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# **Evidence-Based Best Practices for Kindergarten Reading**

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Evidence-Based Best Practices for Kindergarten Reading

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A Literature Review Presented

in Partial Fulfillment of the Requirements

For the Degree of Master of Education

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#### Abstract

This literature review aims to highlight evidence-based best practices for kindergarten reading instruction. Popular reading curriculums and instructional cueing strategies are discussed in relation to their effectiveness for kindergarten reading success. Meaning-emphasis versus code-emphasis reading curriculum philosophies are explored, and specific curriculums that fall into these categories are discussed. Metacognition strategies and their relation to successful reading instruction are underscored. Interventions are examined in the areas of kindergarten phonological awareness, phonics, comprehension, and writing. Successful interventions in each of these areas of literacy instruction are highlighted through current research.

Evidence-Based Best Practices for Kindergarten Reading

Research reveals only 35% of fourth grade students in the United States are reading at or above the National Assessment of Educational Progress (NAEP) Proficient Reading criteria, showing that our current instruction for reading is not having the impact that it should (Nation's Report Card, 2019). In fact, the Common Core State Standards allocate four significant standards to foundational reading skills alone (Core Standards, 2020). Intervention strategies vary from teacher to teacher, and while some teachers base their selections on research and data, still others do not (Wagner, et al., 2017). Yet teacher selection of interventions is not the only variant among instruction of reading to kindergarteners. Districts across the country use a wide variety of curriculums for reading instruction, often without gathering input from teachers and without selecting quality, research-based curriculums (Schwartz, 2019). While a weak curriculum might be overcome by teachers supplementing the instruction, teachers often lack sufficient knowledge of how children learn to read to effectively intervene (Arrow et al., 2019; Loewus, 2019). Reading is an incredibly complex subject to teach, and teacher preparation programs across the country vary widely in what and how they instruct their preservice teachers (Moats, 2020).

Educators and researchers accept the extensive research on the foundational skills students need to acquire when learning how to read (Scarborough, 2001, as cited in April, 2018). Most educators agree that children need a combination of phonemic awareness skills, phonics instruction, sight word recognition, and language skills to progress as readers (National Reading Panel, 2000). However, research on the most effective instructional strategies and intervention strategies to use when teaching kindergarteners to read still leaves room for examination. While there is much research on different strategies and interventions, this literature review focuses on the strategies that are most effective for kindergarteners based on research. Strategies that most support general education kindergarteners in their journeys as beginning readers are highlighted and discussed. This literature review also highlights strategies and interventions that are the most effective for students with speech and language disorders.

The purpose of this literature review is to identify the most effective ways to select strategies to teach kindergarten reading based on research and evidence-based best practices. Research-based metacognitive strategies that support general education kindergarteners by effectively teaching letter names, letter sounds, and other early literacy skills will be identified (Destafano, 2019; Schiff, et al., 2017). Specific interventions used for phonemic awareness and phonics, and interventions that are most crucial in making a long-term impact are discussed (Fälth, et al., 2017). Finally, strategies that are most effective for students with specific learning disabilities are highlighted (Van Reybroeck & Michiels, 2018). These strong reading strategies for kindergarteners will help children reach reading proficiency.

#### **Literature Review**

"Reading is not simply a desire; it is a fundamental skill necessary for virtually everything we do" (Moats, 2020, p. 2). Yet teachers are challenged to ensure that all of their students become successful readers, no matter what specific skill strengths and deficits each of their students have. Educators are challenged to select appropriate strategies and interventions, and make instructional choices that will have the greatest impact for kindergarteners learning to read. This literature review synthesizes numerous studies that have identified strategies and interventions that have positive impacts on young students learning to read.

## **Tier I Reading Instruction Considerations**

## **Tiers of Reading Instruction**

Instruction is broken into three tiers, which refers to different levels of intensity with the intervention in terms of group size, who receives the instruction, and time spent in the instruction. Tier I instruction for reading refers to instruction that every student should receive for at least ninety minutes (Lead for Literacy, 2021). It may be delivered in a whole group setting, in a small group, or individually, but all students receive Tier I instruction regardless of the setting.

