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# Kelsey R. Dewes

# The Impact of See the Sound Visual Phonics Has on Beginning Readers

Northwestern College

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#### Abstract

This paper takes a deeper look at the impact that See the Sound: Visual Phonics has for beginning reading instruction and early intervention instruction for young students. See the Sound: Visual Phonics is a strategy that incorporates hand cues and written symbols into every sound and letter in the English Language. This paper will compare the growth rates that students, who received the intervention and students who did not receive the intervention, made identifying letter names, letter sounds, and onset sounds. Throughout this paper research completed by Goldin-Meadow (2004) supporting the significance hand gestures have in development and student learning, as well as research by Dave Krupke (2008), a lead researcher and trainer in See the Sound: Visual Phonics discussing why this type of visual phonics has a greater impact than others will be considered. Other research completed by Cihon, Gardner, and Morrison (2008) will examine how this specific intervention increases literacy skills for young students who are at-risk readers.

The Impact of See the Sound Visual Phonics Has on Beginning Readers

For students in preschool and kindergarten, learning beginning foundational reading skills is critical to their future academic success (Francis, 1996). The skills that these students learn while their brains are so malleable will set the trajectory for many years to come. Once students have become discrepant from their peers after second grade, students must receive a much more intensified and longer intervention in order to close the gap between them and typical performing peers (Foorman & Moats, 2004). Statically, if a student is behind grade level peers in the area of reading at the end of first grade, they continue to still remain behind their peers in fourth grade. In result, this puts them at risk to continue to be discrepant from their peers throughout the rest of their education career (Francis, 1996).

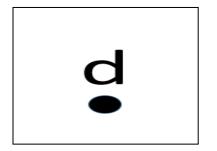
Foorman and Moats (2004) outlined three of the most essential instruction pieces for reading success for students in the beginning stages of reading. These three elements included first explicit instruction in the alphabetic principle while ensuring that students have adequate opportunity to read for meaning with a variety to text. Second, interventions with students with similar reading abilities by a highly certified teacher. Third, high quality, intensive, early intervention with students. This action research project will go into depth about the benefits of See the Sound: Visual Phonics and how it can be a specific strategy for teachers to support struggling readers receiving early reading instruction or interventions.

#### **Literature Review**

See the Sound: Visual Phonics is a strategy that pairs abstract letters and sounds with 46 hand cues and symbols that creates more meaning for young students when learning sound-letter correspondence. See the Sound: Visual Phonics was created by a mother in the 1970s in efforts to help her deaf/hearing impaired son and his classmates learn to read (Woosley, 2006). While it originated to support deaf/hard of hearing students, See the Sound: Visual Phonics is an extremely malleable strategy that can be used to with students who have communication disorders, with students who are struggling to make a connection with abstract letters, or to build beginning literacy skills with young students (Woosley, 2006). One of the main components of See the Sound: Visual Phonics are that this strategy is able to make sounds in our English language "concrete and representable via its multi-sensory nature" (Montgomery, 2008, p. 177). The system is made up of 46 kinesthetic hand movements, called cues, and 46 written symbols to represent all of the letter sounds as well as vowels, constants, diphthongs, and diagraphs that are in our English language (Montgomery, 2008).

When students are learning how to read they often come in contact with words that do not follow the typical sounds that letters make and therefore they cannot be sounded out. In our language there are many times that letters make multiple different sounds and are often more difficult for students to decode. See the Sound: Visual Phonics gives students a strategy to use when encountering these types of words. Every hand cue and written symbol is tied to the way the sound is produced by our mouths (Visual, n.d.). When you say the "d" sound, our mouths send a short burst of air out. The hand cue for the "d" sound is by using one finger to dot the air, similar to the way we push the air out of our mouth. The written symbol for the "d" sound looks like figure one (Visual, n.d.).

