

**Finding your Phooting in Phonics:
Exploring Multi-Sensory Phonics Instruction in a First-Grade Classroom
by
Liz Needleman**

My journey takes place at Pulaski International School is an International Baccalaureate (IB) school located on the North side of Chicago. The school is also home to the Regional Gifted Program for students whose home language is Spanish. In the past seven years that I have worked at the school, there has been a notable shift in demographics. In the 2011-2012 school year there were 895 students enrolled, 82% of whom qualified to receive free or reduced school lunches. In the year 2018-2019, of the 898 students, 59% of students qualify. According to Chicago Public School Data, in my first year at Pulaski, the school was 89% Hispanic, 5.8% White, with the remaining students identifying as African American, Asian or Multi-Ethnic. In the 2018-2019 school data the numbers have changed to 70% Hispanic, 23% White, 3.4% Asian and 1% African American, with 2.8% of students identifying as Multi-Ethnic. All of these changes have impacted the funding the school receives, which has increased its need to rely on parent support with donations. The school is a Level 1+ school servicing students from Pre-K through 8th grade. A Level 1+ rating indicates a school in excellent standing based on attendance and test scores.

In my first grade class of 29 students, I have 16 boys and 13 girls. Three of those students are identified as diverse learners and qualify for an Individual Education Plan, also known as an IEP. A large percentage of our Hispanic students are in a cohort within the Gifted Bi-Lingual program and are in class together. Since I am not endorsed in ELL, my classroom demographic is more heavily weighted with white, monolingual students. My students identify as 58% white, 28% Hispanic, and 14% come from other backgrounds including Malaysian, Chinese, African American and Pakistani. At home, students speak English, Spanish and Polish. Though 59% of our entire school may qualify for free lunch, a significantly smaller percentage of students in my class qualify. My students come from families with a broad range of socioeconomic status.

Our class is self contained, so I teach Reading, Writing and Math, as well as Science and Social Studies through IB units of inquiry. These units frame the concepts we learn about through themes like “How We Express Ourselves.” In first grade, students learn about different forms of art and use this understanding to express emotions by creating their own pieces. During the theme “Sharing the Planet,” students read and write nonfiction books about animal adaptations in different habitats and then go on to write their own nonfiction books, teaching others what they have learned. This understanding of the plants and animals around the world helps them to grasp their impact on the Earth. Due to IB requirements, the children have two days of a foreign language during a weekly rotation. Our students study Spanish from Kindergarten through 8th grade. Although I do not speak Spanish fluently, I try to incorporate

phrases throughout the day. The students are on a six-day rotation schedule during which time they also attend PE twice a week, Music, Art and Library.

My brilliant and engaging students love to process information by sharing their thoughts and feelings with each other. They make connections easily, both to what we are learning and also to one another. Although upper grade teachers report a divide among student friendships along socioeconomic lines, I see a great deal of mixing between genders, races, and socioeconomic lines. During recess and weekly free time, groups are formed based on interests, including dinosaurs, building with blocks, and arts and crafts activities, with a wide range of kids engaging in card games and board games.

Our school is supported by two strong parent organizations. The Friends of Pulaski hosts several events throughout the year, including a gala in the winter complete with a silent auction and art sale. The Bilingual Action Committee hosts movie nights, karaoke, and other events to support outreach to parents, as well as to provide Spanish language materials at our school. For the most part, the parents of the students I teach are members of the Friends of Pulaski group, since the majority of my students come from predominantly English speaking homes whether they are Hispanic, White or Other. In the past I have hosted events to support fundraising for the Friends of Pulaski group, including donut dates with the teacher, pizza parties, and a “sleep under.” As the population has changed, state funding has decreased, which in turn has caused the school to turn to parents for financial support. This shift has both encouraged more parents to send their students to our school while also encouraging them to donate impactful sums of money. Our Friends of Pulaski group has helped to cover the cost of support staff, bought materials for our classrooms, and is currently raising a million dollars to install astroturf on our playground. During our monthly open houses, prospective families come to see my classroom and learn more about our school.

A major push at the school is the inclusion of technology across grade levels, with primary classrooms each having six iPads and upper grades using one-to-one Chromebooks that students are responsible for throughout the year. In my classroom, students use iPads to access leveled reading material in small groups for about 15 minutes on alternating days. I also use them to support their math growth by engaging in individualized math programs during math centers twice a week. We also use them to record culminating projects. During a unit on Healthy Choices, one option for students to show what they have learned is to create a Public Service Announcement and record it on an iPad. They are also used to support research into different habitats and to supplement areas of interest when we need additional sources.

The environment at Pulaski is warm and inviting, with children playing on the playground both before and after school for hours each day. Children can be found participating in afterschool clubs or sports teams year round. Our school’s jazz band wins awards at competitions, and seventh graders design and create fashions for our annual fashion show. The school sponsored a trip to Poland two years ago and is working on another this upcoming summer. I have been told people choose to send their children to our school because they are

looking for a diverse environment with a strong academic program, and I would like to believe that we fit the bill rather well.

Rationale

I can't say I started my educational career on solid phonics phooting. Growing up in Milwaukee, the daughter of a woman with a thick South Louisiana accent meant that not only did those letters not sound the same at home, we had a whole different vocabulary for the pictures. You say fishing pole my mama called it a rod. Pin and pen were interchangeable sounds and I still need context to this day to determine if my mother is saying cord or card. As teachers we often fall to the comfort of teaching how we were taught.

Listening to NPR in the spring of 2018, I heard about a book called Language at the Speed of Sound. The author claimed that "the science of reading can be a difficult concept for educators to grasp." I found the proposition to be infuriating and bought the book. As a cognitive scientist Seidenberg examined the need for teachers to focus more on phonics instruction. I couldn't dispute this as a need in education but I also couldn't say that I had a great deal of confidence in how I was teaching phonics. Having been extensively trained in reading and writing workshops for the past fifteen years, phonics was never a clear focus of instruction or professional development for me. From this book I learned about the website What Works Clearinghouse created by the Department of Education that rates educational programs based on research. The research must meet rigorous standards and therefore prove the program's effectiveness. In my hunt to find an effective phonics teaching program I learned about Orton-Gillingham, a phonics instruction program with a focus on multi-sensory approach. In the fall of 2019 I took a week-long course. I began tutoring a former student with OG materials and moved on to using the materials in my class with two of my lowest performing students. An inclusion teacher was working with two children with IEPs (Individual Education Plans) in my class. For the first few months she was including the two other struggling readers when she taught the children with IEPs. As November came to a close we realized that both children with IEPs had far surpassed the two other students in reading. We decided to double down on supporting these two children. She pulled them for the first 15 minutes of class to work one-on-one with them on phonemic awareness skills. I followed up daily with 20 more minutes of small group instruction where I worked on the phonics skills I had learned about in Orton-Gillingham training.

Working with those two struggling students is what brought me to asking the questions you will read about here.

What happens to my struggling readers when I begin to use a multi-sensory approach to teaching phonics?

What happens to their ability to recall letter names and sounds?

What happens to word attack skills?

What happens to their ability to write letters and words?

What happens to their engagement in class?

Consideration of Ethics:

I will need permission from parents to include pictures of kids engaging in reflective practices. I will also need permission to use reading data for research.

Although the use of a control group might be helpful to prove the effectiveness of the strategies it would be unethical to not use what I think is best practice to educate all of my students.

