

Beyond One-Size-Fits-All: Rethinking Spelling Instruction in Elementary Grades

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Abstract

This study examined K–6 spelling instruction through surveys and interviews with 32 teachers (drawn from a pool of 168 eligible K–6 educators) in a western Pennsylvania district. Findings revealed a lack of formalized programs, overreliance on digital tools, and challenges in differentiating instruction. Effective practices included phonics-based and multisensory methods—both cornerstones of the Science of Reading—yet systemic barriers, such as inconsistent resources and limited professional development, hindered implementation. The study emphasizes the need for targeted training in explicit, systematic instruction to improve student outcomes. Implications include developing standardized assessments and robust professional learning. Future research should examine the long-term impacts of these strategies across diverse educational settings.

Introduction

Spelling instruction is not a uniform process and requires systematic and explicit teaching methods tailored to diverse student needs. Effective instruction depends on teachers having a strong understanding of the multiple components of spelling, including phonological, orthographic, and morphological elements (Moats, 2020). The Science of Reading—an established, evidence-based body of research—provides the theoretical foundation for understanding how systematic, explicit instruction supports spelling development and broader literacy outcomes. This literature review examines the historical development of spelling instruction, identifies effective instructional practices, explores strategies for training both novice and experienced teachers, and emphasizes the overall significance of spelling in literacy development.

Theoretical Framework for Spelling Instruction

Historians emphasize the central role of spelling instruction in English Language Arts (ELA), yet express concern over its declining emphasis in modern classrooms (Pan et al., 2021, p. 1525). Although society expects proficient spelling from educated individuals, many adults report difficulty in this area, and most state assessments do not directly evaluate spelling skills (Moats, 2005, p. 12).

To understand effective spelling instruction, it is important to examine the linguistic roots of English. The language developed from four primary sources: Anglo-Saxon, Norman French, Latin, and Greek. This combination contributes to English being one of the most irregular languages in terms of letter-to-sound

correspondence, a feature known as orthography (Devonshire & Fluck, 2010, p. 365; Kessler & Treiman, 2003, p. 268).

Research consistently supports the benefits of direct spelling instruction. Students who receive explicit instruction outperform peers who do not (Graham & Santangelo, 2014, p. 1704), and this instruction should begin as early as possible within reading curricula (Kim, 2022, p. 421). However, traditional assign and test approaches remain common, often relying on memorization with minimal instruction (Mann et al., 2010, p. 85). To improve outcomes, methods such as cover, copy, and compare, and the taped spelling intervention offer more engaging, evidence-based alternatives that promote repeated practice and immediate feedback (Mann et al., 2010, p. 90; Zannikos et al., 2018, pp. 304–320).

The success of spelling instruction also depends on teacher expertise. Professional development and mentoring are associated with stronger student outcomes (Carreker et al., 2010, p. 192), particularly when school leaders support collaboration and sustained growth (Roberson & Roberson, 2009, pp. 114–115; Atkinson & O'Connor, 2007, p. 16). Principals can further enhance literacy instruction through tiered professional development aligned with the science of reading (Bose, 2023, p. 51). Such professional learning should reintroduce and reinforce instructional practices that support authentic spelling development, including phonological awareness activities, word walls, and multisensory learning strategies beginning in the early grades.

Finally, effective spelling instruction must be systematic and explicit, integrating both orthographic and phonological knowledge (Cassar & Treiman, 1997, p. 67; Cassar et al., 2005, p. 666). While reading has received extensive research attention, spelling remains underexplored, indicating a need for more focused investigation (Calhoon et al., 2010, p. 146).

The History of Spelling Instruction

Historically, spelling instruction held a central role in English Language Arts (ELA) classrooms, particularly in the 20th century (Pan et al., 2021, p. 1525). With the rise of the printing press in the 16th century, spelling became a key indicator of literacy. In recent years, however, its perceived value has declined due to shifts in assessment practices, reliance on spellcheck, and the rise of informal digital communication (Pan et al., 2021, p. 1525). Spelling is often embedded within broader test domains such as composition or language proficiency, making its specific impact difficult to isolate (Moats, 2005, p. 12). Teachers also question its instructional value when improvements fail to transfer meaningfully to student writing (Fresch, 2007).

Although under-researched compared to reading, spelling outcomes are significantly shaped by home literacy, parental education, and early language development. These factors account for 66% of the variance in student scores (Calhoon et al., 2010, p. 146). A foundational framework, Gentry's (2000) developmental model, outlines five stages of spelling: precommunicative, semiphonetic, phonetic, transitional, and conventional. Bear and Templeton (1998, as cited in Gentry, 2000, p. 324) proposed a six-stage model, but Gentry critiqued its final stages as overly similar and difficult to distinguish.

