Not a One-Size-Fits-All Approach: Examining the Impact of Systematic K-6 Spelling

Instruction

by

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Abstract

This study investigated the effectiveness of systematic K-6 spelling instruction, exploring the historical context, instructional practices, and professional development necessary to support both novice and experienced teachers. Using qualitative methods, data were collected through surveys and interviews with 30 elementary teachers in a western Pennsylvania school district. Highlighting a reliance on informal strategies and digital tools, the findings reveal significant gaps in formalized spelling programs which often hinder the development of foundational spelling skills. Effective instructional practices, such as phonics-based and multisensory approaches, were identified as crucial for improving student outcomes. Challenges include differentiating instruction to meet diverse student needs and addressing systemic barriers, such as inconsistent resources and limited professional development opportunities. This study underscores the need for tailored professional development focused on explicit, systematic instruction to enhance teacher capacity and student learning. The implications of this research extend to designing robust training programs and standardized assessments to support effective spelling instruction. Future research could explore longitudinal impacts of these interventions across multiple districts and states.

Keywords: phonics-based instruction, multisensory learning, teacher professional development, differentiated instruction, spelling assessment, educational strategies, English orthography, literacy development, instructional practices, student engagement, science of reading

Dedication

This dissertation is dedicated to the incredible individuals and influences who supported me throughout this journey.

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Chapter One

Introduction

Understanding the impact of effective spelling instruction and teacher training significantly enhances the chances of proficiency for spellers. While classroom teachers have many grade-level content standards to cover, spelling instruction no longer receives the same emphasis it once did. As a result, effective instructional practices for spelling are neglected because the focus has shifted to memorization through word lists.

While the use of spellcheck continues to increase, it is not foolproof and does not resolve the issues faced by struggling spellers. The most significant issue is the lack of training on the best instructional practices for spelling. Teachers need explicit training on various strategies to support all learners. Additionally, teachers need to understand the history of the English language before they can effectively teach spelling, as this historical context provides deeper insights into spelling conventions.

As classroom teachers have shared, students arrive with varying levels of spelling proficiency. The pandemic caused significant gaps, and spellcheck is not a tool that should not be exclusively relied upon. Students and teachers deserve the best training that includes explicit, systematic instruction. Based on existing research, it is imperative to investigate the history of the English language in detail to identify the best instructional practices, as well as to determine how to train and support both novice and experienced teachers. Allowing teachers to meet students at their respective spelling levels, this research enables schools to support teachers and provide students with the best possible instruction.

Researchers might be interested in further exploring spelling instruction due to the gaps created by the pandemic and the ongoing reexamination of the best instructional practices. Additionally, state assessments do not often measure spelling proficiency, and many classroom teachers are not comfortable with spelling instruction. Further research could provide a roadmap for meaningful classroom instruction, particularly in spelling.

Statement of the Problem

"Spelling remains important in the 21st century and should be explicitly taught" (Pan et al., 2021, p. 1529). They also stated that spelling abilities will not develop without explicit instruction. Like many educational concepts, spelling instruction has fluctuated in prominence over the past century. According to Moats (2005), while society expects all educated individuals to possess proficient spelling skills, many adults self-identify as poor spellers and frequently make spelling errors.

Calhoon et al. (2010) stated that while decades of research have focused on reading, there has been comparatively less attention given to spelling. "Nevertheless, factors such as home literacy, parental education, demographic characteristics, and conventional literacy skills explain 66% of the variation in spelling scores" (Calhoon et al., 2010, p. 146). Two prominent research studies on spelling instruction include the Gentry model from 1982 and the Bear and Templeton model from 1998 (Calhoon et al., 2010). Both models discuss the various stages of spelling development but provide limited guidance on optimal instructional practices.

Attributed to its wide range of phonemes and numerous rules governing letter combinations, the English language is often considered one of the most challenging orthographic systems for spelling (Kessler & Treiman, 2003). This complexity arises

from the multitude of linguistic and cultural influences that shape the English language (Kessler & Treiman, 2003).

Spelling instruction goes beyond mere word lists and assessments; therefore, it necessitates teachers who possess expertise in phonemic linguistic units, dedicate time to weekly spelling instruction, and provide direct instruction on spelling strategies.

Providing ample opportunities for practice, reflection, and growth, teachers must differentiate and tailor instruction to suit their students' needs. Many teachers are uncertain about the best instructional practices for spelling, highlighting the need for professional development to support both novice and veteran educators.

Study's Purpose

The purpose of this research was to explore the history of the English language and spelling instruction, identify the best research-based instructional practices for spelling, and determine how to support both novice and experienced teachers. Spelling instruction is complex, and teachers need to be supported in developing beneficial practices to support all learners. This study addressed one overarching question: *What constitutes effective spelling instruction?*

"Puliatte and Ehri (2018) found that students made greater spelling gains when teachers had knowledge of phonemic linguistic units, dedicated time to weekly spelling instruction, and employed various spelling strategies" (Puliatte & Ehri, 2018, p. 243). Effective spelling instruction requires teachers to address the diverse needs of all students, as it is not a one-size-fits-all approach.

Research Questions

With specific questions aimed at understanding effective spelling instruction, the survey given to K-6 teachers focused on a qualitative approach. The survey was broken down into several categories: teacher perspectives, student experiences, instructional methods, classroom dynamics, assessment, professional development, literacy development, and cultural and linguistic factors. The following research questions were examined:

- 1. How many years have you been teaching?
- 2. Which grade(s) have you taught?
- 3. What spelling instruction methods do teachers find effective in their classrooms?
- 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 teachers assess student progress in spelling?
- 8. What resources do teachers use 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 teachers 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?

Methodology

Society expects any educated individual to possess proficient spelling skills, yet many adults self-identify as inadequate spellers and frequently commit spelling errors (Moats, 2005). Unfortunately, data on the effectiveness of direct spelling instruction is limited because few state assessments measure spelling (Moats, 2005). Direct spelling instruction often revolves around conventional assign-and-test procedures (Mann et al., 2010), which do not follow a differentiated instructional approach, although spelling is not a one-size-fits-all skill (Puliatte & Ehri, 2018).

This study analyzed the perspectives of classroom teachers from kindergarten through sixth grade to determine how they instruct spelling, and it also identified the types of professional development needed for effective spelling instruction strategies. This research enables school districts to clearly state and model effective spelling instructional strategies, as well as how to implement them in classrooms. Given the limited studies on spelling, this investigation addresses an often-overlooked topic in spelling education (Calhoon et al., 2010).

Role of the Researcher

The researcher's role was to adopt a non-biased approach in analyzing the survey findings and conducting interviews for a deeper analysis. Maintaining impartiality and avoiding any influence on the findings through leading questions or comments during the

interview process were crucial for the researcher. In the survey analysis phase, the researcher focused on identifying common patterns and any unexpected findings that emerged. Remaining flexible in the research direction was important, as well as trying not to steer responses toward a predetermined outcome. When presenting the findings, the researcher maintained impartiality and refrained from passing judgment on the teachers who participated in the survey. This study was an opportunity to explore a topic with limited existing research, and the outcomes of this study could profoundly influence spelling instruction in elementary schools.

Research Assumptions

The researcher operated under the assumption that providing direct and explicit spelling instruction using a multi-sensory approach would have a positive effect on students, leading to measurable growth in spelling proficiency. Additionally, the assumption existed that many teachers rely on traditional methods (e.g., memorization and testing) as their primary approach to spelling instruction. Given that state assessments frequently do not evaluate spelling skills, it was further assumed that teachers may lack clear methods for accurately assessing the effectiveness of their spelling instruction.

Definition of Terms

This section includes detailed definitions of specific terms used in the study. *Phonemic linguistic units:* Phonemic linguistic units are the smallest perceptible units of sound in a language that differentiate meaning between words, known as phonemes (Encyclopedia Britannica, 2024).

Novice teachers: A novice teacher is typically defined as someone who is in the early stages of their teaching career, characterized by limited experience and expertise in the profession (Merriam-Webster, n.d.).

Research-based instructional practices: Research-based instructional practices refer to teaching methods and strategies grounded in empirical research and have demonstrated effectiveness in improving student learning outcomes (Education Trust, 2021).

Cultural and linguistic factors: Cultural and linguistic factors encompass the influences of cultural backgrounds and language diversity on individuals' behaviors, perceptions, and interactions within educational or social contexts (U.S. Department of Education, 2015).

Explicit instruction: Explicit instruction is a systematic and direct approach to teaching where the teacher clearly models skills and strategies, provides guided practice, and offers immediate feedback to students (Archer & Hughes, 2011).

Summary

In recent years, spelling instruction has seen a decline in emphasis. Given the inherent complexity of the English language, there is a necessity for explicit training for teachers regarding diverse strategies to support all learners. English utilizes a broad spectrum of phonemes and numerous rules that dictate letter combinations (Kessler & Treiman, 2003). Moreover, the limited number of comprehensive research studies on spelling instruction has contributed to uncertainty among teachers regarding optimal instructional practices, underscoring the critical need for professional development that caters to both

novice and experienced educators. Chapter Two provides a thorough review of the literature on this topic.

Chapter Two

Review of Literature

Introduction

Spelling instruction is not a one-size-fits-all approach and requires various systematic and explicit approaches. Effective spelling instruction requires teachers who have a deep knowledge of all the components of spelling instruction (Moats, 2020). This literature review discusses the history of spelling instruction, the best instructional approaches, how to train novice and veteran teachers, and the importance of spelling instruction. This chapter concludes with a brief overview of the findings that informed the design of this study.

Theoretical Framework for Spelling Instruction

Historians concur that spelling instruction is pivotal in English Language Arts (ELA) instruction (Pan et al., 2021). With this viewpoint, historians would likely express skepticism and dismay at the current lack of emphasis on consistent spelling instruction (Pan et al., 2021). According to Moats (2005), there is a societal expectation that any educated individual should possess proficient spelling skills; however, many adults self-identify as inadequate spellers and frequently commit spelling errors (Moats, 2005). Since only a small number of state assessments include spelling as a measured component, data on the effectiveness of direct spelling instruction is scarce (Moats, 2005).

To examine spelling instruction and its effectiveness, it is crucial to initially explore the background and evolution of the English language. The modern English language is broken down into four categories (Moats, 2005):

- Anglo-Saxon
- Norman French
- Latin
- Greek (pp. 15-16)

Given these four components, the English language is classified as the most irregular language in the world in terms of letter-to-sound mappings (Devonshire & Fluck, 2010). Letter-to-sound mapping is called orthography (Kessler & Treiman, 2003).

Graham and Santangelo (2014) examined the effects of formal spelling instruction versus no formal instruction. They concluded that students who received direct spelling instruction demonstrated greater gains than peers who did not (Graham & Santangelo, 2014). As early as possible, spelling instruction should be incorporated into reading instruction (Kim, 2022).

Today, the prevailing method of spelling instruction typically revolves around conventional assign-and-test procedures (Mann et al., 2010). According to Mann et al., this approach often necessitates minimal instruction and compels students to memorize a list of words. "Spelling instruction requires differentiated instructional strategies because it is not a one-size-fits-all approach" (Puliatte & Ehri, 2018, p. 243). Instead of memorized lists, Mann et al. recommended students utilize the cover, copy, and compare method to allow students multiple opportunities to practice new words (p. 90). Another instructional strategy is the taped problems intervention. The taped problems intervention was originally a math-fact fluency intervention and has been modified to support spelling (Zannikos et al., 2018) by providing immediate feedback to students.