While everyone does receive Tier I instruction, it is understood that it should be differentiated to meet the needs of all students. Looking at reading specifically, Tier I instruction will often involve the use of a reading curriculum, explored in subsequent paragraphs. While teacher instructional moves will vary, the curriculum is a large basis for Tier I reading instruction. Another aspect of Tier I reading instruction is cueing, or teacher prompts, explored in subsequent paragraphs. Tier II instruction is an intervention to be employed with a small group of students, and would typically take place for thirty minutes, three to five times a week. It would be conducted with students who did not responding to Tier I instruction, so it would not include all of the students in a class. If students met proficiency through Tier I instruction, they would not take part in further tiers of instruction or interventions. Tier III instruction is the most intensive tier, and is only for students who do not respond to Tier II interventions. It would typically be done in a setting with only one to three students and could last for over an hour every day (Lead for Literacy, 2021).

# **Popular Reading Curriculums**

Many gaps exist in Tier I instruction and curriculum that are commonly utilized in the classroom (Adams, et al., 2020, Murray, et al., 2014; Schwartz, 2019). Some popular reading curriculums are not backed by science (Schwartz, 2019). Reading curriculums are often a large part of a teacher's Tier I reading instruction (Lead for Literacy, 2021). A study was conducted by Education Week researchers on common elementary reading curriculums, including Units of Study (for Teaching Reading), Journeys, Into Reading, Fountas & Pinnell's Leveled Literacy Intervention, and Reading Recovery. They analyzed these popular curriculums and found that phonics was taught in different ways depending on the curriculum used, and not all of the phonics instruction included in the curriculums was research-based. They also found that some curriculums included phonics instruction that encouraged students to guess unknown words, which is not a recommended strategy (Schwartz, 2019). Some reading curriculums encouraged the use of the three-cueing system, a reading technique that encourages students to guess the word based on meaning instead of decoding (Schwartz, 2019).

Popular curriculums often are influenced greatly by philosophical beliefs about reading instruction. This can impact whether curriculums have a meaning-emphasis or code-emphasis in student reading material (Murray, et al., 2014). In a 2014 study, two different reading intervention programs--Leveled Literacy Intervention and My Sidewalks-- were analyzed. The researchers specifically focused on how often the curriculums used word-level, text-level, and program-level prompts in order to examine if the curriculums had more of a meaning or code philosophy (Murray, et al., 2014). The research demonstrated that in curriculums that have a meaning-emphasis philosophy, the student texts were likely to have more multisyllabic words and students would not be able to directly apply their decoding skills to the books (Murray, et al., 2014). The findings from this study showed that Leveled Literacy Intervention had a more meaning-emphasis philosophy, and My Sidewalks had a code-emphasis philosophy (Murray, et al., 2014). Students engaging in a meaning-emphasis philosophy curriculum might guess at unknown words as their word decoding skills might not match the words used in the curriculum texts (Murray, et al., 2014).

In 2020, a team of seven literacy experts teamed up to examine a popular reading curriculum, Units of Study (Adams, et al., 2020). Units of Study was chosen as it is a very common curriculum that is taught Tier I to students in the United States. Sixteen percent of teachers in the United States use these materials (Schwartz, 2019). The team analyzed this reading curriculum with the lenses of phonics and fluency, text complexity and language development, building knowledge and vocabulary, and English Learners support. The Units of Study was examined with a kindergarten through third grade lens, and again with a third through fifth grade lens. To conduct the research, the entire unit was read thoroughly. Then, the

researchers went through the units again and focused on their particular area when writing this report. The findings were that for phonics specifically, this curriculum encouraged the outdated three-cueing system, which confirms previous research findings that curriculums often encourage this type of cueing. The researchers also found that the curriculum was lacking in the area of letter-sound correspondence instruction for children who might struggle to keep pace with the curriculum's suggested trajectory. It was also found that vocabulary instruction was lacking in this curriculum, as well as English Learner supports. While the researchers noted several positives of the curriculum, including its user-friendly design and promotion of the love of reading, it noted several important foundational areas that it is lacking (Adams, et al., 2020).

