

## PLANNING FOR INSTRUCTION: IDENTIFYING LITERACY STRATEGIES AND ACTIVITIES USED BY TEACHER CANDIDATES DURING CLINICALLY RICH FIELD EXPERIENCES

By Chyllis E. Scott, Abby Pierce, Erin K. Washburn, and Carly Waters



Chyllis E. Scott, PhD, is an Associate Professor of Literacy Education in the Department of Teaching and Learning at the University of Nevada, Las Vegas. Her research focuses on content-area and disciplinary literacy, academic writing, and mentoring practices for preservice and in-service teachers and students in higher education. Chyllis can be reached at [Chyllis.scott@unlv.edu](mailto:Chyllis.scott@unlv.edu).

Abby Pierce, EdD, is an Adjunct Professor of Literacy Education at Binghamton University. Additionally, she is a District Success Manager for LETRS (Language Essentials for Teachers of Reading and Spelling) at Lexia Learning. Abby's research and professional interests center around literacy, data-based decision-making, and ongoing professional development. Abby can be reached at [apierce4@binghamton.edu](mailto:apierce4@binghamton.edu).

Erin K. Washburn, PhD, is an Associate Professor of Reading and Elementary Education at the University of North Carolina at Charlotte. Her research focuses on examining supports for striving literacy learners. In collaboration with educators and schools, she has conducted research on teacher knowledge of literacy-related constructs and dyslexia, the efficacy of school-based and out-of-school interventions, and the use of data-based decision making for literacy instruction. Erin can be reached at [ewashbu1@uncc.edu](mailto:ewashbu1@uncc.edu).

Carly Waters, PhD, works as a LETRS District Success Manager for Lexia Learning where she supports school districts with the implementation of LETRS professional learning and capacity building centered on the Science of Reading. Additionally, as a LETRS National Trainer, she facilitates professional learning to strengthen educators' understanding of and application of the Science of Reading and Structured Literacy. Her professional interests include early literacy instruction and professional development. Carly can be reached at [carly219@gmail.com](mailto:carly219@gmail.com).

### Abstract

This study identified the literacy strategies and activities teacher candidates used during clinically rich field experiences based on

their elementary-aged students' needs. The teacher candidates' weekly teaching logs were analyzed, and four categories of literacy strategies and activities emerged, including comprehension, word study, writing, and fluency. The most frequent category was comprehension, which included activating and building background knowledge, monitoring comprehension, and engaging in think-alouds. The second category, word study, aimed to enhance students' spelling, decoding, and vocabulary skills by analyzing word parts and meanings, building words, and sorting words. Additionally, the teacher candidates used writing activities that encouraged students to generate ideas (e.g., brainstorming details, engaging in the writing process, providing students with choice), and they used fluency strategies, such as repeated readings, Reader's Theater, and modeling fluent and disfluent reading. Although this study highlighted evidence-based literacy strategies and activities used by teacher candidates based on their students' needs, it also provides insight into the next steps teacher educators may consider when designing coursework. Specifically, given the ongoing effects of the COVID-19 pandemic on student literacy achievement, it is critical to include more work on explicit phonemic awareness and phonics instructional strategies.

*Keywords:* literacy assessment, reading and writing, teacher preparation, weekly teaching logs

Effective literacy teachers are able to adapt and align their teaching practices with student needs (Nelson et al., 2020; Parson et al., 2018). However, determining which literacy practices, approaches, activities, and strategies that are most effective and efficient to use and that meet the needs of each student is not an easy skill and must be developed over time (Parsons et al., 2018). Thus, teacher candidates (TCs) benefit from "programs and coursework that hold high expectations for rich and well-defined knowledge development" (Risko & Reid, 2019, p. 424) and that include authentic practice with various teaching opportunities (e.g.,

lesson planning, assessment) and clinically rich field experiences (Risko & Reid, 2019) embedded within coursework. Specifically, clinically rich field experiences provide TCs with opportunities to engage in instructional planning (e.g., Burns et al., 2016) with support from other professionals (e.g., cooperating teachers, university faculty) that hinges on knowing what students can do, understanding what underlying needs are present, and using both sets of information to identify evidence-based practices, approaches, and strategies for instruction (e.g., Parsons et al., 2018). Through clinically rich field experiences, TCs have the unique opportunity to apply their knowledge to develop instruction based on their students' needs.

Therefore, the purpose of this research was to identify the literacy strategies and activities that TCs used to develop their instruction for elementary-aged students during the clinically rich field experiences connected with a literacy assessment and intervention course. Throughout the iterative process of using data to inform instruction, the following research question guided this project: What literacy strategies and/or activities do TCs select for literacy instruction based on their students' strengths and needs?

### Preparing Teacher Candidates for Literacy Instruction

Effective literacy instruction requires using research-informed practices, which often include strategy and activity instruction (e.g., National Reading Panel [NRP], 2000). Afflerbach et al. (2008) defined reading strategies as "deliberate, goal-directed attempts to control and modify the reader's efforts to decode text, understand words, and construct meanings of text" (p. 368). Literacy strategies are scaffolds that break down tasks in a gradual manner (Afflerbach et al., 2008). Using literacy strategies in instruction allows students to work toward a specific literacy goal, or skill, that eventually becomes automatic (Serravallo, 2015). Additionally, the Florida Center for Reading Research (FCRR, n.d.) states that student-centered activities "are designed for students to practice, demonstrate, and extend their learning of what has already been taught" (para. 1).

