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# Early Reading Instruction Methods: An Analysis on the Outcomes of Whole Language Instruction and Phonics Instruction

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by

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**Abstract**

Many within the field of education struggle to meet common ground in regards to how we should teach children to read. Throughout the past several decades, educators have engaged in discussions around early reading interventions, specifically related to phonics instruction and whole language instruction. This review examines previous scholarship on these two instructional approaches and the effectiveness of various reading interventions. The findings reveal that each instructional approach targets different skills and that a balanced approach is recommended. The purpose of this review is to highlight each of the characteristics of phonics instruction and whole language instruction and to evaluate their effectiveness. In order to evaluate their effectiveness, there must be a critical understanding of where there is nuance and what future steps need to be taken to reduce the literacy gap.

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## Introduction

*The Literacy Gap & the History of Reading Wars*

Low literacy rates continue to be a persistent challenge in our education system. Children that struggle to learn how to read are more likely to face academic challenges than their peers that are proficient readers, and reading difficulty continues to be the most common rationale for Special Education referrals (Frolov, 2021). The National Academies Press classifies three barriers that could be preventing students from becoming stronger readers. The first barrier mentioned is that students have difficulty understanding alphabetic principle. The second barrier described is, " the failure to transfer the comprehension skills of spoken language to reading and to acquire new strategies that may be specifically needed for reading" (Early Childhood Development and Learning, 50). The final contributing factor is that students may not be motivated to learn how to read or lack appreciation for reading. It is important to recognize that students come from various different backgrounds that may influence their literacy-related knowledge prior to entering school. Children living in poverty, children with limited English proficiency, and children with parents that had difficulty reading are seen as at-risk of falling behind when entering the school system (Early Childhood Development and Learning, 50).

As mentioned previously, when a child continues to struggle with reading, they begin

to avoid reading and become less motivated to learn how to read. Though avoidance is understandable, it places students in a situation where they are put at a greater disadvantage as time goes on. This occurrence is referred to as the Matthew Effect which was coined by sociologist Robert K. Meron, and later adopted by psychologist Keith Stanovich in 1986 (Plessis, 2023). The Matthew Effect is in reference to the biblical story of Matthew, where the rich get richer while the poor get poorer. This concept is designed to illustrate how less skilled readers fall more and more behind while their peers continue to progress. Unfortunately, this is the reality for far too many students in this country. Discussion around effective reading instruction methods attempt to tackle disparities that many students face.

Over the past four decades, many in the field of Education have debated over the topic of reading instruction. This is popularly known as the Reading Wars. The conversation of reading instruction methods have been dated back even farther than the 1980's and 1990's, however this debate has raised plenty of questions in regards to how educators can effectively teach reading to younger learners (Castles et al., 2018). Though this debate is still relevant today, it reached its peak in the 1990's. Across the country, there were copious amounts of disagreement over which curriculum should be taught in schools. This was a significant movement that became a point of conflict among parents, educators, researchers, and more. This debate focuses on two methods of reading instruction. These methods are known as phonics instruction and whole language instruction.

### *The Principles of Reading*

In order to examine the properties of phonics and whole language instruction, it is necessary to consider the foundational principles of reading. The National Reading Panel

describes five principles of reading, which were defined in 1977 amidst the prevalent Reading Wars. According to the National Reading Panel, they deem that Phonemic Awareness, Phonics, Fluency, Vocabulary, and Comprehension are the principles and skills that encompass being a reader. This panel was formed by the United States Congress as a response to the then uprising debate, in which they conducted extensive research to evaluate which reading instruction methods were the most effective.

The first principle that the National Reading Panel outlines is Phonemic Awareness. Phonemic Awareness, "refers to the ability to focus on and manipulate phonemes in spoken words" (National Reading Panel, 2005, 1). A phoneme is the shortest unit of sound in a spoken language. For example, the word chip is composed of three phonemes: /ch/, /i/, /p/. Some common skills that fall under this principle include phoneme isolation, phoneme identity, phoneme categorization, segmenting, belending, and deletion. Phonics refers to matching sounds in spoken language to letters. This is also known as letter-sound correspondence, which bridges the gap between graphemes of a written language and its phoneme in a spoken language. Fluency accounts for a reader's speed, accuracy, and prosody. Vocabulary accounts for both words that are recognized while speaking and listening, and words that are identified on print. The last principle, Comprehension, refers to the ability to understand the meaning of a text, "through a reciprocal interchange of ideas between the reader and the message"(National Reading Panel, 2005, 5).