Effective spelling instruction requires well-trained teachers. Teachers who have undergone professional development and mentoring have students whose spelling proficiency outperforms those of teachers who do not receive such support (Carreker et al., 2010). Effective spelling instruction and training also require supportive principals (Roberson & Roberson, 2009). Principals should foster encouragement, maintain open dialogue, and support teachers in their reflection and growth (Atkinson & O-Connor, 2007). In addition, principals should provide professional development on the science of reading, categorized into three tiers of support: Tier I - whole group, Tier II - small group, and Tier III - individualized (Bose, 2023).

Effective spelling instruction necessitates a systematic instructional approach to support all learners (Cassar et al., 2005). All learners should receive explicit instruction in orthographic patterns, as well as phonological and orthographic knowledge (Cassar & Treiman, 1997). Calhoon et al. (2010) stated how decades of research have taken place on reading, but spelling has been more limited.

The History of Spelling Instruction

In contrast to the irregularity of spelling instruction today, spelling instruction was a critical component of ELA instruction throughout much of the 20th century (Pan et al., 2021). "With the rise of the printing press and printed books, spelling instruction increased in importance at the start of the 16th century" (Pan et al., 2021, p. 1525). Spelling skills were critical to showcase one's talents (Pan et al., 2021 "In the last decade, skepticism about the value of spelling skills has grown, often justified by claims that incorrect spelling is no longer penalized on many standardized tests, technologies such as spellcheck and autocorrect reduce the need for good spelling, and the proliferation of

casual communication obviates the concept of correct spelling" (Pan et al., 2021, p. 1525). "In addition, many children have trouble with spelling, but the number is unknown due to state testing, as state assessments often include it under broad topics such as written composition and language proficiency" (Moats, 2005, p.12). Fresch (2007) stated that teachers do not often see the purpose of spelling instruction because today's instruction seems ineffective regarding student growth. Teachers are also concerned about how spelling knowledge will carry over to writing, and if the time spent on spelling instruction is truly meaningful (Fresch, 2007).

"Despite the limited studies on spelling, home literacy, parental education, demographic factors, and conventional literacy skills account for 66% of the variance in spelling scores" (Calhoon et al., 2010, p. 146). The most intensive research, known as the Gentry model, occurred in 1982 (Gentry, 2000). The Gentry model breaks down spelling instruction into the following five models:

- precommunicative
- semiphonetic
- phonetic
- transitional
- conventional (Gentry, 2000)

The pre-communicative stage is when a child begins to put letters together but does not match specific letters to sounds (Gentry, 2000). The semiphonetic stage is when a child can recognize how letters may correspond to sounds but cannot segment all sounds in a word or match letters to all the sounds (Gentry, 2000). The phonetic stage is when a child uses a sound-based strategy and can segment words (Gentry, 2000). The

transitional stage is when a child is no longer inventing spelling and can use letter patterns to spell (Gentry, 2000). The conventional stage is when a child can spell correctly and extend their knowledge about words and patterns (Gentry, 2000).

There is also the Bear and Templeton Model from 1998 that includes the following six stages:

- prephonemic
- semiphonemic
- letter name
- within-word challenge
- syllable juncture
- derivational constancy (Gentry, 2000, pp. 324)

Stages one to three in the Bear and Templeton Model are the same as the Gentry Model (Gentry, 2000). The differences between the two models involve separating different stages in the Bear and Templeton Model (Gentry, 2000). Gentry theorized that the Bear and Templeton Model would be more confusing because stages four to six are considered qualitatively the same, and it would be difficult to accurately assess and place students in stages that are so similar (Gentry, 2000).

"Another issue with spelling instruction is the misconception that English spelling is 'chaotic and unprincipled'" (Kessler & Treiman, 2003, p. 268). The English language utilizes several homophones, which are words that have the same pronunciation but are spelled differently and have different meanings (Kessler & Treiman, 2003). Mastering it requires years of study, and it is crucial for an English language writer to not solely rely on sound-letter correspondence (Kessler & Treiman, 2003).

Kessler and Treiman (2003) highlight that "while the English language is often regarded as one of the most difficult to learn to write, there is a consensus that the best writing system for a language is Finnish because it follows a one-to-one mapping of sounds to letters" (p. 268). They further explain that "someone who knows the Finnish sound-letter correspondence could do a credible job at spelling out dictated words or pronouncing written text" (p. 268).

"English orthography is more difficult to master than phonologically-transparent orthographies such as Italian, Spanish, and Finnish. Italian children are considered mature readers by the age of eight" (Devonshire & Fluck, 2010, p. 365). Because it takes less time to become literate, there are less Italian children who are diagnosed with dyslexia than English-speaking children (Devonshire & Fluck, 2010 "Devonshire and Fluck were confused by the focus on phonics rather than morphemes and etymology, as morphemes are the smallest unit of meaning in a language but significantly impact the meaning of words (Devonshire & Fluck, 2010, p. 361). Etymology is the study of the origins of the form and meaning of words (Devonshire & Fluck, 2010, p. 361)." Instruction that combines morphemes, phonemes, and etymology best serves to aid in the growth of English-speaking students as spellers, writers, and readers (Devonshire & Fluck, 2010).

Due to the variety of phonemes and various rules for letters, the English language is known as one of the worst orthographic languages for spelling (Kessler & Treiman, 2003). In their 2003 article, Kessler and Treiman discuss several factors contributing to the complexity of English spelling. They note that "the English spelling system has been shaped by at least three other major principles: conservatism, the unadapted spelling of loan words, and the representation of nonphonemic information" (p. 269). They explain

that conservatism means "once a spelling is widely accepted, it tends to stick" (p. 269). This conservatism helps maintain consistency across different dialects and regions. Additionally, the unadapted spelling of loanwords means that "English borrows words freely from other languages, and it almost always uses the spelling of the original language when it does so" (p. 270). This practice preserves the original form of borrowed words, adding to the irregularity of English spelling. The unadapted spelling of loanwords is the English language borrowing words from other languages and utilizing the spelling of the original language (Kessler & Treiman, 2003). Lastly, the English spelling often breaks down words into meanings, and understanding the meaning is impactful to understanding the word (Kessler & Treiman, 2003).

English Language History

The development of the English language has been significantly influenced by various linguistic sources, categorized into four primary origins: Anglo-Saxon, Norman French, Latin, and Greek (Moats, 2005). Anglo-Saxon, also known as Old English, began approximately 1,600 years ago with the decline of the Roman Empire (Moats, 2005, p. 14). According to Moats (2005), "the story of the English language begins roughly 1,600 years ago with the decline of the Roman Empire," and Old English developed in Britain through "the invasion of the Germanic tribes known as the Jutes, Angles, and Saxons" (p. 14). These tribes "pushed the Celtic inhabitants to the west and absorbed the Celtic and Latin words, roots, and pronunciations combined with the invaders' Low West German language," which led to the formation of the Anglo-Saxon or Old English language (Moats, 2005, p. 14). Most of the "regular sound-symbol correspondences and irregular spellings come from the Anglo-Saxon layer of the language" (Moats, 2005, p. 14). The

Norman French component arose from the famous 1066 A.D. invasion of Britain by William the Conqueror of Normandy. Following the invasion, British natives "were required to speak the Norman French language for almost 400 years," which eventually resulted in "the Norman French and Old English languages gradually merging by the late 15th century into what is now known as Middle English" (Moats, 2005, p. 14).

Today, "thousands of terms for legal concepts, social and moral ideals, and artistic values come from Norman French" (Moats, 2005, p. 14). Although the Normans spoke Norman French, "their cultural classes wrote in both their native tongue and Latin" (Moats, 2005, p. 14). Latin-based vocabulary "became the language of scholarship, commerce, and official discourse" (Moats, 2005, p. 14). The integration of the Greek language began during the Renaissance, which Moats (2005) described as "a time of renewed interest in classical Roman and Greek culture and language" (p. 14). At the same time, there was significant growth in scientific disciplines and "a need to name many new discoveries" (Moats, 2005, p. 14). When naming these new discoveries, "scholars looked to the Greek language," while "Latin was more commonly used by scholars who trained in the classics" (Moats, 2005, p. 14).

While spelling instruction is important, it was also stated that grammar, punctuation, text structure, vocabulary usage, and handwriting should receive instruction, as it is more challenging to make spelling gains without those skills (Daffern et al., 2017). As a result, while providing direct spelling instruction, it is a great opportunity to incorporate these additional language skills, even though they could be taught in isolation (Daffern et al., 2017).

The first few years of formal schooling is a known predictor of success with writing (Daffern et al., 2017). This formal schooling should include oral vocabulary, prereading skills, handwriting, and name writing (Daffern et al., 2017). Writing one's name significantly connects to the success of five- and six-year-olds with writing success (Daffern et al., 2017).

As with most concepts in education, spelling instruction has arrived, vanished, and returned over the last century. Graham and Santangelo (2014) noted that some scholars have argued that "spelling should not be directly or formally taught as such instruction is not effective or efficient" and that it will "develop naturally through extensive reading and writing experiences" (p. 1704). However, their investigation into the impact of formal spelling instruction versus no instruction concluded that students who received direct spelling instruction demonstrated "stronger gains when compared to their peers who did not receive such instruction" (Graham & Santangelo, 2014, p. 1704). Furthermore, they found that "the greater the enhancement in spelling instruction, the more pronounced the improvements became" (Graham & Santangelo, 2014, p. 1704).

Effective Spelling Instruction

Pan et al. (2021) concluded that "spelling still matters and should be taught explicitly" in the 21st century (p. 1523). They further emphasized that "spelling abilities will not develop without some form of explicit instruction," highlighting the necessity of intentional and structured teaching methods (Pan et al., 2021, p. 1523). Similarly, Puliatte and Ehri (2018) investigated the impact of teacher knowledge, spelling instructional practices, and student spelling achievement. Their findings revealed that "more significant spelling gains occurred for students with teachers who had knowledge of

phonemic linguistic units, dedicated time to providing weekly spelling instruction, explicitly taught spelling strategies, and had a number of weak spellers in the classroom" (Puliatte & Ehri, 2018, p. 241). Phonemic linguistic units mean that teachers can break down words into their spelling patterns and provide direct weekly instruction with a particular pattern (Puliatte & Ehri, 2018). Within that weekly instruction, a teacher utilizes a variety of spelling strategies to support all types of learners (Puliatte & Ehri, 2018). Lastly, the number of weak spellers serves as a double-edged sword. A significant number of weak spellers allows for significant spelling growth; however, it can impact the ability of other students to progress more quickly and show growth (Puliatte & Ehri, 2018). A classroom teacher is responsible for best servicing all students, and spelling instruction is unfortunately not a one-size-fits-all approach (Puliatte & Ehri, 2018).

Kim (2022) stated that word reading and spelling skills develop together. Spelling instruction should be incorporated into reading instruction as early as possible, and teachers should pay careful attention to students' spelling data to inform reading instruction (Kim, 2022). For example, a spelling assessment may be able to give valuable data on letter reversals or consistently replacing a vowel that a reading test may not (Kim, 2022). Studying the spelling of words allows for the learning of word structures and how letters and combinations of letters impact spelling (Kim, 2022).

Treiman and Bourassa (2000) stated that a long period of development occurs before the first independent readable spellings. Young children believe that the written forms of words should reflect their meanings (Treiman & Bourassa, 2000). For example, large objects like bear should be spelled with more letters, and small objects like mosquitoes should have fewer letters (Treiman & Bourassa, 2000). When students can

segment words into their individual phonemes, the development of spelling significantly grows (Treiman & Bourassa, 2000).

