

# **Explicit, Systematic Phonics Instructions and How it Impacts Reading Achievement**

by

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## **Chapter One**

The body of work referred to as the “science of reading” is not an ideology, a philosophy, a political agenda, a one-size-fits-all approach, a program of instruction, not a specific component of instruction. It is the emerging consensus from many related disciplines, based on literally thousands of studies, supported by hundreds of millions of research dollars, conducted across the world in many languages. (Moats, 2021).

The science of reading is a framework that has been researched for decades to determine how the brain works and how reading is best instructed at each level of schooling. With years of research in the science of reading, researchers have found that phonics is a building block for foundational reading skills and needs to be incorporated into the daily classroom instruction. In the past, phonics was not incorporated into reading instruction, which many believe may be the reason some students are struggling to learn to read (Adams, 1990).

The problem is that phonemic is related to reading achievement, but the role it plays in reading development and the methods and strategies being used is not fully known. With the new Dyslexia Law signed by Governor Dewine, teachers are trained in explicit, systematic, state approved, phonics programs that are being implemented into elementary school classrooms to help work on this problem. According to Kozloff, “If a child memorizes ten words, the child can read only ten words, but if a child learns the sounds of ten letters, the child will be able to read 350 three sound words, 4320 four sound words and 21,650 five sound words (Kozloff, 2021).” This quote summarizes exactly how phonics can help a student and how the mental work will shift from

decoding to comprehending. It is important for students to know phonemic awareness and how to decode words before starting to read. If they learn these foundational skills, reading will become more fluent, and comprehension will be there (Maddox, K., & Feng, J., 2013).

In this research project, I will be looking at Phonics 95 unit assessments (phonics and comprehension) to compare if the growth in phonics matches the growth in comprehension. I will also be pulling MAP scores to compare if these assessments results are showing the same growth as the Phonics 95.

## **Background**

As an elementary school teacher, it is my goal to make sure my students are reading fluently and comprehending what they are reading. To make reading successful, it is important that students can sound out words quickly, which brings in the topic of phonics. In January of 2021, the House Bill 436 was signed into law by Ohio Governor Dewine. This law was created to require all Ohio schools to universally screen for dyslexia or dyslexic tendencies and to provide identified students with structured literacy interventions. Children with dyslexia have a hard time breaking down words into their individual sounds and to recognize the relationships between sounds and letters. Using phonics to teach these children gives them a slow and structured approach to learning to read. Along with this school mandate, schools are to adopt and implement an approved explicit phonics program into their literacy curriculum to service all elementary school students. To support this in my classroom, I used a Correlational Quantitative Research Design (Creswell & Creswell, 2018) to see how Systematic, Explicit phonics instruction impacts reading achievement.

I am a teacher at a small rural school in West Central Ohio. The school district is made up of 1,256 students, in which 97.5% are white, non-Hispanic. The school also has 10.6% economic disadvantage students, 6.4% students with disabilities and 1% multi-racial students (ODE, 2022). The elementary school itself serves 451 students, grades Kindergarten through fourth. It was selected as a Blue Ribbon school in 2022. This Midwest rural school has high achieving test scores with both reading and math being in the top 1% of Ohio schools. The district, as a whole, is also ranked number seven in Ohio.

One big topic in elementary schools is phonics and how it is related to reading achievement in students. Schools are mandated to adopt a state-approved phonics program in schools to support all students in the building blocks of breaking down words to begin reading. Teachers are required and have worked on getting trained, with eighteen hours of state-mandated tutorials to effectively instruct their students. In this study, I conducted research to determine how an explicit, systematic phonics program impacted student achievement on their reading diagnostic assessments. This study investigated the current second graders, current third graders, and the current fourth grade scores from when they were all in second grade. The current second grade students started the explicit phonics instruction in first grade. The current third grade students that are apart of this study started the explicit phonics instruction in second grade meaning their scores reflect their first year of instruction. The current fourth graders students apart of this study did not receive any explicit phonics instruction with the Phonics 95 program.



I first gathered data from the *Phonics 95* unit assessments that students take after 5 weeks of instruction. This assessment includes both phonics skills and comprehensions. I also gathered data from the MAP diagnostic reading assessment which students take three times a year.

### **Importance of Study**

The purpose of this study was to evaluate claims from past research that explicit phonics instruction is a building block to a young child's foundational reading skills. It is important for teachers to understand the why behind their instruction in the classroom and to continue to always be willing to try new things that are going to support the learners in the classroom year after year.

With the new dyslexia law in play in all Ohio schools, it is important that all teachers are educating themselves to be the best instructors in the classroom. The mandatory eighteen hours of professional development that was conducted by the State of Ohio gave valuable information on the background but doing additional research and using students I am currently teaching to investigate the importance is great research for teachers to see the impact of the program.

The goal of my study was to see, in my own school district, how explicit phonics instruction impacted my students' reading achievement overall. Based on the results I can see firsthand the impacts of phonics instruction and I am able to adjust instruction accordingly.

### **Research Question**

I explored one major question throughout the course of this research related to how explicit, systematic phonics helps support students' overall reading achievement: What are the differences in second grade MAP achievement test scores for students with and without phonics instruction in a West Central Ohio Rural School District?

The purpose of this research was to conduct my own research and look for further evidence to find if explicit phonics instruction is a building block to a young child's foundational reading skills and being able to see results within my own students to demonstrate the importance of explicit, systematic phonics instruction.

### **Definition of Terms**

The following educational terms are used consistently throughout this study.

- Alphabetic Principle: "Connecting letters with their sounds to read and write."  
(National Center on Improving Literacy, 2022)
- Comprehension: "The act or action of grasping with the intellect." (Merriam-Webster Dictionary, 2023)
- Decoding: "Decoding is the process of seeing written words on a page and being able to say them out loud." (Merriam-Webster Dictionary, 2023)
- Diagnostic Assessment: "A type of pre-evaluation that is used to gauge the level of a student's knowledge and to discover any learning gaps they might have.

These assessments are low-stake assessments because they are non-graded and do not determine if a child moves to the next grade level. Most diagnostics are given multiple times throughout the school year." (Jones, 2018)

- Explicit: “fully revealed or expressed without vagueness, implication, or ambiguity: leaving no question as to meaning or intent.” (Merriam-Webster Dictionary, 2023)
- Fluency: “Reading fluency is the ability to read at an appropriate pace, with good accuracy, and with natural expression.” (Waterford.org, 2024)
- Grapheme: “A unit (such as a letter or digraph) of a writing system” (Merriam-Webster Dictionary, 2023)
- MAP Diagnostic Achievement Test: “The Measure of Academic Progress test, is a computer-adaptive skills assessment that provides parents, teachers and administrators with metrics to measure a student's academic growth and progress early in their academic life. It is also considered a standardized test that schools use to measure student achievement and student performance in different achievement levels and grades.” (Benjamin, 2023)
- Phonemes: “any of the abstract units of the phonetic system of a language that correspond to a set of similar speech sounds (such as the velar \k\ of cool and the palatal \k\ of keel) which are perceived to be a single distinctive sound in the language.” (Merriam-Webster Dictionary, 2023)
- Phonics: “a method of teaching beginners to read and pronounce words by learning the phonetic value of letters, letter groups, and especially syllables.” (Merriam-Webster Dictionary, 2023)
- Phonics 95 Program: “This program is a Tier 1 structured literacy solution that supports meaningful and effective literacy progress linked across grades,

grounded in the science of reading and supporting the critical K-5 years.” (95 Percent-Group, 2023)

- Science of Reading: “The science of reading is a vast, interdisciplinary body of scientifically-based research about reading and issues related to reading and writing.” (Lawson, B., 2021)
- Systematic: “It most often describes something that is done according to a system or method.” (Merriam-Webster Dictionary, 2023)
- Whole Language: “A method of teaching reading and writing that emphasizes learning whole words and phrases by encountering them in meaningful contexts rather than by phonics exercises.” (Merriam-Webster Dictionary, 2023)

In this chapter, I provided an overview of the study, and why explicit phonics is beneficial to a young child's reading development. I stated the problem and research questions, importance of the study, and definition of concepts. The purpose of this study is to investigate the impacts of the phonics instruction in my school. In the next chapter, I review the literature concerning explicit, systematic phonics instruction in elementary students' overall reading achievement and I will describe it.

## **Chapter Two**

### **Literature Review**

This literature review explores topics related to phonics instruction as it relates to overall reading achievement. Research shows that phonics is related to reading achievement, but the role it plays in reading development and the methods and strategies being used is not fully known (Tunmer, 2013). In elementary school, it is important to build all foundational reading skills to develop students into strong readers as they get older. With this being said, research of the Science of Reading, shows that one of the big reading foundation skills is phonics. Students need to know how to phonetically break down words to help with reading fluency. If students can read fluently, it is easier for them to comprehend what they are reading (Adams, 1990). To better understand how phonics instruction is related to overall reading achievement, this review will be split into three sections. Section one will discuss the importance of Phonics instruction. Section two will discuss the types of phonics instruction. Lastly, section three will discuss the types of phonics assessments. To best understand the current trends related to phonics instruction, I will review of the history of phonics instruction, the reading wars, and the waves in public education in relation to dyslexia in the sections below.