Figure 1: Written Symbol for "d"



In correspondence with the hand gestures, the unique component of See the Sound: Visual Phonics is that they include these written symbols. These symbols never change. Another example would be the symbol for the "j" sound. This symbol will always stay the same, even when we can see this sound written multiple different ways in words like giant, ledge, jump, cage, and schedule. All of these words have the /j/ sound with different letter combinations. The great benefit that See the Sound: Visual Phonics has is that each of the 46 sounds have a symbol tied in with See the Sound: Visual Phonics that never changes. Therefore, underneath the word cage, the "j" symbol would go underneath the /g/ so students knew that /g/ said the "j" sound (Montgomery, 2008).

When including the kinesthetic hand cue, the verbal sound, and the visual symbol, students are able to make a much more meaningful and deeper connection to the abstract form of letters in print (Goldin-Meadow, 2009). By using this multisensory method students are able to pick up on letter names and sounds much quicker than other methods (Rader, n.d.).

Even though See the Sound: Visual Phonics was originally created for students who are deaf/hard of hearing, research has shown that this strategy can also benefit hearing students of all abilities (Montgomery, 2008). Students at risk for struggling in reading, who have received See the Sound: Visual Phonics as a strategy, are able to make bigger gain in letter sound fluency and not become more discrepant from their peers after receiving the intervention (Cihon, 2009).Research also supports kinesthetic movement and gestures can have an impact on a child's ability to communicate what they truly know, more than what they are able to communicate through speech (Rader, n.d.). When a child pairs a gesture or movement with their speech that skill will be more likely to have a lasting impact and cognitively students will be able to retain more information (Rader, n.d.). Research has also shown that young students who struggle with reading need intensified instruction in phonemic awareness to become secure with reading skills, which ties directly with See the Sound: Visual Phonics (Santa, 1999).

#### Methods

#### **Participants**

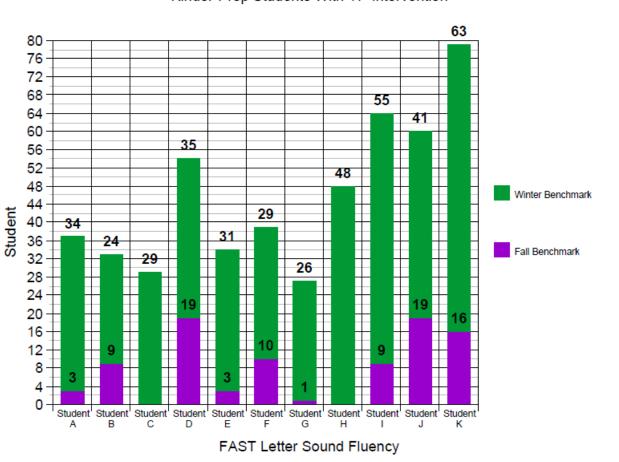
The participants used in this study were 5 and 6 year old students born between the months of May through August 2010 and as well as a second group of 5 and 6 year old students who were born between the months of May through August 2011. These students were all enrolled in a half day, Kindergarten Prep program. Many of these students could have been enrolled in Kindergarten, but their parents chose to hold them back one year before sending them. Some of the students in this study had attended preschool in the same building the year prior to their kindergarten prep year, but some had no prior schooling experience. These specific kindergarten prep classrooms had between 15 and 17 students with one teacher and one paraprofessional.

The students who attended Kindergarten Prep from the year 2015-2016 did not receive any type of instruction around visual phonics. Although they received high quality instruction from a highly qualified teacher, she was not trained in this strategy. The school district trained all of their teachers in August 2016 in See the Sound: Visual Phonics. In result, the students who attended Kindergarten Prep from 2016-2017 received instruction around See the Sound: Visual Phonics and were required to us this strategy.