Mann et al. (2010) stated that most students today are taught to spell using traditional assign-and-test procedures. There is often little instruction because it forces students to memorize a word list and does not prepare students to become competent spellers, readers, and writers (Mann et. al., 2010). In addition, this form of instruction is not often individualized and does not provide sufficient time and practice (Mann et al., 2010).

Mann et al. (2010) recommended utilizing the "cover, copy, and compare" (CCC) method instead of memorized lists, describing it as an effective self-managed strategy for spelling practice (p. 85). The cover, copy, and compare method involves four key steps:

- look at a correctly spelled word
- cover the word
- write the word
- uncover the word and compare it to the original correctly spelled word
 (Zannikos et at., 2018, p. 304)

If correct, provide reinforcement, and if incorrect, copy the word multiple times (Zannikos et al., 2018). The cover, copy, and compare method allows students to practice new words multiple times without having to memorize a list.

While the cover, copy, and compare method is becoming more widely used as a spelling intervention, there is also the taped problems intervention. The taped problems intervention was originally created as a math-fact fluency intervention, but over time, it has been modified for spelling and was renamed the taped spelling intervention

(Zannikos et al., 2018). The taped spelling intervention involves students listening to audio recordings of the spelling words, followed by a timed delay that allows students time to write down the words, and it finishes with the audio stating the correct spelling (Zannikos et al., 2018). "The cover, copy, and compare method and taped spelling intervention both show growth; however, 'the cover, copy, and compare method is both easier to implement and leads to more rapid learning gains" (Zannikos et al., 2018, p. 320).

"While spelling interventions are impactful, a strong emphasis on Tier I direct spelling instruction is crucial for all students, but especially those with language impairments and learning disabilities" (Good et al., 2018, p. 438). Students should be given direct spelling instruction that encourages phonemic awareness, reading, and spelling skills. Students with language impairments should receive direct spelling instruction at least twice weekly that focuses on letter-sound correspondence and orthographic patterns (Good et al., 2018). Letter-sound correspondence focuses on students labeling the letter, its sound, and then identifying a word that begins with that sound (Good et al., 2018). Over time, students are introduced to phonemic segmentation which is the breaking down of every letter within a word to their sound (Good et al., 2018). Orthographic patterns allow students to investigate each phoneme within a word and practice the process of blending the sounds together (Good et al., 2018). Students with learning disabilities need ample opportunities to practice new spelling patterns, corrective feedback, and additional practice (Sayeski, 2011).

Spelling instruction should not be the sole responsibility of the classroom teacher.

Prospective teachers do not always realize all the collaborative opportunities within a

school (Wilson et al., 2015). Classroom teachers should utilize speech-language therapists to assist with language and literacy instruction (Wilson et al., 2015). Speech-language therapists can assist in developing children's orthographic knowledge (Wilson et al., 2015). They can assist through observations and feedback, direct instruction, coteaching, or advising (Wilson et al., 2015). While a teacher introduces a new phonics spelling pattern, a speech-language therapist can support students with forming letter sounds with their tongue placement and overall movement of their mouth (Wilson et al., 2015). A classroom teacher may need support in metalanguage, and a speech-language therapist is an expert in that field. Metalanguage is a language system characterized by explicitly describing and analyzing how a language works (Daffern, 2017). When a student can comprehend metalanguage, their overall writing and spelling improves. Without effective instruction, students will struggle to comprehend and retain language skills (Daffern, 2017).

Miller et al. (2017) examined the connection between spelling instruction and growth in reading and writing. Miller et al. determined that direct spelling instruction led to a higher rate of growth in reading and writing. Additionally, spelling is a more complex skill than reading because spelling has an increased number of correct responses for each sound (Miller et al., 2017).

Kemper et al. (2012) elaborated more on the impact of implicit and explicit instruction of spelling rules. They began by stating that learning occurs both implicitly and explicitly. Implicit learning occurs as learning without the intention or plan to instruct a particular concept (Kemper et al., 2012). While a teacher is explicitly teaching a spelling pattern through a phonics lesson, a teacher is also implicitly teaching reading,

grammar, and writing through improving students' overall understanding of the English language. Explicit instruction should take place over time and build upon itself, while also spiraling back to make sure students are retaining previously taught skills (Kemper et al., 2012).

Given the importance of such structured approaches, a critical question arises: *How much time is the right fit for spelling instruction?* There is not a simple answer to that question. Puranik et al. (2014) analyzed the amount of writing instruction for 21 kindergarten teachers from nine different schools. Their survey included writing instruction and spelling instruction as one block. Puranik et al. concluded that even with a set 90-minute block time, not one class spent the same amount of time on direct spelling instruction. There were two classrooms in the same school that even had varying amounts. Teachers who participated in this research study were also observed focusing on handwriting fluency (Puranik et al., 2014). The study concluded that instructional time often varied based off of the students' needs, teachers' experiences and thoughts on spelling, and curriculum requirements (Puranik et al., 2014). While a set time block is beneficial, it comes down to the expertise of the teachers, students practicing skills at school and home, and spiraling of skills over time (Puranik et al., 2014).

Through a study with 17 elementary teachers in seven school districts in the United States, Tortorelli and Bruner (2022) examined how to differentiate spelling instruction based on the students' strengths and needs (p. 389). "Their study was broken down into three categories:

grouping and organizational structures used by teachers for spelling instruction;

- the extent to which elementary students use analogy to spell unknown words that share spelling patterns with known words; and
- the affordances and challenges of a partnership approach to educational research" (Tortorelli & Bruner, 2022, p. 390).

The first section focused on how teachers would accurately assess their students' knowledge and their overall spelling instructional level. They concluded that teachers must administer the *Words Their Way* spelling assessment at the beginning of each school year for Grades 1-3 (Tortorelli & Bruner, 2022). The *Words Their Way* assessment allows teachers to determine exact spelling patterns that students have mastered, as well as ones they still need to learn. There are also alternative assessments available for 3rd grade and up. While analyzing the data from *Words Their Way*, teachers should also evaluate students' baseline literacy data to look for patterns (Tortorelli & Bruner, 2022).

Vines et al. (2020) stated that best instructional practices can take up to 50 years to enter all classrooms. While examining spelling trends, they noticed that spelling has occurred in 10-year trends (Vines et al., 2020). While examining spelling instruction, Vines et al. concluded that there are seven non-negotiables:

- Teachers must have linguistic knowledge.
- Teachers must be evaluation experts.
- Teachers must differentiate.
- Teachers must determine organizational routines.
- Teachers must integrate authentic tasks.
- Teachers must be critically reflective.

• Teachers must embrace a pedagogy of messiness. (pp. 714 - 720)

First, as previously mentioned, linguistic knowledge involves the ability of teachers to break down words into their spelling patterns and provide direct weekly instruction on a specific pattern. Second, teachers must be able to identify what students know, leverage those strengths, and plan meaningful instruction. Third, instruction is not a one-size-fits-all approach and that applies to spelling, so teachers must differentiate based on their students' strengths and needs. Fourth, teachers need to organize the day in a way that consistently includes spelling instruction. Fifth, teachers need to find ways to incorporate spelling instruction that feels natural to students and can be applied across multiple settings. Spelling instruction should be taught both in isolation and across different content areas to provide students with the background knowledge of unfamiliar words. A variety of different practice opportunities with the spelling pattern should be utilized. Sixth, if the data is not showing growth, or if the teacher notices the instruction is not meaningful, a teacher should be reflective and seek out support from colleagues for professional development on the current best practices to support their instruction. Seventh, learning can be messy, and teachers may need to embrace that with spelling instruction at times. Spelling instruction is complex, and it will take trial and error to find the best fit for each individual student (Vines et al., 2020). While those seven nonnegotiables are vital, Vines, et al. also stated that teachers with a deep knowledge of orthographic development are better able to evaluate and differentiate their spelling instruction.

Schrodt et al. (2020b) investigated the impact of growth mindset through a 10week intervention plan designed to create brave spellers who could write any words they could imagine. Before beginning the intervention plan, Schrodt et al. investigated the overall feelings of kindergarten students regarding writing. While analyzing their feelings, it was discovered that most kindergarten students believe that students in second grade or older write challenging words (Schrodt et al., 2020b). As a result of their baseline interviews, it was determined that a spelling intervention program that focused on growth mindset and spelling should be implemented (Schrodt et al., 2020b). Creating a culture of brave spellers requires a combination of whole-group and small-group instruction through centers that start at the beginning of the school year (Schrodt et al., 2020b). As with most routines, modeling and repetition build more independent learners. "A brave-speller whole-group minilesson is broken down into five sections: connection, teaching point, modeling, guided practice, and restating the teaching point" (Schrodt et al., 2020b, p. 210).

"First, connection involves tying in the spelling concept to real-world examples. Second, the teaching point involves reminding the students to be brave spellers, stretching out the words, and having them write down as many sounds as they hear. Third, modeling involves the teacher stretching the sounds and writing down as many sounds as possible. Fourth, guided practice has the teacher remind the students to be brave spellers, pulls out a picture card that corresponds with the spelling pattern, and the students practice words involving that pattern. Lastly, the teacher concludes the lesson by reminding students they can handle new words by stretching out the sounds and trying their best" (Schrodt et al., 2020b, p. 211). Once the whole group instruction concludes, students transition into small-group work at centers. When transitioning to small groups, students should also utilize their writing journals. The small-group centers should have a

combination of picture cards that include phonetically-regular words, student-choice words, and words connected to the phonics curriculum being taught at the time. Smallgroup center time aims to give students exposure to, and practice with, different spelling patterns. Once whole-group instruction and small-group centers are completed, the students should also have an independent writing task. The teacher begins by reminding students to be brave spellers and to stretch the words. Once the reminder is given, students are each given a word or two from the spelling pattern that they must include in a short writing prompt. The teacher and student choose the word during the center that involves the newly introduced spelling concept. The goal from this is that students will have three different exposures to this word in the same day. The exposures occur during the whole-group, small-group, and independent tasks. "At the end of the independent writing time, the teacher walks around and only checks for the spelling of those one or two words" (Schrodt et al., 2020b, p. 212). If those word(s) are spelled incorrectly, the teacher should model stretching out the word and prompt the student on spelling. The overall goal with the brave speller minilesson is to create lifelong learners who are not afraid to make mistakes, stretch sounding out words, and have multiple exposure opportunities to the new spelling concept (Schrodt et al., 2020b).

Training Novice and Veteran Teachers

Spelling instruction is not a one-size-fits-all approach and requires well-trained teachers. Teachers should be able to seek out professional development opportunities and not be afraid of failure. "Carreker et al. (2010) stated that it is critical to provide all general, special education, and dyslexia teachers with professional development to support their content knowledge" (p. 190). Through their study, Carreker et al. (2010)

concluded that "teachers who received 120 hours of professional development and a year of mentored teaching outperformed those who did not receive the training" (p. 192). However, "not all the teachers who received the 120 hours of professional development were able to count all phonemes, syllables, and morphemes in targeted words" (p. 193).

What exactly does professional development look like? Professional development can vary significantly, but all teachers must take a collaborative approach, regardless of content area. The purpose of requiring all teachers supports the idea that all teachers are literacy teachers (Steeg & Lambson, 2005). A schoolwide professional development initiative should include five parts: directed experiences/demonstration lessons, book study, try its, case studies, and textbook/curriculum explorations (Steeg & Lambson, 2005, p. 475).