#### **Phonics Instruction Overview and History**

##### *Phonics Instruction History*

In the 1980's the best evidence showed that on average, students that had phonics instruction were off to a better start in reading than students without phonics instruction (Paulu, 1988). It makes sense that these children were better readers because English is

an alphabetic language in which students combine the letter and sounds to read. Learning the relationship of letters and sounds enables them to identify most words in the English Language. According to *Becoming a Nations Readers*, most students should complete their study of phonics by the end of second grade (Anderson, 1985). During this time, explicit phonics instruction showed to be more prominent than implicit instruction, but practice revealed that there are some problems with both types of instruction. The ideal phonics program should have elements of both types of instruction. In the 1980s, it was hard to gauge what type of reading development was being used in schools. During this time, phonics was becoming more popular. Phonics was incorporated in many Basal programs, but studies were not done to know how teachers were teaching phonics in their classrooms.

As time passed, the 1990's to 2000's found that phonics remains to be one of the most controversial literacy instruction topics debated in the US, UK, Australia and New Zealand (Campbell, 2018). Throughout this time, there has been lots of new knowledge about how the brain works, how children learn, and how words are structured. Stahl, Duffy-Hester, and Stahl (1998) reviewed the research on phonics instruction. They concluded that there are several types of good phonics instruction and there is no research base to support the superiority of any one type. The National Reading Panel (2000a, 2000b) reviewed the experimental research on teaching phonics and determined that explicit and systematic phonics is superior to nonsystematic or no phonics, but there is no significant difference in effectiveness among the kinds of systematic phonics instruction.

*Reading Wars*

These so called, reading wars, can be traced back to 1779 and are still a topic of discussion today. Throughout the years, the pedagogies changed names multiple times and during different time periods, but they all continue to reference the same arguments.

In the 1950s there were debates on two different pedagogies within reading education. One of the pedagogies is based on a whole word based on visual-recognition-of-word-shapes principal, and the other based on a transform-the-visual-signs-to-speech-sounds principal, which is phonics (Cambourne, 2021). During this time, Rudolf argued that the lack of phonics instruction had created a national security crisis. This was labeled a crisis because they found that students were struggling to learn to read or struggling to read and they knew these students were their future. Moving into the '60s and '70s, was the emergence of the 'great debate'. During this time, there was a blame of students lacking in phonics skills led to the decline in SAT scores of American students. This claim was subsequently refuted (Carson, Huelskamp, & Woodall, 1993).

In the 1992 literature, *Whole Language Evaluation for Classrooms* by Oran Cochran, the pedagogies' names changed to 'whole language' versus 'phonics instruction' as we hear today. This push began in Canada but quickly spread to the United States. During these times, these were debated and everyone looked at the pros and cons of them.

In the late nineties to today, these debates have turned into what people now call 'reading wars.' A consequence of this was the demand that only pedagogies that are evidence based or scientifically derived should be applied in literacy classrooms. This did not help anything, because the war continued because of different views of what each

group thought was the best way of teaching reading and what they deemed as “scientific evidence”.

### *Importance of Phonics Instruction*

The English language is very complex. In order to develop the English Language, children must be able to grasp and master key skills, such as, recognizing letters, turning letters into words, turning words into sounds, and making sense of these sounds (National Reading Panel, 2000). It is essential for children to learn the relationship between letters and sounds because the English language relies heavily on letters to represent sounds, and phonics is the process of teaching children how to achieve this. In phonics, children are taught to identify letters and the sound that the letter makes. They also learn how a change in letter order affects a word’s meaning.

According to Sitthitikul (2014), learning to read is a complex task for beginning readers because they must coordinate many cognitive processes to read accurately and fluently, including recognizing words, constructing the meanings of sentences and text, and retaining the information they read. An essential part of the reading process for beginning readers involves learning the alphabet, including letter-sound correspondence and spelling patterns, and learning how to apply this knowledge into their reading (National Reading Panel, 2000).

Phonics has been defined as “an approach to, or type of, reading instruction that is intended to promote the discovery of the alphabetic principle” (Scraborough & Brady, 2002, p. 20). The goal of phonics instruction is to help students develop the alphabetic principle. This principle is defined as the correspondence between phonemes and



graphemes, and phonological decoding. Students who understand this principle know that the sounds of spoken words are mapped onto written words. As students start to understand this principle, they can start using letter-sound correspondences to figure out unrecognized words. All these foundational skills are pre-requisites for fluency and critical because a fluent reader can invest their energy into comprehension, which is the main goal of reading. Research from how children learn to read indicates that achievement in reading comprehension depends on the ability to recognize the words of text accurately and quickly and that the development in word recognition in return depend on the ability to make use of letter-sound relationships (Maddox, K., & Feng, 2013). Explicit phonics plays a significant role in helping to kick-start the process by which beginning readers acquire un-taught spelling-sound relationships. According to Venezky (1999) phonics instruction is to provide beginning readers with a process for generating approximate phonological representations of unknown words that get close enough to the correct form of the word.

Phonics has many benefits in the foundation of beginning readers. Some of these benefits include faster sound-to-symbol recognition, improved vocabulary and language development, better spelling abilities, and greater understanding of syllable structure. It is important for children to learn letter-sound relationships. When children have the phonics foundational skills, they are more automatic and fluent in their reading so that all the other aspects of reading become natural (Adams, 1990). Children with a phonics background are set apart from the students that do not have the phonics foundational skills and are less fluent readers. DeWine's mandate was influenced by the information

just discussed on phonics instruction, which is the reason for the adoption of Phonics 95 at my school.

### **Types of Phonics Instruction**

In education, particularly, in the teaching of reading over the years, the choice of instruction methods has been heavily influenced by many factors, not only teachers' own frontline experiences about what works, but also politics, economics, and the popular wisdom of the day (National Reading Panel, 2000). As stated in Chapter one, there is a new Ohio Dyslexia law that was passed that mandates that all Ohio schools need to adopt a new state approved phonics program (Ohio Education Association, 2023). That brings the importance of phonics instruction back into the forefront of schools around the country.

Phonics instruction can be defined as the systematic and explicit instruction of letter-sound correspondence. Educators must have a plan of instruction that includes a carefully selected set of letter-sound relationships that are organized into a logic sequence (Armbruster, 2001). There are five key characteristics of effective Phonics instruction. The characteristics include being explicitly and systematically taught, being taught in an integrated literacy program, including flexible instruction, linking phonemic awareness to phonics, and providing opportunities for practice in reading and writing. When including these characteristics into a daily classroom instruction, students will flourish in the foundational letter-sound skills that will lead them into a fluent reader (Armbruster, B. B., Lehr, F., & Osborn, J., 2001). Phonics is an important building block to reading achievement in young children. It is important to know the types of phonics instruction

so teachers are able to give their students the correct teaching methods they need to be a better reader.

There are four types of phonics instruction that can be used in the classroom. These types include synthetic phonics, analytical phonics, analogy phonics, and embedded phonics (Sitthitikul, 2022).

Synthetic phonics is a method of teaching where words are broken up into the smallest phonemes-the smallest unit of sound. This teaching method is used to show children how to identify all the phonemes in a word, match them to a letter, and then correctly spell a word. For example, a teacher would read the word to the student, have the student sound out each letter (/c/ / ă / /t/), and write the letter that matches each sound.

Analytical phonics is when teachers focus on teaching their students to analyze letter-sound relations in words that they have previously learned to avoid pronouncing sounds in isolation. This practice would include using sight words-words that you can look at and know what the word is. For example, a teacher would give students words to read using word parts, like vowel teams (ee, ea, oa) where the students know what sounds the vowel teams make, to be able to read the words. The way the 95 Phonics program is set up, this is a skill that students start to see in first grade, but really hit hard in second grade in the Phonics 95 program.

Analogy phonics is when the students are taught to use parts of a word they have already learned to read and decode. This method is used to help children build upon their existing skills by creating connections to new information. An example of an analogy

phonics lesson would be to use word families. I would give the ending -an and students would add a letter in front of -an to make new words like pan, can, plan.

Embedded phonics is the teaching of phonics skills by using techniques that rely upon a hands-on approach to reading. The importance of this method is for students to be able to use their 'whole-brain' by using their hands and manipulating. An example of this is having the students sound out each sound of a word and pressing little balls of playdoh for each sound. There are many different types of phonics instruction that can be used. These types of instruction build upon each other. In elementary, different forms of instruction may be used to support the age of the students that the teacher is teaching (Armbruster, B. B., Lehr, F., & Osborn, J. 2001). For example, kindergarten students would be working on the sound and would not be ready for the word building.

