phonological awareness instruction (Cheesman et al., 2009), confusing phonological awareness and phonics instruction (Cheesman et al., 2009), counting morphemes in words (Spear-Swerling et al., 2005), and understanding the importance of reading fluency to later reading development (Spear-Swerling et al., 2005). To support preservice teachers' content knowledge of foundational literacy concepts, Hindman et al. (2020) suggest not only introducing these concepts during coursework but also providing “connected field experiences” (p. S203) where preservice teachers practice instructional strategies under the tutelage of a more experienced other. These professional learning opportunities can increase future teachers' knowledge of concepts (Brady et al., 2009; Hudson et al., 2021).

As mentioned earlier, the STR exam assesses candidates' expertise in reading development across ten key areas: oral language development, print awareness and alphabetic knowledge, phonological and phonemic awareness, phonics (decoding and encoding), reading fluency, vocabulary development, syllabication and morphemic analysis, comprehension of literary text, comprehension of informational text, and beginning strategies and reading comprehension skills (TEA, 2022a). The evaluation also considers candidates' proficiency in delivering clear, systematic instruction using sequential and multimodal approaches. It involves the application of both formal and informal assessment methods to gauge student progress. Additionally, candidates are assessed on their ability to design and implement developmentally appropriate, standards-driven instruction that aligns with evidence-based best practices. Furthermore, the evaluation takes into account candidates' skills in utilizing background information to effectively engage students, including those with exceptional needs and emergent multilingual learners.

To demonstrate proficiency in the knowledge mentioned in the previous paragraph, the constructed response requires candidates to analyze the provided assessment data to identify student needs. Once these needs are identified and justified using the data, candidates must pinpoint scientifically based instructional practices to address those needs. Candidates enter the exam not knowing which of the ten skills will be addressed, so they must be prepared to define all ten terms, articulate how each skill contributes to overall reading success, recognize the grade-level expectations for each skill, and identify explicit strategies grounded in the science of reading for proficiency in each of the ten areas.

To support candidates in acquiring and retaining this knowledge, we recommend integrating processes and instructional activities that prompt candidates to synthesize information from various literacy coursework. An illustrative example is the use of a graphic organizer, as outlined in Figure 1. As candidates explore the ten topics and delve into associated instructional practices during their coursework, they can fill in the corresponding rows in Figure 1. The graphic organizer is flexible and can be modified to include additional literacy skills or categories of knowledge relevant to each skill, as the current version in Figure 1 may not cover all the content knowledge essential for teaching grade-school literacy skills comprehensively. Consequently, as candidates prepare for the constructed response, they can review and study the information recorded in their completed graphic organizer.

Figure 1

Graphic Organizer for Documenting Content Across Literacy Coursework

Skill	Definition	Contribution to Reading Success	Grade-Level Expectations (e.g., alignment to TEKS and developmental continuums)	Explicit Strategies
Oral Language Development				
Print Awareness and Alphabetic Knowledge				
Phonological and Phonemic Awareness				
Phonics (Decoding and Encoding)				

Reading Fluency				
Vocabulary				
Syllabication and Morphemic Analysis				
Comprehension of Literary Text				
Comprehension of Informational Text				

The following subsections align with Figure 1 and provide brief context into the type of information candidates might document. It is crucial to emphasize that the information provided is not exhaustive; rather, it acts as a starting point.

Oral Language Development

Oral language development (e.g., TEKS 110.3[b][1]) involves the gradual acquisition of spoken language skills such as vocabulary, grammar, pronunciation, and communication strategies, enabling a child to understand, produce, and effectively use spoken language (Konza, 2014). This development, influenced by language-rich environments, social interactions, cultural context, and individual experiences, begins in infancy and evolves through adolescence. According to Gough and Tunmer's (1986) Simple View of Reading, reading comprehension relies on both decoding and language comprehension skills, with strong oral language providing a crucial foundation for reading. Children with advanced oral language abilities often exhibit higher reading readiness and success (Scarborough, 1998; Dickinson et al., 2010; Lepola, 2016).

Reading experiences contribute to the enhancement of oral language skills. Through exposure to written language in texts, children expand their vocabulary, internalize grammatical structures, and develop a deeper understanding of language conventions. Researchers assert that reading aloud and engaging in discussions about texts further reinforce oral language development by providing opportunities for expressive language use, comprehension, and critical thinking (Cabell et al., 2019). Therefore, one effective strategy to increase oral language development is interactive read-alouds. In this approach, educators or caregivers read aloud to children while actively engaging children in discussions that help them think deeply about and beyond both fiction and informational text. Interactive read-alouds foster active engagement, stimulate language development, cultivate critical thinking skills, and promote a love of reading (McClure & Fullerton, 2017). By integrating this strategy into early childhood and elementary literacy instruction, educators can support children's oral language development and lay a solid foundation for reading success.

Print Awareness and Alphabetic Knowledge

Print awareness and alphabetic knowledge (e.g., TEKS 110.3[D, F]) are fundamental skills closely tied to reading development. Print awareness involves understanding the conventions and basic features of written language, such as recognizing that print carries meaning and understanding how a book works (Clay, 1991). It also includes awareness of print directionality and recognition of letters, words, and sentences (Bialystock et al., 2000). Alphabetic knowledge, on the other hand, focuses on understanding letters of the alphabet and their corresponding sounds, which lays the groundwork for phonics instruction and decoding skills essential for reading (Ehri, 2015; Georgiou et al., 2012).

One effective strategy to foster print awareness and alphabetic knowledge is interactive writing (Hall, 2019; Jones et al., 2010; Williams, 2018). Interactive writing is a dynamic collaborative literacy activity in which the teacher and students collectively compose and construct a piece of writing. Throughout this process, students actively engage in brainstorming ideas, organizing thoughts, selecting vocabulary, and crafting writing under the guidance of the teacher. By participating in interactive writing, students not only develop their writing skills but also enhance their print awareness and alphabetic knowledge. As they contribute to the creation of the text, students are prompted to identify letters, words, and sounds within the context of meaningful writing tasks. Moreover, the teacher's facilitation offers opportunities for explicit instruction on spelling, grammar, punctuation, and other conventions of writing, reinforcing students' understanding of alphabetic principles (Roth & Dabrowski, 2014). Through interactive writing, students gain a deeper understanding of how written language works, ultimately fostering their literacy development and confidence in their writing abilities.

Phonological and Phonemic Awareness

Phonological awareness (e.g., TEKS 110.3[2][A][i-vii]) involves the ability to recognize and manipulate sounds in spoken words (Lindsey et al., 2020). The most difficult skill that follows under phonological awareness is phonemic awareness, or the ability to recognize and manipulate phonemes (e.g., smallest sounds in spoken words) (Ehri, 2022). Ehri (2022) reminds us that phoneme segmentation enables students to break down unfamiliar words into smaller sound units, facilitating the encoding and spelling processes. Additionally, phoneme blending aids in seamlessly combining phonemes to form spoken words, impacting students' decoding skills. In the educational landscape of Texas, there is an expectation that children master phonemic awareness by the conclusion of first grade (TEA, 2017). Also, dyslexia screeners begin to measure this skill as early as kindergarten (TEA, 2021).

According to Brown et al. (2021), using Elkonin boxes is an effective strategy for enhancing phonemic awareness (Clay, 2016; Elkonin, 1963). In this approach, children articulate a word and manipulate tokens into boxes, with each token representing a phoneme, helping them segment the sounds in words like "cat" (/k/ /ă/ /t/). Engaging in phoneme segmentation activities improves the ability to recognize individual sounds within words, which strengthens decoding and comprehension skills, leading to better reading fluency and comprehension (Ehri, 2020; Sargiani et al., 2022). Mastering phoneme segmentation fosters smoother reading and allows students to focus on understanding and critical thinking, while a solid grasp of phonological awareness equips them to comprehend and utilize the alphabetic principle in reading and writing.

Phonics (Decoding and Encoding)

Phonics (e.g., TEKS 110.3[2][B][i-v]) is a foundational method used in teaching reading, focusing on the relationship between letters and the sounds they represent. Phonics instruction equips learners with the ability to decode and encode words by recognizing letter-sound correspondences. This skill is pivotal for reading fluency and comprehension as it enables learners to sound out unfamiliar words and recognize familiar ones more efficiently. Phonics instruction also cultivates phonemic awareness, which is crucial for understanding and manipulating individual sounds within words, thereby enhancing reading and spelling proficiency.