For the purposes of this study, we define literacy activities as exercises or tasks designed for and targeted at specific students as they apply a learned literacy strategy in the context of literacy instruction, including reading and writing. For example, students may use a T-Chart graphic organizer (literacy activity) to compare two topics within a text and/or across texts (literacy strategy).

### Building Teacher Candidates' Knowledge of Literacy Strategies and Activities

Teacher educators can support TCs by providing research-based instruction on how to select and align strategies and activities with students' literacy strengths and needs (International Literacy Association [ILA], 2017). Through in-class practice, teacher educators can scaffold TCs' knowledge and understanding of literacy strategies through modeling (Conrad & Stone, 2015; Harlin, 1999), practical application (Ferguson, 2017; Hilaski et al., 2021), assigned readings (Odo, 2016), and thoughtfully designed assignments (Conrad & Stone, 2015; Nelson et al., 2020).

For example, in-class simulations help TCs practice administering literacy assessments, followed by time devoted to debriefing with peers and teacher educators about their experience using assessment data to guide their instruction (Ferguson, 2017). Second, teacher educators can model how to select strategies linked to the five essential components of reading (i.e., phonemic awareness, phonics, fluency, vocabulary, and comprehension) and how to embed these components into instruction to support students' literacy skills (Conrad & Stone, 2015). Finally, through meaningful assignments, teacher educators can assist TCs to identify and describe elements

of literacy in their field experience classrooms and consider how they would incorporate and apply each component in their future classrooms (Nelson et al., 2020).

### Teacher Candidates Applying Their Knowledge of Literacy Strategies in Practice

Clinically rich field experiences serve as a way for TCs to apply their knowledge from coursework into practice, such as during one-on-one tutoring or small-group instruction (Hilaski et al., 2021; Lipsky et al., 2014; Massey & Lewis, 2011; Odo, 2016; Pletcher & Tefft, 2017; Stefanski et al., 2018). When TCs have the opportunity to work directly with students (e.g., tutoring), they gain firsthand experience administering and analyzing multiple literacy assessments and using data to select strategies and/or activities based on their students' strengths and needs (Massey & Lewis, 2011; Odo, 2016). Likewise, through the use of authentic assessments, TCs begin to understand their students' literacy needs (Hilaski et al., 2021).

To further support TCs' knowledge of literacy strategies and/or activities in practice, teacher educators should provide (a) opportunities for reflection through writing (Lipsky et al., 2014; Massey & Lewis, 2011; Oboler & Gupta, 2010; Odo, 2016; Pierce et al., 2020; Pletcher & Tefft, 2017; Scott et al., 2019; Stefanski et al., 2018; Washburn et al., 2023) and (b) feedback on TCs' instruction and/or lesson plans (Hilaski et al., 2021; Lipsky et al., 2014) in addition to strategy and activity selection (Harlin, 1999). For example, through weekly teaching logs, TCs analyze, justify, and evaluate the outcomes of implementing a strategy into their instruction and refine their practice. Likewise, TCs' participation in a tutoring program, coupled with their teaching logs, supported their development of routines and implementation of strategy instruction based on students' literacy needs (Massey & Lewis, 2011).

### Methods

This study was conducted at two university-based teacher preparation programs in two regions of the United States: Northeast and West. At the time of the project, the researchers were teacher educators and doctoral students at their respective teacher preparation programs. Northeast is a graduate-level program, and West prepares teachers through undergraduate, graduate, and alternate-route-to-licensure programs. Both literacy assessment courses were developed to guide TCs through administering and analyzing literacy assessments to inform instruction. The culmination of the course required TCs to develop a case study report in which TCs presented instructional plans and/or recommendations for their student(s)' literacy skills based on results.

### Participants

Twenty-seven TCs participated in this study. Participants were recruited using purposive sampling (Onwuegbuzie & Collins, 2007). TCs from the Northeast ( $n = 17$ ) were working toward their master's in literacy education, and all but three TCs had an undergraduate background in elementary education. Sixteen TCs identified as White and one identified as Asian, fifteen identified as female, and two as male. TCs from the West ( $n = 10$ ) were working on licensure and a master's in elementary education (K-8) and may or may not have had an undergraduate background in education. Nine TCs identified as female and one as male, and eight identified as White, and two identified as Non-White/Hispanic. The demographics of the elementary students who were tutored were not collected for the class nor the research project.

### Context

For both the Northeast and the West, courses were similarly

designed and taught. The instructors were former colleagues and continued to consult with each other about course development and instruction. Each course was front-loaded with theory, assessments, and strategies and activities for elementary literacy instruction in the five main components of reading (i.e., phonological awareness, phonics, fluency, vocabulary, text comprehension). During the graduate-level course, TCs also gained firsthand knowledge and experience by working with peers to apply the learning process with actual assessments, from assessing and analyzing to making instructional decisions and recommendations. This allowed TCs to learn and practice with their peers (during class), with additional time to ask questions, receive feedback, and reflect. TCs then applied their gained knowledge in their clinically rich field experience with their elementary students. Similar to Harlin (1999), these courses required the TCs to keep weekly teaching logs about each assessment and tutoring experience. The weekly teaching logs were used by the instructors to help the students reflect on their own learning, but also as a way to support and/or provide feedback to and scaffold for each TC prior to their next session.