Teachers are often not given a voice in their district's selection of a reading curriculum, yet the curriculum plays a large role in what Tier I reading instruction students will receive (Schwartz, 2019). These curriculum variances all constitute gaps in Tier I instruction as the philosophies vary and can impact what students might be receiving for their Tier I reading instruction.

# Cueing

In addition to popular curriculums used to instruct reading, there are also a variety of prompts or cues used with students who are learning to read, and these prompts can be selected accurately when the instructor can recognize what cue is needed (Arrow, et al., 2019; Loewus, 2019; Rodgers, 2017; Schwartz, 2019). Cueing in this literature review refers to verbal prompts given by teachers to students to help them figure out an unknown word while reading. Cueing can be categorized as a subset of Tier I instruction as it is direct instruction that all students receive from their teacher. Teachers need to have a strong foundation of the English language

and be able to recognize when students are ready to learn a new spelling pattern, and then instruct it with appropriate cueing or other instructional strategies (Arrow, et al., 2019).

Research done in 2019 on 29 New Zealand teachers sought to determine whether teachers' explicit knowledge of phonology, morphology, and other components of the English language resulted in better reading instruction practices. The study looked to see if teachers need to have a strong understanding of phonology, morphology, and other literacy components to effectively teach reading. The teachers had taught between one year and thirty or more years and had different levels of education. They each took an assessment to show their own knowledge and also filled out surveys throughout the study. The results of the study showed that even teachers who had high levels of linguistic knowledge could not adequately teach reading without understanding strategies, which would include appropriate cueing, needed to instruct struggling readers. However, the teachers did need to have that linguistic knowledge in order to be able to teach their students adequately (Arrow, et al., 2019).

According to research conducted by Loewus in 2019, "75 percent of teachers working with early readers teach three-cueing -- an approach that tells students to take a guess when they come to a word they don't know by using context, picture, and other clues, with only some attention to the letters" (p. 2). Popular curriculums often include teacher prompts that encourage teachers to tell children to look at the picture and make a good guess (Schwartz, 2019). However, this cueing strategy is falling out of favor. Struggling readers will look at pictures as a strategy and make guesses about the words, which is a strategy employed by struggling readers and is not a strategy of strong readers (Moats, 2021, p. 16).

In a 2017 study featured in The Reading Teacher journal, researchers recorded videos of teacher and student interactions at the guided reading table and noted the interactions, and especially the prompts, given from teachers to students when the students struggled to read particular words. This study found that when teachers were domain contingent, meaning that teacher cued the student to use information they had not yet used to decode the word, students had positive results. Examples of cueing that could be domain contingent might be prompting students to use visual information from looking at the word and the letters, or meaning information when helping students think about the context of the text, depending on the student's errors. Implications of this study show that domain contingent cueing strategies have positive impacts on readers as they struggle with unknown words (Rodgers, 2017). Specifically, Rodgers discovered through this study that "teachers whose students had higher outcomes were fully 8 times more likely to be domain contingent than teachers whose students had low outcomes" (Rodgers, 2017, p. 529). While this is not a gap in Tier I instruction by itself, it highlights the importance of appropriate cueing strategies selected by the educator to be used in their Tier I instruction.

### **Metacognition and Learning Targets**

When analyzing reading interventions that have a strong impact on reading success, there was a common thread that emerged in the literature regardless of the intervention used. Metacognition strategies that encouraged children to think about their learning improved student success greatly (Destafano, 2019, Hattie, 2017, Moir, et al., 2020, Schiff, et al., 2017). An example of a metacognitive strategy is having a visible and student-friendly learning target so that students can identify what they are trying to learn as they are learning it. According to John Hattie's research, metacognitive strategies have a 0.6 effect size on student learning and achievement (2017). Metacognitive strategies, according to his study, are considered to have the potential to accelerate student learning (Hattie, 2017). Based on these findings, metacognitive strategies added to a quality reading intervention has the potential to further accelerate student reading achievement.