English orthography is widely viewed as complex due to its many homophones and irregular sound-letter patterns (Kessler & Treiman, 2003, p. 268). Unlike transparent languages such as Finnish, where spelling closely matches pronunciation, English borrows heavily from other languages, retains original spellings, and often encodes nonphonemic information (Kessler & Treiman, 2003, pp. 269–270). Devonshire and Fluck (2010, p. 361) argue that spelling instruction should emphasize morphemes and etymology, which are essential to understanding meaning, rather than phonics alone. They note that orthographic transparency in languages such as Italian contributes to lower rates of dyslexia compared to English (p. 365).

The irregularity of English is largely rooted in its linguistic history. Moats (2005, p. 14) traces its development through four primary sources: Anglo-Saxon, Norman French, Latin, and Greek. Each layer introduced new spelling conventions that contribute to current inconsistencies. Anglo-Saxon provided many common words and irregular spellings, while Latin and Greek contributed academic and scientific vocabulary. The Norman French influence remains visible in legal and social terminology (Moats, 2005, p. 14).

Effective spelling instruction also incorporates related language skills such as grammar, punctuation, vocabulary, and handwriting (Daffern et al., 2017). Foundational writing experiences, including name writing and oral vocabulary development, are predictive of future writing success, particularly in early childhood (Daffern et al., 2017).

Although some scholars claim spelling develops naturally through reading and writing, research indicates otherwise. Graham and Santangelo (2014, p. 1704) found that students receiving explicit spelling instruction made significantly stronger gains than peers who received no formal instruction. They concluded that greater instructional emphasis led to more pronounced improvement (p. 1704).

Effective Spelling Instruction

Pan et al. (2021) affirmed that “spelling still matters and should be taught explicitly” in the 21st century (p. 1523). They emphasized that spelling abilities do not develop without structured instruction. Puliatte and Ehri (2018) found that students made greater gains when teachers had knowledge of phonemic linguistic units, taught weekly lessons, used explicit strategies, and had several struggling spellers in class (p. 241). These units involve breaking words into spelling patterns and providing direct instruction with varied strategies to support all learners. Although a higher number of struggling spellers allows for focused growth, it may slow overall class progress, which reinforces the need to differentiate instruction (Puliatte & Ehri, 2018).

Kim (2022) emphasized that reading and spelling develop concurrently. Spelling assessments can identify issues such as letter reversals or vowel substitutions that may not appear in reading tests. Studying word structures enhances understanding of spelling patterns and phoneme-grapheme relationships.

Treiman and Bourassa (2000) noted that young children often expect word appearance to reflect meaning. For example, they may believe large objects like “bear” should be spelled with more letters. As children gain phonemic awareness, spelling development improves. Mann et al. (2010) criticized the assign-and-test method for its reliance on memorization and lack of individualization. Instead, they

advocated the “cover, copy, and compare” method, where students view a word, cover it, write it, and compare it with the original (p. 85). If incorrect, students repeat the process (Zannikos et al., 2018, p. 304). Zannikos et al. also described the taped spelling intervention, which uses audio prompts and timed writing followed by immediate correction. Although both interventions are effective, the cover, copy, and compare method is easier to implement and produces faster gains (Zannikos et al., 2018, p. 320).

Good et al. (2018) stressed the need for Tier I direct spelling instruction for all students, especially those with language impairments. These students benefit from twice-weekly lessons on letter-sound correspondence and orthographic patterns. Instruction should evolve from identifying letter sounds to practicing phonemic segmentation and blending (Good et al., 2018). Sayeski (2011) added that students with learning disabilities need frequent practice and feedback.

Wilson et al. (2015) encouraged collaboration with speech-language therapists, who can support orthographic knowledge through modeling, observation, and co-teaching. These specialists can help students articulate letter sounds and understand metalanguage, which is the ability to describe and analyze how language works. Daffern (2017) stated that comprehension of metalanguage improves both writing and spelling. Without effective instruction in these areas, students may struggle to retain essential language skills.

Miller et al. (2017) found that explicit spelling instruction leads to greater growth in reading and writing. Spelling is more complex than reading due to the greater number of correct phoneme-grapheme matches required. Kemper et al. (2012) highlighted the value of both implicit and explicit learning. While phonics lessons explicitly teach spelling rules, students also implicitly absorb grammar and reading structures. Effective instruction should be recursive and revisit prior concepts to reinforce retention.