An effective phonics teaching activity is an extension of Elkonin boxes, known as letter or spelling boxes, which requires orthographic mapping (Ehri, 2020; 2022; Miles et al., 2018). In this activity, learners map phonemes to graphemes by connecting sounds in words to the corresponding letters. They are given orally spoken words with target letter-sound correspondences, such as 'ai' in "rain" or 'oa' in "boat." The teacher guides learners in decoding each word by segmenting the sounds using Elkonin boxes and replacing tokens with corresponding letters or combinations. This process enhances decoding and encoding skills, promoting literacy development. For instance, first graders are expected to decode words by applying common letter-sound correspondences (TEKS 110.3[2][B][i]), and this activity helps build the foundational skills necessary for reading success.

Reading Fluency

Reading fluency (e.g., TEKS 110.3[4]) is the ability to read text accurately, smoothly, and with appropriate expression (Samuels, 2006). It is a crucial component of reading development as it enables readers to efficiently and successfully comprehend text. Fluent readers can recognize words automatically, allowing them to focus their cognitive resources on understanding the meaning of the text rather than decoding individual words. Fluent reading is essential for proficient reading comprehension and academic success (Benjamin et al., 2010; Hiebert et al., 2012).

An explicit strategy for teaching reading fluency is the repeated reading technique (Paige et al., 2021; Young et al., 2018). In this approach, students repeatedly read a passage aloud until they can read it accurately and with ease. Initially, the teacher models fluent reading of the passage, emphasizing phrasing, expression, and pacing. Then, students read the passage aloud several times, receiving feedback and guidance from the teacher as needed. Over multiple readings, students gradually improve their fluency, becoming more confident and proficient readers. Repeated reading can be done individually, in pairs, or small groups, and can be tailored to meet the needs of diverse learners. By providing opportunities for repeated practice, explicit modeling, and targeted feedback, the repeated reading strategy effectively enhances reading fluency and promotes overall reading development (Paige et al., 2021).

Vocabulary

Vocabulary (e.g., TEKS 110.3[3][A-D]) refers to the set of words known and understood by an individual or within a particular language or context. It encompasses a wide range of words, including both everyday words and specialized terms. Ricketts et al. (2007) and Sénéchal

et al. (2006) assert that vocabulary knowledge plays a crucial role in reading development as it directly impacts reading comprehension. The more extensive a reader's vocabulary, the better equipped they are to understand and interpret written text. Strong vocabulary skills enable readers to recognize words in context, infer meanings from context clues, and make connections between words and concepts. Additionally, vocabulary knowledge enhances writing skills and overall communication proficiency (DeGroff, 1987; Olinghouse, 2009).

An explicit vocabulary teaching strategy, described by Schwartz and Raphael (1985) and Stahl et al. (1991), involves using word or semantic maps. Students visually organize new words by including definitions, synonyms, antonyms, examples, and related concepts. Teachers introduce the target word with its definition and context, prompting students to consider its meaning and relevance. Students then create word maps by drawing a central bubble for the word, branching out with bubbles for various aspects of its meaning and usage. These maps should include definitions, synonyms, antonyms, contextual examples, and related concepts. Students share and discuss their maps with peers to deepen understanding. Finally, teachers encourage students to use the new vocabulary in writing and discussions, reinforcing learning. This strategy helps students internalize new vocabulary, build connections between words, and expand their vocabulary knowledge, promoting vocabulary acquisition, comprehension, and overall reading development (Mouchrif et al., 2023; Udaya, 2022).

Syllabication and Morphemic Analysis

Syllabication (e.g., TEKS 110.3[2][C]), the process of dividing words into syllables, is crucial for reading development as it aids in accurate decoding and pronunciation (Goodwin & Ahn, 2013). Each syllable contains a vowel sound and may include consonants before or after it. Breaking words into smaller units helps readers blend sounds, improving word recognition and fluency. Advanced syllabication involves morphemic analysis, which breaks down words into morphemes—the smallest units of meaning. Morphemes can be free (stand-alone words) or bound (prefixes, suffixes, roots that modify word meanings).

To facilitate understanding, educators can engage students in interactive activities like word sorting, where students categorize words based on shared morphemes, create word families to explore how morphemes can change the meaning of words, or construct new words using known morphemes. Through these activities, students not only develop their morphemic analysis skills but also strengthen their vocabulary and decoding abilities. Understanding morphemic analysis is pivotal for reading development as it equips readers with the tools to decode and comprehend complex words. By recognizing and analyzing familiar morphemes within unfamiliar words, readers can deduce meanings, expand their vocabulary, and enhance overall reading comprehension (Carlisle, 2010; Ganske, 2020).

Comprehension of Literary Text

A literary text (e.g., TEKS 110.3[8][A-D]) refers to any written work that is considered to have artistic merit and can be a novel, short story, poem, play, or essay. Authors of literary texts often employ language in creative and imaginative ways, aiming to evoke emotions, provoke thought, or convey complex ideas. They frequently explore themes, character development, symbolism, and narrative techniques, inviting readers to engage with the text on multiple levels

beyond the surface. Literary texts are valued not only for their entertainment but also for their ability to provide insight into the human condition and the world around us.

A research-backed approach to bolster comprehension of literary texts involves visualization (Pressley, 1976). Encouraging students to construct mental images while reading can enrich their grasp of the material. Visualization fosters connections, promotes engagement, and enhances comprehension abilities (Staal, 2000). While reading, teachers can prompt students to visualize pivotal events, characters, or concepts depicted in the text. This can be facilitated through queries like "What does this scene evoke in your mind?" and "Can you envisage the main character's emotions in this scenario?"

Making inferences is another critical skill for comprehension. It involves using clues from the text to draw conclusions or make educated guesses about information that is not explicitly stated. Research suggests that teaching students to make inferences improves their comprehension and analytical thinking abilities. One effective strategy used to teach inferencing is the "Think-Aloud" method (Beck & McKeown, 2001; Kucan, 1997). In this approach, the teacher models the process of making inferences by verbalizing their own thoughts while reading a selection aloud. Next, the teacher encourages students to search for evidence, analyze context, and draw logical conclusions while reading. They also provide guided practice with inferential questions and activities that require students to think critically and infer meaning from the text. By refining their abilities to make inferences, students enhance their proficiency in understanding complex texts (Hwang et al., 2023).

Comprehension of Informational Text

Informational text (e.g., TEKS 110.3[9][D][i-iii]) refers to written material designed to inform, instruct, or explain a specific topic or subject matter. Unlike literary works, which often prioritize storytelling and creative expression, informational texts emphasize conveying factual information in a clear and organized manner. These texts come in various forms, and understanding their structures is crucial for effective comprehension. Common text structures found in informational texts include sequential or chronological order, cause and effect, compare and contrast, problem and solution, and descriptive or explanatory formats. Teaching students about different text structures, such as compare/contrast and cause/effect, enhances their ability to navigate and comprehend complex texts (Duke et al., 2012; Kuhn et al., 2017).

Comprehending various text structures empowers readers to effectively navigate informational texts, pinpoint essential details, and grasp meaning with clarity and depth. Educators can facilitate this process by ensuring students are familiar with keywords that serve as cues for specific structures; for instance, "because" often signals a cause-and-effect relationship. Moreover, reinforcing comprehension can be achieved by employing graphic organizers that mirror text structures, allowing students to track their understanding in alignment with the organization of the text. This combination of explicit instruction and practical application equips students with the tools they need to decode complex texts and extract meaning efficiently (Duke & Pearson, 2002; Gajria et al., 2007; Williams, 2005; Williams & Pao, 2011).

Summarization is another powerful strategy for comprehension development, helping students identify main ideas, organize information, and improve recall (Armbruster et al., 1987; Bogaerds-Hazenbergh et al., 2021). Teaching students to identify key points, distinguish between important and supporting details, and condense information into concise summaries enhances comprehension and memory retention. By integrating these strategies into teaching practices,

educators support students in improving comprehension skills. These approaches provide active engagement and metacognitive opportunities, aligning with empirical findings on effective reading instruction (Ghimire & Mokhtari, 2025; Spörer et al., 2009).