*Phonics Instruction*

Phonics instruction is a systematic method of teaching reading. There are several distinguished approaches to phonics instruction which include, analogy phonics, analytic

phonics, phonics through spelling, embedded phonics, and synthetic phonics (National Reading Panel, 2000). Each approach to phonics instruction will vary in terms of how explicit it is being taught. For instance, embedded phonics and analogy phonics tend to be taught in ways that are less explicit compared to the other approaches. These methods may be taught in conjunction with traditionally less explicit reading methods. Embedded and analogy phonics can also be used as a tool used for clarification, rather than a key foundational skill that can be built upon over time. These specific branches of instruction often rely less on the use of decodable texts to teach phonics. As a whole, phonics instruction focuses on the acquisition of letter-sound correspondences. This form of reading instruction is both visual and auditory and is often used as a tool for children that are in the beginning stages of reading. One of the primary outcomes of phonics instruction is for beginner readers to decode words. Decoding occurs when the reader is able to use their knowledge of letter-sound correspondences to read a word accurately. Another goal within phonics instruction is to teach children alphabetic principle. This includes the concept that letters and groups of letters represent a sound in spoken language and that "there are systematic and predictable relationships between written letters and spoken sounds" (National Institute for Literacy, 11). Phonics instruction that is taught explicitly and systematically means that letter-sound relationships are being taught in an organized and sequenced manner, while the teacher provides clear and precise directions for teaching these relationships (National Institute for Literacy, 17).

*Whole Language Instruction*

Whole language instruction is an approach that views language as a whole entity,

meaning that writing, reading, listening, and speaking should be taught together, rather than in isolation. In this method, students learn to read from their background knowledge and real life experiences. The whole language approach is seen as a method that "maximizes learning time while exposing students to many forms of language" (Patzelt, 4). Whole language instruction focuses on outcomes in comprehension and understanding the meaning of a text. The desired outcome is for students to connect to language in a way that is meaningful to them based on their life experiences. Whole language classrooms can be defined as learner-centered environments. Rather than using forms of explicit reading instruction, Whole language teachers will take on the role of a facilitator or a collaborator who guides students "by providing an environment filled with language" (Patzelt, 5). Whole language instruction often relies on a student's exposure to language in multiple environments to build upon their reading skills.

## Methodologies

The sample of studies that have been selected for examination have been chosen under a specific set of guidelines. In order to observe the intricacies of phonics and whole language instruction, the studies that have been chosen evaluate both methods and compare the outcomes for each approach. Each study has a different timeline and data collection strategies. However, the studies focus on a similar age demographic. The discussions around phonics and whole language instruction are used most commonly in the context of younger learners, particularly elementary grade learners. Each of the four studies examine classrooms of first grade students. Another parameter that was utilized for determining whether a study

was adequate, was the date it was published. Though the Reading Wars have remained relevant for several decades, articles were prioritized by dates ranging from the late 1990's to present day.

## Literature Review

*Phonics Interventions in Whole Language Classrooms – Fluency and Spelling*

A study by Maddox & Feng reviewed the efficacy of whole language and phonics instruction. The skills that they examined were reading fluency and spelling accuracy. The authors of this study defined reading fluency as, "…the ability to read sentences smoothly and quickly...Errors are words which are mispronounced, substituted, omitted, or read out of sequence (Maddox & Fang, 2013, 5). They also defined spelling accuracy as, "...the ability to write words with correct letter sequence" (Maddox & Fang, 2013, 6). The school was located in a rural area, with a total of 1,500 students attending. 75% of the students attending this school were white, 15% identified as Hispanic, and the remaining 10% identified as either black or non-Hisanic. The student population of this study is made up of twenty two first grade students in a general education classroom. Six of the students in the study were performing above the grade level standards, fourteen students were performing at their grade level, and two students were performing below the grade level standard. The group of students was then randomly assigned to be in either the phonics instruction group or the whole language instruction group. The study lasted for four consecutive weeks, and students received instruction for 20 minutes, five days a week. The authors intent for this study was to determine if there was a difference in the effect of whole language reading instruction and

phonics instruction, pertaining to the two skills of fluency and spelling.