#### **Data Collection**

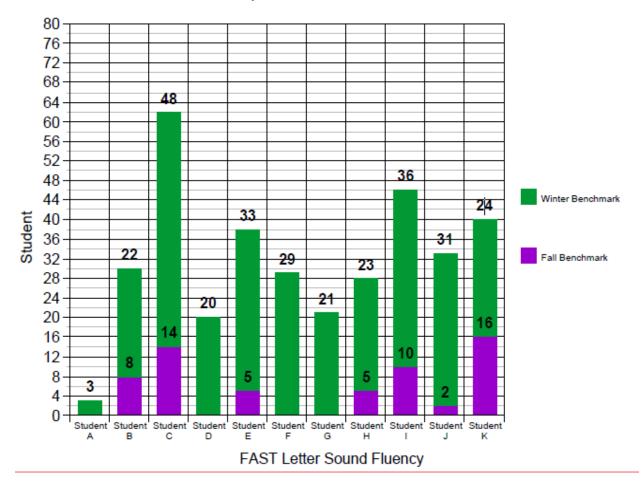
Throughout this action research data was collected to measure the growth rates of students who received the See the Sound: Visual Phonics instruction and students who did not receive this instruction. The students enrolled in Kindergarten Prep were required to participate in all of the district and state wide assessments that typical kindergarteners do. All students took the Formative Assessment System for Teachers (FAST) three times a year. Within this assessment students participated in the following assessments, Letter Naming Fluency, Letter Sound Fluency, Onset Sounds, and Word Segmenting. Data collected showed that students who were taught this strategy, whether they were at risk for reading failure or not, made more growth in the areas of letter sounds and letter identification after being taught See the Sound: Visual Phonics in their classroom. Figure 2: Letter Sound Fluency Scores from Kindergarten Prep Students who Received

## the Intervention



Kinder-Prep Students With VP Intervention

When looking at the data collected for the Letter Sound Fluency Assessment, on Figure 2, students who received the See the Sound: Visual Phonics intervention made a median growth rate, from the fall to spring, of 25 letter sounds. Again, this test is focusing on how many more letter sounds students identified in 1 minute from the fall to spring. Figure 3: Letter Sound Fluency Scores from Kindergarten Prep Students who did not Receive the Intervention



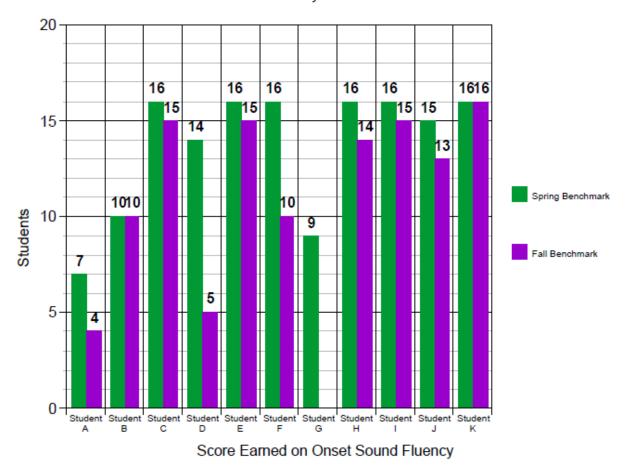
Kinder-Prep Students Without VP Intervention

Students who took this assessment who did not receive the See the Sound: Visual Phonics intervention, in Figure 3, had a median growth rate, from their fall score to winter score, of 20 letter sounds.

When comparing Figures 2 and 3 it is clearly visible that students who received See the Sound: Visual Phonics as an intervention performed better on their Letter Sound Fluency Assessment that those students who did not receive the intervention. When comparing the two groups of students, those who did not receive this intervention did have lower scores when they took this assessment in the fall of their kindergarten prep year than those who did receive the intervention. Although students who received the intervention were earning higher scores before the intervention had much impact, it is their growth rate that is important in this study.

This piece of data focusing on letter sound fluency is where See the Sound: Visual Phonics is able to demonstrate the biggest impact on student performance. Students with this intervention grew a median of five more letter sounds, from fall to spring, than the students who did not receive this intervention.