The optimal amount of spelling instruction varies. Puranik et al. (2014) studied 21 kindergarten classrooms and found inconsistent time allocations even within the same school. Differences were linked to teacher beliefs, student needs, and curriculum constraints. While scheduling is important, instructional quality and repeated practice are more critical for lasting growth.

Tortorelli and Bruner (2022) examined differentiated instruction in seven school districts. Teachers were encouraged to administer the Words Their Way assessment at the start of the year to identify mastered and developing spelling patterns. When paired with baseline literacy data, this assessment supports targeted instruction (p. 390). Vines et al. (2020) noted that best practices in instruction can take many years to become widespread. They identified seven nonnegotiables for spelling instruction (pp. 714–720): teachers must possess linguistic knowledge, act as evaluators, differentiate instruction, establish routines, integrate authentic tasks, reflect critically, and embrace the messiness of learning. Spelling should be taught in isolation and across disciplines, and teachers must be willing to revise approaches when data show limited student growth.

Schrodt et al. (2020b) explored the role of mindset in spelling development through a 10-week intervention with kindergartners. Students were encouraged to be “brave spellers” through mini-lessons

that included connection, modeling, guided practice, and independent writing (p. 210). Words introduced in lessons were reinforced in centers and writing prompts, with targeted teacher feedback to build student confidence and mastery (p. 212).

Training Novice and Veteran Teachers

Spelling instruction requires knowledgeable and well-prepared teachers. Carreker et al. (2010) emphasized the importance of professional development for all general education, special education, and dyslexia teachers to strengthen their content knowledge (p. 190). In their study, teachers who completed 120 hours of professional development and one year of mentored instruction outperformed those who had not received the training (p. 192). However, not all participants were able to accurately count phonemes, syllables, and morphemes in target words, suggesting that training alone does not guarantee mastery (p. 193).

Professional development can take many forms, but it should be collaborative and inclusive across subject areas. This aligns with the belief that all teachers are literacy teachers (Steege & Lambson, 2015). A comprehensive schoolwide professional development model includes five components: demonstration lessons, book study, “try its,” case studies, and textbook or curriculum exploration (Steege & Lambson, 2015, p. 475).

Demonstration lessons should be explicit, relevant to the training topic, and encourage teachers to consider how to apply the practices in their own classrooms. Book studies allow for deeper engagement with theory and practice. “Try its” provide opportunities for teachers to experiment with strategies and reflect on their implementation. Case studies focus on a single student, tracking progress and sharing findings in small groups. Finally, curriculum exploration allows teams to collaboratively investigate and implement new resources (Steege & Lambson, 2015).

While these strategies are valuable, principals must also differentiate professional development to meet the varied needs of novice and experienced teachers. Administrators should consider each teacher’s background, including prior training and experience, to design meaningful support systems. In Pennsylvania, teacher preparation programs began incorporating structured literacy around 2014 to better prepare educators to serve students with dyslexia and other reading challenges (Pennsylvania Department of Education, 2018; Wexler, 2019).

Role of Administration in Professional Development

Principals play a vital role in supporting novice teachers, who are still developing the ability to assess their performance and navigate relationships with students, families, colleagues, and curriculum expectations (Roberson & Roberson, 2009). While administrators often expect first-year teachers to exhibit professionalism, subject knowledge, classroom management, communication skills, a belief in student potential, and a desire to help students succeed (Roberson & Roberson, 2009, pp. 114–115), support must extend beyond these expectations.

Effective leadership involves identifying teachers' strengths, creating opportunities for reflection and observation, and ensuring novice educators have time to focus on strategies that promote student growth (Roberson & Roberson, 2009). Mentorship is essential in this process. Mentor teachers can gain new insights that enhance their own practice, but strong mentoring programs require distributed leadership and learning communities focused on reflective conversations (Hanson & Moir, 2008). All stakeholders must collaborate to foster growth and sustain open dialogue throughout the year (Atkinson & O'Connor, 2007).

To further support beginning teachers, professional development on the science of reading can be organized into three tiers of instructional leadership (Bose, 2023). Tier I, or universal support, builds on preservice knowledge and establishes a foundation through curriculum training, collaboration, and use of available resources. Tier II targets a smaller group of educators, typically 15% to 20% of the staff, and involves more specific interventions such as book studies, support groups, or roundtable discussions. Tier III provides individualized support through partnerships with literacy experts. These partnerships involve classroom observations, workshops, and conferences designed to address a teacher's specific growth areas (Bose, 2023). By strategically implementing these tiers of support, principals can ensure that novice teachers not only survive but thrive during their first years in the classroom.