Several weeks prior to the study, the teacher collected baseline data in the areas of reading fluency and spelling. The teacher used curriculum based measures (CBM) to assess the students. The reading CBM measured the number of words read correctly in one minute. The spelling CBM measured the number of sounds written accurately for twelve words, in two minutes. These two assessments were administered after the four weeks of divided instruction. During the trial, the phonics instruction group were taught phonics patterns, segmenting, blending, decoding, and manipulating words. Throughout the trial, the teacher did not read any stories or any visual supports for context clues, as these principles align with the methods of whole language instruction.

The whole language group read fourteen stories through the Raz-Kids program. Raz-Kids is an, "...internet-based computer program for young readers launched in 2004" (Marchand, 2015, 23). This reading program provides an electronic library of fiction and non-fiction stories, all ranging from 29 different reading levels. The level of each text is dependent on multiple different text components. According to the publisher of Raz-Kids, Cambium Learning Group; this includes but is not limited to: the predictability of the text, illustrative supports, concept load, word count, ratio of different words to total words, number of low-frequency words, and sentence length. The stories that they read in this reading program used words with the same spelling patterns that were used in the phonics instruction group. However, these phonics patterns were not explicitly taught in this group. Instead, the teacher facilitated student-centered conversations around the stories, picture walks, predictions, and vocabulary.

Prior to the study, there was little statistical difference between the groups in both

reading fluency and spelling. Notwithstanding the statistical difference, the students in the whole language instruction group did perform slightly higher in the baseline data from the reading and spelling CBMs. This would indicate that the students in that group were, "were higher level learners"(Maddox & Fang, 2013, 14). However, after the four week trial period of differentiated reading instruction; the students in the phonics instruction group scored higher in both the reading and spelling CBMs. The phonics instruction group increased the mean score in reading fluency by 8.00 points, while the whole language group increased by 4.09 points. This was shown by completing a series of four different t-tests to compare the pretest and post test results for both instructional groups. The t-test results for the spelling accuracy assessment showed that the phonics group increased their mean scores by 1.00 point, and the whole language groups mean score decreased by -0.27 points. This indicates that the phonics instruction group improved in their spelling accuracy, while the students in the whole language group regressed. The authors suggest that the students in the whole language group scored lower because they were not encouraged to use decoding skills (eg. applying phonics skills to derive sounds from printed words and letters). They noted that when a student needed help spelling a word, the teacher would encourage students to use context clues with the use of visuals, or read it again in the context of a sentence.

Maddox & Feng concluded that both instructional methods increased the students fluency and spelling skills, however, more growth was seen in the groups that received explicit phonics instruction. They also argued that their findings are consistent with what the National Reading Panel has found through their own research on the science of reading. Additionally, they state that the data they collected contradicts previous scholarship that argues that decontextualized phonics instruction is ineffective.

*Phonics Interventions in Whole Language Classrooms – Letter Identification and High-Frequency Words*

Pernai et al., observed the effectiveness of a phonics program by the name of, Hello Reader Scholastic Phonics, in a sample of first graders. This study was conducted in a suburb of Chicago. The racial and ethnic background of the school was 96.4% White, 0.4% Black, 1.2% Hispanic, with a total of 686 students enrolled (Pernai et al., 2000). The percentage of low- income students in this school district was 2.2% and the percentage of English Language Learners was 1.7%. Prior to the start of this study, the school district established that their standardized test scores in reading did not meet their expectations. However, the district standards were much higher than the state standards. After evaluating methods to improve upon the reading test scores, the school district mandated that first grade teachers would use a program by the name of Scholastic Phonics Reader. This phonics program targeted three main skills: phoneme manipulation, phoneme segmentation, and blending tasks. Phoneme manipulation is changing individual phonemes, or sounds; in a word. For example, if a student was asked to change the /t/ sound in tap to /p/, the student would say the word pat. Phoneme segmentation is breaking down words into individual sounds. An example would be if you asked a student to break down the word band. The student would be able to say /b/ /a/ /n/ /d/. Lastly, blending is being able to identify a word by hearing each phoneme pronounced separately. For example, if the teacher said /th/ /a/ /n/, the student would be able to identify that the word is *than*.