#### **Metacognitive Strategies**

A study conducted in 2017 with kindergarten students who had speech-language impairments explored the relationship between reading skills and metalinguistic (thinking about language) awareness. An intervention involving spelling and metalinguistic awareness was conducted for three months. The findings were that "strong relations were found between spelling and metalinguistic awareness" and that "working on spelling while emphasizing the three major aspects of metalinguistic training—phonological awareness, alphabet knowledge, and letter–sound matching—contributed to spelling abilities and results in transfer to reading skills" (Schiff, et al., 2017, p. 152). The findings of this study point to a strategy that benefits children who have speech-language impairment.

These results were duplicated in a similar study done with kindergarten students who were not diagnosed with speech-language disorders. These students were instead struggling to retain letter names and letter sounds as identified by their kindergarten teacher, and metacognitive strategies were also proven to be effective. In this study conducted in Wyoming in 2019, a reading specialist working with a group of kindergarteners focused on including specific learning targets for her intervention sessions. She identified what students would learn in their intervention session to help students metacognitively understand what they were trying to learn through her time with them. The learning target was visible and well understood by the children. The learning target was phrased in kindergarten-friendly language, such as "I can name all of my letters and sounds fast" (Destafano, 2019). This study showed great growth in this group of kindergarten students, with 100% of the sample group successfully learning all of the letter names and sounds, and being able to explain what they were learning (Destafano, 2019).

Metacognitive strategies and their impact on reading were examined in another study conducted in 2020 involving 74 children, aged nine and ten years old, as well as five teachers with between one and nineteen years of experience teaching (Moir, et al., 2020). Standardized tests measured children's reading scores before the intervention, and children's self-reports were gathered about their knowledge of metacognitive strategies. The intervention was done in a Tier I, whole group setting, daily for eight weeks. Students were asked metacognitive questions including "Prepare your mind. What is this about?' 'Wonder to yourself. Does this seem likely?' 'If this was a film, what would I see?'" and "'If I don't understand, stop, re-read. If I still don't understand, find the problem word" (Moir, et al., 2020, p. 407). Students in the intervention group had positive growth with the standardized test scores as compared to the control group of students who did not take part in this intervention. Teachers who participated reported their students being much stronger at visualizing during their reading, and having much stronger metacognitive skills that helped their reading after taking part in the intervention. Reading comprehension scores were significantly raised (Moir, et al., 2020).

# Interventions for Specific Areas of Kindergarten Literacy

Even after the teacher examines and uses data to select an appropriate intervention focus and plans to use metacognitive strategies with the selected intervention, the process of finding the appropriate intervention or reading strategy for a kindergarten learner is still not yet complete. Much research has been conducted on the unique areas of literacy, including phonological awareness, phonics, comprehension, or writing.

#### **Phonological Awareness**

According to Dr. Scarborough's Reading Rope breakdown of the foundational skills necessary for reading, phonological awareness is a key piece of learning to be a successful reader (Scarborough, 2001). Phonological awareness includes the ability to manipulate phonemes (phonemic awareness), as well as the ability to manipulate syllables and other parts of words (Scarborough, 2001). Phonemic awareness is critical for kindergarteners just beginning to learn the foundations for reading (National Reading Panel, 2000).

A study conducted in 2017 by Falth et al. explored the effects of different reading programs for preschoolers. While one program had a focus on phonological training and acted as the experimental group, the other program featured a more traditional, comprehensive approach to teaching reading including sentences, syllables, and letter sounds, for example. The results of this study showed that the phonological awareness interventions and instruction experimental group achieved better outcomes. The instruction that focused on phonological training positively impacted not only phonological skills, but also the students' letter names and sounds (Falth, et al., 2017, p. 274). Students in the experimental group retained their learning half a year later. "One interpretation is that phonological training with articulation forms a good basis for future reading development" (Falth, et al., p. 274). This was true for both at-risk and not at-risk children.