First, directed experiences/demonstration lessons should be direct, explicit, and connect to the concept of the professional development, while also asking teachers how they would implement the practices in their classrooms (Steeg & Lambson, 2005). Second, a book study should serve as a learning experience to dig deeper. Third, try its should allow teachers the opportunity to model and practice with their colleagues and students, while also being able to reflect on the professional development and lesson (Steeg & Lambson, 2005). Fourth, case studies should focus on a single student, keep track of the student's learning, and share back in small groups the progress they are observing (Steeg & Lambson, 2005). Fifth, teachers should be given time to meet in a book study with their grade level teams to explore and utilize the new textbook/curriculum (Steeg & Lambson, 2005). While these five professional

development strategies are meaningful and impactful, principals must still adjust to meet the needs of their novice and experienced teachers.

Administrators must also assess and plan meaningful professional development based on the prior training, education, and experiences of their staff. Around 2014-2015, Pennsylvania teacher preparation programs began incorporating structured literacy to better equip teachers to support students with dyslexia and other reading difficulties (Pennsylvania Department of Education, 2018; Wexler, 2019).

Role of Administration on Professional Development

A principal must begin by acknowledging that novice teachers are encountering a world of unknowns (Roberson & Roberson, 2009). Novice teachers are still growing in their abilities to make realistic assessments of their overall performance and how they work with students, parents, colleagues, supervisors, curriculum, scope and sequences, and benchmarks (Roberson & Roberson, 2009). Principals often expect first-year teachers to possess the following skills:

- professional attitude
- adequate knowledge of subject areas
- good classroom management skills
- excellent communication skills
- belief that every child can learn
- desire to help students succeed (Roberson & Roberson, 2009, pp. 114-115)

While these skills are important, a principal should also support a first-year teacher by building on their content strengths, incorporating opportunities for reflection

and observation, as well as ensuring they are providing them with enough time to focus on areas that lead to student growth (Roberson & Roberson, 2009). The training of novice teachers also impacts the mentor teacher. Mentor teachers can gain new knowledge, skills, and values that positively impact their instruction, students, and school (Hanson & Moir, 2008). However, organized mentoring programs that encourage distributed leadership, as well as the development of adult learning communities that focus on reflective conversations about teaching and learning, are required (Hanson & Moir, 2008). Mentoring also requires all stakeholders in the school to work together on reflection and growth (Atkinson & O-Connor, 2007). As part of the mentoring process, novice and mentor teachers and administrators should engage in open dialogue and stay in contact throughout the school year with the goal of reflecting and growing together (Atkinson & O-Connor, 2007).

Providing professional development on the science of reading enables administrators to plan meaningful, research-based training sessions that can be organized into three Tiers of support (Bose, 2023):

- Tier I Universal Support
- Tier II Small-Group Support
- Tier III Individual Support

Tier I supports are for all first-year teachers and build on preservice understanding of the science of reading (Bose, 2023). This tier acknowledges the awareness of the challenge, supports a culture of collaborative learning, provides professional development in curriculum and instruction, and utilizes human and material resources (Bose, 2023). Tier II encompasses about 15 to 20% of the population and can include literacy support

groups, literacy book studies, and literacy roundtable discussions (Bose, 2023). The objective of Tier II is to support individuals more specifically, allowing them to reflect and grow with a smaller group of colleagues in a cohort model (Bose, 2023). Tier III is individualized and promotes a novice teacher collaborating with a literacy expert through observations, workshops, and conferences (Bose, 2023). While collaborating with a literacy expert, the objective is to individually support the growth of a single novice teacher (Bose, 2023).

Overall Importance of Effective Spelling Instruction

While teachers often consider spelling and reading as separate, that mindset should change because both work in tandem within the English language (Ehri, 2000). As previously stated, English does not have a one-to-one phoneme-grapheme correspondence (Booth, 1991). Many words in the English language have formed their spelling based off many years of cultural or social value (Booth, 1991). In addition, spelling instruction has not changed or evolved over the years. Spelling instruction focuses on rote memorization and does not seem to have a systematic instructional approach (Johnston, 2001). Cassar et al. (2005) stated that a systematic instructional approach is crucial to all learners, especially those with dyslexia. Individuals with dyslexia require more direct assistance with developing their phonological and spelling skills (Cassar et al., 2005). In addition to phonological and orthographic knowledge, receiving explicit instruction in orthographic patterns is vital for learners (Cassar & Treiman, 1997).

While spellcheck continues to increase in usage, it is not foolproof (Pan et al., 2021). "According to Pan et al., spellcheck can eliminate typos and other obvious

spelling errors but has an efficacy of about 80%, which leads to the writer having to independently address the remaining 20% of spelling errors" (Pan et al., 2018, p. 245). These researchers suggest that these errors often involve words that are spelled correctly but are homophones with different meanings (Pan et al., 2021).

Conclusion

Spelling instruction requires teachers who have a deep knowledge of all the components of spelling instruction (Moats, 2020). Without this deep knowledge, teachers will struggle to support student errors, plan meaningful instruction, and support all learners. Spelling instruction is complex and requires various systematic and explicit instructional approaches.

Given the current state of research, it is crucial to investigate the nature of spelling instruction in today's classrooms. With a notable gap in the research on this subject, this study aimed to identify the best research-based instructional practices and to design appropriate professional development programs for both novice and experienced teachers. Additionally, the study examined the influence of the historical development of the English language on the acquisition of English language skills. Since spelling instruction is often overlooked in state assessments, this study also explored methods for effectively measuring spelling instruction. Ultimately, this study assessed the impact of explicit spelling instruction, emphasizing that a reliance on spellcheck alone is insufficient for all spelling needs.

Chapter Three

Methodology

Introduction

Understanding teachers' perspectives on spelling instruction is crucial to determining why it often fails to reach its full potential and is frequently neglected. This qualitative research study aimed to understand teachers' views on effective spelling instruction, their current classroom practices, their backgrounds in spelling, and their beliefs on improving spelling instruction for their students. There is a dearth of research investigating effective spelling instruction, but this study addressed the gap by exploring the history of spelling instruction, identifying best research-based instructional practices, supporting both novice and experienced teachers, and examining current classroom practices related to spelling instruction.

The study investigated the following research questions:

- 1. How many years have you been teaching?
- 2. Which grade(s) have you taught?
- 3. What spelling instruction methods do teachers find effective in their classrooms?
- 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 teachers assess student progress in spelling?
- 8. What resources do teachers use 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 teachers 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?

Participant Selection

The survey was distributed to all kindergarten through sixth-grade teachers in the Seneca Valley School District. The Seneca Valley School is a suburban district located in Jackson Township, which is a part of southern Butler County in western Pennsylvania. The district covers 100 square miles. During the 2023-2024 school year, the Seneca Valley School District had an enrollment of 7,413 students, spanning from kindergarten through 12th grade. From the 2023 graduating class, 84.7% pursued education beyond K-12 (i.e., 72.1% 4-year college, 8.7% 2-year college, 3.6% technical school, 0.3% career apprenticeship), and the remaining 15.3% were employed/military/other. Eligibility to participate required teachers to have taught spelling within the past five years or possess a background in literacy. The goal was to collect at least one survey from each grade level across all four elementary buildings, aiming for at least 28 survey responses. This

comprehensive approach facilitated a more in-depth study than previous research on spelling instruction. Calhoon et al. (2010) noted that while decades of research have been conducted on reading, studies on spelling have been more limited. Teachers who completed the survey specified their teaching position and years of employment.

Additionally, only full-time employees in this school district were eligible to participate in the survey. The objective of conducting this study in this school district was to identify effective spelling instruction methods in teachers' classrooms and to understand how the findings can positively impact the entire district.

Instrumentation

This qualitative research study aimed to identify effective spelling instruction through a survey that started by asking teachers about their current spelling instruction practices. The survey then explored which strategies teachers find effective or ineffective and how they assess their students. Additionally, it investigated how teachers' personal experiences as students influence their spelling instruction. The objective was to understand teachers' perspectives on spelling instruction and what works in their classrooms. The open-ended questions allowed teachers to provide deeper insights into their experiences and thoughts. Additionally, some teachers were interviewed to further expand on their responses.

Variables and Constructs

The variables in this study were the teachers who participated in the survey. These participants had varying educational backgrounds and years of teaching experience. The researcher aimed to balance the study between veteran and novice teachers, although participation was entirely voluntary. To measure these variables, the initial questions

addressed what teachers believe spelling instruction should look like and each teacher's years of experience in teaching spelling.

The constructs in this study encompassed the educational backgrounds and teaching experiences of the participants concerning spelling instruction. To benefit from a variety of perspectives, the researcher included teachers with diverse educational backgrounds and teaching experiences for a thorough exploration of the topic.

Pilot Testing

To assess the study's clarity, comprehensibility, and appropriateness, a pre-study was conducted with a small group of teachers. The pilot test aimed to determine whether the study questions could be easily answered by the teachers and analyzed by the researcher.

Instrument

A copy of the instrument used in the study is provided in Appendix A.

Procedures

The IRB approval was provided for the research before recruiting participants. Data was collected through open-ended survey questions. After collecting the surveys, the researcher analyzed the responses for common themes and followed up with interview questions to delve deeper into specific areas of interest. This comprehensive approach facilitated a more detailed study compared to previous research on spelling instruction.

Data collection took place from September 2024 through December 2024. The pre-survey pilot was conducted with a few teachers during the first two weeks of September, and the results were analyzed to ensure clarity and appropriateness of the

survey design. The main survey was distributed to all kindergarten through sixth-grade teachers in October. Follow-up interviews were conducted throughout October and November. With a review to ensure that all grade levels, as well as a variety of novice and experienced teachers, were represented in the study and follow-up interviews, the data collection phase concluded in December.

Summary

This investigation employed quantitative and qualitative analysis methods to analyze the themes of the survey on spelling instruction. Quantitative data was analyzed using statistical techniques (e.g., descriptive statistics and inferential analysis) to identify trends and correlations. For the qualitative data, thematic analysis was conducted to identify recuring themes and patterns in the responses. Aligning with the research questions by offering both numerical data and in-depth qualitative insights, this approach was chosen to provide a comprehensive understanding of spelling instruction practices.

Chapter Four

Results

Introduction

This chapter presents the findings from the qualitative study on teachers' experiences with spelling instruction in the classroom. The data was collected through a questionnaire and analyzed to identify common themes. Direct quotes from the participants are included to illustrate these themes, providing a rich, detailed understanding of the challenges and strategies involved in spelling instruction. This study sought to answer a central question: *What constitutes effective spelling instruction?*

Survey Participants

The survey included 30 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 represented all grades from kindergarten through sixth grade, and the frequency of participants' years of experience and grade level(s) taught can be found in Table 1.

Table 1Frequency 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%

Research Questions

To investigate effective spelling instruction, a qualitative survey was administered to the K-6 teacher participants. The survey focused on several key areas: teacher perspectives, student experiences, instructional methods, classroom dynamics, assessment practices, professional development, literacy development, and cultural and linguistic factors. The following research questions were explored:

- 1. How many years have you been teaching?
- 2. Which grade(s) have you taught?
- 3. What spelling instruction methods do you find effective in your classroom?
- 4. What 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 use 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?

Themes

Lack of Formal Spelling Programs

One of the most prominent themes that emerged from the data was the lack of formal spelling programs in schools. Teachers expressed significant frustration over the absence of structured spelling instruction, particularly in the context of modern communication methods. Participant 18 noted, "In both districts I have taught in, there has not been a concrete spelling instructional method across grade levels." This sentiment was echoed by Participant 22 who pointed out, "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."