This school district had previously implemented a literature-based program for reading. Though the authors don't provide a definitive definition of what a literature-based

program is, it is stated that they did not implement explicit phonics instruction. Therefore, their previous program for reading likely aligned more closely with the principles of whole language instruction. When the phonics program was added, they split the 121 first graders in the district into six classrooms. The baseline data that they collected assessed the students on letter identification, word identification, concepts of print, and words within context.

The letter identification test included orally stating the names and sounds of each letter, and recognizing upper and lowercase letters. The word identification test included three lists of 45 words, each containing a variety of Pre-Primer, Primer, and Level 1 words. These are words that students see frequently, however as a sequence; Pre-Primer words tend to be taught or exposed to a child prior to first grade, Primer words are seen and used often in lower grade levels, and Level 1 words are still words that student may encounter frequently but they may include more complex components such as digraphs, trigraphs, vowel teams, and silent "e". An example of Pre-Primer words that were included on this assessment are: can, it, me, is, in. Primer words on this test included: did, eat, cold, from, like. Examples of Level 1 words in the test are: please, read, today, walk, know. The majority of the words included on these lists were not decodable, rather they are words that students are expected to memorize and remember how they are pronounced. These are also commonly referred to as sight words.

The assessment for concepts of print includes identifying, "the front of the book from the back, being able to track while being read to" (Pernai et al., 2000). The last assessment evaluated using words in context. They started by introducing a story to the students using pictures and discussion. The students were to then read the story aloud for the instructor. This subtest was measured by the amount of words that the student read correctly. The goal

of providing these specific subtests was to gather more comprehensive data on the current reading level of the students in the sample. After the baseline data was collected, they implemented the Scholastic Phonics Readers program. Teachers used this program three times a week for 30 minutes each lesson, spanning from the months of August to January. This phonics program supplemented teachers with decodable leveled readers with high frequency sight words. Each lesson covered four major components: develop phonemic awareness, high frequency words, read the story, and teacher-given dictation.

In order to develop phonemic awareness skills, the teachers used a variety of instructional approaches. This included, "identifying beginning and ending sounds, playing rhyming word games, listening for vowels and consonant sounds, repeating a given word without the first letter(s),and making new words by replacing the first sound in each word with a different letter" (Pernai et al., 2000). The teachers also wrote high frequency words on the board and implemented activities for students to use the words in their own sentences, as well as underlining them in texts. After the first two parts of the lesson were completed, the teachers would introduce the story. There were opportunities for the students to listen to the teacher read, read with a partner, or independently. Prior to reading the story, the teacher would review unfamiliar vocabulary words as well as discuss any predictions about the story. The final part of the lessons would include a teacher-give dictation which would consist of the teacher asking students to write high frequency words and sentences.

After the five months of intervention, students showed growth in all four domains. In August, the students were asked to identify uppercase and lowercase letters. The majority of the students were already proficient in naming each letter but by the end of the study, all of the students were able to identify all 26 letters accurately. The students were also asked to

identify the sounds of all of the letters, and by the end of the study they were all able to say the sounds of each letter accurately. The most growth that was seen at the end of the study was for the Pre-Primer word identification test. This test included 45 high frequency words and the baseline data indicated that the range of words that the students knew were only between 0-10 words, with an average score of 3.86 out of the 45 words. After the intervention period, the average score of correct Pre-Primer words were 37.17 words out of 45. The authors concluded that the Scholastic Phonics Program did support students in becoming more independent readers. Though they believe that this specific phonics program was beneficial, they claim that there should be variation in instruction to meet the needs of all students.