Writing Support

The constructed response not only assesses content knowledge but also writing skills. Academic writing is “specific to the academy and represents a particular discourse” that is quite different than the informal first-person writing in which many students engage (Mason & Atkin, 2021, p. 1049). The type of writing expected in the constructed response can be a new challenge for teacher candidates. TEA (2022a) offers a rubric that delineates the anticipated performance criteria for the constructed response. To achieve a top score of “4,” candidates should fulfill the following criteria:

- The response comprehensively covers all aspects of the assignment.
- It showcases a precise and highly proficient application of the pertinent content knowledge and skills.
- The response presents robust, pertinent evidence, specific examples, and well-founded explanations.

Furthermore, TEA's (2022a) sample prompt requires teacher candidates to identify significant needs and cite specific evidence from exhibits to support their analysis. They are to describe an appropriate and effective instructional strategy or activity that would address the identified student needs and help them achieve grade-level standards. They are also tasked with explaining why each instructional strategy or activity described would be effective in addressing the identified needs and assisting the student in achieving grade-level reading standards as outlined in the TEKS for ELAR.

To support teacher candidates in transitioning into this style of writing, we recommend teaching them the “moves” that should be made in this type of writing. To do this, we analyzed the criteria and expectations outlined by TEA (2022a) and identified three of these “moves”. In addition, we propose sentence stems that illustrate the syntax used when implementing these moves to further scaffold candidates’ writing development (see Table 1).

Table 1

Moves to Make and Sample Sentence Stems

Move	Sentence Stems
Move 1: Identify significant needs and cite specific evidence from exhibits.	<ul style="list-style-type: none"> • In the exhibits, I observed that there is a significant need for <i>[insert specific need]</i>, as seen when <i>[insert specific example from exhibits]</i>. • The evidence presented in <i>[insert specific exhibit]</i> highlights a critical need for <i>[insert specific need]</i>. For example, <i>[insert specific example from exhibits]</i> • From my analysis of the exhibits, it is apparent

	that there is a substantial need for <i>[insert specific need]</i> . Evidence of this need is illustrated when the student <i>[insert specific example from exhibits]</i>
Move 2: Describe an appropriate and effective instructional strategy or activity to address the student's need.	<ul style="list-style-type: none"> ● Considering the specific need, an appropriate instructional approach involves <i>[describe the approach]</i>, which is designed to <i>[explain its effectiveness in addressing the need]</i> ● To effectively support the student, an instructional approach that could be used is <i>[name the strategy and describe it step-by-step]</i> ● Based on the identified need, an effective instructional strategy would be to <i>[describe the strategy]</i>, as this would help the student <i>[explain how it addresses the need]</i>
Move 3: Explain why the described strategy or activity would be effective in addressing the identified needs and assisting the student in achieving grade-level reading standards as outlined in the TEKS for ELAR.	<ul style="list-style-type: none"> ● <i>[name the strategy]</i> is effective in addressing the identified needs because.... ● An important aspect of <i>[name the strategy]</i> that supports the student's need is its emphasis on, directly addressing the grade-level expectation of ● The rationale behind choosing <i>[name the strategy]</i> is...

We recommend embedding valuable opportunities for teacher candidates to analyze and discuss data within all literacy courses as an integral part of their learning experience. This process not only enhances their understanding of literacy concepts but also fosters the development of crucial skills in data interpretation and communication. To scaffold this activity effectively, faculty can incorporate sentence stems and sentence frames, as outlined in Table 1, to model the structured writing required in their future educational practice. This intentional scaffolding allows teacher candidates to practice forming constructed responses while providing a clear framework for expressing their thoughts. By integrating data analysis discussions early in the coursework, candidates can apply this structured approach to their written paragraphs. These opportunities within EPPs can offer a supportive environment for refining both content knowledge and writing. Frequent practice and feedback on these activities may lead to improved proficiency in expressing ideas coherently, a skill that is invaluable in the complex and dynamic field of education.

Conclusion

The recent changes in teacher certification requirements in the State of Texas, particularly the introduction of the Science of Teaching Reading (STR) exam, mark a significant shift in the landscape of educator preparation in our state. With the implementation of this exam, aspiring Pre-K through 8th-grade educators are now faced with the challenge of demonstrating

not only their content knowledge but also their writing proficiency. This shift, mandated by the Texas State Board for Educator Certification (SBEC), points to the importance of a comprehensive understanding of theoretical models that embody this shift, such as the Simple View of Reading (Gough & Tunmer, 1986) and Scarborough's Reading Rope (Scarborough, 2001), as well as the ability to apply explicit systematic instruction techniques. As teacher candidates navigate this new certification process, it is imperative to provide them with guidance and support in preparing for the constructed response segment of the STR exam. By equipping candidates with the necessary content knowledge and writing skills, we empower them to succeed in their journey towards becoming effective educators, capable of meeting the diverse needs of students in today's classrooms.

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Jo'Ann Ruiz-Garcia is a high school educator with 19 years of experience. She has taught all levels of secondary English courses, including remediated and advanced classes. In her spare time, she enjoys spending time with her husband and five children. Her favorite places include various churches and libraries, and her favorite activities include learning, reading, and writing. Jo'Ann's future plans are graduating from TAMUCC with a Doctorate in Curriculum and Instruction and publishing a book of poetic prayers. She also hopes to find a way to remain a student for at least another twenty years!

COMPLEMENTARY RESOURCE

“YOU GOT THREE MORE, GRANDPA?” USING TRI-TEXTS TO SUPPORT STUDENT READING AND LEARNING ACROSS THE CURRICULUM

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Abstract

This article provides an introduction to, and rationale for, the concept of tri-texts. It shares examples of tri-texts with samples of instructional strategies teachers can use to support the process of intertextuality and enhance student learning across the curriculum. I begin with a personal experience of reading aloud picture books about Winnie the Pooh to my six-year-old granddaughter. Personally, I was pleased, but not surprised, that she enjoyed all three books. Professionally, this experience sparked my interest in developing and using tri-texts across the curriculum. I describe tri-texts as an extension of paired text and illustrate samples of instructional strategies used with tri-texts in English/Language Arts, Social Studies, Science, and Mathematics. I end with some concluding thoughts and share examples of other recommended tri-texts across the curriculum.

Introduction

One benefit of taking a historical perspective is that it “broadens the vista and adds a critical dimension to the analysis of present-day issues” (see, Alexander & Fox, 2004). Looking at reading from a historical perspective is a good example. Throughout the recent history of reading research, instruction, and assessment (1950’s to present), there has been much debate over the “right” or “most effective” approach to teach reading (Goodman, 1996). This debate continues today and is centered on a pattern or recurrence of several issues. For example, some recurring and hotly contested issues include the debate over the emphasis on whole word vs. phonetic instructional approaches, unbalanced vs. balanced or integrated reading instruction, individual vs. social reading practices, the use of controlled vocabulary readers vs. authentic children’s literature, formal vs. informal literacy assessment, and most popularly the Science of Reading vs. Whole Language.

At the same time, there is a topic that has neither been hotly contested nor formally or informally debated over the history of reading. This topic involves the important role literature, especially picture books, has on children’s language and literacy development. Universally, parents, grandparents, and teachers all recognize the power and potential of high-quality and award-winning picture books to help children 1) nurture a genuine love of books, 2) develop a positive disposition towards reading, 3) promote language and language development, 4) build

personal, social, and academic vocabulary, 5) enhance inferential strategies and comprehension skills, and 6) support the reading process of intertextuality i.e. making connections between and across books.

Given the current debate over issues about teaching reading going on today, this article functions as a reminder from one reading educator and grandfather about the crucial and pivotal role children's literature plays in the literate lives of children. Specifically, the purpose of this article is to provide an introduction to, and rationale for, the use of tri-texts to support student reading comprehension across the curriculum. It shares examples of tri-texts with samples of instructional strategies that support student reading and learning across the curriculum.