Overall Importance of Effective Spelling Instruction

Although teachers often view spelling and reading as distinct, these skills develop in tandem and should be taught as interconnected components of literacy (Ehri, 2000). English poses unique challenges because it lacks a consistent one-to-one phoneme-grapheme correspondence (Booth, 1991). Over time, cultural and social influences have shaped English spelling, leading to irregularities that are not easily addressed through rote memorization (Booth, 1991). Despite this complexity, spelling instruction has largely remained stagnant and often relies on memorization rather than systematic teaching methods (Johnston, 2001).

Cassar et al. (2005) argued that all students benefit from structured instruction, particularly those with dyslexia. These learners require explicit guidance to build phonological awareness and spelling proficiency. Instruction should also include orthographic knowledge, which refers to recognizing spelling patterns and structures within words. Cassar and Treiman (1997) emphasized that targeted instruction in orthographic patterns is essential for long-term literacy development.

While spellcheck tools have become more common, they are not entirely reliable. Pan et al. (2021) reported that spellcheckers have an estimated accuracy rate of 80%, leaving writers responsible for correcting the remaining errors (p. 245). Pan et al. (2021) noted that many overlooked mistakes involve correctly spelled homophones used inappropriately, reinforcing the continued need for direct spelling instruction.

Methods

There is a lack of research investigating effective spelling instruction. This investigation will seek to fill the gap in the extant research by addressing the following research questions:

- 1) What instructional strategies do elementary teachers perceive as most effective or challenging when teaching spelling, and how do these influence student engagement and learning outcomes?
- 2) How do teachers assess student progress in spelling, and what tools or indicators do they rely on to evaluate effectiveness?
- 3) What resources and professional development opportunities do teachers use or need to support effective spelling instruction?
- 4) In what ways do cultural and linguistic diversity among students affect spelling instruction and student performance?
- 5) What barriers do teachers face in implementing district-provided ELA curricula for spelling instruction with fidelity?

This qualitative descriptive study employed an online survey followed by targeted interviews to explore current K–6 spelling instruction. Twelve open-ended research questions covered teacher background, instructional methods, assessment practices, perceived student challenges, resource use, professional development needs, cultural-linguistic considerations, and the influence of district curriculum fidelity on practice.

Participants and Setting

The survey was sent to all 168 full-time kindergarten–Grade-6 teachers in a suburban Pennsylvania district serving approximately 7,400 students across four elementary schools (2023–24). Eligibility required having taught spelling during the previous five years or holding a literacy position. Purposive sampling sought at least one respondent per grade level (target ≥ 28). Thirty-two teachers responded (response rate = 19%; 53% novice [≤ 5 years], 47% veteran [> 5 years]), providing balanced perspectives across grades.

Instrumentation

The investigator-developed instrument contained (a) demographic items (teaching experience, grade level) and (b) 12 open-ended prompts addressing effective and challenging spelling strategies, student engagement, assessment approaches, resource evaluation, and professional development needs. Items were reviewed by two literacy scholars for content validity and piloted with four teachers, leading to minor wording revisions for clarity. Selected survey respondents ($n = 6$) participated in 30-minute

semi-structured interviews to elaborate on survey themes. Items used for data collection are provided in the Appendix.

Procedures

After Institutional Review Board approval, a two-week pilot was conducted in September 2024. The final survey link was emailed to all eligible teachers in early October with two weekly reminders. Data collection ran October 1–31 (online survey) and November 1–30 (interviews). Participation was voluntary and anonymous; informed consent preceded both survey and interviews.

Data Analysis

Survey and interview narratives were imported into NVivo 14. Using inductive thematic analysis, two researchers independently coded responses, compared codebooks, and reconciled discrepancies to achieve $\geq 90\%$ intercoder agreement. Themes were then organized by research-question category and contrasted across novice versus veteran teachers to identify convergent and divergent patterns. Trustworthiness was supported through member-checking with interviewees and an audit trail documenting coding decisions.

Results

Survey Participants

The survey included 32 teachers from four elementary schools within the same western Pennsylvania school district. On average, these teachers had 7.48 years of experience in K–6 settings. The survey included all grades from kindergarten through sixth grade, and the frequency of participants’ years of experience and grade-level (s) taught is shown in Table 1.