*Frequency and Impact of Phonics Instruction in Whole Language Classrooms*

A study by Dahl et al., examined the effect of phonics instruction within whole language classrooms. This study was conducted from the months of October to May, and the sample consisted of eight first grade classes located in central Ohio. The classes that participated in this study came from a range of different schools including, urban, suburban, and rural schools. There were a total of 178 first grade students within this study, as well as nice classroom teachers. The researchers in this study took on the role of participant-observers, meaning that they would observe how reading instruction was implemented in whole language classrooms. Their objectives were to evaluate how phonics instruction was being used in an identified whole language class, and to address any patterns of phonics instruction, "that were evident in the pretests and post-test comparisons of student achievement" (Dahl et al., 1999, 316). Although they did not implement a reading

intervention, they did gather baseline data in the following assessments: Hearing and Recording Sounds in Words (HRSW), Text Level Reading (TLR), Developmental Spelling Analysis (DSA), and Qualitative Reading Inventory Word Lists (QRI - II).

The researchers visited each school site for half-day observations a total of 117 times between the months of November to May. They documented each time they observed the teacher addressing letter-sound relationships with students. The teachers wore microphones during these periods of observation so that a transcript of phonics intervention could be produced and analyzed. After the duration of the study, it was evident that the teachers used phonics instructions in their whole language classrooms. The majority of the phonics instruction that was taught in the class aligned with the concepts of embedded and analogy phonics. Embedded and analogy phonics are not taught as explicitly or in isolation compared to other approaches of phonics instruction. Along with the type of phonics instruction that was used, they also measured where it occurred within the whole language approach. The teacher would often provide support for spelling during the students time for writing. This support would help students better understand letter-sound correspondences and spelling patterns. Based on the data they collected from the post-tests, they proved that there was a considerable amount of growth in the assessments the students took prior to the study. In the HRSW, 69% of the students accounted for the composite mean score to gain 7.15 with a standard deviation of 2.66 (Dahl et al., 1999, 333). For the initial scores for the DSA, “the average learner in this group spelled only two of the Letter Name words correctly” (Dahl et al., 1999, 333), whereas the post-test scores revealed that the students could spell nearly all 25 words on the list. The post-tests for the QRI-II demonstrated that the majority of the students were proficient in decoding words that extended from the preprimer and primer

lists, which included words from grades 1, 2, and 3. The TLR assessments also indicated that there were gains which moved students from a lower preprimer level to a first grade level. Despite being a whole language classroom, phonics instruction was still being taught. However, it was not an explicit systematic approach; rather it was used as a supplementary tool to guide students that needed more individualized support. The post-test results that they gathered indicate that the reading instruction that was provided did support some students in meeting end-of-the-year benchmarks in reading.

*Explicit Instruction and Guided Reading*

Denton et at. examined two different interventions for reading, both by the name of guided reading and explicit instruction. They defined guided reading as, "small-group lessons in which the primary activity is text reading and instruction is focused primarily on reading for meaning" (Denton et al., 2014). They also state the ways in which teachers can provide a guided reading approach.

> …teachers teach and prompt students to use reading strategies that involve three sources of text information: meaning cues from background knowledge and text context [including cues from illustrations], cues derived from students' understanding of English syntax, and visual information derived from print, including sound–symbol relationships and sound-spellings associated with larger orthographic units such as onsets and rimes (Denton et al., 2014).

Based on the description they provided, there is overlap between the philosophy of whole

language learning and guided reading because it relies heavily on context clues, pictures, and activating prior background knowledge to derive meaning from the text. The other form of intervention that they observed in this study was explicit instruction. They claim that explicit instruction, "most often emphasize[s] synthetic phonics instruction [i.e., teaching individual sound-spelling correspondences and encouraging children to "sound out" words] (Denton et al., 2014).