The reliance on informal methods and technology has created a gap in consistent and effective spelling education. Given the prevalence of texting and social media, where non-standard spelling is common, this gap is particularly concerning. Teachers feel that without a formal program, students are not receiving the foundational skills they need to spell correctly. Participant 1 expressed their frustration by stating, "I find the fact that there is NO formal spelling program/instruction infuriating, especially living in the world of texting."

The absence of a formal program has led to a reliance on technology and informal methods, which some teachers believe are insufficient. Participant 22 highlighted the

need for better training and resources, "We need instruction on how to effectively teach spelling patterns and we need resources to support the teaching of these patterns."

Additionally, the inconsistency in resources was a concern, as Participant 14 shared, "Teachers are not well-trained in our primary resource in ELA. Everyone is using different resources."

The call for a formal spelling program is not simply about having a set curriculum but also about ensuring that there is adequate time allocated for spelling instruction. Participant 1 emphasized this need by saying, "Bring back a formal spelling program and give ELA teachers time to teach." Teachers also highlighted the need for dedicated time within the curriculum to focus on spelling. In many cases, spelling instruction is squeezed into already packed schedules, making it difficult to provide the consistent practice and reinforcement that students need. This lack of time is a significant barrier to effective spelling instruction, as teachers struggle to cover all of the necessary content within limited periods.

The lack of a formalized spelling program presents significant challenges for K-6 educators attempting to deliver systematic and explicit instruction to all learners. Without a cohesive, district-wide framework, teachers are left to develop their own methods, leading to inconsistency in instruction across grade levels and schools. This variability can result in student learning gaps, as some students may receive robust spelling instruction, while others may not. Furthermore, the absence of a structured program places additional strain on teachers, who must independently seek and adapt resources to address the needs of their students. A formalized program would not only ensure consistency, but it would provide educators with the tools necessary to support all

learners effectively, which could reduce disparities and promote district-wide equitable educational outcomes.

Effective Spelling Instruction Methods

Teachers identified several effective methods for spelling instruction, particularly in the early grades. Phonics-based instruction was frequently mentioned as a foundational approach. Participant 11 emphasized:

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 method helps students decode words and understand the relationship between letters and sounds, which is crucial in the early stages of literacy development.

Another effective approach mentioned was the use of multisensory instruction. Participant 21 shared, "I utilize multi-sensory instruction which integrates the spelling utilizing learned patterns." This method involves engaging multiple senses, such as touch and movement, to reinforce learning and improve retention. Teachers use various techniques when helping students form words. As Participant 27 explained, "Using sound circles and phoneme-grapheme mapping to learn how to convert sounds into letters to form words."

Explicit instruction tailored to individual spelling development was also highlighted. Teachers noted the importance of providing many opportunities to practice word patterns. Participant 25 stated, "Explicit instruction is that 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."

Word walls are another effective tool for spelling instruction. By creating a visual display of high-frequency and thematic words, teachers can provide students with regular exposure to important vocabulary. This method not only helps with spelling but also supports vocabulary development and reading comprehension. Participant 2 noted, "Creating a visual word wall with high-frequency and thematic words reinforces spelling through regular exposure."

Interactive games and guided writing activities further enhance student engagement and learning. Games and competitions foster a fun, competitive spirit, motivating students to participate actively in spelling activities. This active participation can lead to better retention and a more positive attitude towards spelling. Participant 2 mentioned, "Incorporating spelling games, such as letter tiles or online resources, engages students and makes learning fun." Participant 28 emphasized, "Different spelling instruction strategies can greatly impact student engagement by making learning more interactive and enjoyable." Guided writing activities provide opportunities for students to practice spelling in context, encouraging them to apply their skills in meaningful ways. Participant 4 stated, "Focus on strategies and patterns. Practice with small groups as well as whole groups."

Effective spelling instruction requires teachers who are well-versed in research-based methods and strategies. Without this knowledge, delivering systematic and explicit instruction becomes a significant challenge. Teachers must understand foundational approaches, such as phonics-based instruction, which teaches the rules of spelling and helps students decode and apply patterns to unfamiliar words. Multisensory techniques and strategies like phoneme-grapheme mapping are equally important, as they engage

diverse learners and reinforce retention. However, the lack of professional development in these areas leaves some teachers underprepared to effectively implement these strategies. This inconsistency can lead to varying instructional quality and gaps in student learning. Providing educators with training in evidence-based spelling methods would not only enhance their ability to support all learners, but it would also foster a more cohesive and equitable approach to spelling instruction across schools.

Challenges in Spelling Instruction

Differentiation and memory retention were highlighted as significant challenges in spelling instruction. Teachers noted the difficulty in tailoring instruction to meet diverse student needs and the challenge students face in remembering irregular spellings. Participant 27 pointed out, "The greatest challenge is there are many exceptions to the rule that words are spelled the way they sound." This complexity is compounded by the need to provide individualized support while managing a large class. Teachers must find ways to engage all students, regardless of their skill level, and provide appropriate challenges to help them progress. As Participant 12 mentioned, "Students are 'all over the place' with their knowledge with spelling which leads into the debate of differentiated lists."

The English language's numerous rules and exceptions make it difficult for students to memorize and apply spelling patterns consistently. Participant 25 expressed this challenge by saying, "The English language has so many rules and exceptions that it's difficult for students to memorize and apply and know when an exception is needed." This issue is further complicated by students' bad habits in spelling. For instance, Participant 4 noted, "Students have a bad habit of spelling a word incorrectly (thay

instead of they or coler instead of color) and even when they practice it correctly, they go back to their bad habit."

Memory retention is another significant challenge, particularly for irregular words that do not follow standard spelling patterns. These words often require rote memorization, which can be difficult for many students. Teachers expressed concern that students are becoming too dependent on technology and are not developing the necessary skills to spell correctly on their own. Participant 2 highlighted this issue by stating, "Remembering the spelling of words, especially irregular ones, can be challenging for many young learners." Additionally, the dependence on technology for spelling was seen as a double-edged sword. Participant 3 shared, "Since we started having students type instead of write, they depend on spell check and sometimes it does not give them the correct word." This reliance on technology can also impact students' abilities to learn and apply spelling rules, as they may not be as engaged in the learning process.

The complexity of the English language poses significant challenges for both students and educators, underscoring the importance of properly training teachers before they begin instructing students. With its numerous rules, exceptions, and irregular spellings, the English language requires a nuanced approach to spelling instruction.

Teachers must be equipped with the skills to differentiate instruction effectively, ensuring all students, regardless of their skill levels, are appropriately challenged and supported. Without this preparation, managing the wide range of spelling abilities in a classroom becomes an overwhelming task. Moreover, the difficulty students face in memorizing irregular spellings and overcoming poor spelling habits highlights the need for explicit and consistent teaching strategies. Overreliance on technology, such as spell check,

further exacerbates the problem, as students may fail to develop foundational spelling skills. Providing robust training for educators in research-based spelling methods will empower them to navigate these complexities and deliver high-quality instruction that meets the needs of all learners.

Impact on Student Engagement

Multisensory approaches and interactive games were noted to significantly enhance student engagement. These methods make learning more enjoyable and help capture students' interests. Participant 27 noted, "Activities that get students up and moving help to increase engagement, concentration, and retention." By involving multiple senses, such as touch and movement, multisensory approaches can make spelling instruction more dynamic and engaging. Participant 25 shared, "Students are more engaged in spelling activities with a hands-on approach, but also with words at their spelling development level. Otherwise, they are frustrated."

These methods not only make learning more enjoyable but also help students see the relevance of their skills. By incorporating spelling into writing activities and other real-world contexts, teachers can help students understand the importance of spelling and its impact on their overall literacy development. Participant 20 explained, "Some of the more multisensory activities and hands-on instruction keep students engaged and focused rather than just writing and studying words." This was echoed by Participant 2:

Techniques that involve multiple senses—such as writing in sand, using manipulatives, or incorporating movement—tend to capture students' interest and make learning more enjoyable. Utilizing games and competitions foster a fun competitive spirit, motivating students to participate actively in spelling activities.

Student engagement is a critical component of effective spelling instruction, as it directly impacts motivation, focus, and retention. Multisensory approaches and interactive activities have proven to be particularly effective in capturing students' interests and making learning activities more dynamic. Techniques that involve movement, touch, and hands-on interaction help students remain focused while reinforcing spelling patterns in memorable ways. When activities are tailored to students' developmental levels, they not only promote engagement but also reduce frustration, ensuring that all learners feel supported. Incorporating real-world applications, such as writing activities, further highlights the relevance of spelling and its importance in overall literacy development. Games and friendly competitions add an element of fun and foster a competitive spirit, encouraging active participation. Providing these engaging opportunities helps students build both their skills and their enthusiasm for learning, making spelling instruction a more impactful and enjoyable experience.

Assessment of Spelling Progress

Teachers use various methods to assess student progress in spelling. Participant 12 described their approach, "Weekly spelling assessments. These assessments have several words that were given to practice with the pattern, several words where they have to apply the pattern, and a dictation sentence." This method allows teachers to evaluate students' understanding of spelling patterns and their ability to apply these patterns in different contexts.

Participant 21 highlighted the use of concept mastery assessments, "I utilize concept mastery assessments at the end of each learned lesson." These assessments help ensure that students have grasped the key concepts before moving on to new material.

Additionally, some teachers use comprehensive assessments throughout the year. As Participant 25 noted they use "*Pre-, mid-, and end-of-year spelling inventory and weekly assessments*." These track progress over time.

Daily observations during specific routines also play a crucial role in assessing student progress. Participant 19 explained, "Student progress in spelling is assessed through teacher observations during daily UFLI routines (i.e., auditory drill, word work, and dictation)." These observations provide immediate feedback and allow teachers to adjust instruction as needed.

Writing samples and portfolios are also valuable tools for assessing spelling skills. Writing samples allow teachers to analyze students' spelling accuracy in their written work, providing a clear picture of their abilities. Participant 2 emphasized, "Analyzing students' writing for spelling accuracy provides insight into their ability to apply spelling skills in context." This method also helps teachers identify patterns and trends, which can inform instruction and help address common challenges.

Portfolios, which are collections of students' work over time, offer a comprehensive view of their progress. By maintaining a portfolio, teachers can track improvements and identify areas that need further attention. Participant 25 shared, "Maintaining a collection of students' spelling work over time can show progress and highlight areas needing improvement." This method also allows students to see their own growth and take pride in their achievements. Portfolios provide a tangible record of students' progress, which can be motivating and encouraging for both students and teachers.

These assessment methods are crucial for providing targeted support and ensuring that students are effectively developing their spelling skills. By using a variety of assessment methods, teachers can gain a more comprehensive understanding of students' abilities and needs, and they can use them to make informed decisions in their classrooms.

Accurately assessing student learning in spelling is essential for providing targeted support and ensuring skill development. Effective assessment methods combine frequent, focused evaluations with opportunities for students to demonstrate their abilities in meaningful contexts. Weekly spelling assessments that incorporate practice words, application of patterns, and dictation allow teachers to gauge students' understanding and their ability to generalize patterns. Concept mastery assessments and comprehensive evaluations, such as pre-, mid-, and end-of-year inventories, provide insights into longterm progress and highlight areas that need reinforcement. Daily observations during structured routines, like word work and dictation, offer immediate feedback and enable teachers to adjust instruction in real time. By showcasing students' ability to apply spelling skills in authentic contexts, writing samples and portfolios add further depth. These tools not only reveal individual growth but also allow educators to identify trends and tailor instruction to address common challenges. A well-rounded approach to assessment ensures that teachers can accurately monitor progress, provide effective interventions, and celebrate student achievements, which foster confidence and continued learning.