Table 1

Frequency of Participants’ Years of Experience and Grade Level(s) Taught

Years of Experience	Grade Level(s) Taught	Frequency
1-3 years	K, 1 st , 2 nd , 3 rd , 4 th , 5 th	6.67%
5-8 years	K, 1 st , 2 nd , 3 rd , 4 th , 5 th , 6 th	6.67%
> 8 years	K, 1 st , 2 nd , 3 rd , 4 th , 5 th , 6 th	86.67%

The following themes were developed from the survey items and follow-up interviews.

A lack of formal spelling programs: Across interviews and surveys, teachers repeatedly underscored the absence of a coherent, district-wide spelling curriculum. As Participant 18 observed, “In both districts I have taught in, there has not been a concrete spelling instructional method across grade levels.” Without a common framework, educators rely on ad-hoc resources—often technology-based—which they fear do not provide systematic skill building. Participant 22 captured this concern: “When it comes to reading skills, writing, and phonics, teachers are finding other resources that they can incorporate that are more relevant and engaging for students.”

Frustration with the status quo was palpable. “I find the fact that there is NO formal spelling program/instruction infuriating, especially living in the world of texting,” stated Participant 1. Teachers also highlighted gaps in training and materials: “We need instruction on how to effectively teach spelling patterns and we need resources to support the teaching of these patterns,” remarked Participant 22, while Participant 14 added, “Teachers are not well trained in our primary resource in ELA. Everyone is using different resources.” Several respondents called for scheduled instructional time—Participant 1 pleaded, “Bring back a formal spelling program and give ELA teachers time to teach.”

Effective spelling instruction methods: Despite curricular gaps, teachers identified practices that yield results, especially in early grades. Phonics emerged as foundational: Participant 11 asserted, “Phonics-based instruction works the best. It teaches the rules of spelling, and students can apply this to other words outside of their ‘spelling list.’” Multisensory techniques further strengthen retention; Participant 21 noted, “I utilize multi-sensory instruction which integrates the spelling utilizing learned patterns.” Practical tools ranged from sound circles and phoneme-grapheme mapping (Participant 27) to visual word walls and interactive games (Participant 2).

Explicit, developmentally aligned lessons were also crucial. “Explicit instruction is . . . individualized based on spelling development. Students need multiple exposures and practice with the word patterns in order to apply the spelling pattern in authentic situations,” explained Participant 25. Small-group and whole-group guided writing extended practice opportunities (Participant 4). Collectively, these strategies illustrate that structured, hands-on, pattern-focused instruction can compensate—at least partially—for the lack of a formal program.

Challenges in spelling instruction: Teachers cited two persistent hurdles: differentiating for wide ability ranges and helping students retain irregular spellings. “The greatest challenge is there are many exceptions to the rule that words are spelled the way they sound,” observed Participant 27. This complexity forces educators to juggle multiple word lists and supports (Participant 12). English’s rule-exception dichotomy further complicates mastery: “The English language has so many rules and exceptions that it’s difficult for students to . . . know when an exception is needed,” said Participant 25.

Bad habits compound the issue. Participant 4 described students who repeatedly revert to misspellings—“thay” for “they,” “coler” for “color”—even after targeted practice. Technology can both aid and hinder; spell-check dependence sometimes yields erroneous corrections (Participant 3). As Participant 2 summarized, “Remembering the spelling of words, especially irregular ones, can be challenging for many young learners.”

Impact on student engagement: Hands-on, multisensory activities markedly increase motivation. “Activities that get students up and moving help to increase engagement, concentration, and retention,” reported Participant 27. When tasks match individual developmental levels, frustration falls and interest rises; Participant 25 noted, “Students are more engaged . . . with words at their spelling development level. Otherwise, they are frustrated.” Games, manipulatives, and movement-based tasks turn practice into play: “Some of the more multisensory activities and hands-on instruction keep students engaged and focused rather than just writing and studying words,” explained Participant 20. Participant 2 concurred that such techniques “capture students’ interest and make learning more enjoyable.”

Assessment of spelling progress: Respondents use a spectrum of formative and summative tools. Weekly pattern-based tests coupled with dictation (Participant 12), lesson-ending concept mastery checks (Participant 21), and pre-/mid-/post-year inventories (Participant 25) offer periodic snapshots. Daily observation within phonics routines provides immediate feedback (Participant 19). Writing samples supply authentic evidence: “Analyzing students’ writing for spelling accuracy provides insight into their ability to apply spelling skills in context,” said Participant 2. Portfolios likewise reveal growth over time; Participant 25 emphasized that they “show progress and highlight areas needing improvement.”