As students get older, they will be able to do more of the forms. All forms of phonics instruction are effective depending on the student's learning style and age. All types of these instruction forms are important, but there is a time (grade level) in which you use each type of instruction, because they build upon each other (Sitthitikul, 2022).

Cunningham (1990) conducted a study with 42 Kindergarten and 42 First Graders that demonstrated that students that receive a "metalevel" approach, which explicitly emphasized the application, value, and utility of phonemic awareness, performed significantly better on a reading achievement test than a group of students that received skill and drill phonics-an implicit approach, which is where the students are segmenting and blending sounds. (Cunningham, 1990, pg.429). This approach of phonics is aligned with the embedded approach that was mentioned above. This shows that students using a

thorough phonics program are gaining more foundational skills than a program that is just practicing skills.

There is much debate over best practices of phonics instruction to better develop young readers at the elementary level. Some believe that explicit instruction of beginning reading skills, especially the teaching of phonics, is best, while some believe that systematic instruction in literacy tasks, the whole language, philosophy is better (Adams, 1990; Chall, 1967). Systematic phonics instruction is a way of teaching reading that stresses the acquisition of letter-sound correspondences and their use to read and spell words (Harris & Hodges, 1995). Those who favor a skills instruction emphasize and can point out demonstrations of true experiments that intense teaching of decoding skills to students struggling with word recognition increases their performance on standardized measures.

All in all, there are many types of instruction when it comes to teaching phonics. There may be much debate with teachers and the state, but finding the best instruction for students in elementary school is key to producing good beginning readers. In the school I am teaching in, the teachers were using materials from many places and teaching in a whole language approach. We are now focused on teaching students explicit phonics instruction with a program called 95 Phonics.

### **Phonics Assessments**

Every school uses different phonics programs and all programs use different types of assessments. Some schools have even developed their own phonics resources and

assess according to their resources. In this study, it was important to know the different types of phonics assessments and if there is an assessment that is more useful than others.

According to Glazzard (2017), elementary schools have developed a variety of assessment processes which assess the students' knowledge and skills in synthetic phonics. Using these assessment tools helped identify students' gaps in phonics knowledge which led to the types of interventions needed. This study argued that a more detailed assessment framework may be required for the purpose of assessing children's reading development than the model which schools currently adopt. Phillips, Kelly and Symes (2013) have identified many specific skills that need to be assessed in order to know if a child is having trouble reading. These skills include: decoding, behavioral (passage reading for fluency and comprehension), cognitive (blending and segmenting), reasoning (verbal and non-verbal reasoning), and processing (Phillips, Kelly and Symes, 2013). They believed this framework for assessment could provide a more comprehensive assessment of reading development and be more useful for determining intervention than a phonics screener. They also argued that another effective assessment is a sub-divided phonological awareness assessment that is broken into compound word, syllable, onset and rime and phoneme blending and segmenting.

An effective reading assessment should include a pre-reading skills section of the skills named above. This would help teachers in finding the areas of concern in students' pre-reading skills to be able give appropriate interventions in reading. Research has consistently indicated that the effective teaching of reading uses a balance of phonics and meaning-focused approaches to teach children to read (Pressley et al., 2001; Taylor and Pearson, 2002, Hall, 2013).

In 2014, a report was done with evaluating the phonics screener that was commissioned by the Department of Education. It was undertaken by the National Foundation for Educational Research (NFER). The screener consisted of an individual, oral assessment requiring the reading of words and nonsense words. It was first introduced in 2014 and was given to all children in year one, unless their teacher made a judgment to exempt them. The students that did not meet the standard in year one would then retake the screener in year two. The study looked at this assessment to evaluate if the confidence level in teachers administering it was high and if the school prepared the teachers for administering it and the appropriateness of the screening check for specific groups of students. It also evaluated the screener for identifying and tracking the impact of the check on teaching and learning; meaning, understanding the impact of the teaching of phonics in elementary schools, assessing the impact of the screener of a wider literacy curriculum, and quantifying the impact of the check on the standard of reading and assessing its value for the money it costs.

To conduct this study, researchers conducted interviews with school leaders, literacy coaches, first and second grade teachers, and parents in the 19 case-study schools. Survey responses were collected from 583 literacy coaches and 625 were collected from 1st grade teachers. In year one, findings of this study found that teacher surveys and case-study schools believe that almost all are committed to teaching phonics of some degree and when teaching reading, an emphasis is placed on phonics instruction to learn to decode words, but they do not see a commitment to systematic synthetic phonics as incompatible with teaching other decoding skills. In year two, findings found that teachers were more positive of the screener and thought it gave teachers useful

information they could use in teaching. In the last year of the study, most of the teachers that were interviewed reported that the screener would have very minimal impact on the standard of reading in their school. They believed that it gave no new information. It was found that this screener was more useful to teachers of students with reading difficulties.

In conclusion, as stated above, there are many types of assessments and many opinions of what types of assessments are beneficial to a primary school teacher. In my experience and in my classroom, after teaching weekly phonics skills, students are tested with a spelling test. I also use a cumulative assessment at the end of each unit to test on all the skills we have worked on. This assessment includes, sound-spelling mapping, multisyllable words, sorting words, and even comprehension.

## **Summary**

In this chapter, the review of literature was provided. It explored the topics related to phonics instruction and how it relates to overall reading achievement. The review was split into three sections including The Importance of Phonics, Types of Phonics, and Phonics Assessments. There are many Phonics instruction approaches that are commonly used, such as those found in the Phonics 95 program. In the next chapter, I will explain the methodology of the study.



## **Chapter Three**

### **Methodology**

The focus of this research was to determine the relationship of explicit phonics instruction and overall reading achievement. In order to explore this topic, I used a Correlational Quantitative Research Design (Creswell & Creswell, 2018) that incorporated the following: importance of phonics instruction, types of instruction, and types of phonics assessments. In the sections below, I described the study participants and setting and then provide additional details regarding the data collection and analysis involved.

### **Participants**

In this study, I collected new data from my 2<sup>nd</sup> grade students during the 2023-2024 school year. I also looked at deidentified student data from previous school years. I had a class of twenty-one students, and all students received parent/guardian permission to participate in the current study. Even though there were 21 students in the class, 20 students were randomly chosen as my sample to match the amount of students in the classes of unidentified students. Because all participants were students in my class, they constituted a convenience sample (Bui, 2019). All twenty-one students identified as white. Eleven students identified as male and nine females. Students ranged from seven to eight years old, two students qualified for free and/or reduced lunch due to parents' income, and four were considered below grade level in terms of reading achievement. One student in the class had an existing Individualized Education Program (IEP) for speech, while 1 of the 21 students in the class had a Reading Improvement and

Monitoring Plan (RIMP). See details in Table 1 below. NOTE: Students within the classroom are labeled with Student #.

**Table 1**

*Participant Information*

<b>Name</b>	<b>Age</b>	<b>Race</b>	<b>Gender</b>
Student 1	7	White	Male
Student 2	8	White	Male
Student 3	8	White	Male
Student 4	8	White	Female
Student 5	8	White	Male
Student 6	8	White	Male
Student 7	8	White	Female
Student 8	7	White	Female
Student 9	7	White	Male
Student 10	7	White	Female
Student 11	8	White	Male
Student 12	8	White	Female
Student 13	8	White	Male
Student 14	7	White	Female
Student 15	7	White	Male
Student 16	8	White	Male
Student 17	8	White	Male

Student18	8	White	Female
Student 19	7	White	Female
Student 20	7	White	Female

## Setting

The research took place in a small rural school in West Central Ohio. At the time of the study, the school district was made up of 1,256 students, in which 97.5% are white, non-Hispanic. The school also has 10.6% economic disadvantage students, 6.4% students with disabilities and 1% multi-racial students (ODE, 2022). The elementary school itself serves 451 students, grades Kindergarten through fourth. It was selected as a Blue Ribbon school in 2022. This Midwest rural school has high achieving test scores with both reading and math being in the top 1% of Ohio schools. The district, as a whole, is also ranked number seven in Ohio.

Students in my current second grade class are on year two of instruction from the Phonics 95 program, meaning they were taught this same program in first grade and now in second. Tier one instruction is given by myself as whole group instruction in the classroom after lunch (between 11:50 and 12:15 PM). Reinforcement of the phonics skills are completed in leveled reading small groups at my kidney table (between 12:30 and 1:30 PM). These groups are leveled by reading achievement on the MAP assessment and teacher observation. After every five to six weeks, I give the students a unit assessment to test students on the skills being taught in each unit. Materials used for instruction include student workbooks, sound chips and boards, online visual display, and

pop-its. Students have possession of these items in their cubbies and pop-its are available for students in small group instruction.