I begin with a personal experience of reading aloud picturebooks about Winnie the Pooh to my six-year-old granddaughter, including my reflections on the whole experience. Personally, I was pleased, but not surprised, that she enjoyed all three books. Professionally, this experience sparked my interest in developing and using tri-texts across the curriculum. I describe tri-texts as an extension of paired text and illustrate samples of instructional strategies used with tri-texts in English/Language Arts, Social Studies, Science, and Mathematics. I end with some concluding thoughts.

Reading Aloud Winnie the Pooh

Like most children, my six-year-old granddaughter loves stuffed animals, especially cuddly brown bears. Recently, I read aloud to her at bedtime three picture books about a very special bear known around the world – Winnie the Pooh. These books were *Finding Winnie: The True Story of the World's Most Famous Bear* (Mattick, 2015), *Finding Winnie: The Story of the Real Bear Who Inspired* (Mattick, 2015), and *Winnie: The True Story of the Bear Who Inspired Winnie-the-Pooh* (Walker, 2015). I read these books because she sleeps with a stuffed bear that she named Winnie. I also wanted to introduce the fascinating story behind the world's most famous bear.

I read aloud the first picture book, pausing when my granddaughter asked a question, made a comment, or noted a feature of an illustration. After reading, she placed her stuffed bear next to the picture book and began to animate how her bear was like and not like Winnie. After a short while, she stopped and stated, "Let's read the next one, Grandpa."

I read aloud the second picture book in the same manner that I read the first one. After reading, my granddaughter placed her stuffed bear in between the two picture books and again animated how her bear was like and not like Winnie in each book. After a short while, she stated, "I like these two books, Grandpa. Let's read the third one."

I read aloud the third picture book in the same manner as the first two. After reading, my granddaughter laid down the three books in front of us and stated,

I like all these books, Grandpa. They all are about a soldier who found a baby bear at the railroad station. The bear didn't have any parents, so the soldier felt sad and couldn't leave him there. He named the bear Winnie, like I named my stuffed bear Winnie, and took him to a zoo. Winnie met Christopher Robin at the zoo and became a famous bear. I love Winnie but I love my stuffed bear more.

I started to collect the books to signal it was ready to go to sleep. My granddaughter put one hand on top of the three books and stated,

You know, Grandpa, these books are the same but also a little different. They really don't tell the same story. This book [pointing at a book] said that the baby

bear at the railroad station was for sale, not for adoption. This book [pointing at a different book] said the soldier was a veterinarian and took care of horses. And this book [pointing at the third book] said the soldier named the bear Winnie after where he lived. I like them all, Grandpa. You got three more?

I said, “Yes, but that will be tomorrow night.” I collected the three books, placed them in her bookcase, and my granddaughter crawled under the covers. We both said goodnight and we loved each other. Then, she rolled over and went to sleep.

Reflection

Afterwards, I tried to sleep but couldn’t. I kept reflecting on this whole experience. Personally, I was pleased, but not surprised, that she enjoyed all three books. I particularly enjoyed how she connected her own stuffed bear to the baby bear in each of the stories. Professionally, I kept thinking that, while I read each book separately, my granddaughter saw three books collectively, making connections across the books in the form of similarities and differences. I also kept thinking about her last question, “You got three more, Grandpa?”

This question sparked my curiosity about the concept of tri-texts. It also inspired me to develop tri-texts across the curriculum and share instructional strategies used with tri-texts across the curriculum, specifically in English/Language Arts, Social Studies, Science, and Mathematics. Simply stated, this whole experience inspired this article.

From Paired Text to Tri-Text

The concept of tri-text builds on and extends the notion of paired text. Simply put, a paired text is two texts that are related in some way, e.g. topic, theme, character, concept, etc. Paired text is not a new idea; however, it has been, and continues to be, a powerful concept in literature-based reading instruction (Bintz, 2015). A tri-text consists of three texts that are also related in some way. The three picture books about Winnie the Pooh is an example of a tri-text.

Ways to Develop Tri-Text

Like paired text, there are many ways develop a tri-text (see, Lupo, et al., 2019). Among others, these ways include pairing contradictory texts, three texts that tell the same story but in contradictory ways. Another way is pairing corresponding texts, three texts that address the same theme but in unique ways, e.g. different voices, stances, etc. Still another way is pairing companion texts, three texts that complement each other by collectively widening the perspective on a specific topic in a content area.

Benefits of Tri-Text

A tri-text has many of the same benefits for readers as do paired text. Among others, a tri-text: 1) helps readers “develop both an expectation for connections and strategies for making the search for connections more productive and wide ranging” (Short & Harste, with Burke, 1996, p. 537), 2) enables students to learn about one text from other texts, and reading and sharing understandings of tri-text can contribute to learning across all subjects (Neufeld, 2005, p. 302), 3) helps students share and extend understandings of each text differently than if only one

text is read and discussed (Short, Harste, Burke, 1996, p 537), 4) enables students to read one text to build background knowledge for reading related texts (Soalt, 2005, p. 680), and 5) increases vocabulary by seeing same words in different contexts and motivation to explore topics of little interest to students (Soalt, 2005, p. 681).

Intertextuality

One of the most important benefits is that tri-texts support the process of intertextuality. This term, first coined in the 1960s by Julia Kristeva (Allen, 2000), essentially means “to weave together” (King-Shaver, 2005, p. 1). Since then, much professional literature emphasizes the importance of intertextuality, commonly referred to as making connections between texts (Harvey & Goudvis, 2017).

Intertextuality refers to the personal connections students make between the books they are currently reading and their past experiences. Instructionally, a tri-text is one way to put intertextuality into action in the classroom. It supports students to make intertextual connections across texts. In the process students develop both an expectation for connections and strategies for making connections productive and wide ranging (Short, Harste, Burke, 1996, p. 537).

Instructional Strategies

There are many instructional strategies that can be used with tri-texts. Here, I share examples of tri-texts and illustrate samples of instructional strategies used with specific tri-texts. I personally developed all these instructional strategies, each of which can be used across content areas. I present these examples of tri-text and samples of strategies by academic discipline. I also share additional tri-texts across the curriculum (see Appendix A).

English/Language Arts: The picture books *The Oldest Student: How Mary Walker Learned to Read* (Hubbard, 2020), *Mr. George Baker* (Hest, 2004), and *Papa’s Stories* (Johnson, 1994) is a tri-text on the topic of the importance of learning to read, no matter the age. Tri-Text Story Chart is an instructional strategy used with this tri-text of picture books. The following are short descriptions of each picture book.

In the 19th century, Mary Walker was an African American slave who lived and worked with her family on a cotton plantation until freed by the Emancipation Proclamation. She married and raised children but never learned to read. Finally, at age 114, Mary Walker took a reading class in her retirement home and finally learned to read.

Mr. George Baker tells the story of an African American man who is 100 years old and an accomplished drummer, but he never learned to read. Each morning, he sits on his front porch with a young boy waiting for the school bus to take them both to school. George Baker never learned to read, and Harry hasn’t learned to read yet. Together, they go to school to learn to read. Harry is learning to read with other children, and George Baker is learning to read with other grownups down the hall from Harry.

Papa’s Stories tells the tender story between a father, Papa, and his daughter, Kari. Kari loves Papa to read her stories. One day, she discovers from a neighborhood friend that Papa’s stories are not the same as the real stories in the books. She questions whether Papa can really read. Papa finally admits to her that he never learned to read. He also vows to start learning to read so that he can continue reading to her.