Professional Development Needs

The need for professional development with evidence-based spelling strategies, phonics instruction, and differentiated teaching methods was a recurring theme. Teachers emphasized the importance of professional development to strengthen their literacy instruction. Participant 19 emphasized, "Professional development that helps teachers understand the importance of the connection between phonics instruction and spelling - specifically the importance of decoding and encoding instruction occurring at the same time."

Teachers highlighted the need for targeted support related to spelling. As

Participant 17 noted, "More training in reading programs, phonics interventions, and

phonemic awareness are great professional development teachers could use to enhance
their knowledge about spelling." Participant 2 noted, "Training in multisensory
approaches, assessment techniques, and integrating technology to support spelling can
also enhance their effectiveness." This ongoing training is essential for staying current
with best practices and addressing students' individual needs.

Learning opportunities regarding differentiated instruction were also mentioned as beneficial. Participant 28 stated, "Workshops on differentiated instruction can help teachers tailor their spelling lessons to meet the diverse needs of their students." This type of professional development can provide teachers with the tools and knowledge they need to implement effective spelling instruction that meets the needs of all students.

Teachers expressed interest in expanding their knowledge of how to effectively use educational technology tools in the classroom. Participant 28 shared, "Training in the latest educational technology tools can provide new ways to engage students and track

their progress." Integrating technology into spelling instruction can offer new opportunities for interactive and personalized learning, enhancing student engagement and progress tracking.

Professional development is not simply about acquiring new skills but also about building a community of practice. By sharing experiences and strategies, teachers can support each other and improve their instruction. Participant 2 highlighted, "Professional development focused on evidence-based spelling strategies, phonics instruction, and differentiated teaching methods would benefit teachers." This collaborative approach can lead to more effective and consistent spelling instruction across classrooms.

Teachers emphasized the importance of ongoing professional development to stay current with best practices, as well as to address the diverse needs of their students. This training can also help teachers feel more confident and prepared to implement effective spelling instruction.

Providing teachers with meaningful professional development is vital for effective spelling instruction. Training in evidence-based strategies, such as phonics, multisensory approaches, and differentiated instruction, equips educators to address diverse student needs and improve literacy outcomes. Teachers emphasized the importance of understanding the connection between decoding and encoding, as well as utilizing technology to engage students and track progress. Enabling teachers to share strategies and ensure consistency across classrooms, collaborative professional development fosters a community of practice. By investing in ongoing, targeted training, schools can empower teachers to deliver high-quality, impactful spelling instruction.

Impact on Literacy Development

Spelling instruction is seen as essential for promoting literacy development, supporting both reading and writing skills. Teachers emphasized how spelling reinforces the link between letters and sounds. Participant 2 noted, "Spelling instruction plays a crucial role in overall literacy development by reinforcing the relationship between letters and sounds, which enhances phonemic awareness and decoding skills essential for reading."

The influence of spelling on reading was also highlighted. Participant 12 explained, "Spelling impacts how children read. If they learn more patterns and understand how the English language works, they will be more successful in their reading and writing." Participant 24 also mentioned, "Spelling is closely linked to reading and writing, and as a result, comprehension, too, and so a deficit in spelling skills will affect the other areas." This interconnectedness means that weaknesses in spelling can have a ripple effect, impacting other areas of literacy development. The understanding of spelling patterns and the structure of the English language supports students in becoming more proficient readers and writers.

Teachers noted that strong spelling instruction can benefit multiple aspects of literacy development. Participant 27 stated, "Spelling instruction can lead to improvements in reading skills, including word reading and reading comprehension." By focusing on spelling, teachers can help students develop the skills necessary for fluent reading and effective comprehension.

By providing a solid foundation in spelling, teachers can support students' overall literacy. This foundation helps students build the skills they need for reading fluency,

comprehension, and effective writing. Teachers highlighted the importance of integrating spelling instruction into the broader literacy curriculum to ensure that students develop strong, interconnected literacy skills.

Directly supporting both reading and writing skills, spelling plays a pivotal role in literacy development. These skills reinforce the connection between letters and sounds, enhancing phonemic awareness and decoding abilities that are essential for reading success. Teachers emphasized that understanding spelling patterns and the structure of the English language improves reading fluency, comprehension, and writing proficiency. Weaknesses in spelling can have a ripple effect and impact multiple areas of literacy. By integrating effective spelling instruction into the broader literacy curriculum, educators can provide students with a strong foundation that fosters fluency, comprehension, and overall literacy growth.

Cultural and Linguistic Factors

Cultural and linguistic factors play a significant role in students' spelling abilities. Teachers noted that students who speak a language other than English at home may experience additional challenges. Participant 2 explained, "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." Participant 19 also mentioned, "For some students, their cultural and/or linguistic backgrounds could present challenges for their learning and performance in spelling." These challenges can not only include differences in language structure but also varying levels of exposure to English outside of school.

The structure of a student's first language can also impact their spelling skills. Participant 5 highlighted, "Students' cultural and linguistic backgrounds play a crucial role in their spelling abilities. For instance, those whose first language has a different structure than English often find spelling more challenging." These differences can make it more difficult for students to grasp English spelling conventions, and this can be particularly true for students whose home language has phonetic and orthographic rules that differ significantly from English.

Teachers also pointed out that learning two languages simultaneously can affect spelling. Participant 10 noted, "If students are coming from a home that has a second language that definitely will impact their spelling. They may be learning two different languages." This dual-language learning can create distinct challenges, as students navigate between different sets of linguistic rules.

Understanding these cultural and linguistic factors is crucial for providing effective spelling instruction. By recognizing and addressing these unique challenges, teachers can better support students from diverse backgrounds and help them develop strong spelling skills.

Teachers must be reflective and aware of the diverse cultural and linguistic backgrounds of their students, as these factors significantly impact spelling abilities. For students who speak a language other than English at home, differences in phonetic patterns and orthographic rules can present unique challenges. The structure of a student's first language often influences their ability to grasp English spelling conventions, especially when the languages have differing rules. Additionally, students learning two languages simultaneously may face added difficulty with navigating

between distinct linguistic systems. Recognizing these factors is essential for providing equitable and effective spelling instruction. By tailoring approaches to address these challenges, teachers can support students from diverse backgrounds in developing strong spelling and literacy skills.

Summary

The study explored effective spelling instruction through a survey of K-6 teachers in a western Pennsylvania school district. A significant gap in formal spelling programs was found, leading teachers to rely on informal methods and technology. Teachers expressed frustration, with Participant 18 noting, "In both districts I have taught in, there has not been a concrete spelling instructional method across grade levels." The absence of a structured program leaves students unprepared for correct spelling, especially in the context of texting and social media. Another teacher, Participant 22, emphasized the need for consistency, "We need instruction on how to effectively teach spelling patterns, and we need resources to support the teaching of these patterns."

Several effective instructional methods were identified, particularly phonics-based instruction, word walls, and multisensory approaches. Participant 11 highlighted the success of phonics by saying, "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 (e.g., sound circles and phoneme-grapheme mapping) also play a vital role in spelling instruction, as noted by Participant 27.

Challenges like differentiation and memory retention emerged as key issues.

Participant 27 stated, "The greatest challenge is there are many exceptions to the rule that words are spelled the way they sound." Participant 12 added, "Students are 'all over

the place' with their knowledge of spelling, which leads into the debate of differentiated lists."

Teachers underscored the importance of professional development to address these challenges. Participant 19 stated, "Professional development that helps teachers understand the importance of the connection between phonics instruction and spelling... is crucial." Ultimately, the findings emphasized the need for structured programs and targeted professional development to support teachers and students with spelling instruction. Chapter Five will present the interpretation of findings, discuss their implications, and offer recommendations based on the study's results.

Chapter Five

Discussion

Introduction

The current investigation examined the history of the English language and spelling instruction, identified the best research-based instructional practices for spelling, and determined how to support novice and experienced teachers. The study addressed one overarching question: *What constitutes effective spelling instruction?*

Designed with targeted questions to explore effective spelling instruction, the qualitative research survey included 30 kindergarten through sixth-grade teachers from four elementary schools within a single western Pennsylvania school district. The following research questions were examined:

- 1. How many years have you been teaching?
- 2. Which grade(s) have you taught?
- 3. What spelling instruction methods do teachers find effective in their classrooms?
- 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 teachers assess student progress in spelling?
- 8. What resources do teachers use 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 teachers 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?

Summary of Findings

Through academic research and survey responses, the study revealed valuable insights into the challenges, strategies, and systemic issues associated with K-6 spelling instruction. The findings highlighted a growing need for structured, research-based approaches that integrate effective practices into classrooms while addressing the barriers posed by inconsistent resources, limited professional development, and evolving student needs.

Lack of Formalized Spelling Programs

One of the most prominent findings was the lack of formalized spelling programs across schools in the district. Overwhelmingly, teachers expressed frustration about the absence of cohesive resources, leaving them to independently develop instructional methods. Participant 18 noted, "In both districts I have taught in, there has not been a concrete spelling instructional method across grade levels," emphasizing the variability in instructional quality and focus even within single districts. Participant 22 echoed these sentiments, "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." This inconsistency often results in unequal student learning opportunities and places additional strain on teachers to fill learning gaps.

Instructional Strategies

Another critical finding centered on effective strategies for spelling instruction. Teachers highlighted the importance of phonics-based instruction, multisensory approaches, and explicit differentiation. Participant 11 described phonics instruction as foundational, "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 aligns with research by Puliatte and Ehri (2018), which emphasized that direct instruction in phonemic linguistic units fosters greater spelling gains. Additionally, multisensory approaches were widely endorsed for their ability to enhance engagement and retention. Participant 21 shared, "I utilize multisensory instruction, which integrates the spelling utilizing learned patterns," demonstrating how such strategies can simultaneously address diverse learning styles and reinforce spelling patterns (Cassar & Treiman, 1997).

Differentiation. Teachers also noted that differentiation is essential for addressing the diverse needs of students. Participant 25 stated, "Explicit instruction is individualized based on spelling development. Students need multiple exposures and practice with word patterns in order to apply the spelling pattern in authentic situations." However, providing individualized support proved challenging in classrooms with varying skill levels, as Participant 12 explained, "Students are 'all over the place' with their knowledge of spelling, which leads into the debate of differentiated lists."

These challenges highlight the need for targeted resources and professional development to support teachers in implementing effective differentiation strategies.

Technology. A key challenge identified was students' reliance on technology and its impact on foundational spelling skills. Teachers reported that spellcheck and other digital tools often acted as crutches, hindering the development of 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 reliance on technology aligns with concerns raised by Pan et al. (2021), as they observed that digital tools often fail to address the deeper orthographic understanding needed for proficient spelling.

Student Engagement Methods. Despite these challenges, teachers noted creative and interactive methods enhanced student engagement. Word walls, spelling games, and small-group instruction were particularly effective. Participant 2 shared, "Creating a visual word wall with high-frequency and thematic words reinforces spelling through regular exposure," while Participant 28 noted, "Different spelling instruction strategies can greatly impact student engagement by making learning more interactive and enjoyable." Incorporating these methods fostered enthusiasm and improved retention and application of spelling patterns.

Assessment. Assessment practices emerged as a significant area of variation among teachers. Most relied on informal methods, such as writing samples and observations during lessons. Participant 19 explained, "Student progress in spelling is assessed through teacher observations during daily UFLI routines (i.e., auditory drill, word work, and dictation)." While these methods provided valuable insights into

individual student progress, they lacked the consistency and scalability necessary for broader analysis. Participant 25 highlighted the use of multiple assessment points, "*Pre, Mid, and End of year spelling inventory and weekly assessments*," which offer a more comprehensive view of growth but require significant time and effort to implement effectively.