Summary of Data Collection Methods

Data Collection

- *Letter name and sound recognition*

This assessment is individually administered. Each child is presented with the uppercase alphabet out of alphabetical order. Next they are shown the lowercase alphabet including the addition of serif typeface **a** and **g** which accounts for the additional letters in the lowercase inventory of 28. These letters are included as they are frequently used in books. In conclusion the child is shown the uppercase alphabet examples again and asked to state the sounds each letter makes. This assessment was administered every few weeks.

- *DIBELS - Dynamic Indicator of Basic Early Literacy Skills -NWF* is a sub test from this assessment
- *NWF - Nonsense Word Fluency -*

A standardized, individually administered measure of the alphabetic principle including letter-sound correspondence in which letters represent their most common sounds and of the ability to blend letters into words in which letters represent their most common sounds. This assessment presents students with randomly ordered vowel-consonant and consonant-vowel-consonant nonsense words for example *ov*, *sig*, and *rav* and asked to verbally produce an individual letter sound, or read the whole word. For example, if the student sees “pov” they could say /p/ /o/ /v/ or say the whole word /pov/. The student is allowed 1 minute to produce as many letter-sounds as he/she can. Because the measure is fluency based, students receive a higher score if they read the whole word than if they produce each sound in isolation.

- *Running Records*

This individually administered assessment can be done with any leveled text. In general the first 100 words of a text are used to measure reading accuracy and strategies used to decode words. In the case of students who read books with fewer than 100 words in a text all of the words in the text are used. The assessment is timed to determine the rate of words read per minute. I record the information of how many misread words a student has in a given passage and if they are able

to self-correct those mistakes. I also follow the reading passage with 2 literal and 2 inferential questions to determine if a student is able to comprehend what they are able to decode. I administer formal running records approximately every 5 weeks to determine students' guided reading levels as defined by Fountas and Pinnell. In addition to those formal assessments I take an informal running record of a student in each reading group I see each day.

- Journal

As the year has progressed I have used a journal to capture my observations and thoughts about struggles and success of my students. I have recorded questions and made plans for following up on concerns. The journal allowed me to look back over the course of the year and reassess how I proceeded with different strategies. I was also able to track how the children's experiences seemed to be developing over the course of the year.

- Photographs and Short Video Clips

These images allowed me to capture evidence of emotions and how the children used the kinesthetic materials to practice sounds and make connections between objects and letters and their sounds.

- Case study of three individual students

When the year began I had two students, Melanie and Christopher, that were far below grade level. Both students' kindergarten teachers had presented them to the Multi-Tiered-System-of-Support committee at our school with the hopes that they could eventually receive an individual education plan. Unfortunately, at the time, they were not selected to be assessed. When the school year began I knew that these two particular students would need a great deal of support so I started to think about how I could adjust instruction to meet their needs. Upon entering first grade neither had mastered the letters of the alphabet, a skill generally gained prior to entering Kindergarten. They each knew a single sight word. Mason is a new student to our school this year. He has a better mastery of the alphabet but is still reading below grade level. At the beginning of the year his father expressed concerns with his ability to read and asked what he could do to support him at home. He mentioned that there had been some family disruption the previous year that might be impacting Mason's reading. These three children became the focus of my questioning.

Christopher is the second of three boys. His older brother, in second grade, is an exceptional reader and his younger brother is three years old. He lives with his mother and father and his paternal grandparents live on the first floor of their building. His cousin is also in the first grade at our school and the boys play together at recess even though they are in different classes. His maternal grandmother is a retired teacher from our school. One of the earliest notes in my journal is from a meeting with his mother. I asked her to come in because I noticed how few letters he knew and she said she wasn't surprised. Over the summer she had him tested for dyslexia. (Journal Sept 23) He is an astounding story teller. During writer's workshop he loves to share his "work" which is usually a few scribbles in the picture area and maybe a couple of

letters repeated in the lined section, but that story will go on with details about how he found a video game machine in his backyard and his dad brought it up to their apartment and they played it all afternoon. His stories are unique and never modeled after another student's experience like his classmates often do. They don't use the patterns of books we've read in class and when I have asked his mom they don't seem to relate back to his life experiences either. He is polite and works hard. His smile lights up our room everyday and he is excited to share what he knows. He has warm engaging relationships with several students and enjoys his recess time. His joyous nature belies his academic struggles. Even as late as March he was struggling to consistently identify the letters in his name.

Melanie is the fifth of six children. She lives with her mom, three older brothers, older sister and younger brother. I have known Melanie for about three years, since I taught one of her brothers. Both she and my former student are shy and sweet students. The brother that she is closest in age to, a second grader, is academically advanced and prone to violent outbursts. Last year he had a difficult time accepting redirection from his teacher and would often hide in the corner of the classroom yelling or crying as a result of a reminder to wait his turn to be called upon. Melanie's father was released from prison last year and is sporadically involved in her life. As a small child she received early intervention services but there was no transition plan put into place when she aged out of the program at 3, therefore when she entered school as a kindergartener she received no additional educational support. She was born with her heart on the wrong side of her chest and several small spleens. This causes her immune system to be compromised so she has regular check-ups at Children's Hospital. In the beginning of the year I could go several days without hearing her voice. Even in our morning greeting she would be more comfortable waving hello than trying to speak to a classmate. Her comfort level in social interactions is primarily as an observer. She stays on the fringe of groups and watches children. She laughs at the jokes they make but rarely offers her own. She has a smile that lights up the room, but it's rare. She is a collector. Sometimes she finds treasures on the ground but other times those items may have been left in or on another child's desk. She is generous and loves to share with other children. When I brought in chips for her to have at snack time she would pass out bags to other kids. She draws pictures for her friends and is able to represent people and situations through drawings.

Mason is new to our school this year. At the beginning of the year his father had sole custody of him and his older brother who is in fourth grade. His father is a long distance truck driver and so Mason would stay with his grandmother and 20 year old uncle. On Wednesdays he had court monitored visitation with his mother as well as family counseling sessions. His father explained that in Kindergarten Mason's teacher had been concerned with his reading progress. At the beginning of the year Mason knew all of his consonant sounds, some vowels and several sight words. He was able to match one-to-one when reading a book and entered the year reading

at a level Reading Behaviors. He struggled to follow a pattern presented in a book for example if the text said “The bug is ____” on each page, Mason followed the pattern for the first page but on the next page he said “There is green bug.” (journal Sept. 25) Thereby showing he knew each letter group represented a word but using only the first letter in some instances to guess a word like “there” for “the” and creating his own sentence for the page. For the first few months of school September through November he worked with the inclusion special education teacher in a small group with the child in my class who was identified as needing an Individual Education Plan. Mason is a teddy bear come to life. He is the second largest child in our class. He has a big booming voice and loves chatting with his classmates and teachers. He is easily excited and is bursting with enthusiasm for all of our subjects, but PE is the highlight of his week. His exuberance can sometimes be a challenge for his first grade agemates. When he does not feel included he gets very upset, he tends to cry and shut down. When he is challenged by an assignment he struggles to begin and asks for additional support. Particularly when it comes to writing Mason is likely to say “I can’t do this I’m stupid” (journal Oct 3) He often looks to the adult in the room for reassurance and support in both academic and social interactions.

Implementation

In October of 2019 I attended a week-long institute of the Orton-Gillingham approach to phonics instruction. I learned about using dual textured sand to help children use their kinesthetic senses to lock in the form and sound of letters. I learned how to use a three part drill to have children practice decoding letter sounds and rapidly recognize syllables. I learned visual cues for letter sounds and how to use a plastic canvas with a page over it to create a textured surface that kids can use to build muscle memory of non-phonetically spelled words. The workshop reminded me of the importance of crossing the midline so children activate both their left and right brains while we work. I was recharged and excited to return to work and tackle all of my students’ reading difficulties. The day after I returned to school our city went on strike for three weeks.