## **Data Collection**

When using a correlational quantitative research design approach, I instructed a phonics program (95 Percent Group, 2023) and gave unit assessments, every five to six weeks, that matched the phonics program. I also administered the Fall and Winter MAP assessment (Benjamin, 2023). In the section below, I will describe each instrument.

### *Phonics 95 Unit Assessment*

The Phonics 95 unit assessment (95 Percent Group, 2023) assessed students on the second and third 5-6 weeks of phonics material they worked on in class instruction. Throughout the year they took six of these assessments, but for this study, they will be taking unit 2 and unit 3 assessments. These assessments broke down many skills they worked on throughout the unit. They worked on matching sounds with spelling of words, sorting words according to the phonics rule, listening to a sentence and being able to spell the words correctly applying the phonics skills, breaking down and spelling multisyllabic words, and being able to decode and read a passage and check understanding with comprehension questions (See Appendix 1). One area of the assessment that will be used in the study is the sound spelling mapping section. I chose to use this section because I believe it shows the most application of the phonics skills in my students. The students have to listen to a word, break down the amount of sounds in the word, and then correctly and phonetically spell the word.

I used this instrument in my study to compare my current second grade students to the current third grade deidentified students. They were not compared to the current 4<sup>th</sup> grade students because they were the group that did not have this explicit instruction, so they did not take these assessments. I used this data to look at the growth of phonics skills and how it compared to the growth comprehension skills on this assessment from both years. This helped me to look back at my original research question of if phonics instruction influences reading achievement.

### **Figure 1**

*Comparing Phonics 95 unit scores*



### *MAP Assessment*

The MAP assessment (Benjamin, 2023) was given three times a year to students in grade kindergarten-fifth grade to assess students' reading achievement. This instrument was given to my students in September, January and will be given again in May and is an online assessment. This assessment is used to show measures of academic progress in a student. MAP is a three-part test that measures students' knowledge in reading, language arts and math. For this study, we will be using the reading test. The reading assessment is used to test students on word meaning, literal comprehension, interpretive comprehension, and evaluative comprehension. For this assessment, students

were spread out throughout the classroom with their ‘offices’ up and they used their personal chrome books. I walked around the classroom to proctor this assessment. The scores of the assessment took 24 hours to be posted onto the online portal. When scores were posted, I pulled up each student’s individual report to check overall reading achievement in comprehension. I used this assessment to compare reading achievement between my current second grade class, current third grade deidentified students, and the current fourth grade deidentified students, who had not had any explicit phonics instruction. This was used to support my research question of if phonics instruction influences overall reading achievement because each of these groups have a different amount of explicit phonics instruction.

### **Data Analysis**

In order to answer my research question, I analyzed the data from each data collection tool separately and also looked at the data as a whole. I describe each type of data analysis in the sections below to address the research question, what are the differences in second grade achievement test for students with and without phonics instruction in a midwestern Ohio Rural School District. First, the scores of students were explored from three different student groups; second grade, third grade and fourth grade. At each of the grade levels the students were exposed to different levels of phonics instruction. To compare the three groups of students, an ANOVA was run to compare student performance on the MAP achievement at second grade level in Fall and Winter. A 3 x 2 ANOVA compared the three groups of students at both points (Fall and Winter) on the NWEA MAP Growth 2-5 Assessment.

Additionally, students in grades 2 and grade 3 were also compared on their phonics 95 assessment data that was given twice, assessment 2 and 3 using a 2 x 2

ANOVA. Currently there are five sections that the phonics 95 program evaluates students; sound spelling mapping, word sort, sentence dictation, syllable mapping and comprehension. For the purpose of this study, the focus will be on sound spelling mapping because this is the section that requires the most application of their phonics skills learned.

### *Phonics Unit Assessment*

After collecting the unit assessment data from Phonics 95 unit two assessment, I scored each student's assessment using the guidelines set forth in the assessment manual (95 Percent Group LLC, 2020). These results told me how students are understanding the different phonics skills being taught and who needs additional support in each category of the assessment. I then used descriptive statistics to calculate the mean and standard deviation of all scores. Doing so enabled me to determine the average assessment scores and how closely the scores in the data set were clustered around the mean. I completed this same procedure for unit three assessment. I then conducted a 2x2 ANOVA test to see if the difference in the means is statistically significant between the unit 2 and unit 3 tests.(See Figure 1.) With this test, I was able to compare scores between each grade and the growth between assessment 2 to assessment 3 and the differences between the growth between the different grade levels with different amounts of explicit instruction.

### *MAP Reading Assessment*

After administering the MAP Reading assessment, I waited for the MAP scores to come back 24 hours after the students completed it. I then used descriptive statistics to calculate the mean and standard deviation of all scores. Doing so enabled me to

determine the average assessment scores and how closely the scores in the data set were clustered around the mean. I then conducted a 2x3 ANOVA test to see if the difference in the means is statistically significant between Winter MAP scores between the three sample groups. (see figure 2)

### *Comparing MAP Assessment Scores with Previous Year Students*

I pulled past second grade data from these same assessments on deidentified students from the past two years (current third and fourth graders). I then used descriptive statistics to calculate the mean and standard deviation of the scores from each year. Doing so enabled me to determine the average assessment scores and how closely the scores in the data set were clustered around the mean. I then took the previous year's numbers and compared them to this year's second grade class, who has had more explicit instruction using descriptive statistics. To break this down even more, I compared students with no explicit phonics instruction with students with one year of phonics. I then compared students with one year versus two years of phonics. Lastly, I compared students with no phonics with students with two years of phonics instruction.

**Figure 2**

### *Comparing Winter MAP Scores*





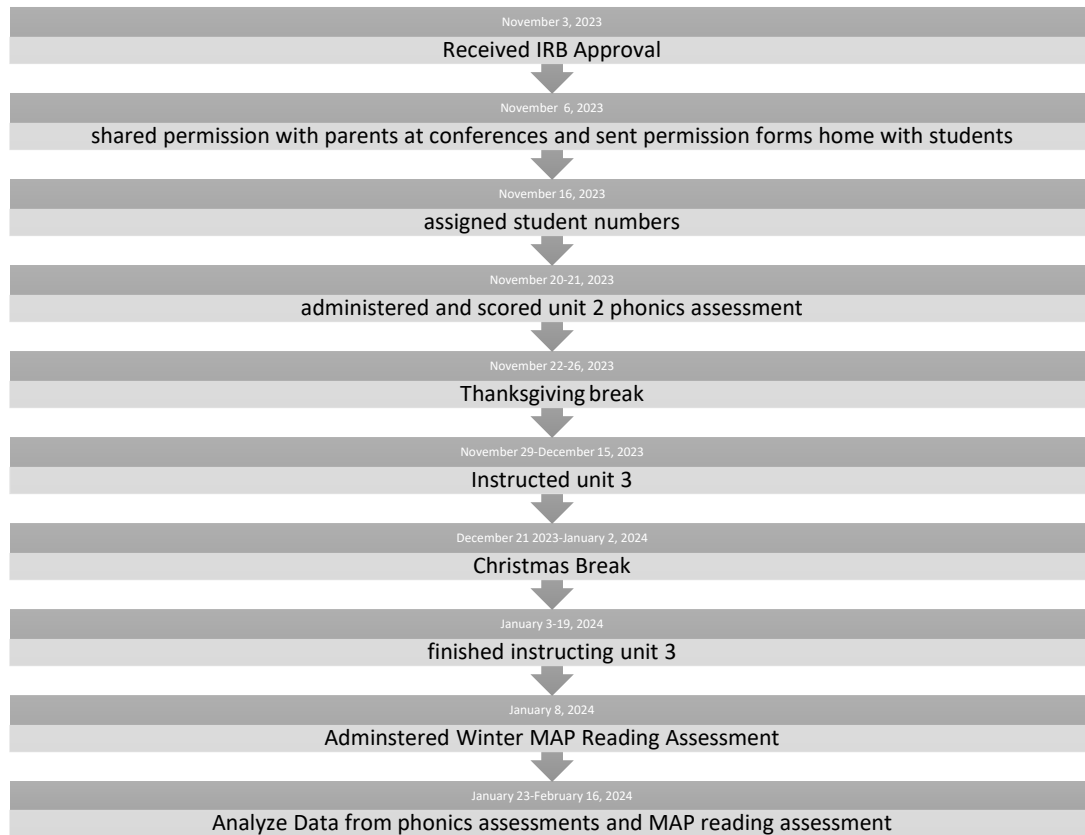
## **Procedures**

The current study began after I received approval from Wittenberg's Institutional Review Board (IRB). First, I presented the permission forms (see appendix 2) during conferences with my students' parents. Some parents read and signed the permission form during our conferences and other took them home and returned them within the next week. After obtaining all permission slips, I created student numbers for each participant. I then finished teaching unit two in the Phonics 95 program (see appendix 3) and then administered the Phonics 95 Unit 2 assessment (95 Percent Group LLC, 2020) to all of the students in my classroom. This assessment was given in a whole class setting.