Professional Development

Lastly, the study emphasized the critical role of professional development in equipping teachers to address the challenges of spelling instruction. Teachers consistently called for training in evidence-based strategies, phonics instruction, and differentiated teaching methods. Participant 19 articulated this need, "Professional development that helps teachers understand the importance of the connection between phonics instruction and spelling—specifically the importance of decoding and encoding instruction occurring at the same time—is crucial." Despite a strong interest in professional growth, many teachers felt current opportunities were insufficient or disconnected from classroom realities, as Participant 22 shared, "We need instruction on how to effectively teach spelling patterns and we need resources to support the teaching of these patterns."

In summary, this study revealed both significant challenges and opportunities within K-6 spelling instruction. While demonstrating a commitment to improving outcomes through innovative and evidence-based practices, teachers are navigating a landscape marked by inconsistent resources, evolving student needs, and systemic barriers. These findings underscore the urgent need for systemic changes, including the adoption of formalized spelling programs, improved professional development, and strategies to meaningfully integrate technology into spelling instruction.

Interpretation of Findings

This study underscores the critical importance of systematic, research-based spelling instruction as a foundational aspect of literacy development. Spelling is intricately connected to reading and writing, with effective instruction significantly enhancing phonemic awareness, decoding skills, and overall literacy proficiency.

Teachers in this study consistently emphasized how explicit spelling instruction reinforces reading fluency and comprehension while simultaneously supporting writing skills. As Participant 12 remarked, "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 observation aligns with Graham and Santangelo's (2014) findings that systematic instruction equips students with tools to decode and encode words more effectively, fostering comprehensive literacy growth.

Phonics-Based Instruction

Phonics-based instruction emerged as a cornerstone of effective spelling strategies. Teachers reported that phonics not only teaches the rules of spelling but also enables students to generalize these rules for unfamiliar words. Participants recognized the importance of phonics-based instruction (Participant 2; Participant 3; Participant 5; Participant 7; Participant 9; Participant 11; Participant 13; Participant 14; Participant 16; Participant 19; Participant 20; Participant 24; Participant 26; Participant 27; Participant 28; Participant 30). Research supports this assertion, with Puliatte and Ehri (2018) demonstrating that phonics-based methods foster a deeper understanding of letter-sound relationships, enhancing both decoding and encoding skills. Moats (2005) further highlighted the necessity of phonics for developing orthographic knowledge, a critical

component of literacy. Reinforcing the value of this approach, Devonshire and Fluck (2010) emphasized that combining phonics with morphological awareness provides students with a comprehensive framework for understanding the structure of the English language.

Multisensory Approaches

Another key finding from this study was the effectiveness of multisensory approaches in spelling instruction. Techniques such as phoneme-grapheme mapping, sound circles, and tactile activities like writing in sand were identified as highly engaging and effective for improving retention. Participant 19 highlighted, "Students are more engaged in spelling activities with a hands-on approach, but also with words at their spelling development level. Otherwise, they are frustrated." These methods engage multiple senses and help students internalize spelling patterns more deeply. Research by Schrodt et al. (2020a) corroborates this, as they demonstrated how multisensory strategies improve spelling accuracy and foster positive attitudes toward learning. Graham and Santangelo (2014) and Good et al. (2018) similarly found that incorporating tactile and auditory components into instruction enhances cognitive processing and memory retention, particularly for students with language impairments or learning difficulties.

Diverse Student Needs

Despite these successes, the study also revealed significant challenges, particularly in differentiating instruction to meet diverse student needs. Teachers reported that students arrive with varying levels of spelling proficiency which makes individualized instruction essential, yet difficult to effectively implement. Participant 29 emphasized, "Phonics patterns, differentiated patterns based on students' needs, and

consistent practice are key to ensuring growth in spelling proficiency." This aligns with findings from Vines et al. (2020) who stressed the importance of tailoring instruction to address students' unique strengths and weaknesses. However, systemic barriers, such as inconsistent resources and a lack of formal spelling programs, often hinder teachers' abilities to provide cohesive instruction. Participant 16 remarked, "Systematic phonics instruction is necessary, but the inconsistency in resources across grade levels makes it difficult to maintain continuity." Moats (2005) argued that systematic approaches and consistent resources are essential for effective spelling instruction. Because these elements are often missing, teachers are left to rely on their own ingenuity to fill the gaps.

Digital Tools

The role of technology in spelling instruction presents both opportunities and challenges. Digital tools like interactive games and word walls were noted to enhance student engagement, but over-reliance on spellcheck was identified as a significant barrier to developing independent spelling skills. Participant 26 explained, "The most effective spelling instruction methods are those that balance traditional approaches with technology, ensuring students build foundational skills without becoming overly dependent on digital tools." Pan et al. (2021) found that while technology can address surface-level errors, it often fails to cultivate the deeper orthographic and morphological understanding necessary for spelling proficiency. Devonshire and Fluck (2010) emphasized that while technology can complement instruction, it should never replace explicit teaching methods. Balancing digital tools with hands-on instruction ensures that students develop the foundational skills needed for spelling and broader literacy.

Professional Development

The findings of this study also highlighted the importance of professional development in equipping teachers to navigate these challenges. Participant 24 emphasized, "Training in the latest evidence-based practices and strategies, particularly those integrating phonics and multisensory approaches, is vital for supporting student growth in spelling." Carreker et al. (2010) found that professional development, especially when paired with mentoring, significantly enhances teachers' effectiveness in spelling instruction. Steeg and Lambson (2005) emphasized that ongoing training in evidence-based strategies, differentiation, and multisensory methods is essential for addressing the diverse needs of students. Additionally, Vines et al. (2020) noted that professional development should be tailored to address systemic barriers, such as resource limitations and time constraints, ensuring that teachers are equipped to provide meaningful instruction.

This study reinforces the idea that spelling instruction is a vital component of literacy development, yet it remains under-supported in many educational systems. Teachers identified effective strategies such as phonics-based and multisensory instruction, but systemic barriers (i.e., inconsistent resources, limited professional development, and over-reliance on technology) continue to hinder progress. Addressing these challenges will require a coordinated effort to provide teachers with the tools, training, and time to implement effective spelling practices. As Moats (2005) emphasized, achieving literacy goals necessitates a comprehensive approach that integrates spelling, reading, and writing into a unified instructional framework. By

addressing these gaps, educators can ensure that students receive the high-quality instruction they need to succeed in literacy and beyond.

Theoretical Framework

The findings of this study largely align with the theoretical framework, emphasizing the importance of structured, research-based spelling instruction as a cornerstone of literacy development. The framework effectively highlighted impactful strategies such as phonics-based methods, multisensory approaches, and differentiated instruction. However, several findings suggest potential gaps or areas where the framework may need expansion or refinement to fully address systemic and contextual challenges.

One key area of alignment is the focus on explicit, systematic instruction, particularly in phonics-based and multisensory approaches. These strategies align with existing theoretical models that prioritize structured acquisition of literacy skills by explicitly teaching phonemic and orthographic patterns (Graham & Santangelo, 2014; Moats, 2005). Participant 11's observation that "phonics-based instruction works the best" supports the framework's emphasis on the foundational role of phonics, while Participant 21's use of multisensory strategies reinforces the integration of diverse learning modalities to enhance student engagement and retention (Schrodt et al., 2020a).

However, the findings also highlighted systemic challenges (e.g., inconsistent resources and limited professional development) that the current framework may not fully address. Participant 22 observed, "Teachers are finding other resources that they can incorporate that are more relevant and engaging for students," reflecting structural barriers that influence teaching effectiveness. These findings align with systems-based

models, such as Fullan's Change Theory (2007), which emphasizes the importance of aligning organizational resources, policies, and teacher development to achieve meaningful instructional improvements.

Another area requiring theoretical expansion is the integration of technology in spelling instruction. Teachers noted that while digital tools like interactive games can enhance engagement, over-reliance on tools like spellcheck hinder the development of independent spelling skills. Participant 26 explained, "The most effective spelling instruction methods are those that balance traditional approaches with technology, ensuring students build foundational skills without becoming overly dependent on digital tools." This finding aligns with Mishra and Koehler's Technological Pedagogical Content Knowledge (TPACK) framework (2006), which emphasizes the importance of balancing technological tools with sound pedagogical and content knowledge to ensure effective learning outcomes. TPACK could complement the existing framework by addressing the nuanced role of technology in fostering deeper orthographic understanding while mitigating its potential drawbacks.

Professional development also emerged as a critical area for teacher support and systemic improvement. Participant 28 emphasized, "Workshops on differentiated instruction can help teachers tailor their spelling lessons to meet the diverse needs of their students." While the current framework addresses effective instructional practices, it may not fully account for the broader systemic need for targeted and sustained teacher training. Recent models, such as the Learning Forward Standards for Professional Learning (2022), offer a modern framework emphasizing evidence-based, collaborative

professional development aligned with student outcomes. Integrating this approach would ensure that professional learning is directly tied to classroom realities and teacher growth.

In summary, the findings of this study align well with the theoretical framework regarding instructional practices but reveal gaps in addressing systemic barriers, technological integration, and professional development. Incorporating modern frameworks such as Fullan's Change Theory (2007), the TPACK framework (Mishra & Koehler, 2006), and the Learning Forward Standards for Professional Learning (2022) would provide a more comprehensive understanding of the complexities involved in spelling instruction and its broader implications for literacy development.

Limitations of the Study

While this study offers valuable insights into K-6 spelling instruction, several limitations constrain the scope and depth of its findings. These limitations stem from factors related to the study's design, implementation, and broader systemic challenges in education.

One of the primary limitations of this study is its focus on a single school district. While this localized approach allowed for in-depth exploration of teachers' experiences and perspectives, it limits the generalizability of the findings to other districts or regions. Participant 14 shared, "Teachers are not well-trained in our primary resource in ELA. Everyone is using different resources," and this highlights that spelling instruction practices and teacher preparation can vary widely even within a limited geographic area. This observation aligns with Vines et al. (2020) who noted that best practices in spelling instruction often take decades to achieve widespread adoption due to differences in local

educational policies, resources, and priorities. A broader sample across multiple districts could reveal patterns and variations that were not captured in this study.

The sample was heavily skewed toward experienced teachers, with a smaller representation of novice educators. On average, 86.67% of participants had more than eight years of teaching experience, while only 13.34% had eight years or less. While veteran teachers provided valuable insights based on years of practice, the voices of less experienced teachers, who may approach spelling instruction differently, were underrepresented. Participant 12 commented, "The strategies I learned in teacher prep programs don't always align with what's expected in the classroom," suggesting that newer teachers might face distinct challenges and opportunities compared to their seasoned counterparts.

Self-Reported Data and Subjectivity

The reliance on self-reported data, primarily through surveys and interviews, introduced the potential for bias and subjectivity. Teachers' responses may have been influenced by personal frustrations, professional aspirations, or a desire to align their reported practices with perceived best practices. For instance, Participant 16 stated, "Systematic phonics instruction is necessary, but the inconsistency in resources across grade levels makes it difficult to maintain continuity." This reflects a widespread sentiment but also highlights the potential for exaggeration or overgeneralization of challenges.

Furthermore, self-reported data is inherently limited in providing objective measurements of instructional effectiveness (Moats, 2005). While teachers' perspectives offer valuable qualitative insights, the absence of direct classroom observations or

quantitative data makes it difficult to assess how reported strategies translate into student outcomes. Largely due to insufficient formal training, Moats emphasized that educators frequently diverge from research-based spelling instruction, indicating that teachers' self-reported adherence to best practices may not always reflect their actual instructional methods.