Once we returned to school we settled back into our routines and I began working in small groups with students on reading. Each day I meet with 3 groups of students. These groups are homogeneous reading leveled groups of between 2-6 children. Approximately every 5 weeks I assess the students to determine their reading needs and adjust the groups accordingly. Depending on the levels of the groups I meet with each group 2-4 times a week.

Due to Christopher and Melanie’s high needs I met with them 4 times a week. Our daily reading group lessons included reading a large format or “Big Book ” together to practice one-one correspondence of reading. This is when children are able to recognize that a spoken word takes up the space of a single word on the page. For example when a child repeats the poem 1,2, buckle my shoe they should make 5 finger taps. Some children may tap randomly across the page or make 6 taps due to the double syllable in the word buckle. Once we have read the large format book together and children have memorized the pattern of the pages of the book

they are given a student sized hand held copy of the book. We also review the letters from the alphabet we've worked on so far adding an additional letter each session. This includes holding an object that begins with that letter, observing the letter on a large card, writing the letter in sand or shaving cream and then writing the letter on paper with a pencil. They also used aural discrimination to identify pictures that began with that letter. This series of activities engages the students across multiple sensory modalities, kinesthetic, aural, and visual. For some of the letter sounds I used a puppet to show tongue placement. Once the children had about seven specific letter sounds they moved on to writing words and even nonsense words by changing an initial letter in a consonant-vowel-consonant word to practice using the sound of the day's new letter.

What happens to their ability to recall letter names and sounds?

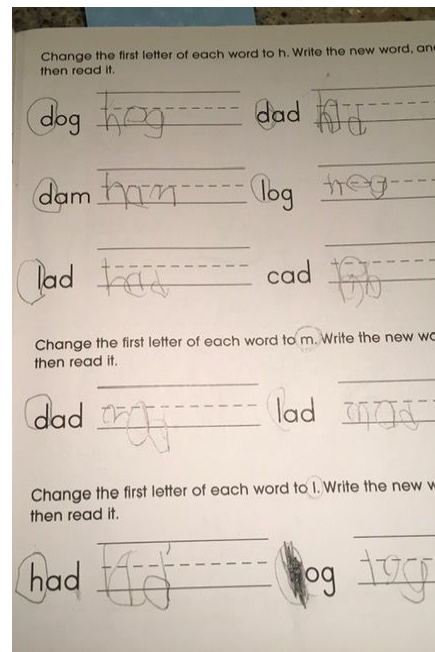
At the beginning of the year, when I discovered how far behind Christopher and Melanie were I realized I needed to add an additional component to the regular battery of assessments. I administered an alphabet recognition assessment that I took from Columbia's Teachers College Reading and Writing Project. The assessment presents the child with the uppercase alphabet out of order, followed by the lowercase alphabet and finally the uppercase again but this time asking the child the sounds each letter represents. This test is untimed. When I gave Christopher the assessment he smiled and looked at the sheets rubbing his chin saying "Hmmm, no I don't know these." (Journal Sept 20) We went one by one and he found 9 letters he knew the names of. He was able to tell me the sounds of 3 letters. C was not one of them. When Melanie was given the assessment she took her pose of elbow on the table, head resting on chin, hand covering her mouth. She simply shook her head as I pointed to letters if she was unable to recall the names or sounds. When she was able to identify 16 letters and 7 sounds she popped her head up and softly said each name and sound. I did not administer this assessment with Mason at the because from his reading test it seemed that he knew the letter sounds and was confident in that knowledge.

Letter names and sounds became a major focus of each day with this reading group. Using what I had learned at the Orton-Gillingham training, our sessions began with the introduction of a new sound. I would show the 8.5" x 5.5" card with the letter on it. Beginning on February 18, I would pass a small plastic object that began with the letter, for example a small plastic leaf representing the letter "L." The object passing provided a concrete, tangible connection to the sound that we were working on that day. Then we reviewed the letters we had learned on previous days. I held up the card and the children repeated the letter name and sound for each letter. Next, I placed the cards on a narrow ledge in consonant-vowel-consonant patterns and the children practiced sounding out each letter and then blending them together to create a nonsense word. We then used dual textured sand or shaving cream to trace the letters as I said aloud sounds. For sounds that are represented by more than one letter the children divided the

sand in half if the sound was /k/ they would draw a “c” on one side of the divide and a “k” on the other. Writing letters in a texture was followed by looking at pictures of objects and discriminating between sounds that began with the letter and others that did not. These pictures allowed the children to visualize multiple examples of the letter sound. Other activities in the workbook included practice writing the letter and writing the letter below pictures that began with that sound. Once the children had several known letter sounds the book presented consonant-vowel-consonant letter sets that the children were expected to eliminate a letter from and then add the letter they used in that lesson to create a new word. An example of this can be seen in Picture C. I also used a mouth puppet which fit on my hand so I could show the children correct tongue placement for different letters like “L”. Another kinesthetic approach I used was to trace letters that the children struggled to remember with puffy paint on index cards. They then reviewed those letters with a partner and practiced tracing the letters while they repeated the name and sounds.



B



C

Picture B- Melanie writes letters in dual textured sand. The orange sand is coarser grain and the green sand is finer, providing sensory input as she writes each letter.

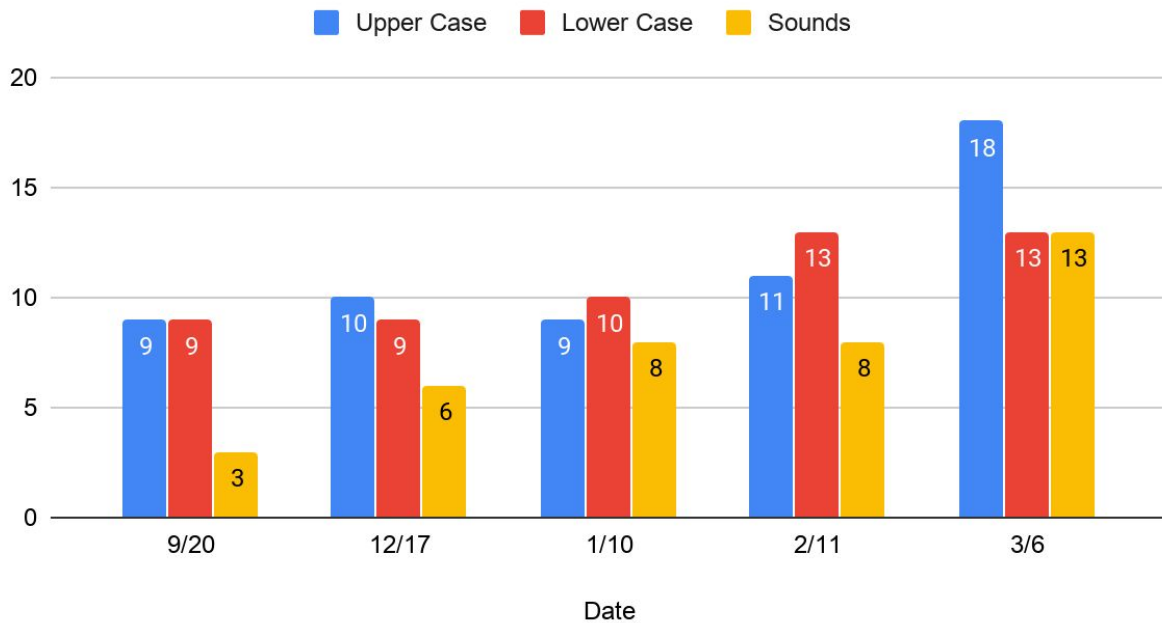
Picture C - An example of Christopher’s work from the work book, eliminating and replacing initial sounds.