After administering and scoring the assessment and calculating the mean and standard deviation of the assessment scores, I began instructing the next unit of phonics instruction to the class. In small groups, I used the data to dictate the skills that need to be retaught in leveled reading groups. Instruction took place daily for about 30 minutes. After the next six weeks, I administered the unit three assessment. (See Figure 3) below for a timeline of these procedures.

**Figure 3**

*Research Timeline*



*Note.* This table is a flow chart that maps out the timeline of the research.

**Summary**

In summary, I used a Correlational Quantitative Research Design (Creswell & Creswell, 2018) in my second-grade classroom to determine the impact explicit phonics instruction has on overall reading achievement. Data collection tools included phonics unit assessments, and MAP reading assessments which I analyzed using descriptive statistics and an AVOVA tests. The following chapter details my research findings.

## **Chapter 4**

### **Findings**

The focus of this research was to determine the relationship of explicit phonics instruction and overall reading achievement. I did this by conducting my own research to look for further evidence to find if explicit phonics instruction is a building block to a young child's foundational reading skills and being able to see results within my own students to demonstrate the importance of explicit, systematic phonics instruction. In order to explore this topic, I used a Correlational Quantitative Research Design (Creswell & Creswell, 2018) to test my research question: What are the differences in second grade MAP achievement test scores for students with and without phonics instruction in a West Central Ohio Rural School District? In the section below, I present my research results from my collected data.

### **Results**

#### *Phonics*

To determine student success, the students were assessed on the Phonics 95 Unit Assessments 2 and 3. Students in grades 2 and 3 were each assessed on the two levels of assessments 2 and 3. A 2x2 ANOVA was run to determine if a significant difference was present between the different grade levels and assessments. The analysis failed to detect a significant difference between either of the grades as well as the different assessments.

**Table 2***Descriptive Statistics for Phonics 95 Assessments*

<b>Grade and Assessment</b>	<b>N</b>	<b>M</b>	<b>SD</b>
2nd Assessment 2	20	181.85	2.99
2nd Assessment 3	20	192.75	2.56
3rd Assessment 2	20	179.55	3.06
3rd Assessment 3	20	190.20	3.38

*Note.* The mean in the table shows that the scores of the current second grade students started higher and ended at a higher mean than the current 3<sup>rd</sup> graders. The mean also shows that the current second graders had a greater growth measure than the current 3<sup>rd</sup> graders. The standard deviation shows that there was more of a range of student scores within the current 3<sup>rd</sup> grade students.

**Table 3***2x2 ANOVA Phonics Assessments Data*

<b>Summary</b>
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<b>Groups</b>	<b>Count</b>	<b>Sum</b>	<b>Avg.</b>	<b>Variance</b>		
Column 1	20	19.82	0.99	0.00		
Column 2	20	19.48	0.97	0.00		
Column 3	20	19.2	0.96	0.01		
Column 4	20	18.68	0.93	0.00		
<b>Source of Variation</b>	<b>SS</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>P-Value</b>	<b>F crit</b>
Between Groups	0.04	3	0.01	2.28	0.08	2.72
Within Groups	0.39	76	0.00			
Total	0.42	79				

*Note.* This table is a 2x2 ANOVA that was run on the Phonics Assessment scores of the two study groups. An ANOVA is run to show a comparison between and within groups. This data failed to show a significant difference between the grade levels. This data

failed to show a significant difference between the grade levels. This means that the overall phonics skills scores were not significantly different from the amount of explicit phonics the students received.

#### *Map Data*

To determine the impact of the intervention, students were assessed on the MAP in the Winter of their second grade year. A one-way ANOVA was run to compare student performance based on grade (2nd, 3rd, 4th). Table 3 presents the Descriptive Statistics for each of the grade's levels on the MAP Winter Assessment. The ANOVA failed to detect a significant difference between the three grade level groups on their MAP assessment.

**Table 4**

#### *Descriptive Statistics for Winter Map Data*

<b>Grade and Screening Season</b>	<b>N</b>	<b>M</b>	<b>SD</b>
2 <sup>nd</sup> Winter	20	192.75	2.56
3 <sup>rd</sup> Winter	20	190.2	3.38
4 <sup>th</sup> Winter	20	190.95	2.42

*Note.* When looking at the mean of each grade level, they are close, but it does show that the student with the most explicit phonics instruction (current 2<sup>nd</sup> graders) had the highest mean or average score on this particular assessment. The standard deviation did not show any consistent results to support my research question.

**Table 5**

*3x2 ANOVA Fall and Winter MAP Data*

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<b>Summary</b>						
<b>Groups</b>	<b>Count</b>	<b>Sum</b>	<b>Avg.</b>	<b>Variance</b>		
Column 1	20	3855	192.75	131.14		
Column 2	20	3804	190.20	288.80		
Column 3	20	3803	190.15	117.40		
<b>Source of Variation</b>	<b>SS</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>P-Value</b>	<b>F crit</b>
Between Groups	88.43	2	44.22	0.28	0.76	3.16

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Within	9069.50	57	159.11
Groups			
Total	9157.93	59	

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*Note.* This table is a 3x2 ANOVA that was run on the MAP scores of the three study groups. An ANOVA is run to show a comparison between and within groups. This data failed to show a significant difference between the grade levels. This means that the overall reading achievement scores were not significantly different from the amount of explicit phonics the students received.

## Summary

In this chapter, I gave all of the results of the data found in this study to find if explicit phonics instruction has an impact on students overall reading achievements. The results found in both data points studied, found that there is no significant difference. The two data points used was two Phonics unit assessments from the Phonics 95 program and the Winter MAP reading assessment. Even though both did not find a significant difference, the sample size was very small in the overall school using this phonics program.



## **Chapter 5**

### **Discussion**

The goal of my study was to see, in my own school district, how explicit phonics instruction impacted my students' reading achievement overall. Based on the results I can see firsthand the impacts of phonics instruction and I am able to adjust instruction accordingly. In chapter 5, I gave a discussion of my results, reflections about my results, ideas of future studies and the limitations of this study.

### **Discussion**

The data collected in this study with both the Phonics Unit Assessments and the Winter Map data failed to detect a significant difference. For the Phonics unit assessment data, a 2x2 ANOVA was run to determine if a significant difference was present between the different grade levels and assessments. The analysis failed to detect a significant difference between either of the grades as well as the different assessments. For the Winter MAP data, A one-way ANOVA was run to compare student performance based on grade (2nd, 3rd, 4th). The ANOVA failed to detect a significant difference between the three grade level groups on their MAP assessment. In conclusion, the data has failed to detect a significant difference. This told me that the explicit phonics instruction being used in the school in which I teach is not showing growth in overall reading achievement within the group of students within the study.

When breaking down all of the statistics found in my study, some major things stuck out to me and could make these statistics make sense. When the Science of

Reading came into play and teachers were expected to start this newly adopted Phonics program, there was many of different opinions. There were veteran teachers frustrated because they felt they have been doing a great job with their instruction they have been doing for years, and there was some lack of trust thinking this was just another phase of education that will not stick around. With all these mixed feelings of this program, the expectation was for teachers to teach a very new scripted program with fidelity. All of these things could have contributed to teachers all teaching the program in their own ways. This could have made an effect in results that students could have had depending on their teacher and the effort they put into the instruction.

Something that I would like to note about this study is that the school that I teach at is a high achieving school. As stated above, we were rated a Blue Ribbon School and also ranked number 7 in the State of Ohio. With this being said, I think it is important to know that the students in our school may not look academically and as diverse as many other schools. Comparing multiple schools or even if I had scores from a different district, this could have shown a difference in the statistics that I got from this study. Another privilege the school I teach at has common planning time. This give us time to work with fellow teachers and our intervention, gifted, and literacy coaches on a weekly basis. This is a benefit in making sure we have common time to work push our students to their fullest potential. Not all schools have this privilege.

Even though the statistics do not show a significant difference, as teachers in the classroom, we are seeing a benefit within our students' phonics and reading skills. The grade level that is showing the most growth and least number of gaps in phonics skills is the current 1<sup>st</sup> graders. This could be contributed to the fact that these students started

their kindergarten year with this new Phonics 95 program. The 1<sup>st</sup> grade teachers have been able to change their intervention time to be able to have the Title teachers pushing into the classroom instead of pulling students because the gaps are not as significant. As a classroom teacher, I am seeing and hearing other teachers talk about the benefit of we are seeing in this phonics instruction within our students. This goes to show me that even though the statistics didn't show it, my research is proving the literature above to be true.