### Data Collection

Data collection took place within semester-long, 16-week literacy assessment courses. At both institutions, weekly teaching logs served as the primary source of data for the present study. TCs were required to keep weekly teaching logs for the duration of the semester. This assignment allowed them to write about their assessment and/or instructional experiences using open-ended questions (e.g., What were your findings from the assessments? What are your next steps for assessment/instruction?). Additionally, the course instructors used the weekly teaching logs to help the TCs think about their learning and to provide feedback for the TCs to address before their next session. Northeast TCs had nine weekly teaching logs ( $n = 153$ ), and West TCs had six ( $n = 60$ ) for a collective total of 213 weekly teaching logs. Data analysis began after final grades were posted and with written consent by the participants in accordance with each university's Institutional Review Board.

### Data Analysis

To answer the research question, weekly teaching logs were analyzed using content analysis (Krippendorff, 1980) to identify the literacy strategies and activities TCs selected for instruction based on literacy assessment data. First, weekly teaching logs were read, and each literacy strategy and activity mentioned was given an initial code (e.g., word sorting, making connections, prewriting). Eighty-nine initial codes were identified (i.e., literacy strategies and activities). Next, using axial coding (Strauss & Corbin, 1998), initial codes were then collapsed into four overarching categories: comprehension, word study, writing, and fluency.

### Findings

TCs' weekly teaching logs revealed the literacy strategies and activities they selected based on their students' needs, which were grouped into four categories: comprehension, word study, writing, and fluency. Table 1 shows frequency counts and percentages for each of the four categories and corresponding literacy activities and strategies that emerged from our analysis of TCs' weekly teaching logs. The frequency and percentages of the strategies and activities were as follows: (1) comprehension ( $n = 114$ , 43.5%), (2) word study ( $n = 60$ , 22.9%), (3) writing ( $n = 51$ , 19.5%), and (4) fluency ( $n = 37$ , 14.1%). In the sections below, we describe each category (i.e., comprehension, word study, writing, and fluency) and literacy strategies and activities.

<b>Comprehension</b> 43.5% (n = 114)	<b>Word study</b> 22.9 % (n = 60)	<b>Writing</b> 19.5% (n = 51)	<b>Fluency</b> 14.1% (n = 37)
Making text-to-text, text-to-self, and text-to-world connections	Word sorting (open and closed), word sorting as a game	Prewriting techniques such as using a graphic organizer, brainstorming ideas, or verbalizing ideas before writing	Repeated readings with poetry
Click and Clunk (Boardman et al., 2016; Klingner & Vaughn, 1998)	Word hunting with connected text	Writing process (prewriting, drafting, revising, and editing) (Graham et al., 2012)	Reader's Theater (Ratliff, 2006; Wolf, 1993, 2004)
Summarizing with drawings	Word building	Sketch-to-write	Robot Reader (Marcell & Ferraro, 2013)
Stop and jot with sticky notes			
Making inferences (More Incredible Inference Game)			

**Table 1. Examples of Selected Literacy Strategies and Activities from TCs' Weekly Teaching Logs**

### Comprehension

Comprehension is “the process of simultaneously extracting and constructing meaning through interaction and involvement with written language” (Snow, 2002, p. 11). Specifically, comprehension strategies are “techniques to teach students tools to comprehend text, including summarization, predictions, and inferring word meanings from context” (Hougen & Smartt, 2020, p. 362) and used to guide students while they are reading and writing (NRP, 2000). When analyzing the weekly teaching logs, literacy strategies and activities were coded as *comprehension* when they displayed evidence of TCs actively building students' understanding and meaning of a text or concept.

For comprehension, TCs reported using graphic organizers, activating and/or building background knowledge to make predictions, monitoring comprehension, and summarizing. For example, TCs would preview the questions before reading the text together, helping each TC to identify critical points in the text to pose questions and discussions, which supported their students' process of comprehension. Additionally, TCs sought out support from their course instructors and class peers, as well as their school-based reading specialists. Through these extended opportunities, TCs were able to develop comprehension lessons that targeted the students' needs. In this example, the TC shared how the school-based reading specialist helped to guide the instruction, “We [the TC and reading specialist] chose a passage at the [students'] reading level from *Read Works* and designed a lesson that incorporated sticky notes to be used throughout the reading to allow the [students] to monitor their comprehension.” Further, TCs also had co-teaching opportunities with peers in the course where they encouraged active engagement with the text and deeper understanding, such as:

[My colleague] and I used a great comprehension [activity] that our students truly enjoyed. We implemented a Bucket of Details [activity]. [It] required the students to fill a bucket with detail[s] like, characters, setting, actions, and main idea ... comprehension skills that our students struggled with according to assessment data.

TCs also taught think-aloud strategies to help their students monitor their own thinking and comprehension while reading a story or passage:

Thinking-aloud required a lot of prompting: The think-aloud did not go exactly as planned ... When [the student] read a page, she seemed to struggle with comprehension and the ability to vocalize what she was thinking. However, when I read the pages, she could more easily recall what she had just heard. Many of [the student's] thoughts were just reciting back what was on that specific page ... I tried to prompt her to make predictions, connections, or questions about the text.

As the most frequent category, TCs provided many examples of comprehension strategies and activities during their instructional sessions. TCs also consistently mentioned not only their student's learning but also their learning as a teacher and how they could continue to improve instruction moving forward.