Christopher

After a full year of Kindergarten Christopher entered first grade knowing the names of 9 uppercase letters, 9 lowercase letters and the sounds of 3 letters. By March he had doubled his

known uppercase letters and was able to recall more than 4 times the original number of letter sounds. Unfortunately, this still had him very far behind his like age peers. This shows that he is making progress but the progress is alarmingly slow. His rate of learning is so slow in this classroom setting that this became a major indicator that he does in fact require an Individual Education Plan.

Christopher's Upper Case, Lower Case and Sounds

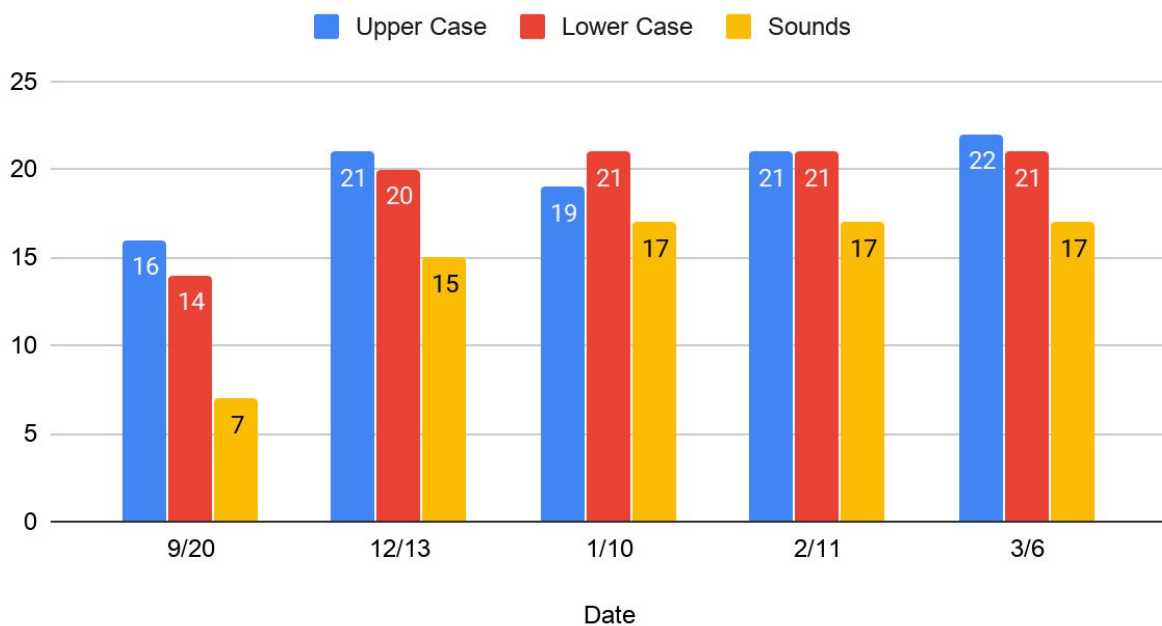


One reason I think he had a difficult time progressing more rapidly through learning the letters is that he faced an overwhelming amount of information and expectation in our regular classroom setting. With peers that are able to read chapter books he got into the habit of approaching school as a place that wasn't really designed for him. His peers are able to sound out multisyllabic words, create a variety of sentences with complex structure and craft a written opinion with supporting details. Since none of those were within his own scope of ability he simply turned his brain off. His focus became social engagement. He spent his time chatting with others and taking cognitive breaks with a classmate who had an IEP (journal January 23). The cognitive load of the classroom was too much, and out of a sense of resilience he shut down. Within the confines of our small group he found success. Each day learning a new sound, using those sounds to eventually sound out some short words. Our group included reading phonics controlled readers so a book was written with only the sounds that he had learned thus far. He did an excellent job of reading those books. He used what he had learned of the letters, checked the pictures and developed the ability to hone in on one to one correspondence when reading words.

Melanie

Melanie entered first grade with a larger base of known letters and letter sounds, but with a much more reserved personality. She began the year with a base of 16 uppercase letters, 14 lowercase and 7 sounds. By December she had already learned 21 upper, 20 lower case letters and 15 sounds. Her progress essentially paused there. During the bulk of our time together January - March she learned only 1 more letter name and 2 more letter sounds. While her letter name and sound acquisition languished she showed a broader jump in learning how to decode nonsense words as is evidenced by the chart in the next section.

Melanie's Upper Case, Lower Case and Sounds



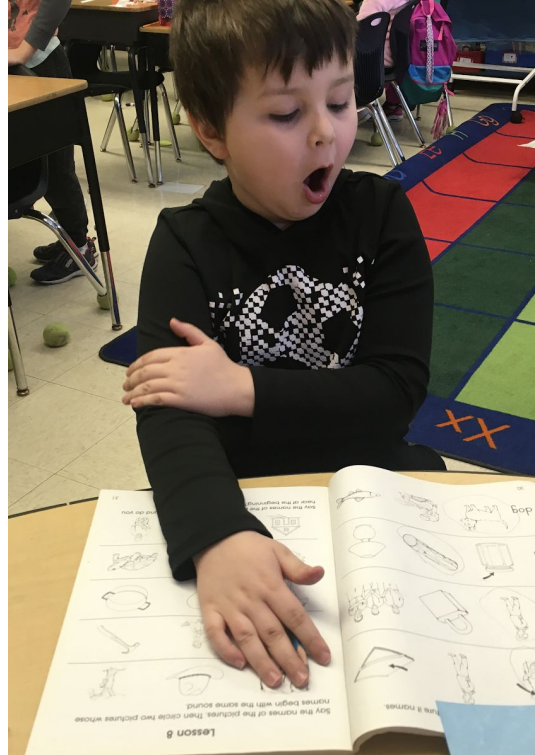
By March the letter name and sound gap between Melanie and Christopher had narrowed. When reading the phonics controlled books in class Christopher was actually more successful reading at a rate of 97% accuracy while Melanie was still guessing based on initial letter sounds. I think a part of this achievement divide could be related to a confidence issue. Christopher approached our reading work from the beginning with a sunny disposition and a degree of openness that helped him celebrate his achievements. Melanie on the other hand noticed the difference between herself and her peers and focused more on the difficulties she was having.

I did not assess Mason's letter knowledge this year because during our initial assessments he seemed to have a firm grasp on the letters and their sounds. Upon reflection I think that in future classes I will assess a broader range of students in the area of letter knowledge. I usually only assess the letter knowledge of students in the lowest reading group. As the year went on I discovered even some higher level students struggled more with vowel sounds than I had anticipated.

What happens to word Attack skills?

When I first tested Christopher at the beginning of the year he would look at the illustrations of a book and tell a fantastical story about what was happening in the book. For example in a book about a girl at a pond observing different things in the park which contains a single line of print on each page, “I see a duck”, “I see a rock” etc. Christopher looked at the pages and said things like “I was walking in the park today with my dad. There was a beautiful duck swimming in the water. It looked cute”(journal Sept 18) Christopher did not use any written information to read the page he exclusively told stories based on the picture. When Melanie read the same line of text she used what she saw and pointed to the words in an approximation of one to one but used little or no alphabetic knowledge to read the text. She said “ There is a bird” (journal Sept. 16) She displayed an understanding that the words on the page had meaning but struggled to assign sounds to the letters she read. When Mason read the same passage he said “I see a bird” (journal Sept. 25) He has a stronger base of sight words, he began the year with a base of 15 known sight words. He also was able to identify all the letters and letter sounds in the alphabet. He used what he saw in the first letter of a word to guess what he thought the word might say. In this case he reversed the letter “d” and read it as a “b” and said the word “bird” disregarding the additional information given by the other letters.