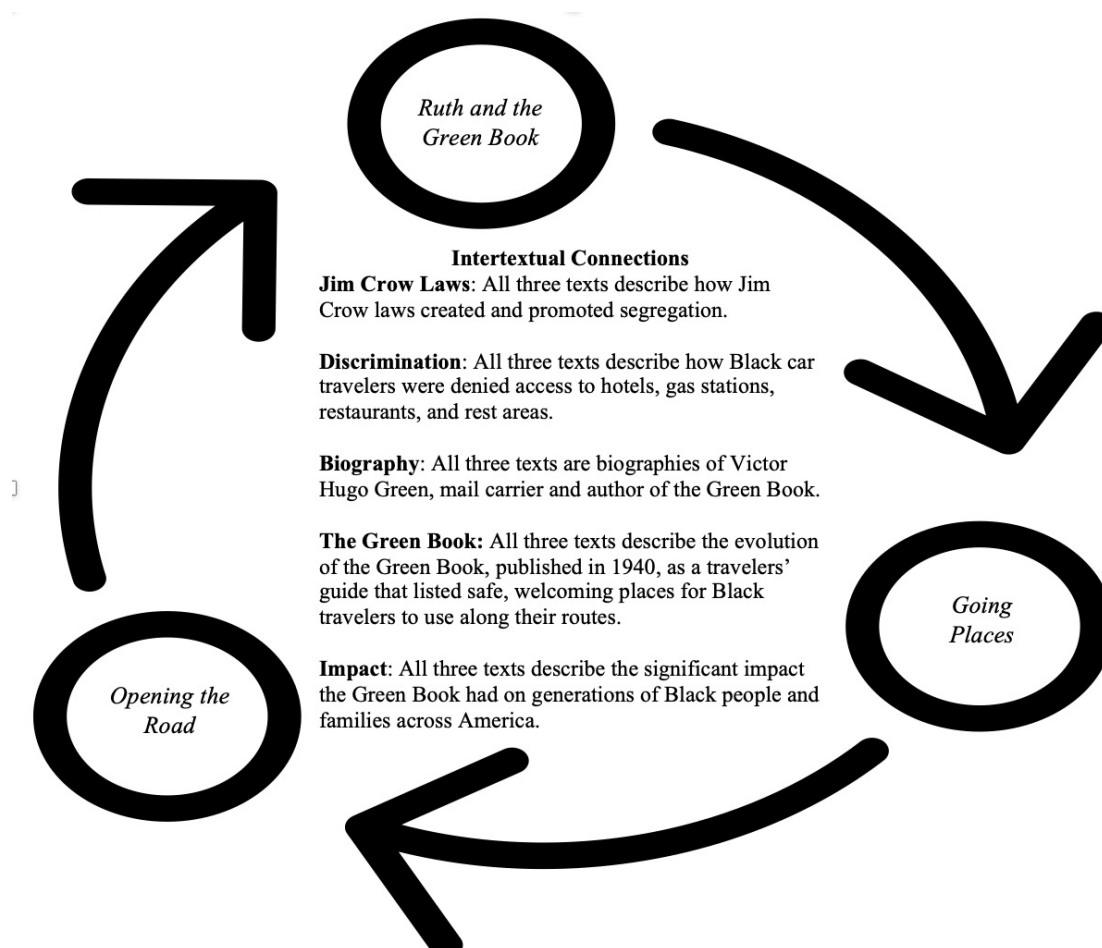
Tri-Text Story Chart is an instructional strategy that uses story elements as a framework to support reading comprehension in each text and the identification and description of intertextual connections across texts (see Figure 1)

Figure 1. Tri-Text Story Chart

	<i>Papa's Stories</i>	<i>Mr. George Baker</i>	<i>The Oldest Student</i>	Intertextual Connections
Character	Papa, Mama, Kari (daughter), Kari's neighbor friend	Mr. George Baker, Mrs. Baker, Harry, little neighborhood boy	Mary Walker, African American, slave, and the nation's oldest student in 1848, mother, father, sisters, brothers	All three texts identify and describe the main character as an African American adult with an important relationship with a child.
Setting	Family house, rural	Morning, George Baker's outside front porch	Cotton plantation in Alabama	All three texts identify and describe the major problem as an adult who never learned to read.
Problem	Papa reads to Kari but makes up stories based on illustrations, not words, because he never learned to read.	George Baker is 100 years old and an accomplished drummer, but he never learned to read.	Mary Walker was a slave, slaves were expected to work, not go to school. Mary never learned to read or write.	All three texts describe and illustrate the main character as determined, perseverant, and dedicated to learning to read.
Solution	Kari accidentally learns Papa can't read by her friend reading the same stories as Papa but with a different version. Mama confirms to Kari Papa can't read. Papa starts to learn to read, and now reads the real stories.	George Baker and Harry sit together, side by side, on the front porch waiting for the school bus to take both to school. Harry is learning to read with other children, and George Baker is learning to read with other grownups down the hall from Harry.	Emancipation Proclamation freed Mary Walker and family. Mary and mother worked as cleaning ladies to feed siblings. Mary vowed to learn to read. Mary married, had children, and worked. At age 114, Mary took reading class in her retirement home and learned to read.	All three texts describe how the main character sees learning to read as a gift to himself/herself and an act of love to loved ones. All three texts describe how the main character saw learning to read as an act of freedom. All three texts had a mood of honesty and courage.
Mood	Gentle, honest, determined, accepting	Gentle, honest, determined, accepting	Determined, courageous	

Social Studies: The picture books *Opening the Road: Victor Hugo Green and His Green Book* (Dawson, 2021), *Ruth and the Green Book* (Ramsey, 2010), and the nonfiction book *Going Places: Victor Hugo Green and His Glorious Book* (Bolden, 2020) is a tri-text on Victor Hugo Green, an African American man and mail carrier who published a green book to protect African Americans from Jim Crow laws that promoted racial segregation and discrimination while traveling by automobile across the United States. Circles of Intertextual Connections is an instructional strategy that supports student identification and description of intertextual connections across texts (see Figure 2).

Figure 2. Circles of Intertextual Connections



Science: The picture books *The Man Who Made Time Travel* (Lasky, 2003), *Sea Clocks: The Story of Longitude* (Borden, 2004), and *The Discovery of Longitude* (Galat, 2012) is a tri-text on the true story of John Harrison, a country clockmaker from England who solved one of the greatest nautical navigation problems of the 19th century. The problem was longitude. At the time, there was no way for sailors to determine longitude and therefore their ships often became lost at sea, and even worse sank from crashing into rocks and losing lives. John Harrison solved the problem by brilliantly designing and successfully testing a sea clock that accurately determined longitude.

Intertextual Connections Category Chart is an instructional strategy that supports reading comprehension in each text and the identification and description of intertextual connections across texts. During or after reading, students write a short overview of each story in the left-hand column of the chart. Along the top, students identify important intertextual connections across the tri-texts. In the columns underneath, students describe each intertextual connection (see Figure 3).

Figure 3. Intertextual Connections Category Chart

	Problem of Longitude	The Longitude Act	H4 Timepiece	Controversy
<i>The Man Who Made Time Travel</i> (Biography of John Harrison who solved one of the most perplexing scientific problems of all time in nautical navigation, namely, longitude)	All three texts identify and describe longitude as the most serious problem in nautical navigation during the 18 th century. The problem became an international crisis when, on October 22, 1707, a violent storm passed through the Scilly Isles of the southwestern coast of England. Twenty-	All three texts discuss the Longitude Act. In 1714, seven years after almost 2000 sailors lost their lives, the British Government passed the Longitude Act. The Act promised to pa] a large monetary reward of £20,000 sterling as a prize to anyone who could solve the problem of longitude. The solution had to be a “practical and useful method for measuring longitude. In addition, the British Government also created a Board of Longitude consisting	At the time, astronomers and mathematicians believed that the solution to the problem of longitude was in the stars, like latitude. All three texts discuss identify and discuss the real solution to longitude and the person who solved it - John Harrison. By trade, John Harrison was a country carpenter and clockmaker. Over time, he designed and built four clocks solve the problem of longitude. The clocks were called H-1, H-2, H-3, and H-4. Unlike traditional timepieces, H4 was more a small watch than a large	All three texts acknowledge and describe the controversy surrounding the acceptance of H-4 solving the problem of longitude. Even though H-4 had been tested at sea and proved it was able to determine the exact longitude of a ship, the Board of Longitude disagreed. Astronomers, especially Nevil Maskelyne, still believed the answer was in the stars, not in a timepiece. The Board denied Harrison all the monetary prize, electing instead to
<i>Sea Clocks: The Story of Longitude</i> (Life story of John Harrison, highlighting his surprising solution to	one British ships sailed into fog and crashed on the rocks, piercing their hulls. Four ships sank within minutes. Approximately 2000 sailors died in the crashes. The ships			