As more Science of Reading research is coming into play in the State of Ohio, there are more requirements for the schools to follow. One of these requirements is for all schools to adopt a reading series that is on an approved list from the state. The current reading series that we use in K-2 is older and not on this list. Our 3-4 grades do not use a set reading series. Because of this, our school must choose a new reading series to adopt by next year. Most new curriculums are comprehensive, meaning the phonics will be incorporated within the new series. As we are learning this, it looks as if we will be moving away from the Phonics 95 program and implementing a new program. This is causing frustration with teachers that have just gotten comfortable with the Phonics 95 program and are seeing great results with it. So, even though we are seeing results, this instruction may be changed again due to the education laws.

### **Future Studies**

In the future, I think it would be important to think about the sample size of the study. With how small this group was, it did not show the results that I think it could have. The classes that were chosen for this study were typical classrooms with not a huge range of student academic. I wonder what it would look like if I used an inclusion

classroom where there are high students as well as the lowest students in the grade that also work with the intervention specialist? I think looking at a grade level as a whole could give good data to use in a study like this.

I would also like to know if using more phonics assessment would have made a difference. I used assessment 2 and assessment 3 of the phonics program because those were the assessments given in the timing of this study. I am sure looking at assessment 1 (first unit assessment) and assessment 6 (last unit assessment) would show a bigger significance because it would show a whole year's worth of instruction and compare to the beginning of the year.

## **Reflections**

To test this study on how explicit phonics instructions impacts overall reading achievement, I chose to use two different assessments. The assessments used were the Phonics 95 unit assessments that are used to test students phonics achievement in each unit and the NWEA Map assessment which is used to test students overall reading achievement. I chose these two assessments because they helped to show students individual phonics skills as well as their overall reading achievement. I thought this would show me the connection I tried to make between the two and if phonics instruction impacted overall reading achievement. As stated above, these two assessments failed to detect a significant difference.

With the conclusion of this study, I questioned if making my sample size grade wide versus one class in each grade would have made a difference in the results that I have found in this study. Another question that I asked myself is if this study was done

in a year from now, would I have seen more results because I would have had four grade levels to compare and one of the grade levels would have had explicit phonics instruction all years of the schooling, starting in kindergarten.

Although the data showed there was no significant difference, as a teacher, we look at these numbers differently than in a statistical way. When looking at the data in number form instead of statistical form, this could have made a huge difference in the plans we would make for individual students. For example, if I was looking at a student that has to meet a cut score to not be put on a Reading Improvement Plan (RIMP), a small difference in number (score on assessment) could make a big difference in how a teacher determines if a student needs additional support within the classroom. So, even though the data failed to show a significant difference, in a classroom, these scores may mean more to a teacher and show more of a significance when looking at data for individual students.

## **Limitations**

Throughout this study, there were some limitations that needed to be stated. The limitations that were discussed were the sample size of the group and the length of the study.

For this study, there were three different groups of 20 students. One group was the current 2<sup>nd</sup> grade students in my classroom (20 random students chosen out of 21), unidentified current 3<sup>rd</sup> grade students (20 students), and unidentified current 4<sup>th</sup> graders(20 students). This is a total of 60 students in all of this study. For a study of how explicit phonics instruction impacted my student's overall reading achievement, this is a

very small sample size. In the future, using a larger sample size and more groups (grade levels with explicit phonics instruction), may give different results of the effect or impact that phonics instruction could make.

Another limitation within this study was the length of the study. In this study, there was only two Phonics 95 assessments given (assessment 2 and assessment 3). I also only used one MAP assessment of the second-grade school year for each sample to compare in this study. Having a longer study cycle could have also made a difference in the results of this study.

## **Summary**

The purpose of this study was to evaluate claims from past research that explicit phonics instruction is a building block to a young child's foundational reading skills. It is important for teachers to understand the why behind their instruction in the classroom and to continue to always be willing to try new things that are going to support the learners in the classroom year after year. The problem that brought this study to life is that phonemic awareness is related to reading achievement, but the role it plays in reading development and the methods and strategies being used is not fully known. This was the driving force to the research question that states: What are the differences in second grade MAP achievement test scores for students with and without phonics instruction in a West Central Ohio Rural School District?

I used a Correlational Quantitative Research Design (Creswell & Creswell, 2018) in my second-grade classroom to determine the impact explicit phonics instruction has on overall reading achievement. Data collection tools included phonics unit assessments,

and MAP reading assessments (which I analyzed using descriptive statistics and a ANOVA test).

The results of the 2x2 ANOVA conducted on the Phonics 95 assessments 2 and 3 and the 2x3 ANOVA conducted on the Winter NWEA MAP data failed to detect significant differences in scores. These differences included differences between grade levels and differences between assessment 2 and 3. These differences also included the comparison between Winter MAP scores between 3 grade levels (grade 2, 3, 4).

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# Appendix 1

## Phonics 95 Assessment



### 95 Phonics Core Program™ Grade 2 – Assessment #2 Teacher Directions

(To be administered after Lesson 10)

#### A. SOUND-SPELLING MAPPING

You are going to spell words using sound-spelling mapping paper. Let's do the first word together. The word is coach. Word? coach. Let's finger-stretch coach and say all the sounds in the word. /k/ /ɔ/ /ch/. There are 3 sounds in the word coach. Tap a box for each sound and place a dot in the bottom right corner of each box. Now let's write the letters that spell each sound. What is the first sound? /k/. Which letter? c. We write letter c in the first box. What is the next sound? /ɔ/. Which letters? o-a. Write o-a in the second box. Next sound? /ch/. Which letters? c-h. We write c-h in the third box since these 2 letters spell 1 sound.

Now it's your turn. I'll say a word. 1) Repeat the word. 2) Finger-stretch while saying the sounds to yourself and place dots in the boxes. 3) Then, write the letter or letters that spell each sound. Remember that each sound gets its own box. 4) Finally, read the word.

Example: coach

	c	oa	ch				
1. claw	c	l	aw				3
2. aid	ai	d					2
3. spoil	s	p	oi	l			4
4. fright	f	r	igh	t			4
5. sway	s	w	ay				3

Scoring: Award 1 point for each correctly spelled sound, placed in the correct box.

Example: Student receives 3 out of 4 points for spoil if i is missing from the vowel team in the third box.

Total points: 16

#### B. WORD SORT

Now, you will identify words that have the vowel team syllable pattern. Look at the example pair of words (stack-stay). First, I find the vowel letter or letters in each word in the pair. Next, I identify which word in the pair has the vowel team pattern and circle it. The word stay has the vowel team a-y, so I circle it. Finally, I say the vowel sound /ā/, read the word stay, and write stay in the vowel team column. (Model the process of circling the word stay and writing it in the vowel team column while the students mirror this process on their paper.)

Now it's your turn. 1) Find the vowel letter or letters in each word. 2) Identify which word in the pair has the vowel team pattern and circle it. 3) Say the syllable type, the vowel sound, and read the word. 3) Write the word in the vowel team column.

Word Pairs		Vowel Team
stack	<u>stay</u>	stay
<u>cheek</u> 1	check	cheek 1
<u>toe</u> 1	top	toe 1
lad	<u>load</u> 1	load 1
<u>toys</u> 1	totes	toys 1
drum	<u>draw</u> 1	draw 1

Scoring: Award 1 point for the correctly circled word in each pair and 1 point for spelling the word correctly when writing the word in the vowel team column.

Example: Student receives 1 out of 2 points possible if the word load is circled but is misspelled as lad.

Total points: 10



## 95 Phonics Core Program™

### Grade 2 – Assessment #2

#### Teacher Directions

(To be administered after Lesson 10)

#### C. SENTENCE DICTATION

You are going to write two sentences on your paper using correct spelling and punctuation. I'll say the sentence and you will repeat it. Then, you will have time to write the sentence on your paper. Listen as I say the sentence.

*Joe will join us on Sunday.*

Say it with me. *Joe will join us on Sunday.* Repeat the sentence one more time. *Joe will join us on Sunday.* Now write it. If you forget a word, raise your hand and I will tell you. (Allow ample time for students to write the sentence then repeat the directions for sentence 2.)

1. Joe will join us on Sunday. (9)
2. The fleet of boats sailed with speed. (9)

**Scoring:** Award 1 point for each correctly spelled word in the sentence, 1 point for each capital letter (beginning of the sentence and proper nouns), and 1 point for the correct punctuation.

**Total points:** 18

#### D. SYLLABLE MAPPING

You are going to spell multisyllable words with closed and vowel team syllable patterns. We will begin by doing the first one together. The word is flawless. Tap the box on your paper for each syllable you hear. (flaw/less) How many syllables? (2) Now write the letters that spell the sounds in each syllable in the table next to the word *Example*. (Give the students time to write each syllable in the syllable boxes on their paper.) Watch me and correct your work if it does not match mine. (Model how to write each syllable in the syllable boxes.) The syllable flaw should be in the first syllable box. The syllable less should be in the second syllable box.

Now, it's your turn. I'll say some more words and you'll write each syllable in the syllable boxes on your paper. Finally, write the whole word in the last column and read the word.