In reading group, we have worked on a series of steps to encourage “word attack” skills. Christopher, Melanie and Mason are all using a strategy of sounding out individual letters and then tapping the sounds down their arms. For “cup” they would stick out their non-dominant hand and place their dominant hand at their shoulder saying the /k/ sound. Then they tap their elbow and say /u/. Finally they tap their fist and say/p/. They then return their dominant hand to the opposite shoulder and brush down blending the sounds together.



Picture A - This picture shows Christopher tapping out the sound of the letters in this consonant-vowel-consonant word as he breaks apart each individual sound to read and then blends them back together to form the word.

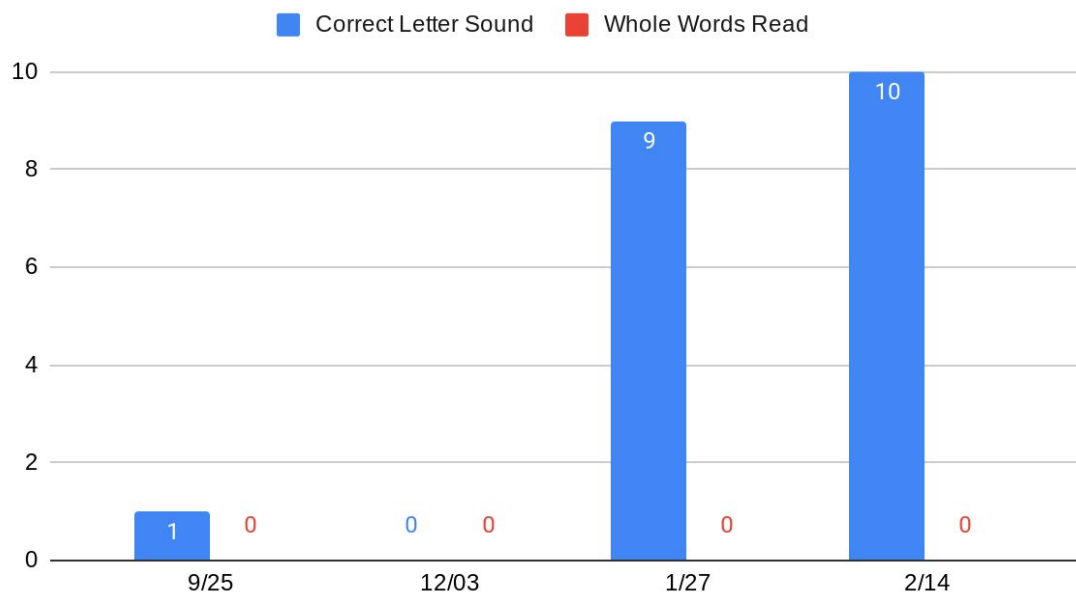
Using magnetic letters I would distribute 7 of the same letters to each child. One example are the following letters a, t, b, c, m, h, s. Then I would have the children put a and t together to make at. We would then place a letter in front of that chunk to make “cat”, “sat”, “hat” etc.

Being able to recognize parts of known words in unknown words is another word attack skill. Due to Mason’s relative strengths in alphabet knowledge he also worked on building words from chunks. For example I would give him a segment like “ot” and a sheet with single letters he could then use to create words. Once he found real words from the ot family he would record them on his whiteboard. He was given one minute to record as many words as he could find. On the reverse side of the alphabet sheet were a set of blends that he could then use to practice larger words.

The following graphs show how each child scored on the Nonsense Word Fluency reading assessment on four checkpoints throughout the year. For each assessment the children are presented with a novel set of two and three letter vowel-consonant or consonant-vowel-consonant set of letters. The assessment is administered for one minute individually.

Christopher

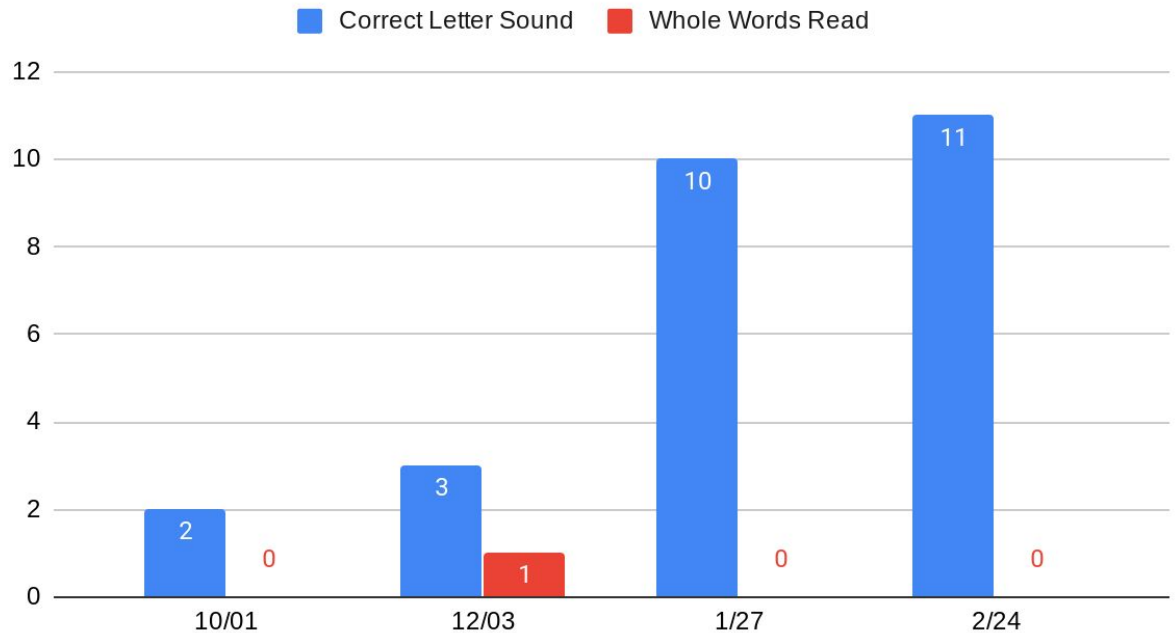
Correct Letter Sound and Whole Words Read



Christopher was able to recognize only one letter the first time he took this assessment and unable to find a letter that he could correctly identify the sound for in the second assessment. During the assessments he would often point to the letters on the page and either shake his head no and look at me or he would call out random letters. By the time he took the assessment in January and February he was feeling more confident and looking at each letter taking time to find letters he was familiar with. At no point was he able to blend all three letter sounds into a “word.”