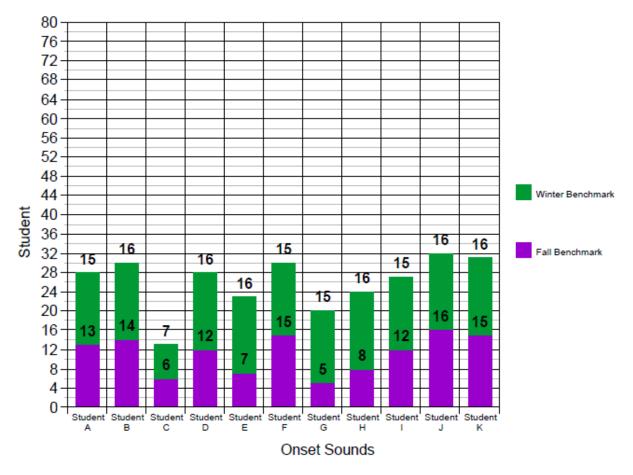
Figure 4: Onset Sound Fluency from Students who did not Receive the Intervention



**Onset Sound Fluency Without Visual Phonics** 

Figure 5: Onset Sound Fluency from Kindergarten Prep Students who Received the

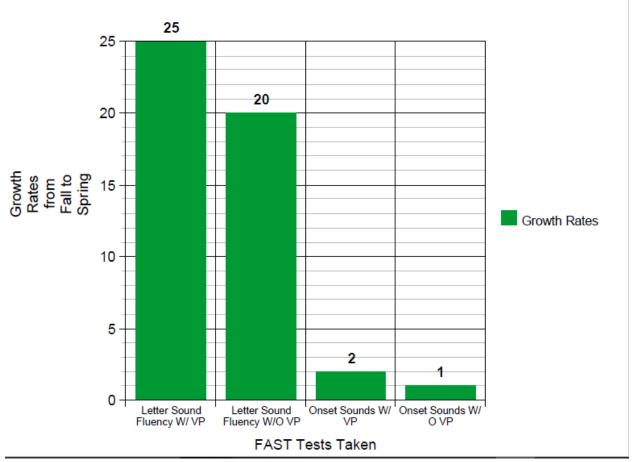
### Intervention



Kinder-Prep Students With VP Intervention

Figures 4 and 5 go into depth regarding the Onset Sound Fluency Assessment on the FAST Assessment. This assessment focuses on identifying the first sound in many different words. Students are given visuals of four different pictures. The test administrator tells the student what each picture is, then asks students what picture begins with a specific sound. Students have to point to the correct picture identifying the proper first sound. Students take this assessment in the fall and spring of their Kindergarten Prep and Kindergarten year. Sixteen points are possible for this assessment, which in result means there is not a lot of opportunity for students to make a lot of growth on this assessment. The growth rates for this assessment did not vary as much and students performed very similar, whether they had the See the Sound: Visual Phonics intervention or not.

Figure 6: Median Growth Rates Comparing FAST Scores from Kindergarten Prep Students who Received the Intervention and who did not Receive the Intervention



Median Growth Rates for FAST Scores

The final figure compares the median growth rates of all of the assessments data was collected in, Letter Sound Fluency and Onset Sounds. It compares the students who received the intervention and students who did not receive this intervention. As you THE IMPACT OF SEE THE SOUND

can see on the Letter Sound Fluency Assessment students who received this intervention demonstrated the biggest growth rate by gaining five more letter sounds than those who didn't receive this intervention. Since there isn't a huge opportunity for students to demonstrate growth with the Onset Sound Assessment, the growth rates didn't vary to demonstrate the intervention had much of an effect on students' growth.

#### **Data Analysis**

When analyzing the data collected to determine the effect that See the Sound: Visual Phonics had on students beginning literacy scores, Letter Sound Fluency was the area that demonstrated the biggest growth. When looking at the two groups of students, the students who received See the Sound: Visual Phonics as an intervention made a median growth rate of 25 letter sounds from the fall to spring benchmark. Students who did not receive this intervention made a median growth rate of 20 letter sounds from fall to spring. The Onset Sound Fluency Assessment didn't demonstrate as big of a discrepancy. Data showed that students who received the intervention made a median growth rate of 2 correct onset sounds and students who didn't receive the intervention had a median growth rate of 1 correct onset sounds.

When comparing the data for these assessments for students who received the See the Sound: Visual Phonics intervention and students who did not receive the intervention, earned scores that were more similar than expected. In the research stated earlier in this paper, it was noted that the biggest impact that See the Sound: Visual Phonics has is giving students a strategy to make a visual connection with the abstract print. The data collected has shown that the growth rate for students who received this intervention made their biggest gains in the area that focused on sound to letter correspondence.