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A meta-analysis was conducted in 2016 examining sixty-eight studies on phonemic awareness, phonics, fluency, and comprehension interventions and their long-term effects. Studies were found with the ERIC database, and only peer-reviewed articles were included in this analysis. The study examined long-term effects of a multitude of interventions. The results showed that phonemic awareness and comprehension interventions were more effective at longterm results than phonics interventions alone (Suggate, 2016).

A study by Wilkowski et al. conducted in 2012 examined the impact of an early intervention phonemic awareness program on kindergarteners. The research was conducted in New York with 171 general education kindergarteners. The researchers tracked students' letter names and letter sounds to measure the impact of phonological interventions, coupled with phonics interventions, conducted in early childhood. The results showed significant positive impacts on young children, demonstrating the need for interventions based around phonological awareness skills for children lacking in these skills. This study supports phonemic awareness as an effective intervention for kindergarteners, even in regard to letter names and sounds. "This ten-week intervention program consisted of teacher-created lessons which focused on phonemic awareness skills, such as alliteration, rhyming, segmenting, and blending phonemes, as well as concepts of print" (Wilkowski, et al., 2012). This is interesting as the students increased their identification of letter names and sounds, even though the specific intervention focused on phonemic awareness skills in addition to phonics skills.

#### Phonics

When phonological skills are in place, phonics instruction must be closely examined for kindergarten learners. "Findings provided solid support for the conclusion that systematic

phonics instruction makes a bigger contribution to children's growth in reading than alternative programs providing unsystematic or no phonics instruction" (National Reading Panel, 2000, p. Simply put, phonics instruction involves teaching the relationship between sounds and 92). letters, although it also involves learning other spelling patterns (The National Institute for Literacy, 2006, p. 6). The National Institute for Literacy reported that systematic phonics instruction should be explicitly taught in kindergarten and benefits all children, but especially those who are having difficulties learning to read (The National Institute for Literacy, 2006, p. 13). "Learning to read is not natural or easy for most children. Good readers process the letters of each word in detail, although they do so unconsciously" (Moats, 2020, p. 15). While good readers have automatic, unconscious reading ability, the process is not easy for all children and must include learning the relationship between letters and sounds (Moats, 2020, p. 15). Looking again at Dr. Scarborough's Reading Rope breakdown, students must develop strong decoding strategies in their journey to be readers (Scarborough, 2001). Effective phonics interventions can involve many different strategies depending on what the students are focusing on.

A study conducted with kindergarteners in 2013 examined the impact of supplemental phonics instruction in the form of flashcard drill practice. The researchers wanted to see the impact of a brief intervention, as this intervention was only once a week for five weeks. Six kindergarteners participated in this research. The researchers used flashcards to practice not letter sounds, which is more common, but decoding skills. The instructor showed the children a word and had them repeat each of the sounds in the word and then the complete word. Kindergarten-appropriate decoding words were used, including words following the Consonant Vowel Consonant and similar patterns. The students in the group all grew at their own rates, and all showed improvement from the initial assessment. However, one week following the intervention, the students' regressed in their word-reading scores. The brevity of the intervention might relate to their regression (Noltemeyer, et al., 2013).

In a nine-week study of 220 preschoolers who were at-risk for reading difficulties, researchers experimented with interventions that involved students listening to high-quality readalouds and focused on rhyming, alliteration, and letter sounds that corresponded with the book (Bailet, et al., 2009). The study examined reading interventions done with pre-kindergarteners who were at risk for reading difficulties. The study found that preschoolers who were at-risk for reading difficulties responded very well to the phonics interventions. The students made great gains with both phonological and phonics skills when engaged in a phonics and phonemic awareness intervention (Bailet, et al., 2009). These gains included improvement in their "phonological awareness, vocabulary, print, and letter knowledge skills" (Bailet, et al., 2009, p. 348).