Melanie

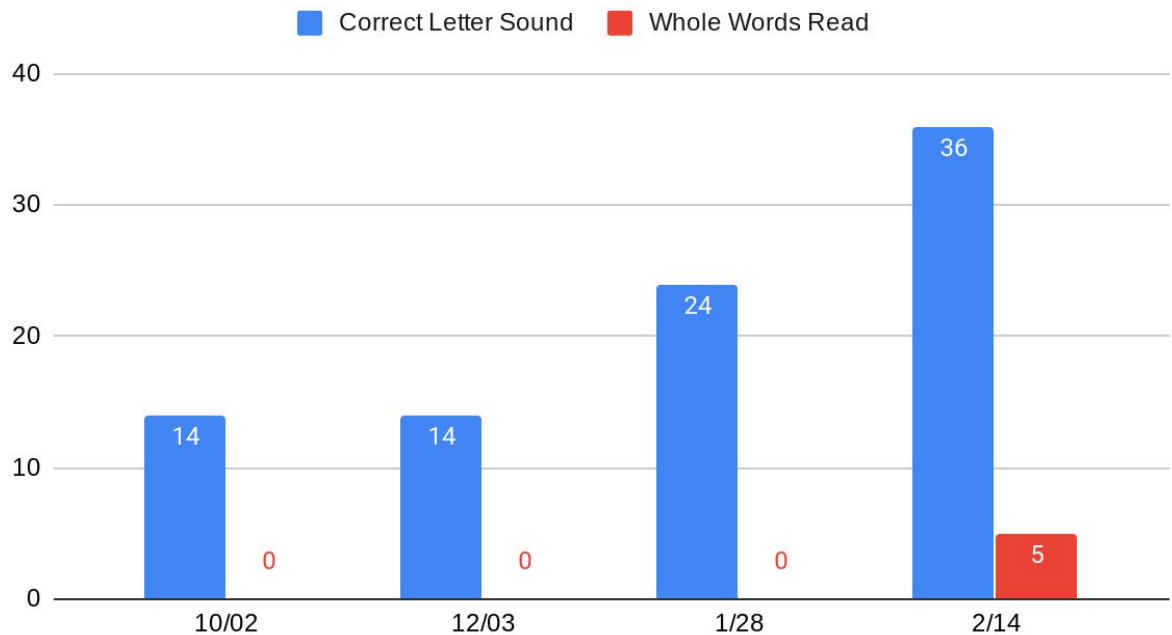
Correct Letter Sound and Whole Words Read



Melanie has a larger base of known letter sounds than Christopher. Due to her shyness and the timed nature of this test I think this was a particularly challenging assessment for her. During this assessment she sits with her elbow resting on the table and her head in her chin covering her mouth with her hand. She looks intently at each of the letter chunks and shakes her head as I point to each one. (Journal Oct. 1) In December she found a single three letter chunk that she was able to call out as a word which gave her credit both for reading a whole word as well as the three letters. As the year progressed she was more confident sitting up and removing her hand from her mouth but still she simply shook her head at each word group calling out only a few of the letters she recognized. (Journal February 24)

Mason

Correct Letter Sound and Whole Words Read



Mason sits down to assessments in the same way that he enters our classroom, joyful smiling and ready to go. Once we began the test his forehead would crease and he would slow down, looking at me to check each of his answers. (Journal October 2) Since he only gets credit for reading a “whole word” when he has done it on the first pass it took quite a few assessments for him to achieve any credit in that area. For example when a child is presented with lag if the child first sounds out each letter /l/ /a/ /g/ then follows with “lag” they do not get credit for the whole word. This process of sounding out each letter one at a time also slows down the assessment often causing the child to run out of time faster than if they had simply read the three sounds as a word. By the final round of this assessment he showed that he was gaining speed and ease with sounding out letter sounds and cvc combinations.

Each child showed a trend of improvement with each assessment, but looking at this data now there is not as much improvement with Melanie and Christopher as I hoped. Within the construct of our reading groups I noticed a much more significant improvement with utilizing the word attack skills but there does seem to be a bit of a disconnect between what they can do in group and what they are able to show in the assessment setting. I think the combination of the timed test and the general anxiety one feels during an assessment contributed to the lack of significant improvement.

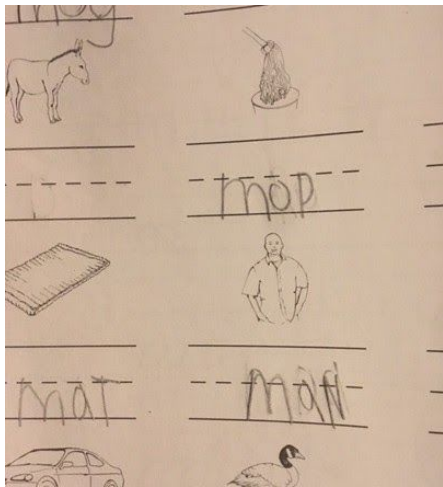
During our work on word attack skills I noticed that Mason's reading group was struggling with correctly reading vowel sounds. I was surprised to hear a similar need within higher reading leveled groups. This led me to add a visual vowel component to our daily whole class morning phonemic awareness practice on February 24 (Journal Feb 23).

What happens to their ability to write letters and words?

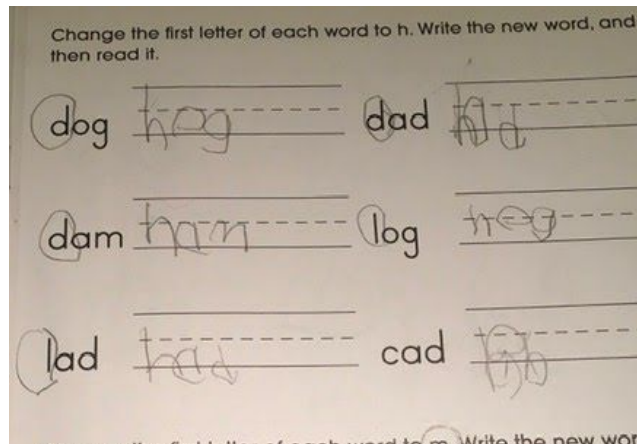
At the start of the school year Melanie knew how to write her name and the word mom and love. She struggled to read her own name. In our class we have 5 other children whose names start with M so I had to put a heart next to her name on her mailbox so she could differentiate between her own name and that of her classmates. Her writing was limited to repetitions of "love", "Melanie", "mom" and interspersed with letter strings to fill out the lines (Journal Sept 23). Christopher confined his writing to a few circles in the picture space and a set of three to four letter strings in the writing space (Journal Sept 23). He struggled to make representational drawings and simply used his paper as a prop to tell fascinating stories.

Part of our work in reading group was learning the correct formation of the letters in addition to the letter names and sounds. Melanie and Christopher would trace dotted examples of the daily letter before they began sound discrimination activities. They also used the dual textured sand to practice letter formation.

Within the context of our reading group the two of them began to be able to write the initial sound of pictures that represented the sound of the day. Since Melanie had a larger base of known letter names and sounds than Christopher I encouraged her to sound out all three letter sounds in words representing pictures.



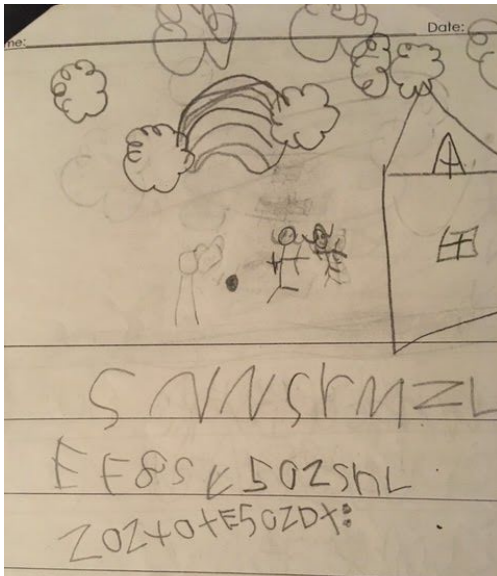
D



E

Picture D is an excerpt from Melanie's workbook where she wrote all three letter sounds from a picture of a C-V-C word. Picture E is a sample from Chris's book where he is changing the initial letter sound in a word to create a new word.