### Word Study

Word study is “an approach to spelling instruction that moves away from a focus on memorization” (Williams et al., 2009, p. 570). In addition to spelling, word study encompasses decoding, vocabulary, and morphology skills. In word study, word work is a hands-on method that incorporates word sorting, a technique in which words are sorted into orthographic-like feature categories through either an open (discovery) or closed (orthographic feature is given) sort. When analyzing the TCs' weekly teaching logs, literacy strategies and activities were coded as *word study* when the TCs had students analyze word parts and meanings (e.g., prefixes, suffixes), build words (e.g., using letter-sound correspondence), sort words (e.g., sorting open/closed syllable words by spelling or sound patterns), and/or hunt for skill words in a connected text.

The TCs selected word study strategies and activities based on their students' needs. For example, one TC played a game to scaffold their students' learning of spelling rules:

We started [the lesson] by playing a [spelling] game where [the students] were asked to identify and categorize the short and long vowel /a/ within word patterns. During the game, the students discussed their reasoning for why and how they identified and categorized these patterns.

TCs also described how the students practiced long vowel sounds:

Students quickly recognized the patterns within the long /e/ words and were able to sort the words appropriately. During [the highlighting of skill words activity], both students were able to skim and scan the text in order to locate long /e/ [skill] words.

By incorporating word study strategies and activities, TCs engaged their students to support their phonics, vocabulary, and word recognition skills.

### Writing

Writing is “a complex process that requires a wide range of skills—a strong vocabulary; an understanding of genre, text structure, and voice; basic mechanical skills (grammar and punctuation); organizational skills; and higher-order thinking” (Reading Rockets, 2021a, para. 1). When analyzing the TCs' weekly teaching logs, literacy strategies and activities were coded as *writing* when the TCs engaged the students in writing about reading or creative writing (Graham & Alves, 2021; Kim et al., 2021). Data to inform writing instruction were collected from writing samples.

For writing, TCs in this study saw the value and importance of writing instruction for their students' literacy development. Selected

strategies and activities included writing alongside students as a form of motivation, brainstorming topics and details, the writing process, providing students with choice (e.g., multiple writing prompts), writing poems, and shared writing. In the following example, a TC provided motivation and support to their student:

[The student's] reading teacher indicated that she does not enjoy writing. This activity helped break down the writing process and made it seem more manageable ... I wrote along with [my student], which seemed to increase her motivation to write. She was engaged in the activity and excited to share her writing and compare it to mine.

Further, a TC noticed that their students needed support with organizing details within their writing. Thus, the TC introduced a prewriting strategy. First, the group brainstormed ideas together and then used a stem from the graphic organizer (i.e., brain map) to write their own paragraph. From this lesson, the TC later noted in their teaching logs how they would modify this writing activity next time: “I should allow students to now prewrite on their own and conference with them individually or [in] small group[s].”

Over the course of the semester, TCs reflected on their student growth and development in relation to their writing instruction. Similarly, the TCs noted their own learning as teachers and writers.

### Fluency

Fluency is “the ability to read a text accurately, quickly, and with proper expression (prosody) and comprehension. Because fluent readers do not have to concentrate on decoding words, they can focus their attention on text meaning” (Hougen & Smartt, 2020, p. 364; Rasinski et al., 2020). When analyzing TCs' weekly teaching logs, literacy strategies and activities were coded as *fluency* when the TCs focused instruction on improving their students' oral reading, which encompasses their accuracy, automaticity, rate, and prosody.

For fluency, TCs reported using strategies that modeled and practiced fluent reading of a shared text. For instance, a TC recorded their students' reading and had the students listen to the recording. The recordings were not only a way to engage and excite the students, but they also gave the students ownership of their learning. For example:

The reading and recording of the poem was EXTREMELY effective for this student. Hearing her voice and “scoring” it [using the fluency rubric] was a strong asset to this lesson. [The student] immediately set goals for herself on where she sought improvement in rate/speed and was able to compliment herself on an area where she was stronger—volume.

TCs also used Reader's Theater (Ratliff, 2006; Wolf, 1993, 2004), Robot Reading (Marcell & Ferraro, 2013), and repeated readings with poetry. According to Rasinski et al. (2020), “For decoding skills to become automatic, fluency instruction that includes regular opportunities for repeated and assisted reading is recommended” (p. 7). Similarly, Reader's Theater “involves children in oral reading through reading parts in scripts. In using this strategy, students do not need to memorize their part; they need only to reread it several times, thus developing their fluency skills” (Reading Rockets, 2021b, para. 1).

For example, a TC shared, “We centered our lesson around Reader's Theater. We read the script as a group. We plan on implementing the strategy again. Reader's Theater helped the students gain confidence in reading out loud.” By using evidence-based fluency strategies and activities, it appears the TCs were able to support their students' fluency and, thus, confidence when reading aloud.

## Discussion

The aim of this study was to better understand what literacy strategies and activities TCs identified using in their weekly teaching logs to adapt instruction for elementary-aged students during the course. Findings revealed that the literacy strategies and activities selected from most to least frequent by TCs were comprehension, word study, writing, and fluency.