This study took place across two school districts in the southwestern United States. One of the school districts served a large urban population while the other school district was rural. The students in the urban school district were 27% African American, 62% Hispanic, 8% White, and 4% identified as other ethnicities. 80% of the families within this school district were considered to be economically disadvantaged based on the amount of students that received the free and reduced lunch program. This would indicate that this district likely serves Title-1 schools. According to the Oregon Department of Education, the classification of Title 1 indicates that the school or school district has a large population of families in poverty. Title 1 schools receive additional funding through the Every Student Succeed Act, which was passed in 2015. Five schools within that district participated in this study, compared to the four schools that the other district had. In the smaller school district, 11% of the students were African American, 81% Hispanic, 6% White, and 1% other ethnicities. 86% of the families within this school district were considered economically disadvantaged and 31% of students from both districts were English Language Learners.

The sample for this study included at-risk first graders in these two school districts. They screened students using the Test of Word Reading Efficiency (TOWRE) and the Woodcock–Johnson III Tests of Achievement. Students that scored in the 30th percentile

were selected for participation in this study. Once the students were identified as needing additional support in reading, they were divided into three groups. The group that received guided reading instruction had a total number of 74 students, the explicit instruction group consisted of 73 students, and the control group had 71 students. The students in the control group did not receive an intervention and instead had the typical reading instruction that was provided by their schools originally.

For the guided reading group, they used the procedures described by Fountas and Pinnell. Guided reading lessons created by Fountas and Pinnell include four components: Introducing the text, supporting effective reading, teaching processing strategies, and discussing and revisiting texts (Fountas and Pinnell, 1996). For this intervention, the teacher provided students with short books that were leveled to the students current performance, but they were not decodable texts. In a typical guided reading lesson, the teacher would provide a book for the students to read independently. The teacher would facilitate a discussion on the book prior to having the students read it. This consisted of asking the students to make observations and predictions about the book based on the illustrations. After reading independently, the teachers had the students refer back to the text so that they could acknowledge specific places where students showed effective reading behaviors (eg. self correcting errors). At the end of the lesson, students would then engage in discussions around the text (eg. summarizing the text, comprehension questions about the characters, cause-and-effect relationships).

The explicit instruction group had lessons that consisted of:

Phonologically based instruction in word reading, phonemic decoding, and spelling

> (word study), with application of skills in fully decodable text; text reading practice to build fluency; and explicit, sequential comprehension instruction that included listening to or reading non decodable text (Denton et al., 2014).

One of the larger components that they targeted for this intervention was word study instruction. This scripted program provided systematic instruction in phonemic awareness skills, spelling, and recognition of high frequency words. To target the area of fluency, they used the Quick Reads fluency program which encourages students in using self-monitoring strategies as well as practiced repeated reading. The comprehension program that they implemented was specifically developed for this study. Their comprehension program required teachers to model strategies through "think-alouds" and discussions around the text. They would also give specific feedback to students who used these self-monitoring strategies while working in small groups and independently.

The outcomes that were measured in the study included, word reading, fluency, and comprehension. Their results showed that the explicit instruction group and the guided reading group had significantly higher outcomes in the area of word reading and decoding compared to the typical school instruction group. In this domain, the explicit instruction group, "...exceeded the growth that would be expected with typical instruction by 54% on phonological decoding, whereas those who received GR [guided reading] intervention exceeded expected growth by 27%"(Denton et at., 2014). Though the authors hypothesized that the explicit instruction group would perform the highest in these measures compared to the other groups, the guided reading group did see some improvements in this domain because they were exposed to analogy phonics instruction. This form of phonics instruction

is not as explicit of an approach as the synthetic phonics instruction that the explicit instruction group practiced, and it relies on students to, “identify unknown words by analogy to known words or word parts” (Denton et al., 2014). In the domain of fluency, they found that the explicit instruction and guided reading groups performed better than the typical instruction group. They used two measures to evaluate which interventions were the most effective and they found that the explicit instruction and guided reading groups increased their test scores by 31% and 26% respectively (Denton et at., 2014). The study also indicated that they saw the most improvement from the explicit instruction group in the domain of reading comprehension.