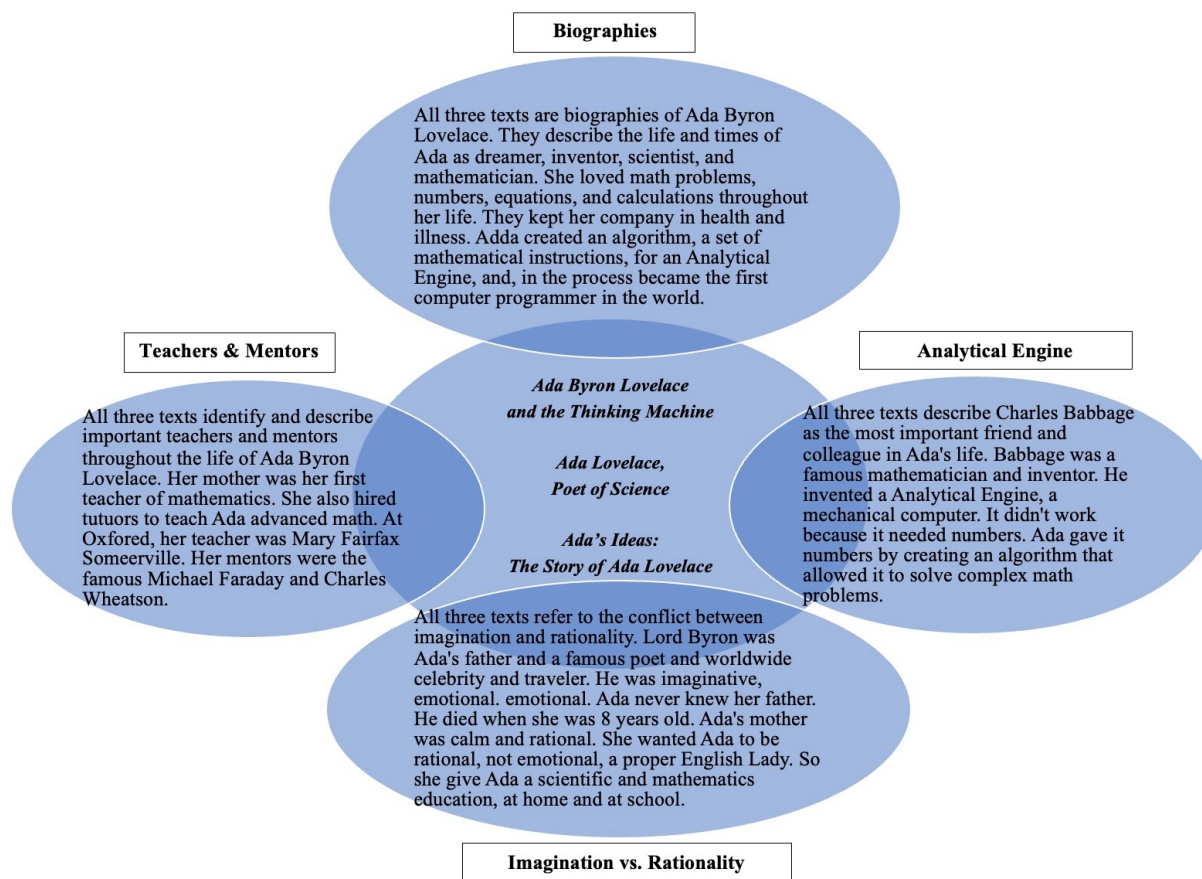
the nautical navigation problem of longitude, a timepiece developed in his workshop and tested at sea)	crashed that night because the sailors were lost and did not know it. In terms of nautical navigation, they did not know their location because at the time there was no way to measure a ship's location. Sailors used the stars in the sky to determine latitude, but they had no way to measure longitude. The problem was longitude and the country who solved it would rule the seas.	of scientists, mathematicians, and astronomers to judge all the entries to the competition.	clock. It had no pendulum, could withstand the rocking of a ship at sea, and was not affected by temperature. Harrison tested H-4 at sea, and it kept accurate time. He had successfully built a timepiece, a sea clock, that solved the problem of longitude. Harrison won the prize for solving the problem, making him wealthy and earning him international recognition and praise.	pay half, £10,000 sterling. The Board of Longitude demanded a retrial. Once again, H-4 proved successful at determining the longitude of a ship at sea and in different temperatures. In 1773, John Harrison finally was awarded the total prize money for solving one of the greatest problems in the world.
<i>The Discovery of Longitude</i> (Narrative describing the remarkable story about one of the most serious problems of nautical navigation in the 18th century and about John Harrison, the man who ingeniously solved the problem.				

Mathematics: The picture books *Ada Byron Lovelace and the Thinking Machine* (Wallmark, 2015), *Ada Lovelace, Poet of Science: The First Computer Programmer* (Stanley, 2016), and *Ada's Ideas: The Story of Ada Lovelace, the World's First Computer Programmer* (Robinson, 2016) is a tri-text on Ada Lovelace. The following is a precis that captures the main ideas of each story.

Ada Byron Lovelace was the daughter of the famous English poet, Lord Byron. Instead of poetry like her father, Ada loved science and mathematics. She particularly loved numbers. While studying at Oxford in England, she met several noted mathematicians, most notably Charles Babbage. She developed a collegial relationship with Babbage who had designed a mechanical computer, but it didn't work because it needed numbers. Ada Byron Lovelace gave it numbers by creating an algorithm that allowed it to solve complex math problems. In the process, she had become the first computer programmer in the world.

Spheres of Intertextual Connections is an instructional strategy that supports reading comprehension in each text and the identification and description of intertextual connections across texts. During or after reading, students identify an important intertextual connection at the top of each sphere. In each sphere, students describe each intertextual connection (see Figure 4).

Figure 4. Spheres of Intertextual Connections



Conclusion

As mentioned at the beginning, this article functions as a reminder from one reading educator and grandfather about the crucial and pivotal role children's literature plays in the literate lives of children. Specifically, it provided an introduction and rationale for the concept of tri-texts. It also shared examples of tri-texts used with samples of instructional strategies to support student the process of intertextuality across the curriculum. All tri-texts consisted of picture books, a mostly traditional and highly popular kind of text. Much recent research, however, has been, and continues to be, conducted on the development and implementation of text sets using expanded, not traditional ideas of texts (Tracy, Menickelli, & Scales, 2016). In addition to picture books, these expanded ideas of texts include newspapers, cartoons, field guides, websites, tweets, blogs, songs, podcasts, poems, etc.

Similarly, Cappiello & Dawes (2021) provide examples of resources and suggestions for developing text sets, also referred to as linked text sets (NWESD Communications, 2019; see also, Pytash, et al., 2014; Cummins, 2017). Linked text sets consist of non-traditional texts like multimodal and multi-genre texts, including, among others, digital texts, YouTube videos, news articles, podcasts. These kinds of non-traditional texts offer students different formats to read, different voices to hear, and different perspectives to consider.

Moving forward, I hope this article will spark teacher curiosity about developing and using tri-texts with traditional texts, like those presented here. I also hope it will inspire teachers to develop and implement tri-texts that consist of expanded views of text, including multi-modal and multi-genre texts. The possibilities are endless.

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Appendix A.