Professional development needs: Teachers unanimously called for ongoing, targeted training. “Professional development that helps teachers understand the importance of the connection between phonics instruction and spelling . . . decoding and encoding instruction occurring at the same time,” urged Participant 19. Desired topics include advanced phonics, phonemic-awareness interventions (Participant 17), multisensory methods, and technology integration (Participant 2). Differentiation workshops were also requested: “Workshops on differentiated instruction can help teachers tailor their spelling lessons to meet the diverse needs of their students,” said Participant 28. Technology training is another priority: “Training in the latest educational technology tools can provide new ways to engage students and track their progress,” Participant 28 added.

Impact on literacy development: Teachers see spelling as a linchpin for reading and writing. Participant 2 emphasized that it “plays a crucial role . . . by reinforcing the relationship between letters and sounds, which enhances phonemic awareness and decoding skills.” With deeper pattern knowledge, “they will be more successful in their reading and writing,” explained Participant 12. Deficits ripple outward—“a deficit in spelling skills will affect the other areas,” warned Participant 24—whereas strong instruction “can lead to improvements in reading skills, including word reading and reading comprehension,” noted Participant 27.

Cultural and linguistic factors: Students who speak languages other than English face additional hurdles. “Students who speak a different language at home may face unique challenges, such as differences in phonetic patterns and orthographic rules between their home language and English,” observed Participant 2. Participant 5 agreed: “Those whose first language has a different structure than English often find spelling more challenging.” Dual-language learners juggle competing systems. “They may be learning two different languages,” Participant 10 pointed out. Recognizing and addressing these factors is essential, as Participant 19 summarized: “For some students, their cultural and/or linguistic backgrounds could present challenges for their learning and performance in spelling.”

Collectively, these themes illustrate the intertwined needs for a structured spelling curriculum, robust professional learning, and culturally responsive, multisensory instruction to ensure equitable literacy outcomes for all K–6 learners.

Discussion

This study revealed persistent challenges and promising strategies in K–6 spelling instruction through survey responses and analysis of existing research. Teachers consistently voiced the need for structured, research-based approaches that integrate phonics, multisensory techniques, and differentiated instruction. However, many struggle against inconsistent resources, insufficient professional development, and the demands of diverse student needs. A dominant finding was the widespread absence of formalized spelling programs. Teachers expressed frustration over the lack of cohesive instructional materials, which forces them to develop lessons independently. Participant 18 shared, “In both districts I have taught in, there has not been a concrete spelling instructional method across grade levels,” while Participant 22 noted that teachers often seek outside resources to fill these gaps. This inconsistency results in variable instructional quality and inequitable learning experiences for students.

Teachers identified several effective instructional strategies, beginning with phonics-based instruction. Participant 11 stated, “Phonics-based instruction works the best. It teaches the rules of spelling, and students can apply this to other words outside of their ‘spelling list.’” This approach aligns with research from Puliatte and Ehri (2018), who found that explicit instruction in linguistic units supports strong spelling outcomes. Multisensory strategies were also widely endorsed. Participant 21 explained, “I utilize multisensory instruction, which integrates the spelling utilizing learned patterns,” reinforcing research from Cassar and Treiman (1997) that shows these techniques enhance engagement and retention. Differentiated instruction was another recurring theme. Participant 25 emphasized the importance of tailoring lessons to individual spelling development, though Participant 12 acknowledged, “Students are ‘all over the place’ with their knowledge of spelling,” which complicates differentiation.

Technology emerged as both a tool and a challenge. While digital games and resources can boost engagement, many teachers cautioned that over-reliance on spellcheck has diminished students’ independent spelling abilities. Participant 3 remarked, “Since we started having students type instead of write, they depend on spellcheck, and sometimes it does not give them the correct word.” This concern is echoed by Pan et al. (2021), who found that technology often fails to cultivate deep orthographic

knowledge. Teachers also highlighted creative methods to foster student engagement. Participant 2 noted the benefit of “creating a visual word wall with high-frequency and thematic words,” while Participant 28 emphasized that interactive instruction can improve retention and enjoyment. However, assessment practices varied significantly across classrooms. Participant 19 relied on daily observations during University of Florida Literacy Institute (UFLI) routines, and while Participant 25 employed multiple assessments throughout the year, these methods require substantial effort and often lack consistency across settings.

Professional development was repeatedly cited as essential for equipping teachers with effective instructional tools. Teachers sought training in phonics, multisensory instruction, and strategies for differentiation. Participant 19 stressed the importance of linking phonics to spelling instruction, stating, “Professional development that helps teachers understand the importance of the connection between phonics instruction and spelling . . . is crucial.” Participant 22 echoed this need, emphasizing the necessity of both instruction and resources to support teaching spelling patterns.