The National Early Literacy Panel also supports phonics interventions for early childhood children. Their findings also support that phonological awareness skills should be taught in combination with other skills, such as letter sounds and letter recognition (National Center for Family Literacy, 2009, p. 119).

An interesting study conducted in 2012 examined the long-term effects of phonics interventions employed with children who were English Language Learners and those who were native English speakers. They sought to find out if the impact of phonics interventions had lasting results two years after the intervention. The phonics intervention consisted of "lettersound correspondences, phonemic decoding, spelling, and assisted oral reading practice in decodable texts" (Vadasy, et al., 2012, p. 990). Students participated in the intervention for thirty minutes at a time for four days each week, for a total duration of eighteen weeks. For the next two years after the intervention, students were assessed in the fall and spring. The findings were that this supplemental phonics intervention had positive impacts for all students, both English Language Learners and native English speakers. Interestingly, English Language Learners were benefited with "word level outcomes, i.e. word reading and spelling" outcomes, and native English speakers had advantages with "word level, fluency, and comprehension outcomes" (Vadasy, et al., 2012, p. 998).

#### Comprehension

Phonological awareness and phonics skills are the common foci of kindergarten instruction strategies and interventions. Comprehension skills and fluency are often less discussed when looking at kindergarteners and their reading trajectory. Nonetheless these skills are important even in early childhood as language comprehension is a crucial component of skilled reading (Scarborough, 2001).

A 2018 study involving kindergarten through fifth grade students examined the blended learning approach to reading instruction to see if it was effective for English language learners and native English speakers. The study involved a quasi-experimental group design in which the students used computerized learning programs that differentiated for reading level and also contained comprehension aspects. Students engaged with a computer literacy program as well as received direct instruction. The study found that blended learning was highly effective for English language learners. While many interventions for young learners target solely phonics or phonemic awareness, focusing on comprehension as well increased the learning of English language learners in this study (Kazakof, et al., 2018).

Supporting these findings, in a meta-analysis of the long-term effects of different types of reading interventions, comprehension interventions were shown to have some of the largest effects on students' reading abilities (Suggate, 2016, p. 90). Described in the prior phonological awareness section, a meta-analysis conducted in 2016 studied long-term effects of many interventions, and the results showed that comprehension interventions had a long-lasting impact on students (Suggate, 2016). "Comprehension interventions, on the other hand, appeared particularly effective" (Suggate, 2016, p. 90).

A study published in 2008 examined a reading intervention conducted for nine weeks. Twelve children participated, all of which had not responded to other evidence-based reading interventions. The children were the average age of seven years old. The researchers examined the impact of a reading intervention that incorporated both phonological awareness training skills as well as vocabulary instruction. The results of this study showed that students who had not responded to evidence-based reading interventions did grow in their reading skills in multiple skill subsets through this intervention (Duff et al., 2008, p. 325). This particular intervention did involve phonemic awareness and phonics, but also integrated vocabulary as well (Duff et al., 2008).

The Simple View of Reading, a common reading theory, is defined as "a formula demonstrating the widely accepted view that reading has two basic components: word recognition (decoding) and language comprehension" (Farrell, et al., 2019, p. 1). A study conducted in 2006 sought to examine the Simple View of Reading's two components,

comprehension and decoding, and its effect on young readers. Two studies were conducted, one involving eighth grade readers and another involving kindergarten, second, and fourth grade readers. Both comprehension and phonological skills were examined, involving the major components of the Simple View of Reading. Results of standardized reading achievement assessments were analyzed. "The results support the simple view of reading and the phonological deficit hypothesis" (Catts, et al., 2006, p. 278). The results showed that children who struggled with comprehension could decode words but struggled with multiple areas of comprehension. Children who struggled to decode had average comprehension ability as measured by a listening comprehension task. The research also found that students who struggled with comprehension in kindergarten still struggled with it in second and fourth grades (Catts, et al., 2006). This has importance for teachers selecting reading interventions as "classifying poor readers or children at risk for reading disabilities on the basis of their strengths and weaknesses in language comprehension and word reading could lead to more effective intervention strategies" (Catts, et al., 2006, p. 291). Determining the area of need before intervening is important for student success.