In the progression of work across the six examples Christopher's writing becomes less grounded on the lines provided on the page. He struggles to maintain the cognitive load of remembering the new sound and referring back to the example on the page to write each letter. On the pages like Melanie's example where he was asked to write the letter name of the initial sound of each picture he was able to complete the task but when asked to sound out a three letter word he struggled with balancing the act of sounding out the letters and writing each letter. As I observed Melanie's progression with writing in our small group, I encouraged her to use her sounding out abilities during Writing Workshop.



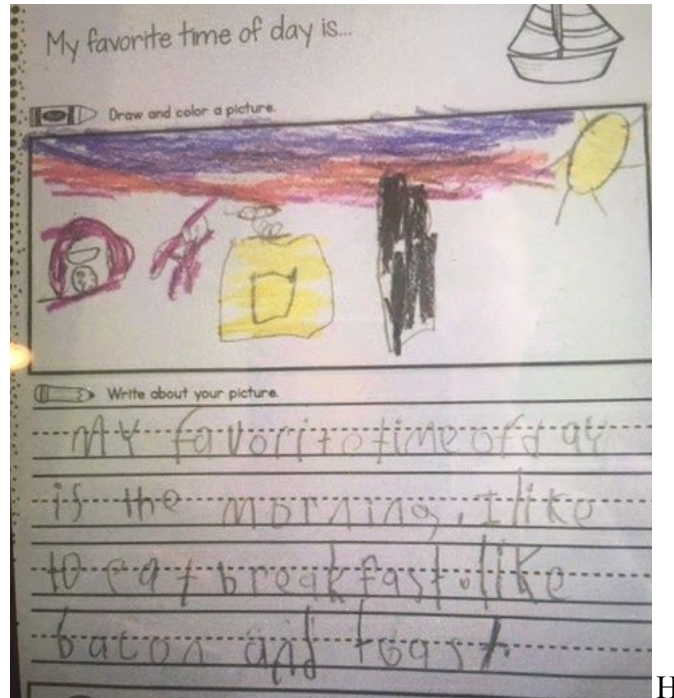
F



G

Picture F is a page from Melanie's Writing Workshop folder from March just before schools shut down due to Covid 19. G a sample from Chrstitopher's Writing Workshop folder also from March.

In this page from Melanie's Writing Workshop folder she continues to use letter strings and intersperses numbers within her writing, just as she did at the beginning of the year. She did not show evidence of sounding out words or attempts to separate words from one another. Christopher meanwhile used the initial letter sound of S to write the word snake. He followed that with a few additional letters and seems to have gone back to correct the letter sound. While Melanie is showing more advanced skills within the reading group Christopher was able to use what he was exhibiting and transfer the skills he was using to his independent writing. This could be that he has more confidence in his abilities than Melanie. As a child who pays a lot of attention to what others are doing Melanie seemed to be more impacted by the notion that she needed to write quickly and fill up the space during independent writing workshop times. As I was looking through her folder I found a piece of writing which had been done by a classmate that she had put her own name on.



Picture H a piece Mason wrote while on shutdown and posted to our class Dojo page.

This is a sample from a piece of writing Mason shared on May 22. At the beginning of the year he limited his writing to simple sentences like “I love my mom” “I love my dog” (Journal Oct 3) He was content to write one sentence per page. This piece is showing a continuation of thoughts across three sentences explaining details of what he is thinking. He is using a variety of long vowel patterns as well as blends. All of these skills are related to the work that we had been doing in our small distance learning group. Other stories that he posted to our class dojo page included telling about what he and his dog Zoe had gotten up to. Unfortunately he read those stories aloud so I can’t examine how he used his phonics knowledge to write the words he included. It sounds like his ability to write sounds has helped him to develop a more mature storytelling format with a beginning, middle and end in his piece.

What happens to their engagement in class?

At the beginning of the school year Melanie struggled to engage in class. Not only did she not raise her hand to participate in whole class discussions about the books I read aloud, but she struggled to greet her classmates during our morning meeting, often covering her mouth with her hand and nodding at the person sitting next to her. (Journal Sept 12) Christopher and Mason, being more confident and outgoing children, were comfortable engaging in social emotional group activities but severely limited the instances that they contributed during academic class discussions.

By January I noticed that both Christopher and Melanie were actively participating in our morning phonics routine.(Journal January 13) The Special Education teacher that worked in our

classroom for the first hour of the day had been pulling both children out to give them one-on-two phonemic awareness practice. When the whole class was working on these drills they felt confident and able to participate in our work. Mason had been actively participating in the phonemic awareness activities since the beginning of the year since they were within his zone of proximal development.

By early February I observed active participation from all three children during our unit on animal adaptations in Science class. They were each regularly raising their hands in whole class discussions and sharing their ideas in small groups. (Journal February 6) During our whole class read alouds, while we were discussing text-to-text connections Melanie shared ideas about books and poems that related to one another. (Journal Feb 20) She had also developed the confidence to participate in our morning greeting rituals that included not only greeting the person on either side of her but also to say hello in a different language each day.

For all three of the children coming to reading group was never a struggle. Even when faced with the devastation of having to miss Ipad time due to scheduling conflicts the kids were excited to come. On the rare occasions that we had to miss a group because of testing, field trips or assemblies they would ask when we were going to have our group and express disappointment in missing out.

I think part of the impact on their academic engagement was the fact that the work we did in reading group was specifically suited to their needs as learners. They loved the extra attention and special materials we used in our group, colorful sand, shaving cream and the sound related toys. From their smiles and engagement I believe they genuinely enjoyed the work we did together.

Challenges

From a practical aspect data collection has been extremely challenging during this project. Between missing a month of school in October due to training followed by a city wide strike and then the schools being closed due to the Covid pandemic we lost another three months of school. I have had to rely on some data collection via our online platform where students post writing and examples of what has happened with the children during our remote learning. I wonder how things may have turned out differently if I had the additional four months of school in a normal school year.

Even in the classroom setting there were challenges to the work we did. The management of sand distribution. Differentiation with materials and time meant that these struggling readers were getting a disproportionate amount of attention compared to all of the other children. In a classroom the teacher's attention is their most precious resource. Christopher and Melanie received a third of my guided reading time while the other 27 children split the other two thirds. For a lot of the kids it was fine, but as we've moved into distance learning I see that some children were held back because of this. Balancing working the most with the lowest performing students versus giving a more balanced amount of time to all students is an ethical dilemma teachers face daily.

One of the greatest challenges I faced is having the students attend class. One chicken/egg predicament that educators of struggling students face, including myself, is the question, are kids not coming to school because they struggle or are they struggling because they don't come to school and the knowledge that one exacerbated the other. The closing of schools in March blew this problem up into a catastrophe. For a third of my class, the children who were already reading above grade level this meant more time to read books they had already come to love. For the half of the class that was reading on grade level they have continued to work on reading, their parents who are now home with them are spending more time reading one-on-one with them and they are making steady progress. For the lowest 15% of my class however, this has been devastating. Half of those children rarely participate in the social engagement video conference sessions, let alone engage in online learning programs. Some of these children have multiple siblings and are raised by a single parent who struggles under normal circumstances. Those who are participating in small groups are often in bed, the tv is on and they end up eating during our half hour small group session. The result of this is that the achievement gap is going to become a chasm by the time we return to school.

My attempts to counter these issues have been multi-faceted. Mason and Christopher were joining our zoom meetings on their parent's phones therefore they struggled to be able to read the books that I shared with them on the tiny screens. So I printed copies of the books we were reading and dropped them off at the boys' homes along with their writing and work books that we had been using in class. I increased the number of meetings we had from once a week small group to three times a week in addition to our twice a week whole class meetings for socializing and three weekly writing groups. I maintain communication with all three kids' parents and each of them was provided a school chromebook so they could work at home. Christopher was struggling to stay engaged while we were working so I sent him some smelly pencils to practice writing his sight words and use while we were working in our small groups. I also dropped off additional books I thought he would enjoy reading at home.