Overall, the findings reinforce the view that spelling is fundamental to literacy development. As Participant 12 explained, “Spelling impacts how children read. If they learn more patterns and understand how English works, they will be more successful in their reading and writing.” This statement aligns with Graham and Santangelo (2014), who found that systematic instruction enhances decoding and writing skills. Multiple participants endorsed phonics-based instruction, a method supported by Puliatte and Ehri (2018) and Moats (2005) for its ability to build orthographic knowledge. Devonshire and Fluck (2010) emphasized that phonics instruction paired with morphological awareness creates a more robust understanding of English spelling structures. Multisensory approaches were also highly effective. Participant 19 described students being more engaged when hands-on methods aligned with their spelling level, reducing frustration and increasing retention. These findings are supported by Schrodtt et al. (2020a), Good et al. (2018), and Graham and Santangelo (2014), who found that tactile and auditory components can be especially helpful for students with learning difficulties.

Despite these promising strategies, teachers reported challenges in addressing varied student needs. Participant 29 emphasized the importance of differentiated instruction and practice, echoing Vines et al. (2020), who argue that instruction must be tailored to individual strengths and weaknesses. Systemic barriers—such as inconsistent instructional materials—make it difficult to implement cohesive approaches. Participant 16 noted, “Systematic phonics instruction is necessary, but the inconsistency in resources across grade levels makes it difficult to maintain continuity.” Technology, when used appropriately, can enhance engagement, but reliance on spellcheck undermines the development of spelling proficiency. Participant 26 shared, “The most effective spelling instruction methods are those that balance traditional approaches with technology.” This sentiment reflects Pan et al. (2021) and Devonshire and Fluck (2010), who caution against allowing digital tools to substitute for explicit teaching.

Professional development remains a crucial area for improvement. Participant 24 stressed the need for training in phonics and multisensory methods, while Carreker et al. (2010) and Steeg and Lambson (2015) found that professional development coupled with mentoring significantly improves teacher

effectiveness. Vines et al. (2020) argued that training must address practical classroom barriers. Ultimately, this study affirms that effective spelling instruction—especially when grounded in evidence-based practices—is essential but under-supported. Teachers need consistent programs, better resources, and ongoing training to help all students develop as confident readers and writers. As Moats (2005) asserted, literacy success depends on integrating spelling, reading, and writing into a unified instructional approach.

The study's findings aligned with the theoretical framework by affirming the value of structured, research-based methods—particularly phonics and multisensory strategies. Participant 11 supported this, noting, “Phonics-based instruction works the best,” while Participant 21’s use of multisensory strategies reinforced the role of diverse learning modalities. These practices align with Graham and Santangelo (2014) and Moats (2005), who advocate for explicit instruction of phonemic and orthographic patterns. However, some gaps in the framework became evident. Participant 22 noted that teachers seek external resources due to limitations within their schools, indicating the need to incorporate systems-level theories such as Fullan’s Change Theory (2007), which highlights the importance of aligning resources and professional learning with instructional goals. Another gap concerns technology. As noted above, Participant 26 highlighted the need to “balance traditional approaches with technology.” Mishra and Koehler’s (2006) TPACK framework, which stresses integrating technological, pedagogical, and content knowledge, could expand the framework to better reflect the nuanced role of technology. Professional development also warrants greater theoretical attention. Participant 28 emphasized the importance of “workshops on differentiated instruction,” and the Learning Forward Standards for Professional Learning (2022) provide a contemporary framework for designing evidence-based and classroom-relevant training.

There are several limitations to this study. Its single-district focus (Western Pennsylvania) restricts generalizability, as spelling instruction varies across geographic and institutional contexts. Participant 14 commented, “Teachers are not well-trained in our primary resource in ELA. Everyone is using different resources,” illustrating the issue’s localized nature. While this reflects variability within the district, it may not represent broader systemic trends. As Vines et al. (2020) observed, spreading best practices across districts can take decades. Additionally, while the sample included both veteran (47%) and novice (53%) teachers, the near-even split may limit conclusions specific to either experience group. The study yielded a 19% response rate, which introduces the potential for nonresponse bias. It is plausible that those who chose to participate were more engaged with spelling instruction than those who did not respond, potentially skewing the findings. Participant 12 noted that teacher preparation strategies are often misaligned with classroom expectations, suggesting that newer teachers might experience spelling instruction differently. The reliance on self-reported data introduces subjectivity. While Participant 16 highlighted the challenge of resource inconsistency, such responses may reflect personal frustrations and not always align with objective instructional effectiveness. Moats (2005) warned that even well-meaning educators may stray from evidence-based methods due to inadequate training.