As the teacher educators at the two university-based teacher preparation programs, it was encouraging to see TCs name, discuss, and use literacy strategies and activities that were informed by research (e.g., FCRR, Reading Rockets, What Works ClearingHouse [WWC]) rather than relying on less credible sources. For example, TCs most frequently noted using various literacy strategies and activities related to comprehension. One strategy TCs used was Click and Clunk, a component of Collaborative Strategic Reading (Klingner & Vaughn, 1998), which has a strong evidence base (U.S. Department of Education [WWC], 2013).

TCs also selected a myriad of strategies and activities for word study, including word building (Foorman et al., 2016). TCs used research-informed writing strategies and activities, such as graphic organizers and the writing process (prewriting, drafting, revising, and editing) (Graham et al., 2012). Lastly, for fluency, TCs often used Repeated Reading (Foorman et al., 2016), Reader’s Theater (Young & Rasinski, 2018), and Robot Reader (Marcell & Ferraro, 2013). As teacher educators, we hope that TCs, and teachers in general, continue to look for and use credible sources when selecting literacy strategies and activities for instruction based on their students’ strengths and needs.

Furthermore, researchers Rupley et al. (2009) stated that using literacy strategies (and activities) is important for all students, especially for striving readers, such as students who have difficulty with literacy development, as they often rely on strategies as they grapple with increasingly difficult texts. Likewise, Risko et al. (2008) suggested that “implementing instructional strategies that are made explicit and tracing pupils’ learning when using these strategies seemed to help [TCs] appreciate their power as teachers and the positive impact of their teaching on struggling readers” (p. 273). In the present study, TCs were able, to some extent, to select strategies to begin to meet their students’ needs.

Researchers (Darling-Hammond, 2017; Zeichner, 2010) have noted the need for authentic instruction for preservice and in-service teachers, including the preparation of TCs for literacy assessment and instruction (e.g., ILA, 2017). According to Hilaski et al. (2021), “Integrating more practice-based methodologies, such as embedded clinical experiences, provides a means to authentic, practical learning and varied levels of scaffolding for TCs” (p. 41). When TCs combine their experiences and teaching logs, TCs can build upon their knowledge and application of literacy assessment data to plan instruction. Moreover, by providing TCs with opportunities to not only assess students but to use that assessment data strategically to make instructional decisions, TCs will be more equipped to meet the diverse literacy needs of the students they teach.

### Implications for Practice

Findings from the present study indicate that TCs can select literacy strategies and activities based on their students’ needs during clinically rich field experiences. To support TCs with strategy selection, teacher educators need to implement the following actions: (a) build TC knowledge of evidence-based literacy strategies and activities, perhaps by modeling and scaffolding instruction in the course; (b) provide opportunities for TCs to apply their learning in real-world settings; (c) support both TCs and practicing teachers with information about literacy strategies and activities that can

be readily applied in their instruction (see Table 2); and (d) give constructive feedback to help further support TCs instruction.

Resource	Web address	Overview
Collaboration for Effective Educator Development, Accountability, and Reform (Lane, 2014)	<a href="https://cedar.education.ufl.edu/wp-content/uploads/2014/12/IC-12_FINAL_12-15-14.pdf">https://cedar.education.ufl.edu/wp-content/uploads/2014/12/IC-12_FINAL_12-15-14.pdf</a>	Literacy strategies that address students’ strengths and needs (i.e., phonemic awareness, phonics, fluency, vocabulary, comprehension).
Florida Center for Reading Research (FCRR, n.d.) Student Center Activities	<a href="https://www.fcrr.org/student-center-activities">https://www.fcrr.org/student-center-activities</a>	Literacy activities to reinforce pre-kindergarten through fifth grade students’ learning in small groups or individually (i.e., phonological awareness, phonics, fluency, vocabulary, comprehension).
IRIS Center (n.d.)	<a href="https://iris.peabody.vanderbilt.edu/module/csr/cresource/#content">https://iris.peabody.vanderbilt.edu/module/csr/cresource/#content</a>	Literacy strategies that support reading comprehension for K-12 students.
Reading Rockets (2021c)	<a href="https://www.readingrockets.org/strategies">https://www.readingrockets.org/strategies</a>	Literacy strategies to support striving readers (i.e., phonological awareness, phonics, fluency, vocabulary, comprehension, writing).
Texas Center for Learning Disabilities: Effective Reading Interventions for Upper-Elementary Students (n.d.)	<a href="https://www.texasldcenter.org/teachers-corner/five-research-based-ways-to-teach-vocabulary">https://www.texasldcenter.org/teachers-corner/five-research-based-ways-to-teach-vocabulary</a>	Literacy strategies that support vocabulary knowledge of K-12 students.
University of Florida Literacy Institute (UFLI) (n.d.)	<a href="https://education.ufl.edu/uflir/resources/#hubs">https://education.ufl.edu/uflir/resources/#hubs</a>	Literacy activities (i.e., phonemic awareness, phoneme-grapheme correspondence, decoding and encoding, irregular and high-frequency words, connected text, writing)

**Note.** Resources provided in the table were selected to support TCs in finding evidence-based literacy strategies and activities. The resources are not an exhaustive list of available resources. TCs should also use *What Works Clearinghouse* (U.S. Department of Education, 2013) to determine the effectiveness of selected literacy strategies and activities for instruction on improving students’ learning outcomes.