## Discussion

### *Study Samples*

When evaluating different types of interventions and approaches to instruction, it is important to consider the methodologies that each scholar utilizes. One factor to consider is the sample of the study. Each of the studies within this review have used samples of students in the first grade. During the first three years of elementary school, students are expected to learn how to read. Many researches within the field of education argue that, “teaching students to read by the end of third grade is the single most important task assigned to elementary schools", because as students progress through the system, they are expected to use reading to learn (National Center To Improve the Tools of Educators, 1996, 4). Despite there being a limited range in regards to different grade levels among each of the populations in the studies, it does reflect the natural progression of early reading interventions within the

field. Another factor to consider is that these studies were administered to students in the general education setting. Up to 15% of school-age children are eligible under IDEA in the category of Specific Learning Disability (SLD), and 80% of those with a SLD struggle with reading (Shaywitz et al., 2021, 34). The interventions that were implemented in these studies do not provide a comprehensive representation of the needs and supports that students with reading disabilities need, because the majority of the data that was collected was within the context of a general education class. Additionally, it's important to note the population of English Language Learners within each study. For instance, Denton et al. conducted their study within a school district that was made up of 31% English Language Learners and Pernai et al. examined a commercialized phonics program within a school district that was made up of only 1.7% of English Language Learners. The outcomes of these studies may reflect different outcomes based on the student populations that were observed.

*Interventions and Outcome Measures*

While phonics instruction and whole language instruction are often seen as comparable approaches, it is worth noting that there is nuance. Phonics instruction is an instructional approach, whereas whole language instruction is a philosophy. Both have numerous differences that set them apart from each other. Phonics instruction is often taught in an explicit and systematic way, as opposed to whole language instruction that is focused more on the child's metacognitive ability and exposure to literature. Regardless of which approach is used, the National Reading Panel outlines the necessary skills that students need in order to develop strong reading skills. Two of these skills were targeted in the study by Maddox & Feng. Through their study, they found that phonic instruction was more effective

in the domains of spelling accuracy and reading fluency. Since phonics instruction teaches students letter-sound correspondences, it is not surprising that that group performed higher than the whole language instruction group which primarily focused on reading comprehension skills. With that being said, if they assessed students on comprehension; the outcomes might have shown the whole language instruction to be more effective. Though one of the primary outcomes with whole language instruction is to build students comprehension skills, it targets various independent skills too.

Pernai et al., examined the outcomes for identifying letters and sounds, as well as reading high-frequency words. The intervention that they implemented was a commercialized phonics program, and this was introduced into a literature-based program that did not previously implement explicit phonics instruction. They found that the phonics program created growth in all areas that they assessed in the beginning of the study. Like Maddox & Feng, they used the whole language instruction groups as their control and the skills that they assessed the students on are more aligned with the skills that are taught with phonics instruction. The goals for these two studies were to examine the effect of phonics instruction into already established whole language classes, therefore the outcomes that they were measuring reflected only a small portion of the principles of reading provided by the National Reading Panel. It is also worth noting that these authors claim that phonics instruction should not always be taught in isolation, rather there should be a balanced approach.

The study by Denton et al., observed student outcomes in typical school instruction, explicit instruction, and guided reading instruction. The intervention that they implemented for the guided reading group consisted of a commercialized program by Fountas and Pinnell.

The explicit instruction group received both a commercialized program as well as a comprehension program that was specifically designed for the study. Since parts of the intervention were curated for the study, it is important to consider the implications of what they wanted to measure and how it might reflect their own bias. Denton et al., argued the importance of explicit instruction and concluded that it is more likely to be beneficial for at-risk students. Through their study, they did find that the guided reading group did perform higher than the typical school instruction group in the domain of word reading and decoding. This raises the questions that Dahl et al. sought for in regards to whether phonics instruction is implemented into whole language instruction classrooms. They found that there were 844 documented phonics transactions during the duration of their study (Dahl et al., 1999, 325) which indicates that reading instruction methods are often not taught in isolation from each other. This is to be considered when evaluating the outcomes in the previous studies because there may have been overlap between each approach whether it was a deliberate and intentional decision by the teachers or not. Since the principle of teaching is often to meet kids where they are and to find ways to support them in their academics, it is no wonder that phonics instruction is often interwoven into whole language instruction because many children need explicit reading instruction to learn foundational skills. Ultimately, phonics instruction reflects only one of the principles of reading that is outlined by the National Reading Panel, and whole language instruction aligns with skills in the domains of reading comprehension. The studies that have been presented in this review do not reflect how reading instruction should target each of the five principles of reading, however; it does show how individual skills such as letter-sound recognition scaffold students into learning other skills (ei. spelling, fluency).