For Melanie school tends to be a respite from some challenging issues at home. Her mother requested that we move our reading group meetings from Zoom to Google Meets which would be easier to attend on her school chromebook. Unfortunately the chromebook locked when someone entered the incorrect password three times. The school librarian was able to remotely reset the computer and Melanie attended three reading groups in a row. For two of the meetings her three year old brother was in the room with her which presented a bit of a challenge since he was somewhat distracting. Then I didn't hear from her for a week. When I reached out to her mother I discovered that Melanie's oldest brother was in the middle of a psychiatric crisis and they were waiting to get him admitted to a hospital. Obviously our reading group fell to the wayside as her mother had emergency issues with her brother to attend to. Above all else I want Melanie to be safe and healthy so in times like these academics can be a lower priority for some families.

Conclusion

As I reflect back on this year I have a few key takeaways that will change my teaching. For one I need to more broadly assess my students' alphabetic knowledge. In the past I have assessed my lowest performing students, but this work has brought to light for me the need to test more broadly. This will help me to meet the needs of students who struggle with vowel sounds and be able to detect their misconceptions earlier in the year.

Assessment in general can be stressful and a stress inducing activity for myself and my students. In the last few years I have been implementing mindfulness activities after lunch and in certain transition periods during the day. Perhaps including some deep breathing techniques or relaxation practice may help to calm my more anxious students prior to our individual assessments. It seems that some children do not perform as well on these timed assessments as they do in our regular reading group. I wonder if a calming practice will help the children to show their growth more accurately in an assessment.

I did not see the results for Melanie and Christopher I had hoped. From what I had heard about Orton-Gilligham it was a magical solution to my struggling students' needs. I learned a great deal from the training but my observations and assessments did not present the magic bullet I was hoping for.

As I used the multi-sensory approach with Christopher, Melanie and Mason I found a relevancy for students I didn't previously realize needed phonics support so I began using the approach with other reading groups. What I learned from this work was how to incorporate a systematic approach to phonics instruction. Once I had a better grasp of phonics instruction I saw the relevance for higher achieving students. Although the research indicated that there is no clear impact on students who use a multi-sensory approach to phonics instruction I will continue to use this method.

When students struggle a cycle begins. Work is hard so they begin to avoid the work. Students who are able to complete the work develop skills which leads to a greater difference between what students are able to achieve. Struggling students must overcome the challenge of the activity, the emotional struggle that comes with working on skills others have mastered and the knowledge that things are harder for them than for others. The joy in school is often limited to times when the playing field is leveled, PE, recess, listening to a story. If the opportunity to use sand, shaving cream and puffy paint takes away the drudgery of working on letter names and sounds then I'm in. I think the emotional support and engagement is worth the accessories. When I watched Christopher and Melanie grab their book boxes and race over to the reading table to begin lessons I knew that at least getting them to show up fought a huge chunk of the problem.

Literature Review - Multisensory Phonics Instruction

How Universities Impact the Classroom- What you learn is what you do

Twenty years ago when I was finishing my degree in Education from the University of Maryland my course load looked almost identical to my colleagues who are recent graduates. I don't believe that my college was so far-sighted that my degree should be as current as it appears to be compared to new graduates and the student teachers I work with. About ten years ago I went back to school to pursue a Masters in Reading. Shortly before we graduated I turned to a classmate and asked why we hadn't learned how to teach little kids to put sounds together and read. In my course work I learned how to assess children and how to encourage discouraged readers but the majority of our work was focused on how to work with middle to high school students. I was looking for the magic that would turn those dancing letters on the page into words my primary kids could read. Allington (2013) relates an experience where his professor claimed that it takes 50 years for research findings to trickle down into the classrooms where the kids are learning. When I discovered Seidenberg's cognitive science research about the science of reading I was irate that there were people who knew what little kids needed but teachers weren't getting that information. Was it because the idea of phonics instruction didn't fit with the constructivist approach I learned about in college? Do we look at those struggling readers as empty vessels? Seidenberg (2018) argues that teacher's colleges rely on the idea of teachers as co-learners in the classroom ensuring that no one is leading the learners and leaving the children to flounder if they are part of the 5-15% of people with dyslexia. (Schlesinger and Gray 2017) explain that systematic phonics instruction has an impact on struggling readers. Why isn't a class on phonics instruction a course requirement? When I interviewed recent graduates they explained that the expectation was that pre-professionals would learn about phonics instruction from their cooperating teachers. If teacher's colleges aren't explicitly teaching phonics teachers must rely on how they learned to teach children. Alternatively teachers are instructed to maintain strict fidelity to core reading programs that have little or no scientific background in teaching children to read. (Allington 2013) If Universities don't fill the gaps and teach reading instruction textbook corporations will, to the detriment of our young readers.

Small Group Instruction - Who is leading it and what are they doing?

Oftentimes in a classroom paraprofessionals working in small groups are working with the struggling readers (Allington 2013). In my school when there have been opportunities for teachers to have the support of a paraprofessional they are working with our lowest readers. The challenge of teachers needing to support all of their students in small group instruction requires a level of structure and routine that not all teachers enter the profession ready to engage in. (McIntyre, et al., 2005) describe a study in which less than half of the eligible participants in a supplemental reading study fit the model of at least 30 minutes of receiving supplemental

reading instruction. Those who did were often working with individuals who were not the child's classroom teacher. Educators working with the children included specific program coaches, Reading Recovery specific teachers or an afterschool club with a teacher. What McIntyre et al. (2005) did find was that children benefit from supplemental instruction. Gilbert et al. (2013) echo that sentiment and claim that interventions should be provided by skilled, knowledgeable instructors. Since I began my teaching career I have read over and over, (Seidenberg 2018, Bear et al. 2012, Schlesinger and Gray 2017) about the importance of teachers delivering phonics instruction but little is said to explain what that looks like in a classroom.

What Experts Say About Reading Instruction

In my quest to find a reading instruction plan that meets the needs of my struggling readers I found suggestions from (Bear et al. 2012) who recommended drum playing to help children understand the concept of word in a text. They also explained the importance of Word Study and repeated reading to help develop fluency. This suggestion was repeated by (Allington 2013) who highlighted the importance of struggling readers engaging with high-success reading activities, books with 98% accuracy or higher for readers. Using 18 non-English graphemes comprised of star wars characters and symbols taken from ancient alphabets (Schlesinger and Gray 2017) compared multisensory Orton-Gillingham style interventions to teach those graphemes. Although they did not observe any measurable impact from using the multisensory approach I wanted to see for myself how those strategies coupled with the ideas from Bear et al. and Allington would impact my lowest performing students.

Policy Recommendations

School Level -

- Send all primary and special education teachers to Orton-Gillingham or Wilson training to support their understanding of phonics instruction
- Monthly follow up which could include peer observations between grade level partners in the first year and tapering off to once a quarter in the following year
- Support of Reading intervention teacher

District Wide Recommendations

- District level professional development to support phonics instruction
 - Possibly sending teachers to or inviting Orton-Gillingham or Wilson to train primary teachers and special education teachers

- Add the support of a reading intervention teacher in all title one schools requiring those teachers to have an advanced degree in either special education, a reading endorsement or at least 5 years of teaching reading experience to qualify for the position

University Recommendations

- A reevaluation of reading education and requirements for elementary education graduation via post graduate surveys sent during the first or second year of teaching
- Undergraduates should be required to take a class on phonics instruction

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