**Table 2. Evidence-Based Literacy Strategies and Activities**

While the findings in this study demonstrated that coursework based on literacy assessment and instructional planning helped TCs begin to develop their skill sets in supporting the needs of their students, given the Science of Reading research (e.g., Kilpatrick, 2020; ILA, 2019; Moats, 2020; Moats & Tolman, 2019), there is more work to be done to prepare TCs to effectively plan for targeted literacy instruction.

For example, when designing learning experiences for TCs in the realm of word study, it is critical that we, as teacher educators, include a phonemic awareness assessment to ensure teachers have a comprehensive view of their students’ word study needs (Kilpatrick, 2020). This, in hindsight, was a limitation in the study by proxy of being a limitation in the courses itself. In addition, while there is space for word sorts and activities in phonics instruction, explicit phonics instruction following a scope and sequence is necessary for students to develop their word recognition skills (Moats &

Tolman, 2019). Similarly, a stronger focus on embedding content during comprehension and writing instruction is needed to support students in developing a deeper understanding of complex texts and the ability to communicate their ideas effectively (Moats & Tolman, 2019; Shanahan, 2018).

Amidst the continuing impact of the COVID-19 pandemic on education, it is necessary that TCs and teachers feel comfortable using evidence-based literacy strategies and activities that match students' needs. Based on the 2022 National Assessment of Educational Progress (NAEP) Report Card, students' decoding skills are at an all-time low. This reality amplifies the need for explicit, systematic, comprehensive, and targeted phonics instruction in our schools (ILA, 2019). The inclusion of this type of instruction in coursework is essential for teachers to feel prepared to design effective literacy instruction.

## Conclusion

As this research focused on better understanding of the literacy strategies and activities TCs selected for instruction across essential reading components, we were unsuccessful in locating extensive research pertaining to this specific topic. As evidenced by the review of literature, there has been other research on TC preparation for literacy instruction, which includes building TCs' knowledge and foundation of literacy as a whole, literacy assessments, and clinically rich field experiences. TCs need time, multiple real-life opportunities, practice, and feedback to develop a profound understanding of literacy instruction and planning for elementary students that is targeted to each student's strengths and areas for growth. As teacher educators and researchers, we believe more research is needed that explores the literacy strategies and activities that TCs use to support their students and scaffold instruction so that it becomes automatic for readers and writers.

## References

- Afflerbach, P., Pearson, P. D., & Paris, S. G. (2008). Clarifying differences between reading skills and reading strategies. *The Reading Teacher, 61*(5), 364-373.
- Boardman, A. G., Vaughn, S., Buckley, P., Reutebuch, C., Roberts, G., & Klingner, J. (2016). Collaborative strategic reading for students with learning disabilities in upper elementary classrooms. *Exceptional Children, 82*(4), 409-427.
- Burns, R. W., Jacobs, J., & Yendol-Hoppey, D. (2016). The changing nature of the role of the university supervisor and function of preservice teacher supervision in an era of clinically rich practice. *Action in Teacher Education, 38*(4), 410-425. <https://doi.org/10.1080/01626620.2016.1226203>
- Conrad, D., & Stone, C. (2015). Connecting the dots in preservice teacher education: Focusing on literacy instructional strategies to prepare teacher candidates for curriculum and certification challenges. *Delta Kappa Gamma Bulletin, 81*(4), 41-49.
- CSR: A reading comprehension strategy. IRIS Center. (n.d.). <https://iris.peabody.vanderbilt.edu/module/csr/cresource/#content>
- Darling-Hammond, L. (2017). Teacher education around the world: What can we learn from international practice? *European Journal of Teacher Education, 40*(3), 291-309. <https://doi.org/10.1080/02619768.2017.1315399>
- Ferguson, K. (2017). Using a simulation to teach reading assessment to preservice teachers. *The Reading Teacher, 70*(5), 561-569. <https://doi.org/10.1002/trtr.1561>
- Five research-based ways to teach vocabulary. Texas Center for Learning Disabilities. (n.d.). <https://www.texasldcenter.org/teachers-corner/five-research-based-ways-to-teach-vocabulary>
- Florida Center for Reading Research. (n.d.). *FCRR student center activities*. <https://www.fcrr.org/student-center-activities>
- Foorman, B., Beyler, N., Borradaile, K., Coyne, M., Denton, C. A., Dimino, J., Furgeson, J., Hayes, L., Henke, J., Justice, L., Keating, B., Lewis, W., Sattar, S., Streke, A., Wagner, R., & Wissel, S. (2016). *Foundational skills to support reading for understanding in kindergarten through 3rd grade* (NCEE 2016-4008). Washington, DC National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education. [https://ies.ed.gov/ncee/wwc/Docs/practiceGuide/wwc\\_foundationalreading\\_040717.pdf](https://ies.ed.gov/ncee/wwc/Docs/practiceGuide/wwc_foundationalreading_040717.pdf)
- Graham, S., & Alves, R. A. (2021). Research and teaching writing. *Reading and Writing, 34*, 1613-1621. <https://doi.org/10.1007/s11145-021-10188-9>
- Graham, S., Bollinger, A., Booth Olson, C., D'Aoust, C., MacArthur, C., McCutchen, D., & Olinghouse, N. (2012). *Teaching elementary school students to be effective writers: A practice guide* (NCEE 2012-4058). What Works Clearinghouse.
- Harlin, R. P. (1999). Developing future professionals: Influences of literacy coursework and field experiences. *Literacy Research and Instruction, 38*(4), 351-370.
- Hilaski, D. M., Maxwell, N., & Jones, J. (2021). "It opened my eyes ...": The potential of an embedded clinical experience in teacher preparation. *Reading Horizons: A Journal of Literacy and Language Arts, 60*(2), 22-50. [https://scholarworks.wmich.edu/reading\\_horizons/vol60/iss2/3](https://scholarworks.wmich.edu/reading_horizons/vol60/iss2/3)
- Hougen, M. C., & Smartt, S. M. (2020). *Fundamentals of literacy instruction and assessment, pre-K-6*. Paul H. Brookes.
- International Literacy Association. (2017). *Standards for the preparation of literacy professionals*. Author. <https://www.literacyworldwide.org/get-resources/standards/standards-2017>
- International Literacy Association. (2019). *Literacy leadership brief: Meeting the challenges of early literacy phonics instruction*. Author. <https://www.literacyworldwide.org/docs/default-source/where-we-stand/ila-meeting-challenges-early-literacy-phonics-instruction.pdf>
- Kilpatrick, D. A. (2020). *Equipped for reading success: A comprehensive, step-by-step program for developing phoneme awareness and fluent word recognition*. Casey & Kirsch.
- Kim, Y-S. G., Yang, D., Reyes, M., & Connor, C. (2021). Writing instruction improves students' writing skills differentially depending on focal instruction and children: A meta-analysis for primary grade students. *Educational Research Review, 34*, 1-16. <https://doi.org/10.1016/j.edurev.2021.100408>
- Klingner, J. K., & Vaughn, S. (1998). Using collaborative strategic reading. *Teaching Exceptional Children, 30*(6), 32-37.
- Krippendorff, K. (1980). *Content analysis: An introduction to its methodology*. Sage.
- Lane, H. B. (2014). Evidence-based reading instruction for grades K-5. CEEDAR Document No. IC-12. Retrieved from [http://ceedar.education.ufl.edu/wp-content/uploads/2014/12/IC-12\\_FINAL\\_12-15-14.pdf](http://ceedar.education.ufl.edu/wp-content/uploads/2014/12/IC-12_FINAL_12-15-14.pdf)