Examples of Recommended Tri-Texts Across the Curriculum

Academic Discipline	Topic	Tri-Text
ELA	Different Perspectives	<i>Luke's Way of Looking</i> (Wheatley, 2001), <i>Once Upon an Ordinary School Day</i> (McNaughton, 2005), <i>The Noisy Paint Box</i> (Rosenstock, 2014)
	Words	<i>The Right Word: Roget and His Thesaurus</i> (Bryant, 2014), <i>Noah Webster and His Words</i> (Ferris, 2015), <i>A River of Words: The Story of William Carlos Williams</i> (Bryant, 2008)
	Books	<i>The World That Loved Books</i> (Parleto, 2008), <i>Wild about Books</i> (Sierra, 2004), <i>Look, a Book!</i> (Gleeson, 2017)
	Parts of Speech	<i>Merry-Go-Round: A Book about Nouns</i> (Heller, 1990), <i>A Memory of Elephants: And Other Collective Nouns for Animals</i> (Burger, 2017), <i>Nouns and Verbs Have a Field Day</i> (Pulver, 2006)
	Punctuation	<i>The Girl's Like Spaghetti: Why You Can't Manage Without Apostrophes!</i> (Truss, 2007), <i>Dee and the Apostrophe</i> (Henderson, 2021), <i>Alfie the Apostrophe</i> (Donohue, 2010)
	Fairy Tales	<i>Jack and the Beanstalk</i> (Galdone, 2013), <i>Kate and the Beanstalk</i> (Osborne, 2005), <i>Trust Me, Jack's Beanstalk Stinks! The Story of Nack and the Beanstalk as Told by the Giant.</i> (Braun, 2011)
	Library & Librarians	<i>Schomburg: The Man Who Built a Library</i> (Weatherford, 2019), <i>The Librarian of Basra: A True Story from Iraq</i> (Winter, 2006), <i>The Book Woman</i> (Henson, 2008) <i>Shin Creek: The Pack Horse Librarians of Kentucky</i> (Appelt, 2019), <i>That Book Woman</i> (Henson, 2008)
	School	<i>Midnight Teacher: Lilly Ann Granderson and Her Secret School</i> (Halfmann, 2018), <i>Nasreen's Secret School: A True Story from Afghanistan</i> (Winter, 2009), <i>Rain School</i> (Rumford, 2010)
SOCIAL STUDIES	Racial Discrimination	<i>Sit-in: How Four Friends Stood Up by Sitting Down</i> (Pinkney, 2010), <i>Separate is Never Equal: Sylvia Mendez and Her Family's Fight for Desegregation</i> (Tonatiuh, 2014), <i>A Place Where Sunflowers Grow</i> (Lee-Tai, 2012)
	Tuskegee Airmen	<i>Flying Above Expectations</i> (Simmons, 2018), <i>Calvin Spann: Daring Fighter Pilot</i> (Harris, 2019), <i>The Tuskegee Airmen</i> (Shea, 2015)

	Carter Woodson	<i>Carter G. Woodson: Black History Pioneer</i> (McKissack, 2013), <i>Carter Reads the Newspaper</i> (Hopkinson, 2019), <i>Carter G. Woodson: The Man Who Put “Black” in American History</i> (Haskins, 2000)
	Social Justice	<i>Different Like Me: A Children’s Book on Social Justice</i> (Dior, 2021), <i>Mommy, What’s a Protest?</i> (Jackson, 2020), <i>The People’s Painter: How Ben Shahn Fought for Justice with Art</i> (Levinson, 2021)
	Civil Disobedience	<i>The Composition</i> (Skarmeta, 1998), <i>The Stamp Collector</i> (Lanthier, 2012), <i>Red Kite, Blue Kite</i> (Jiang, 2013)
	Revolutionary War	<i>Aaron and Alexander: The Most Famous Duel in American History</i> (Brown, 2015), <i>George vs. George: The American Revolution as Seen from Both Sides</i> (Schanzer, 2004), <i>Revolutionary Rogues: John Andre and Benedict Arnold</i> (Castrovilla, 2017)
	Slavery	<i>Freedom Song: The Story of Henry “Box” Brown</i> (Walker, 2012), <i>Henry’s Freedom Box: A True Story from the Underground Railroad</i> (Levine, 2007), <i>Box: Henry Brown Mails Himself to Freedom</i> (Weatherford, 2020)
	Thanksgiving	<i>1621: A New Look at Thanksgiving</i> (Grace, 2004), <i>Squanto’s Journey: The Story of the First Thanksgiving</i> (Bruchac, 2000), <i>Thank you, Sarah: The Woman Who Saved Thanksgiving</i> (2002)
	Columbus	<i>Encounter</i> (Yolen, 1992), <i>Christopher Columbus: Controversial Explorer of the Americas</i> (Brink, 2018), <i>Christopher Columbus: New World Explorer or Fortune Hunter?</i> (Gunderson, 2013)
	Female Aviators	<i>Flying Solo: How Ruth Elder Soared Into America’s Heart</i> (Cummins, 2013), <i>Fearless Flyer: Ruth Law and Her Flying Machine</i> (Lang, 2016), <i>Brave Harriet</i> (Moss, 2001)
	Immigration	<i>Landed</i> (Lee, 2006), <i>Kai’s Journey to Gold Mountain: An Angel Island Story</i> (Currier, 2005), <i>Paper Son: Lee’s Journey to America</i> (James & Loh, 2013)
	World War II	<i>Faithful Elephants: A True Story of Animals, People and War</i> (Tsuchiya, 1951), <i>Hiroshima No Pika</i> (Maruki, 1980), <i>Shin’s Tricycle</i> (Kodama, 1992)
	Lewis & Clark	<i>My Name is York</i> (van Steenwyk, 1997), <i>The Journey of York: The Unsung Hero of the Lewis and Clark Expedition</i> (Davis, 2019), <i>American Slave, American Hero: York of the Lewis and Clark Expedition</i> (Pringle, 2006)

	911	<i>Branches of Hope: The 9/11 Survivor Tree</i> (Magee, 2021) Colleen, M. (2021). <i>Survivor Tree</i> (Colleen, 2021), <i>Miracle of Little Tree: The 9/11 Survivor Tree's Incredible Story</i> (Foster, 2020)
	Civil War	<i>The Blue and the Gray</i> (Bunting, 1996), <i>Sarah Campbell: Tale of a War Orphan</i> (Dane, 2014), <i>The Silent Witness: A True Story of the Civil War</i> (Friedman, 2008)
SCIENCE	Space Science	<i>Come See the Earth Turn</i> (Mortensen, 2010), <i>Galileo Galilei</i> (Munoz, 2020), <i>Look Up! Henrietta Leavitt, Pioneering Woman Astronomer</i> (Burleigh, 2013)
	Life Science	<i>Germs Make Me Sick!</i> (Berger, 1985), <i>Body Battles</i> (Gelman, 1992), <i>The Sneezzy Breeze</i> (Loper, 2020)
	Earth Science	<i>The Island That Moved: How Shifting Forces Shape Our Earth</i> (Hooper, 2004), <i>Earth</i> (Simon, 2003), <i>Layers of the Earth</i> (Baby Professor)
	Physical Science	<i>What's the Matter in Mr. Whisker's Room?</i> (Ross, 2007), <i>Matter: Physical Science for Kids</i> (Diehn, 2018), <i>Matter Matters: A Kids Guide to the Properties of Matter</i> (Smith, 2024)
	Beaufort Scale	<i>Dare the Wind: The Record-Breaking Voyage of Eleanor Prentiss and the Flying Cloud</i> (Fern, 2014), <i>Close to the Wind: The Beaufort Scale</i> (Malone, 2007), <i>Hear the Wind Blow</i> (Boyle, 2021)
	Fossils	<i>Dinosaur Lady: The Daring Discoveries of Mary Anning, the First Paleontologist</i> (Skeers, 2020), <i>The Fossil Girl: Mary Anning's Dinosaur Discovery</i> (Brighton, 1999), <i>Mary Anning and the Sea Dragon</i> (Atkins, 1999)
	Marie Tharp	<i>Solving the Puzzle Under the Sea: Marie Tharp Maps the Ocean Floor</i> (Burleigh, 2016), <i>Ocean Speaks: How Marie Tharp Revealed the Ocean's Biggest Secret</i> (Keating, 2020), <i>Marie's Ocean: Marie Tharp Maps the Mountains Under the Sea</i> (James, 2020)
	Eugenie Clark	<i>Shark Lady: The True Story of How Eugenie Clark Became the Ocean's Most Fearless Scientist</i> (Keating, 2017), <i>Swimming with Sharks: The Daring Discoveries of Eugenie Clark</i> (Lang, 2016), <i>Fish Watching with Eugenie Clark</i> (Ross, 2000)
	Rosalind Franklin	<i>Rosalind Franklin</i> (Vegara, 2021), <i>Rosalind Franklin: Unlocking DNA</i> (Borgert-Spaniol, 2017), <i>Remembering Rosalind Franklin: Rosalind Franklin and the Discovery of the Double Helix Structure of DNA</i> (Stone, 2024)