Technology’s impact on spelling instruction was noted but not systematically evaluated. Participant 19 pointed out that daily observations are used to monitor progress, but technology may distract from foundational practices. Pan et al. (2021) found that while digital tools may correct errors, they do not

support the deep learning required for orthographic development. Additionally, the study did not examine how linguistic and cultural diversity affects instruction. Participant 10 observed, “If students are coming from a home that has a second language, that definitely will impact their spelling.” Devonshire and Fluck (2010) emphasized that tailored approaches are necessary for bilingual learners, a point not fully explored here. The study also did not incorporate family or community perspectives, which may further illuminate the influence of home environments on spelling development.

Time constraints and the lack of a dedicated spelling curriculum posed significant challenges. Participant 1 expressed, “Bring back a formal spelling program and give ELA teachers time to teach.” These pressures often result in fragmented or rushed instruction. As Puranik et al. (2014) noted, time constraints frequently force spelling to take a back seat to other literacy goals. The absence of standardized assessments was also problematic. Participant 19 highlighted the use of informal assessments, while Participant 25 described using spelling inventories, yet neither approach offers consistency across classrooms. Calhoon et al. (2010) underscored the importance of standardized tools to evaluate instruction and support data-driven decision-making.

Professional development was another limitation. Teachers called for training that connects research with classroom realities, but many felt current offerings fell short. Participant 28 emphasized the value of workshops on differentiated instruction, yet reported that opportunities often lacked relevance or depth. This disconnect weakens teachers’ ability to implement best practices consistently and confidently.

Future research should address these gaps by expanding studies to include multiple districts and broader geographic regions. Examining areas with established science-of-reading frameworks may yield valuable comparative insights. Research should also investigate the quality of district-provided ELA resources, particularly how well they support spelling instruction, differentiation, and English learners. Participant 14’s observation that “everyone is using different resources” underscores the importance of evaluating curricular alignment with best practices. Standardized assessment development is also needed. As Participant 25 mentioned, using a combination of inventories and weekly checks can be effective at the classroom level but lacks scalability. Future research could support the creation of reliable tools to track spelling growth system-wide.

Professional development should remain a central research focus. Participant 17 noted, “More training in reading programs, phonics interventions, and phonemic awareness are great professional development opportunities,” reinforcing the need for evidence-based, accessible training. Studies could explore which professional development models best support teacher learning and transfer into classroom practice. Districts already using successful models may offer lessons for scalability and sustainability. Longitudinal research can assess how professional development influences both teacher behavior and student outcomes over time. Additionally, future work should evaluate how technology can enhance spelling instruction without undermining foundational skills. Participant 28 recognized the motivational benefits of digital tools but stressed the importance of hands-on methods for student focus and retention. Finally, studies should examine the long-term effectiveness of tech-based tools in supporting deeper orthographic understanding.

This study underscores the critical role of spelling instruction in literacy development. While teachers identified effective practices such as phonics, multisensory techniques, and differentiation, systemic barriers—including inconsistent resources, limited training, and over-reliance on technology—continue to hinder progress. These findings reinforce the contemporary relevance of the science of reading, which emphasizes systematic, explicit instruction grounded in phonological awareness as a critical foundation for spelling proficiency. Future research must address these challenges through broader inquiry, improved resource analysis, assessment development, and targeted professional learning. By doing so, educators and policymakers can ensure all students receive high-quality spelling instruction, setting the foundation for strong reading and writing skills that lead to lifelong academic success.

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Appendix

Research Questions Provided via Microsoft Forms

- 1) How many years have you been teaching?
- 2) Which grade(s) have you taught?
- 3) What spelling instructional methods have you found effective in your classroom?
- 4) Which instructional strategies do you find the most challenging or rewarding when teaching spelling?
- 5) What are some common challenges students face when learning to spell?
- 6) How do different spelling instruction strategies impact student engagement?
- 7) How do you assess student progress in spelling?
- 8) What resources do you utilize for spelling instruction, and how do you evaluate the effectiveness?
- 9) What kind of professional development would benefit teachers with spelling instruction?
- 10) How do you believe spelling instruction impacts overall literacy development, including reading and writing skills?
- 11) How do cultural and linguistic backgrounds of students affect their learning and performance in spelling?
- 12) What challenges do teachers encounter when trying to implement the district-provided ELA curriculum with fidelity?



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