- Lipsky, M., Schumm, J. S., Doorn, K., & Adelman, A. (2014). Preparing preservice teachers for data-based decision making in working with struggling readers: A collaborative effort. *Journal of Reading Education, 40*(1), 36-42. <https://doi.org/10.1177/1086296X198332>
- Massey, D. D., & Lewis, J. (2011). Learning from the “little guys”: What do middle and high school preservice teachers learn from tutoring elementary students? *Literacy Research and Instruction, 50*(2), 120-132. <https://doi.org/10.1080/19388071003725705>
- Marcell, B., & Ferraro, C. (2013). So long, robot reader! A superhero intervention plan for improving fluency. *The Reading Teacher, 66*(8), 607-614. <https://doi.org/10.1002/trtr.1165>
- Moats, L. C. (2020). Teaching reading “is” rocket science: What expert teachers of reading should know and be able to do. *American Educator, 44*(2), 4-9, 39.
- Moats, L., & Tolman, C. A. (2019). *LETRS: Language essentials for teachers of reading and spelling*. Lexia Learning.
- National Association of Education Progress (NAEP). (2022). *Scores decline in NAEP reading at grades 4 and 8 compared to 2019*. <https://www.nationsreportcard.gov/highlights/reading/2022/>
- National Reading Panel (US), National Institute of Child Health, & Human Development (US). (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups*. National Institute of Child Health and Human Development, National Institutes of Health.
- Nelson, J., Papola-Ellis, A., & Giatsou, E. (2020). Developing literacy-minded educators: Authentic field-based teacher preparation. *Literacy Research and Instruction, 59*(1), 17-38. <https://doi.org/10.1080/19388071.2019.1662861>
- Oboler, E. S., & Gupta, A. (2010). Emerging theoretical models of reading through authentic assessments among preservice teachers: Two case studies. *Reading Matrix: An International Online Journal, 10*(1), 79-95. [https://digitalcommons.odu.edu/teachinglearning\\_fac\\_pubs/6](https://digitalcommons.odu.edu/teachinglearning_fac_pubs/6)
- Odo, D. (2016). An investigation of the development of pre-service teacher assessment literacy through individualized tutoring and peer debriefing. *Journal of Inquiry and Action in Education, 7*(2), 31-61.
- Onwuegbuzie, A. J., & Collins, K. M. (2007). A typology of mixed methods sampling designs in social science research. *The Qualitative Report, 12*(2), 281-316. <http://www.nova.edu/ssss/QR/QR12-2/onwuegbuzie2.pdf>
- Parsons, S. A., Vaughn, M., Scales, R. Q., Gallagher, M. A., Parsons, A. W., Davis, S. G., Pierczynski, M., & Allen, M. (2018). Teachers' instructional adaptations: A research synthesis. *Review of Educational Research, 88*(2), 205-242. <https://doi.org/10.3102/0034654317743198>
- Pierce, A., Washburn, E. K., Scott, C. E., & Waters, C. (2020). The use of ongoing reflection in a literacy assessment course: Illuminating teacher candidate self- and social- awareness. *Association of Literacy Educators and Researchers Yearbook, 42*, 249-266.
- Pletcher, B., & Tefft, D. (2017). “So what are we working on today?” Preservice teachers' use of assessment data in a reading diagnosis course. *Journal of Teacher Action Research, 3*(3). [http://www.practicalteacherresearch.com/uploads/5/6/2/4/56249715/so\\_what\\_are\\_we\\_working\\_on\\_today.pdf](http://www.practicalteacherresearch.com/uploads/5/6/2/4/56249715/so_what_are_we_working_on_today.pdf)
- Ratliff, G. L. (2006). The performance role of reader's theatre in a literature classroom. *CEA Forum, 35*(2), 1-5.
- Rasinski, T. V., Yates, R., Foerg, K., Greene, K., Paige, D., Young, C., & Rupley, W. (2020). Impact of classroom-based fluency instruction on grade one students in an urban elementary school. *Education Sciences, 10*(227), 1-10. <https://doi.org/10.3390/educsci10090227>
- Reading Rockets. (2021a). *Writing*. <https://www.readingrockets.org/teaching/reading-basics/writing>