Words to Dictate

Example: *flawless*

1. misled
2. unload
3. painful
4. sightsee

First Syllable	Second Syllable	Word
flaw	less	flawless
mis (1)	led (1)	misled (1)
un (1)	load (1)	unload (1)
pain (1)	ful (1)	painful (1)
sight (1)	see (1)	sightsee (1)

**Scoring:** Award 1 point for each correctly spelled syllable (2 total) and 1 point for correctly spelling the word. Student is not awarded a point for the syllable if it is not divided accurately or extra letters are added.

**Example:** Student receives 1 out 3 points if they map the word *sightsee* as *site-see*; 0 points for the first syllable (*site*), 1 point for the second syllable (*see*), and 0 points for the whole word (*sitesee*).

**Total points:** 12



**95 Phonics Core Program™**

**Grade 2 – Assessment #2**

**Teacher Directions**

*(To be administered after Lesson 10)*

**E. PASSAGE READING AND COMPREHENSION**

1) Read the passage to yourself. 2) After reading the passage, read the questions carefully and write your responses to the questions in complete sentences.

**Shawn and Troy**

Shawn had a little pet pig named Troy. His mom said the pig made too much noise, so Shawn had to find a new home for his pig. Shawn groaned and bawled, but he knew Troy's oinks gave Mom a pain. Mom said, "Troy must go!"

1. What did Shawn need to do? (Shawn had to find a new home for his pig.) (2)
2. How do you know Shawn is unhappy? (Shawn groaned and bawled.) (2)

**Scoring:** Student is awarded 2 points if the answer is correct and is written in a complete sentence.

**Examples for Q1:**

*Answer: find a new home* (Student receives 0 out of 2 points for question #1. The response does not provide specific details about who needs a new home and it is not written in a complete sentence.)

**Examples for Q2:**

*Answer: Shawn threw a fit.* (Student receives 2 out of 2 points for question #2. Although the response does not show specific vocabulary from the text, the answer shows an understanding of the vocabulary — groaned and bawled = throws a fit. Also, 1 point is awarded for a complete sentence.)

**Total points: 4**



## Appendix 2

### Parental Consent for Study

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#### Parental Consent for Research Study

Dear Families,

I am currently enrolled at Wittenberg University. One of the requirements of my coursework is to complete a research study involving students in my class. I am writing to inform you of the procedures that will take place during the research and to invite your student to participate.

**The Research Procedures:** I am going to use the Phonics 95 program that is in place in the classroom to work with each student with their developing phonics skills. The goal is to use the building blocks of phonics to improve the students' reading ability. All students will receive their usual phonics instruction within the classroom. I will use the assessments connected to their program and their MAP score to compare how the phonics program is helping students reading achievement on the MAP assessment they take three times a year. There will be no additional assessments given to the students that they do not already take in 2<sup>nd</sup> grade.

**Time/Duration:** The research will begin in mid-November and will last until around mid-January. Students will participate in phonics instruction as they already do on a daily basis in my classroom (nothing different than usual). It will be completed during our designated phonics time. No core instruction will be affected for this study.

**Benefits:** The push on explicit phonics instruction has been brought into our classroom starting last year. Students are using phonics as a building block of their reading achievement. This study I will be conducting will give evidence regarding the importance of this phonics program.

**Confidentiality:** If you agree to your child's participation in this study, your child's assessment data will be used in my report, which will be shared with colleagues at Wittenberg University. Your child's name and any other identifiable information will **NOT** be shared. When I collect and analyze any data that your child produces, I will white-out the name and replace it with "Student #." All student participants will be referred to as "Student #," and real names will never be used in the reporting of the data. Your child's data will not be used or distributed for future research studies.

**Participation:** You are able to accept or decline participation in the study. Refusal to participate will involve NO penalty or loss to your child!

Please reach out to me if you have any questions or concerns regarding this form or the research study.

Thank you for your consideration,

Caitlin Broerman

**Please complete the form on the back of this page to give or deny consent to for your child to participate in the study.**

For questions regarding your rights as a participant in this research or IRB approval, contact Dr. Darby Hiller, Associate Provost for Academic Affairs and Institutional Research, IRB Chair, at 937-591-1024, or by email at [hillerd@wittenberg.edu](mailto:hillerd@wittenberg.edu).

-----  
Date \_\_\_\_\_

Parent/Guardian First and Last Name \_\_\_\_\_

Child's First and Last Name \_\_\_\_\_

Please select one of the following options:

- ☐ I **grant permission** for my child's assessment data to be included in the research study.  
☐ I **do NOT grant permission** for my child's assessment data to be included in the research study.

Parent/Guardian Signature \_\_\_\_\_

## Appendix 3

Daily phonics instruction from Phonics 95

**Lesson  
12**

**DAY 1**

**Unpredictable Vowel Team ow**

**Learning Objective**

Students demonstrate understanding of the ow vowel team pattern by correctly identifying, reading, and writing pattern words in isolation and in passages.

**DAY 1**

**Phonological Awareness Warm-Up**

**2 min**

Today we are going to practice phoneme substitution. Let's review the instructions:

- I'll say a word and you repeat it.
- Next, I'll tell you a sound to substitute, or change, in the word.
- Then, tell me the new word. Ready?

Say cry: ( <b>cry</b> ) Change /k/ to /d/. Word?	<b>dry</b>	Say trend: ( <b>trend</b> ) Change /t/ to /f/. Word?	<b>friend</b>
Say grew: ( <b>grew</b> ) Change /g/ to /t/. Word?	<b>true</b>	Say pride: ( <b>pride</b> ) Change /p/ to /b/. Word?	<b>bride</b>
Say freeze: ( <b>freeze</b> ) Change /f/ to /b/. Word?	<b>breeze</b>	Say tread: ( <b>tread</b> ) Change /t/ to /b/. Word?	<b>bread</b>
Say clay: ( <b>clay</b> ) Change /k/ to /p/. Word?	<b>play</b>	Say block: ( <b>block</b> ) Change /b/ to /f/. Word?	<b>flock</b>
Say broom: ( <b>broom</b> ) Change /b/ to /g/. Word?	<b>groom</b>	Say trick: ( <b>trick</b> ) Change /t/ to /b/. Word?	<b>brick</b>
Say drip: ( <b>drip</b> ) Change /d/ to /t/. Word?	<b>trip</b>	Say drop: ( <b>drop</b> ) Change /d/ to /k/. Word?	<b>crop</b>
Say plank: ( <b>plank</b> ) Change /p/ to /b/. Word?	<b>blank</b>	Say three: ( <b>three</b> ) Change /th/ to /t/. Word?	<b>tree</b>
Say fled: ( <b>fled</b> ) Change /f/ to /s/. Word?	<b>sled</b>	Say slap: ( <b>slap</b> ) Change /s/ to /f/. Word?	<b>flap</b>

**Phonics Pattern**

**5 min**

Today we are learning how to read and spell words with the vowel team pattern. Remember, a vowel team has 2 or more letters side by side that are pronounced as 1 vowel sound. Some vowel teams spelled with 2 letters side by side can be pronounced 2 different ways. In this lesson, we will learn the 2 sounds for the vowel team o-w. The letter w becomes part of the vowel team when it teams up with the vowel o.


**Lesson 12, Day 1**

**292**

95 Phonics Core Program™ • Grade 2 • Teacher's Edition



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4. I try the most common pronunciation first, /ō/ as in snow, for the word in the phrase.
  - The word is /plō/ when pronounced with the /ō/ snow sound.
  - I read the phrase: "/plō/ the field."
    - The phrase does not make sense when I use the /ō/ pronunciation.
5. I swap the sound for the /ou/ owl sound.
  - The word is /plow/ when pronounced with the /ou/ owl sound.
  - I read the phrase: "/plou/ the field."
    - The phrase does make sense when I use the /ou/ pronunciation.
6. I place the word under the /ou/ owl column. 

(Display the wind blows.)

Let's sort the next word together. I'll answer and gesture with you.

- Look at this phrase. What do I do first? **find the word with the o-w vowel team**
  - Yes, let's use our fingers to find the o-w vowel team and underline the word. (Underline blows.)
- Syllable type and gesture?  **vowel team**
- Vowel sounds? /ō/ or /ou/
  - Try the most common long o pronunciation first. Word? /blōz/
    - Read the phrase. **the wind /blōz/**
    - Does this pronunciation make sense in the phrase? **yes**
- Where does this word go?  **under the /ō/ snow column**





Now it's your turn. Turn to page 98 in your Student Workbook. Here are the steps:

1. Find the word with the vowel team pattern and underline it.
2. Say the syllable type and gesture.
3. Say the vowel sounds.
4. Read the phrase using the most common pronunciation for the vowel team first.
5. If the most common pronunciation does not make sense, swap the sound.
6. When you decide which vowel sound makes sense in the phrase, write the word under the correct column.

the wind blows

the wind blows





OW 	OW 
blows	plow

#### Key Routine for Word Sorting:

- Find the vowel team pattern word.
- Underline the pattern word.
- Syllable type and gesture?
- Vowel sounds?
  - Does the most common sound make sense?
  - If no, swap the sound.
- Where does this word go?