Maria Mitchell	<i>What Miss Mitchell Saw</i> (Barrett, 2019), <i>Milkshakes with Maria Mitchell</i> (Anderson, 2016), <i>Maria's Comet</i> (Hopkinson, 2003)
Maria Merian	<i>Summer Birds: The Butterflies of Maria Merian</i> (Engle, 2010), <i>The Bug Girl: Maria Merian's Scientific Vision</i> (Marsh, 2019), <i>The Girl Who Drew Butterflies: How Maria Merian's Art Changed Science</i> (Sidman, 2018)
Benjamin Banneker	<i>Benjamin Banneker</i> (Martin, 2014), <i>Benjamin Banneker: Self-Educated Scientist</i> (Simons, 2018), <i>Benjamin Banneker: Pioneering Scientist</i> (Wadsworth, 2003)
Sally Ride	<i>To the Stars!: The First American Woman to Walk in Space</i> (Van Fleet, 2018), <i>Sally Ride: The First American Woman in Space</i> (Baby Professor, 2017), <i>Sally Ride Biography for Kids</i> (Zabel, 2024)
Mae Jamison	<i>Mae Among the Stars</i> (Ahmed, 2018), <i>Mae Jemison: A Kid's Book about Reaching Your Dreams</i> (Nhin, 2020), <i>Astronaut Mae Jemison</i> (Lassieur, 2016)
Katherine Johnson	<i>Hidden Figures: The True Story of Four Black Women and the Space Race</i> (Shetterly, 2018), <i>A Computer Called Katherine: Ho Katherine Johnson Helped Put America on the Moon</i> (Slade, 2019), <i>Counting the Stars: The Story of Katherine Johnson, NASA Mathematician</i> (Cline-Ransome, 2019)
Edwin Hubble	<i>The Boy Whose Head Was Filled with Stars: A Life of Edwin Hubble</i> (Marinov, 2021), <i>Dreams and Adventures: The Edwin Hubble Story</i> (Martin and Martin, 2018), <i>Edwin Hubble</i> (MacDonald, 2001)
Jane Goodall	<i>The Watcher</i> (Winter, 2011), <i>The Story of Jane Goodall: An Inspiring Biography for Young Readers</i> (Katz, 2020), <i>I am Jane Goodall</i> (Meltzer, 2016)
Henrietta Leavitt	<i>Look Up!: Henrietta Leavitt, Pioneering Woman Astronomer</i> (Burleigh, 2013), <i>From 1860 to 1920: Louis Pasteur to Henrietta Swan Leavitt</i> (Rogers, 2023), <i>Exploring Space: Women Who Led the Way</i> (Dickmann, 2022)
Elizabeth Blackwell	<i>Elizabeth Blackwell: First Woman Doctor</i> (Greene, 1991), <i>Dr. Elizabeth Blackwell: Doctress of Medicine</i> (Recinos, 2020), <i>Elizabeth Blackwell: The First Woman Doctor</i> (Sabin, 1998)
Wilson Bentley	<i>Snowflake Bentley</i> (Martin, 2009), <i>Snowflakes in Photographs</i> (Bentley, 2000), <i>My Brother Loved Snowflakes: The Story of Wilson A. Bentley</i> (Bahr, 2002)

MATHEMATICS	Sophie Kowalevski	<i>Nothing Stopped Sophie: The Story of Unshakable Mathematician Sophie Germain</i> (Bardoe, 2018), <i>Lighter Than Air: Sophie Blanchard, the First Woman Pilot</i> (Smith, 2019), <i>Numbers in Motion: Sophie Kowalevski, Queen of Mathematics</i> (Wallmark, 2020)
	Infinity	<i>The Boy Who Dreamed of Infinity: A Tale of the Genius Ramanujan</i> (Alznauer, 2020), <i>Srinivasa Ramanujan</i> (Srinivasan, 2012), <i>Friend of Numbers: The Life of Mathematician Srinivasa Ramanujan</i> (Narayanan, 2023)
	Zaha Hadid	<i>The World is Not a Rectangle: Portrait of Architect Zaha Hadid</i> (Winter, 2017), <i>Building Zaha: The Story of Architect Zaha Hadid</i> (Tentler-Krylov, 2020), <i>Zaha Hadid</i> (Vegara, 2019)
	Grace Hopper	<i>Grace Hopper: Queen of Computer Code</i> (Wallace, 2017), <i>Computer Decoder: Dorothy Vaughan, Computer Scientist</i> (Diehn, 2019), <i>Grace Hopper</i> (Fields, 2019)
	Emmy Noether	<i>Emmy Noether: The Most Important Mathematician You've Never Heard Of</i> (Becker, 2020), <i>Beautiful Symmetry: The Story of Emmy Noether</i> (Christianson, 2017), <i>Emmy Noether, A Woman of Greatness</i> (Bohn, 2005)
	Maryam Mirzakhani	<i>Maryam Mirzakhani</i> (Eboch, 2021), <i>Maryam's Magic: The Story of Mathematician Maryam Mirzakhani</i> (Reid, 2021), <i>Maryam: An Inspiring Story of a Great Mathematician</i> (Williams & Mirzakhani, 2024)
	Pythagoras	<i>What's Your Angle, Pythagoras?</i> (Ellis, 2004), <i>Pythagoras and the Ratios: A Math Adventure</i> (Ellis, 2010), <i>Pythagoras</i> (Harkins & Harkins, 2007)
	Fibonacci	<i>Blockhead: The life of Fibonacci</i> (D'Agnesse, 2010), <i>Wild Fibonacci: Nature's Secret Code Revealed</i> (Hulme, 2010), <i>Rabbits, Rabbits Everywhere: A Fibonacci Tale</i> (MCallum, 2007), <i>The Rabbit Problem</i> (Gravett, 2010)
	Probability	<i>Probably Pistachio</i> (Murphy, 2001), <i>A Very Improbable Story</i> (Einhorn, 2008), <i>That's a possibility: A book about what might happen</i> (Goldsone, 2013)
	Graphing	<i>Tiger Math: Learning to Graph from a Baby Tiger</i> (Nagda and Bickel, 2000), <i>The Great Graph Contest</i> (Leedy, 2005), <i>Joey Meets the Average Family: A Math Story about Mean, Median, Mode, and Range</i> (Breazeale, 2014)
	Money	<i>Money Math: Addition and Subtraction</i> (Adler, 2019), <i>Pigs will be pigs: Fun with math and money</i> (Axelrod, 1997), <i>The Coin Counting Book</i> (Williams, 2001)

	Geometry	<i>Sir Cumference and the First Round Table</i> (Neuschwander, 1997), <i>Circle Loves Pi</i> (Lewis, 2022), <i>Happy Pi Day to You</i> (Worth, 2020)
	Shapes	<i>The Greedy Triangle</i> (Burns, 2008), <i>Shape Up!: Fun with Triangles and other Polygons</i> (Adler, 1998), <i>Triangle</i> (Barnett, 2017)
	Operations	<i>The Multiplying Menace: The Revenge of Rumpelstiltskin</i> (Calvert, 2006), <i>The Best of Times: Math Strategies that Multiply</i> (Tang, 2002), <i>Minnie's Diner: A Multiplying Menu</i> (Dodds, 2007)
	Algebra	<i>Mystery Math: A First Book of Algebra</i> (Adler, 2011), <i>Adi sorts with variables</i> (Karanja, 2018), <i>Adi sorts with variables</i> (Karanja, 2018)



Dr. Bintz is currently a Professor in the School of Teaching, Learning, and Curriculum Studies at Kent State University. He has extensive classroom teaching experience including teaching high school English in Chicago, Illinois and San Juan, Puerto Rico; middle school language arts in Dhahran, Saudi Arabia; and grades 4-6 at an Alternative School in Bloomington, Indiana. His personal experiences and professional interests include using award-winning literature to teach across the curriculum K-12, collaborative teacher research, and reading comprehension assessment. Dr. Bintz has published numerous articles and book chapters in leading literacy journals such as *The Reading Teacher*, *Language Arts*, *Journal of Adolescent and Adult Literacy*, and *Middle School Journal*, and has presented at many international, national, and state conferences and conducted professional development workshops throughout the United States.

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Upcoming & Future TJLE Issues

The new editorial team for the TJLE will begin their term on September 1, 2025, and they will serve from 2025-2028. Their team will consist of educators from Schreiner University. They will put out a call for manuscripts future issues shortly at talejournal.com. In the meantime, we would like to welcome the following individuals to the TJLE editorial team for their new era:

Dr. Chanelle Maynard

Dr. Joan Brilliant

Dr. Neva Cramer

Dr. Annie Culver