#### Conclusion

When I began to consider collecting data around the area of See the Sound: Visual Phonics, I hypnotized that students who received this intervention would demonstrate a clear discrepancy from those who didn't receive the intervention in the area of letter sound fluency. See the Sound is directly tied to letter sounds and throughout the past five years, when I have assessed my students in this area they are almost always using the hand gestures while they are reading the letter sounds. This strategy ties directly in with this assessment so it only makes sense to see significant growth in this area.

I also felt it was important to include onset sound assessments to see if this strategy had much of an impact phonemic awareness skills. The data showed that this strategy affected student growth very little. This is not as surprising for me to discover because throughout my instruction I have seen how this strategy makes a strong connection between the abstract letter and gesture, more than it does without the abstract form of the letter.

Throughout the past five years I have used See the Sound: Visual Phonics with students in grades preschool through 5<sup>th</sup> grade who receive special education services. I have had students come to me at the end of their kindergarten year knowing only 3 letters. With the support of this visual phonics they gained anywhere from 12-20 letters within three months of instruction. I have also used this strategy with 5<sup>th</sup> graders who THE IMPACT OF SEE THE SOUND

are struggling with decoding. Using the written symbol tied with each visual phonics sound to label and break down multisyllabic words has supported them when reading more difficult material. I have also used this strategy with 2<sup>nd</sup> graders who are struggling to remember irregular sight words. One of the most effective things about this strategy is that it can be such a great support system for struggling readers for multiple years. If a preschooler begins to learn the hand gestures, then goes onto learn the symbols, and apply them when they're reading more difficult text, they already are a step above those students who don't use this strategy.

In conclusion, the most growth was seen was when students were taking the FAST Letter Sound Fluency Assessment. Students who received this intervention were able to read a median of 5 more letter sounds and have a higher growth rate than those students who did not receive this intervention. With the research heavily supporting that the use of gestures has a significant impact on student learning, all students could benefit from a strategy as simple as See the Sound: Visual Phonics (Goldin-Meadow, 2009). See the Sound: Visual Phonics will give students a strong tool to rely on as they begin to lay the foundational reading skills that will be critical to their future academic success.

#### **Annotated Bibliography**

Cihon, T. M., Gardner, R., Morrison, D., & Paul, P. V. (2008). Using visual phonics as a strategic intervention to increase literacy behaviors for kindergarten participants at-risk for reading failure. *Journal of Early and Intensive Behavior Intervention,* 5(3), 138-155. doi:10.1037/h0100428

This article goes into depth about the research around a reading intervention program that was implemented for kindergarten students using See the Sound: Visual Phonics. This reading intervention was implemented with hearing students who were considered high risk for struggling in reading. The researchers used Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and the curriculum based assessment to determine if the intervention was successful.

I used this research to compare my findings with throughout this research project. This research article also supported me throughout my paper to use as evidence that See the Sound: Visual Phonics is a credible strategy and supports students who are struggling in the area of reading.

Foorman, B. R., & Moats, L. C. (2004). Conditions for Sustaining Research-Based

Practices in Early Reading Instruction. *Remedial & Special Education*, *25*(1), 51-60.

This research article discusses the best research based strategies to support students who are struggling in the beginning stages of reading. It discusses the critical components that reading interventions should include, strategies, ideas for interventions, and how to most appropriately implement these. This article goes into depth covering different initiatives in different states and the results they had after implementation of reading strategies.

I used this article in my research to cover the strategies that are critical to young children's success when beginning to read. The foundational skills that are laid out in this article supported my research article as to why See the Sound: Visual Phonics is a strategy that is beneficial for struggling students. It also supported my research on Visual Phonics because it connects

Goldin-Meadow, S. (2009). How Gesture Promotes Learning Throughout Childhood.

*Child Development Perspectives, 3*(2), 106-111. doi:10.1111/j.1750-8606.2009.00088.x

This research article looks at how hand gestures can have a significant impact on learning as a child. It discusses their research findings concluded that children can express more knowledge and what they know through using gestures than verbally expressing it. It discusses how using hand gestures can support cognitive learning in a way that can have a significant impact on development of their brain in many different ways.