## Answer Key

OW 	OW 
blows	plow
show	brown
slow	cow
row	frown

1. the big <u>show</u>	4. please go <u>slow</u>
2. a <u>brown</u> dog	5. with a <u>frown</u>
3. milk the <u>cow</u>	6. <u>row</u> the boat

## Writing



5 min

## SOUND-SPELLING MAPPING

You already know some ways to read and spell the long o sound. In this activity, when you hear the /ō/ or /ou/ sound in a word, it's spelled with the vowel team o-w.

We've done sound-spelling mapping before. Let's do one together.

The word is flown. Word? **flown**

- Figure out how many boxes we'll use.
  - Finger-stretch the sounds in flown. /f/ /l/ /ō/ /n/ How many sounds? **4**
  - How many boxes? **4** Tap and place a dot for each sound. /f/ /l/ /ō/ /n/
- Spell the sounds.
  - Which letter spells the /f/ sound? **f** Which box? **first**
  - Which letter spells the /l/ sound? **l** Which box? **second**
  - Which letter or letters spell the /ō/ sound? **o-w** Which box? **third**
    - Remember, the o and w go in the same box because they spell 1 sound, which is pronounced /ō/.
  - Which letter spells the /n/ sound? **n** Which box? **fourth**
- Sounds? /f/ /l/ /ō/ /n/
- Word? **flown**

--	--	--	--	--	--	--

f	l	ow	n		
---	---	----	---	--	--





Now it's your turn. Turn to page 98 in your Student Workbook.  
Here are the steps:

1. Finger-stretch and place a dot in the bottom right corner of the boxes you'll need.
2. Write the letters. Remember that each sound gets its own box.
3. Mark a V connecting the vowels if the word follows the silent-e pattern.
4. Whisper the sounds and read the word to yourself.

### Answer Key

Words to Dictate	Correct Answers in Student Workbook	Words to Dictate	Correct Answers in Student Workbook
flown	f . l . ow . n .	4. kept	k . e . p . t .
1. show	sh . ow .	5. plows	p . l . ow . s .
2. flake	f . l . a . k .	6. chow	ch . ow .
3. crow	c . r . ow .	7. whack	wh . a . ck .

### Writing



3 min

#### SYLLABLE MAPPING

Today we're going to practice spelling multisyllable words. We've done syllable mapping before, so let's do one together.

The word is rainbow. Word? **rainbow**

- I tap 1 box for each syllable we hear. **rain/bow** How many syllables? **2**
- Now, I write the letters that spell the sounds in each syllable.

First syllable? **rain**

- First sound? /r/ Letter? **r**
- Second sound? /ā/ Letters? **a-i**
- Third sound? /n/ Letter? **n**
- Syllable type and gesture?  
**vowel team**
- Syllable? **rain**

Second syllable? **bow**

- First sound? /b/ Letter? **b**
- Second sound? /ō/ Letters? **o-w**
- Syllable type and gesture?  
**vowel team**
- Syllable? **bow**

- Word? **rainbow**

--	--

rain	
------	--

rain	bow
------	-----



Now it's your turn. Turn to page 99 in your Student Workbook. Here are the steps:

1. I'll say a word and you repeat it.
2. Tap a box for each syllable you hear.
3. For each syllable, say the sounds, write the letters, and say the syllable type while showing the gesture.
4. Mark a V connecting the vowels if the syllable follows the silent-e pattern.
5. Write the multisyllable word in the last column and whisper read it to yourself.

**Note:** Remind students that they can finger-stretch sounds to spell the syllables.

### Answer Key

Words to Dictate	First Syllable	Second Syllable	Word
rainbow	rain	bow	rainbow
1. tinfoil	tin	foil	tinfoil
2. window	win	dow	window
3. upset	up	set	upset
4. mailbox	mail	box	mailbox
5. excuse	ex	cuse	excuse

### Passage Reading



5 min

#### PASSAGE 1 – UNDERLINE PATTERN WORDS

Now we'll practice finding words with the vowel team o-w. Today's passage is about a family whose cow gave birth to twin calves.

We are going to look for words that have the o-w vowel team and underline them.

Let's look at the title of the passage. (Do not read the title.) The word **Cows** has a vowel **o** followed by the letter **w**. Remember, the letter **w** becomes part of the vowel team when it teams up with the vowel **o**. I make the vowel team gesture and underline it. Help me find more words with vowel team o-w to underline. Hold up the vowel team gesture when you see another one, and I'll underline it. (Continue underlining ow vowel team words above the black line.)



# Lesson 12

## DAY 1

## Unpredictable Vowel Team o



Now it's your turn. Turn to page 96 in your Student Workbook. Here are the steps:

1. Begin below the black line and continue underlining to the end of the passage.
2. Use your fingers to find the vowels.
3. If you find a word with an o-w vowel team, underline it.

I'll give you a few minutes and we'll check them together.

## DAY 2

### Phonological Awareness Warm-Up



2 min

Today we are going to practice phoneme substitution. Let's review the instructions:

- I'll say a word and you repeat it.
- Next, I'll tell you a sound to substitute, or change, in the word.
- Then, tell me the new word. Ready?

Say glaze: ( <b>glaze</b> ) Change /g/ to /p/. Word?	<b>plays</b>	Say frail: ( <b>frail</b> ) Change /f/ to /t/. Word?	<b>trail</b>
Say brand: ( <b>brand</b> ) Change /b/ to /g/. Word?	<b>grand</b>	Say crown: ( <b>crown</b> ) Change /k/ to /f/. Word?	<b>frown</b>
Say clay: ( <b>clay</b> ) Change /k/ to /s/. Word?	<b>sleigh</b>	Say grove: ( <b>grove</b> ) Change /g/ to /d/. Word?	<b>drove</b>
Say slack: ( <b>slack</b> ) Change /s/ to /b/. Word?	<b>black</b>	Say grade: ( <b>grade</b> ) Change /g/ to /b/. Word?	<b>braid</b>
Say crack: ( <b>crack</b> ) Change /k/ to /t/. Word?	<b>track</b>	Say flee: ( <b>flee</b> ) Change /f/ to /g/. Word?	<b>glee</b>
Say trays: ( <b>trays</b> ) Change /t/ to /k/. Word?	<b>craze</b>	Say fright: ( <b>fright</b> ) Change /f/ to /b/. Word?	<b>bright</b>
Say frill: ( <b>frill</b> ) Change /f/ to /g/. Word?	<b>grill</b>	Say fries: ( <b>fries</b> ) Change /f/ to /p/. Word?	<b>prize</b>
Say slump: ( <b>slump</b> ) Change /s/ to /k/. Word?	<b>clump</b>	Say cry: ( <b>cry</b> ) Change /k/ to /t/. Word?	<b>try</b>

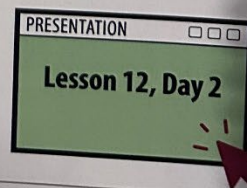
### Phonics Pattern



4 min

#### Sort Words

Let's practice sorting o-w vowel team words based on each word's correct pronunciation within a phrase.





## Appendix 4

### *Assessment 2 and 3-Individual Student Scores*

2023-2024	2022-2023	2023-2024	2022-2023
Assessment 2	Assessment 2	Assessment 3	Assessment 3
100%	100%	100%	100%
100%	88%	100%	79%
100%	100%	100%	100%
100%	100%	100%	95%
100%	100%	100%	100%
100%	94%	100%	95%
100%	100%	95%	100%
100%	56%	95%	89%
100%	88%	95%	68%
100%	100%	100%	100%
100%	100%	100%	95%
100%	100%	100%	95%
94%	94%	95%	89%
100%	100%	95%	79%
94%	100%	95%	95%
100%	100%	95%	100%
100%	100%	100%	100%
100%	100%	100%	100%
100%	100%	84%	89%

## Appendix 5

### *MAP Data-Individual Student Scores*

2023-24 Fall Score	2022-23 Fall Score	2021-22 Fall Score
182	196	201
174	170	179
160	186	161
169	173	185
187	197	168
207	184	198
199	178	180
166	163	173
180	152	175
177	199	203
193	163	164
165	198	177
186	165	161
174	162	199
194	186	183
174	186	188
201	177	166
185	190	200
196	180	192
168	186	177
2023-24 Winter Score	2022-23 Winter Score	2021-22 Winter Score
185	209	211
175	173	187
179	217	177
174	182	196
193	206	180
215	190	205
211	191	183
190	173	185
203	161	186
184	201	210
204	171	185
190	205	182
198	170	177
186	181	199
187	204	186
191	198	201
209	188	177
196	195	198
197	194	194
188	195	184