Technology and Changing Educational Tools

The role of technology in spelling instruction emerged as both an opportunity and a challenge. Teachers expressed concerns about students' reliance on tools like spellcheck, which may hinder the development of foundational spelling skills. Participant 19 noted, "Student progress in spelling is assessed through daily observations during routines like auditory drills and word work, but reliance on technology can sometimes overshadow these foundational practices." This aligns with Pan et al. (2021), as they found that while digital tools can address surface-level errors, they often fail to foster deeper orthographic and morphological understanding.

However, the study did not quantitatively evaluate the impact of technology on spelling instruction. For example, while some teachers reported positive experiences with digital tools such as spelling apps or online games, these tools' long-term effects on student learning remain unclear. The lack of data on how technology complements or detracts from traditional methods represents a significant gap in the study.

Addressing Linguistic and Cultural Diversity

The study also faced limitations in fully addressing how linguistic and cultural diversity impacts spelling instruction. Teachers reported challenges in supporting English learners, as they often struggle with differences in orthographic patterns and phonemic

structures between their home language and English. Participant 10 noted, "If students are coming from a home that has a second language, that definitely will impact their spelling. They may be learning two different languages." While this observation highlights a critical issue, the study did not include detailed analyses or specific strategies for addressing these challenges.

Devonshire and Fluck (2010) highlighted that linguistic diversity introduces additional challenges to spelling instruction, necessitating tailored strategies that consider variations in phonology and morphology. The lack of focus on these tailored approaches represents a gap in understanding how to effectively support bilingual and multilingual learners. Additionally, the study did not capture the perspectives of families or communities, which could have provided valuable insights into how home language and culture influence spelling development.

Time Constraints and Curricular Challenges

Teachers frequently cited limited instructional time as a barrier to effective spelling instruction. Participant 1 expressed frustration, "Bring back a formal spelling program and give ELA teachers time to teach." The rigid structure of school schedules often forces educators to prioritize other literacy components, such as reading comprehension and writing, at the expense of spelling. This finding aligns with Puranik et al. (2014) who noted that time constraints often limit the opportunity for dedicated spelling instruction, leading many teachers to incorporate it into broader literacy lessons instead. Moreover, the lack of formalized curricula exacerbates this challenge. Without dedicated time blocks or structured resources, teachers often resort to piecemeal approaches that may lack coherence or consistency. The pressure to meet district

standards and prepare students for standardized assessments further reduces the time available for comprehensive spelling instruction, leaving gaps in student learning.

Assessment Limitations

With teachers relying primarily on informal methods such as writing samples, dictation exercises, and observations during lessons, assessment practices also presented challenges. While these methods provide valuable insights into individual progress, they lack standardization and scalability. Participant 19 explained, "Student progress in spelling is assessed through teacher observations during daily UFLI routines (i.e., auditory drill, word work, and dictation)," and this highlights the reliance on subjective measures.

The lack of standardized spelling assessments hinders the evaluation of instructional effectiveness and the comparison of student outcomes across classrooms or districts. Emphasizing the need for more systematic approaches to track progress and guide teaching practices, Calhoon et al. (2010) highlighted that the absence of consistent, research-based tools complicates efforts to measure the impact of instructional methods on spelling development.

Professional Development Gaps

Finally, the lack of robust professional development emerged as a significant limitation. Teachers strongly desired targeted training in evidence-based strategies, differentiation, and integrating technology into spelling instruction. Highlighting the need for professional learning opportunities that address practical classroom challenges, Participant 28 noted, "Workshops on differentiated instruction can help teachers tailor their spelling lessons to meet the diverse needs of their students." However, many

participants reported that current opportunities are insufficient or disconnected from classroom realities. This disconnect limits teachers' abilities to implement best practices consistently and effectively.

Recommendations for Future Research

Building on the findings and limitations of this study, future research should focus on several key areas to more deeply understand effective spelling instruction and address the gaps highlighted by both teachers and the existing literature. An important future direction would be to expand the scope of research to include multiple school districts across Pennsylvania and other states that mandate a more systematic approach, such as those guided by the science of reading framework. Expanding the geographic and demographic reach could reveal valuable patterns and variations in spelling instruction practices. This broader approach would allow researchers to compare the effectiveness of different curricula, resources, and instructional strategies across diverse educational settings, and it would offer insights that a single-district study could not provide. For example, investigating how resource availability, community support, and district-level policies impact spelling outcomes would be invaluable for developing scalable, system-wide improvements.

Another critical area for future research is the analysis of district-provided English Language Arts resources. Many teachers in this study expressed frustration with the inadequacy or inconsistency of their current materials. Reflecting concerns about the lack of cohesive and effective materials to support spelling instruction, Participant 14 noted, "Teachers are not well-trained in our primary resource in ELA. Everyone is using different resources." By evaluating the quality and alignment of ELA resources with

research-based best practices, future studies could provide actionable recommendations for improving the tools that teachers use in their classrooms. Research in this area could also assess whether existing resources adequately address linguistic diversity and differentiation needs, ensuring that all students, including English learners, have equitable access to effective instruction.

Future studies should also explore developing and implementing comprehensive assessment tools to systematically evaluate spelling instruction. The absence of standardized spelling assessments was a recurring theme in this study and resulted in teachers relying on informal observations and writing samples to gauge student progress. Highlighting the varied approaches teachers take in the absence of standardized tools, Participant 25 noted that they use "pre-, mid-, and end-of-year spelling inventories alongside weekly assessments" to monitor student development. While these methods are useful for individual classrooms, they lack the consistency needed for broader analysis. Research into standardized, research-based assessments could provide teachers and administrators with tools to track student progress more effectively, evaluate the impact of instructional strategies, and ensure that interventions are targeted and data-driven.

Professional development also warrants significant attention in future research.

Teachers in this study consistently emphasized the need for better training to support effective spelling instruction, particularly in the areas of phonics, differentiation, and integrating technology. Underscoring the need for targeted professional learning to strengthen instructional practices and improve outcomes, Participant 17 emphasized, "More training in reading programs, phonics interventions, and phonemic awareness are great professional development opportunities to enhance teachers' knowledge about

spelling." Professional development could focus on explicit and systematic instruction shown to enhance student learning outcomes. Future studies could explore strategies for designing and implementing professional development programs that are both practical and accessible, while remaining closely aligned with the realities of classroom teaching. Such programs should focus on explicit and systematic instruction proven to enhance student learning outcomes, ensuring that training not only builds teacher capacity but also translates effectively into improved student achievement.

Additionally, research could examine districts that have already implemented similar training and collected data that demonstrates the effectiveness of their approaches. Longitudinal studies could further evaluate the impact of professional development on teacher practices and student outcomes, providing valuable insights into which types of training yield the greatest benefits. This evidence-based approach would help identify professional development models that are practical, scalable, and aligned with classroom needs, ultimately driving meaningful improvements in teaching and learning.

Addressing its potential and pitfalls, future research should consider the role of technology in spelling instruction. While teachers expressed concerns about students' over-reliance on spellcheck, they also highlighted the engagement benefits of digital tools like spelling apps and online games. Reflecting the potential of digital tools to complement traditional methods when thoughtfully integrated, Participant 28 emphasized, "Some of the more multisensory activities and hands-on instruction keep students engaged and focused rather than just writing and studying words." Future studies could explore integrating technology effectively into spelling instruction, ensuring that it enhances, rather than undermines, foundational skills. Research could also evaluate

the long-term effects of technology-based instruction on spelling proficiency, examining whether such tools can support deeper learning of orthographic patterns and rules.

Conclusion

This study underscores the critical role of spelling instruction in fostering literacy development and highlights the strengths and challenges of current practices. While teachers have identified effective strategies (e.g., phonics-based instruction, multisensory approaches, and differentiation), systemic barriers (e.g., inconsistent resources, limited professional development, and over-reliance on technology) continue to hinder progress. Future research must address these gaps by expanding the scope of inquiry, analyzing instructional resources, developing standardized assessments, and exploring the integration of professional development and technology. By focusing on these areas, researchers can provide educators and policymakers with the tools and insights to ensure that all students, regardless of their backgrounds, have access to high-quality spelling instruction. In doing so, educators can support the development of proficient spellers and also the creation of confident, capable readers and writers prepared for lifelong success.

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Appendix A

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?

Appendix B

Informed Consent

Dear Educator: I am Joshua Sektnan a doctoral student from Youngstown State University. I am conducting a study to investigate the impact of systematic K-6 spelling instruction. In this study, you will be asked to answer a few survey questions. I will also need to collect information to describe you such as years of teaching and grade level. You may also meet with me for a follow-up session and your participation should take about 20 minutes. You (may be at risk of harm because of this research. The harm include/s: physical and emotional/psychological. For example: 1) The survey you will answer questions and you may have negative emotional feelings from your experiences when completing the survey. 2) When you perform the tests in this study, you may get muscle soreness from typing. 3) You may become embarrassed if a breach of confidentiality allowed your practices to become known in the community.] The likelihood that you will be harmed is minimized because I will keep your name anonymous. The benefits to you from being in this study are hearing about more effective spelling instructional practices, trainings, and potentially resources. Your privacy is important, and I will handle all information collected about you in a confidential manner. I will report the results of the project in a way that will not identify you. I do plan to present the results of the study to my dissertation committee. You do not have to be in this study. If you don't want to, you can say no without losing any benefits that you are entitled to. If you do agree, you can stop participating at any time. If you wish to withdraw, just tell me or the contact

person listed below. If you have questions about this research project, please contact Dr. Karen Larwin at khlarwin@ysu.edu. If you have questions about your rights as a participant in a research project, you may contact the Office of Research Services at YSU (330-941-2377) or at YSUIRB@ysu.edu. I understand the study described above and have been given a copy of this consent document. I am 18 years of age or older and I agree to participate. The act of completing the survey indicates consent.

From: do-not-reply@cayuse.com <do-not-reply@cayuse.com>

Sent: Friday, September 6, 2024 11:15 AM

To: Josh Sektnan <jtsektnan@student.ysu.edu>; Karen H Larwin <khlarwin@ysu.edu>

Subject: 2025-13 - Initial: Initial - Exempt



Sep 6, 2024 11:15:44 AM EDT

Karen Larwin Teacher Ed and Leadership St

Re: Exempt - Initial - 2025-13 Not a One-Size-Fits-All Approach: Examining the Impact of Systematic K-6 Spelling Instruction

Dear Dr. Karen Larwin:

Youngstown State University Human Subjects Review Board has rendered the decision below for Not a One-Size-Fits-All Approach: Examining the Impact of Systematic K-6 Spelling Instruction

Decision: Exempt

Selected Category: Category 3.(i)(A). Research involving benign behavioral interventions in conjunction with the collection of information from an adult subject through verbal or written responses (including data entry) or audiovisual recording if the subject prospectively agrees to the intervention and information collection.

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

Category 3.(i)(B). Research involving benign behavioral interventions in conjunction with the collection of information from an adult subject through verbal or written responses (including data entry) or audiovisual recording if the subject prospectively agrees to the intervention and information collection.

Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation.

Any changes in your research activity should be promptly reported to the Institutional Review

Board and may not be initiated without IRB approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly reported to the IRB.

Findings: This investigation *Not a One-Size-Fits-All Approach: Examining the Impact of Systematic K-6 Spelling Instruction,* meets the exempt criteria

The IRB would like to extend its best wishes to you in the conduct of this study.

Sincerely,

Youngstown State University Human Subjects Review Board