- Reading Rockets. (2021b). *Reader's theater*. [https://www.readingrockets.org/strategies/readers\\_theater](https://www.readingrockets.org/strategies/readers_theater)
- Reading Rockets. (2021c). *Classroom strategy library*. <https://www.readingrockets.org/classroom/classroom-strategies>
- Risko, V. J., & Reid, L. (2019). What really matters for literacy teacher preparation? *The Reading Teacher, 72*(4), 423-429.
- Risko, V. J., Roller, C. M., Cummins, C., Bean, R. M., Block, C. C., Anders, P. L., & Flood, J. (2008). A critical analysis of research on reading teacher education. *Reading Research Quarterly, 43*(3), 252-288. <https://doi.org/10.1598/RRQ.43.3.3>
- Rupley, W. H., Blair, T. R., & Nichols, W. D. (2009). Effective reading instruction for struggling readers: The role of direct/explicit teaching. *Reading & Writing Quarterly, 25*(2-3), 125-138. <https://doi.org/10.1080/10573560802683523>
- Scott, C. E., Gould, C., Pierce, A., & Washburn, E. K. (2019, November 8). *Critical reflection as a conduit: An examination of teacher candidates' beliefs about literacy assessment and instruction* [Paper presentation]. The Association of Literacy Educators and Researchers, Corpus Christi, TX, United States.
- Serravallo, J. (2015). *Reading strategies book: Your everyday guide to developing skilled readers*. Heinemann.
- Shanahan, T. (2018, July 6). Should we teach reading comprehension strategies? [Blog post]. International Literacy Association. <https://www.literacyworldwide.org/blog/literacy-now/2018/07/06/should-we-teach-reading-comprehension-strategies>
- Snow, C. (2002). *Reading for understanding: Toward an R&D program in reading comprehension*. Rand Corporation.
- Stefanski, A. J., Leitze, A., & Fife-Demski, V. (2018). Preservice teacher sense-making as they learn to teach reading as seen through computer-mediated discourse. *Reading Horizons, 57*(1), 32-54. [https://scholarworks.wmich.edu/reading\\_horizons/vol57/iss1/4](https://scholarworks.wmich.edu/reading_horizons/vol57/iss1/4)
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research techniques*. Sage.
- University of Florida Literacy Institute. (n.d.). *Resource hubs*. <https://education.ufl.edu/uflri/resources/#hubs>
- U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. (2013, July). *WWC review of the report: The impact of Collaborative Strategic Reading on the reading comprehension of grade 5 students in linguistically diverse schools*. [https://ies.ed.gov/ncee/wwc/Docs/SingleStudyReviews/wwc\\_csr\\_071613.pdf](https://ies.ed.gov/ncee/wwc/Docs/SingleStudyReviews/wwc_csr_071613.pdf)
- Washburn, E. K., Pierce, A., Scott, C. E., & Waters, C. (2023). What does written reflection reveal about teacher candidates' knowledge, beliefs, and skills related to literacy assessment? *Reading Horizons: A Journal of Literacy and Language Arts, 62*(1), 80-108. [https://scholarworks.wmich.edu/reading\\_horizons/vol62/iss1/5/](https://scholarworks.wmich.edu/reading_horizons/vol62/iss1/5/)

- Williams, C., Phillips-Birdsong, C., Hufnagel, K., Hungler, D., & Lundstrom, R. P. (2009). Word study instruction in the K–2 classroom. *The Reading Teacher*, 62(7), 570-578. <https://doi.org/10.1598/RT.62.7.3>
- Wolf, S. A. (1993). What's in a name? Labels and literacy in readers theatre. *The Reading Teacher*, 46(7), 540-545.
- Wolf, S. A. (2004). *Interpreting literature with children*. Routledge.
- Young, C., & Rasinski, T. (2018). Readers theatre: Effects on word recognition automaticity and reading prosody. *Journal of Research in Reading*, 41(3), 475-485. <https://doi.org/10.1111/1467-9817.12120>
- Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college- and university-based teacher education. *Journal of Teacher Education*, 61(1–2), 89–99. <https://doi.org/10.1177/0022487109347671>

noredink



Lay a foundation  
for writing growth in  
your classrooms and  
prepare your students  
for success on  
the redesigned  
**STAAR RLA test.**



Learn more about delivering strong writing instruction in Texas with NoRedInk.