### Writing

The National Center for Family Literacy recognizes the impact of early writing skills. "Conventional reading and writing skills that are developed in the years from birth to age 5 have a clear and consistently strong relationship with later conventional literacy skills" (National Center for Family Literacy, 2009, pg. vii).

A study conducted in 2017 involved 179 kindergarteners, and examined at the effects of "phonological awareness, conceptual knowledge of the writing system, and textual competence" and their importance on reading success (Pinto, et al., 2017, p. 1). Researchers looked at the kindergarteners' invented spelling, phonological awareness, and textual competence. Results of the study showed that the conceptual knowledge of the writing system is a predictor of later reading success. They found that invented spelling is a reliable way to track this. The results showed that emergent literacy is an important indicator of later reading success (Pinto, et al., 2017).

A study conducted in 2018 analyzed the intervention and strategy of writing for children who have developmental language disorders. The researchers aimed to study the impact of finger writing (in which students use their finger instead of a pen or pencil to make the movements of writing letters) on students' reading, handwriting, and spelling. Five children in a special-education school in Belgium participated in this study. The children were between seven and ten years old and had diagnosed developmental language disorder. The findings were that the finger writing intervention had a positive effect on the students and should be considered an effective intervention, especially for students with developmental language disorders. "The key factor that seems to have enabled the learning is the orthographic-motor integration forced by the finger- writing task" (Van Reybroeck, et al., 2018, p. 1335). Students improved in both their reading and spelling ability after taking part in the intervention (Van Reybroeck, et al., 2018).

Further supporting the effectiveness of writing interventions includes a study conducted in 2003 that won the International Reading Association's Outstanding Dissertation Award. This study examined the impact of interactive writing and its impact on kindergarteners' beginning reading skills, including phonological awareness and spelling. Eighty-seven kindergarteners participated in this study. Children were placed in small intervention groups and worked with literacy teachers for sixteen weeks. Interventions involved reading skills, but also included interactive writing activities with teacher feedback and scaffolding. After participating in this interactive writing intervention, the kindergarteners showed growth in their reading ability (Craig, 2003). Specifically, the researchers found growth with "word identification" "passage comprehension" and "word-reading development" (Craig, 2003, p. 440). The results showed that "writing instruction that encourages phonemic segmentation and invented spellings provides a rich context for developing the phonological awareness and alphabetic knowledge children require for early reading... interactive writing not only enhances kindergarten children's word reading but also their reading comprehension" (Craig, 2003, p. 440).

#### Conclusion

Reading is a large and important focus of kindergarten instruction, setting the foundation for success throughout the rest of the kindergarteners' lives. Many of the foundational skills needed for being a reader are taught in kindergarten. While the strategies and interventions vary from classroom to classroom, there are common threads in selecting and teaching effective reading strategies that emerge from research. Reading curriculums might promote a more meanings-based or code-based emphasis, while teachers select appropriate materials based on their specific student needs (Schwartz, 2019 and Murray, et al., 2014). Cueing strategies and prompts vary, but reflect the emerging decoding skills of unique readers in the classroom (Loewus, 2019, Schwartz, 2019, Moats, 2021, and Gill, 2019). Metacognition strategies have positive impacts for students in their unique interventions, regardless of the intervention (Destafano, 2019). Teachers consider multiple areas of literacy when implementing a reading intervention, whether it relates to phonological awareness, phonics, comprehension, or writing. Each subset of literacy has its own place in a child's reading trajectory, depending on the skills they already have (Scarborough, 2001). While selecting an appropriate strategy or intervention for kindergarteners is not a simple task, the consideration of selecting an appropriate route benefits kindergarteners in their lifelong journeys as readers.

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