I used this research to support how the gestures that See the Sound: Visual Phonics use is directly correlated to student learning and achievement. Using kinesthetic movement by gesturing is directly connected to learning and student success.

Montgomery, J. (2008). Dave Krupke. Communication Disorders Quarterly, 29(3), 177-

182. doi:10.1177/1525740108318413

This article is an interview with Dave Krupke, a lead researcher and trainer for See the Sound: Visual Phonics. In this interview Krupke discusses the history of this program, the benefit it has for hearing and non-hearing students, how to implement this strategy in the RTI process, and research on why this strategy is effective.

This interview was used in this action research project because this article gives great background on See the Sound: Visual Phonics. This article also discusses research that supports See the Sound: Visual Phonics and why this strategy is an easy, cost effective, but simple strategy to implement.

Rader, N. D., & Zukow-Goldring, P. (2012). How the hands control attention during early

word learning. *Benjamins Current Topics Gesture and Multimodal Development,* 79-98.

This research article goes into depth about how gestures with young students can have a long lasting impact. It discusses how teaching young children with a multisensory approach is much more likely to get students attention and connect to their long term memory than not using a multisensory approach. It also came to the conclusion that infants would attend to adults if they were speaking and using their hands to communicate, which resulted in more effective learning.

I used this research article to justify the importance of using multiple different sensory methods to teach students. This article helped support my justification by their research that students learn more effectively when multiple different modes of learning are incorporated. This also supports how students will be more engaged in learning when they are active and using their body to learn.  Santa, C., & Høien, T. (1999). An Assessment of Early Steps: A Program for Early Intervention of Reading Problems. *Reading Research Quarterly, 34*(1), 54-79.
Retrieved from <u>http://ezproxy.nwciowa.edu:2152/stable/748269</u>

This article goes into depth discussing the intervention practices that teachers are using to support struggling readers. This article studies different early intervention reading programs and breaks them down to determine what strategies work best for the demographic of readers who are at-risk. The researchers focused a lot on the benefits of writing throughout their study as well as the significance that phonemic awareness has on building reading foundational skills.

This resource supported the importance that phonemic awareness plays in building a strong reading foundation for struggling readers. Throughout my paper I discuss how See the Sound: Visual Phonics ties directly in with building phonemic awareness skills and plays a significant role in reading growth for young students.

Visual Phonics page. (n.d.). Retrieved February 17, 2017, from

## http://seethesound.org/visual\_phonics.html

This is the official See the Sound: Visual Phonics website created by the International Communication Learning Institute. This organization's main mission is to provide trainings, information, and resources so more students have access to See the Sound: Visual Phonics to better their reading and speaking skills. This website outlines the purpose of See the Sound: Visual Phonics is to display more information about this strategy. They offer an overview of what the purpose of See the Sound: Visual Phonics is, how it works, information about trainings, tips for teachers implementing the strategy, as well as the research that has already been conducted on this strategy.

This resource was used in this research paper to help locate previous research. This website was also used to describe the history and how See the Sound: Visual Phonics orientated. The research articles on this website and contact information was also used to further investigation into this topic and contact experts in the field.

Woolsey, M. Lynn; Satterfield, Susan T.; Roberson, Len, M. L., Scatterfield, S. T., &

Roberson, L. (2006). Visual Phonics: An English Code Buster? Retrieved February 17, 2017, from <u>https://www.questia.com/library/journal/1P3-</u> <u>1189435031/visual-phonics-an-english-code-buster</u>

This research article covers many different research that has been done to determine See the Sound: Visual Phonics' successfulness. This article covers many different research studies that have been done and how the results determine that this strategy is very beneficial for students learning to read or struggling readers. It also discusses research with the use of this strategy with deaf/hard of hearing students and the benefits for hearing students as well. It concludes that this strategy is a great resource for a large population of our young children.

I used this research article to support my research as to why See the Sound: Visual Phonics is a strong strategy for many different students. This research article also had great supporting information about the history of this program and how it has been implemented in schools.