## Conclusion

*The Complexity of Reading Instruction – An Overview*

The current literacy gap is not something to be ignored, as it is a challenge that impacts students throughout their schooling career. Many within the field of education see these challenges and seek evidence-based practices that demonstrate their effectiveness in helping students learn how to read. Over the past four decades, the conversation around reading instruction methods have caused some disagreement within the field. Phonics instruction and whole language instruction are often discussed in this discourse because they share very different philosophies and approaches to reading instruction. Phonics instruction is often taught systematically and explicitly, whereas the philosophy of whole language is to allow students to explore literature more or less independently within literature-rich environments. If taught in isolation, these instructional approaches will not target all five domains from the National Reading Panel.

*Next Steps*

Knowing that one approach is not enough to teach young children how to read, we must acknowledge the value and importance of each instructional approach. Each student is going to have their own set of strengths and weaknesses, as well as their own unique background. The skills that students bring with them into elementary school often vary from student to student. That being said, educators should be prepared to present instruction in ways that are accessible to all students. Both instructional methods can be effective in helping students learn how to read, but the skills that they target are not aligned with one

another. In order to reduce the current literacy gap, educators must be diligent and intentional about the instructional methods that they provide. Rather than continuing to compare these methods which demonstrate near-opposite components, we should question what our desired outcomes are for our students and develop interventions that will explicitly teach the skills that they need in order to read.

References

Armbruster, Bonnie, et al. Put Reading First Kindergarten through Grade 3 Third Edition. 2006, lincs.ed.gov/publications/pdf/PRFbooklet.pdf.Patzelt, Karen. Principles of Whole Language and Implications for ESL Learners, 1995.

American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*. (DSM-5) American Psychiatric Association Publishing. 2013

Castles, A., Rastle, K., & Nation, K. (2018). Ending the Reading Wars: Reading Acquisition From Novice to Expert. *Psychological Science in the Public Interest*, *19*(1), 5-51.

Dahl, Karin L, et al. "Phonics Instruction and Student Achievement in Whole Language First-Grade Classrooms." International Reading Association , vol. 34, no. 3, 1999, pp. 313–341.

Denton, Carolyn A et al. "An Experimental Evaluation of Guided Reading and Explicit Interventions for Primary-Grade Students At-Risk for Reading Difficulties." Journal of research on educational effectiveness vol. 7,3 (2014): 268-293.

Frolov, Latoya. "What Is Specific Learning Disorder?" Psychiatry.Org - What Is Specific Learning Disorder?, Aug. 2021.

Learning to Read, Reading to Learn: Helping Children with Learning Disabilities to Succeed, National Center to Improve the Tools of Educators, 1996, files.eric.ed.gov/fulltext/ED398691.pdf.

Maddox, K., & Feng, J. (2013). Whole Language Instruction vs. Phonics Instruction: Effect on Reading Fluency and Spelling Accuracy of First Grade Students. Georgia Educational Research Association.

National Reading Panel - Teaching Children to Read, 2005, www.nichd.nih.gov/sites/default/files/publications/pubs/nrp/Documents/report.pdf.

Patzelt, Karen. Principles of Whole Language and Implications for ESL Learners. 1995, files.eric.ed.gov/fulltext/ED400526.pdf.

Pernai, Karen, et al. Piecing Together Phonics and Whole Language: A Balanced Approach, May

2000.

"Phonics Instruction." Reading Rockets, National Reading Panel, 2000, www.readingrockets.org/topics/phonics-and-decoding/articles/phonics-instruction.

Plessis, Susan. "Matthew Effect in Reading: Why Children with Reading Difficulties Fall Farther and Farther Behind." Development, Reading, Writing, and Math Solutions, 4 July 2023, www.edubloxtutor.com/matthew-effect-in-reading/.

Shaywitz SE, Shaywitz JE, Shaywitz BA. Dyslexia in the 21st century. *Current Opinion in Psychiatry*. 2021;34(2):80-86.