

**The Effects of Modeled Invented Spelling**

By

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## **Abstract**

This qualitative study examines how a kindergarten teacher uses invented spelling to model productive struggle in interactive writing lessons in order to improve student independence in writing unknown words during writer's workshop. Students engaged in four weeks of writing instruction with one interactive writing lesson given weekly, on top of the mini writing lessons taught daily. My findings indicate that direct teacher modeling of how to stretch out the sounds in words and write what is heard, impacts students' phonemic awareness skills and independence.

*Keywords:* invented spelling, interactive writing, scaffolding, phonemic awareness, kindergarten

## **The Effects of Modeled Invented Spelling**

I believe writing is one of the most valuable skills to be learned in the early years of schooling. The relationship between learning to write and learning to read is reciprocal; early writers use invented spelling to illustrate their growing knowledge of sound-letter relationships and concepts of print (Clay, 1998). Students often experience their first formal writing experiences when entering kindergarten. Kindergarten writing expectations have changed since the implementation of the Common Core State Standards, which are the goals and expectations of the skills and knowledge that students need to develop at each grade level in order to be college and career ready. The development of these standards defined explicit expectations of what students should know and be able to do in grades kindergarten through 12th grade. By the end of kindergarten, students need to be able to use a combination of drawing, dictating, and writing to compose informative, narrative, and opinion pieces.

When my school was introduced to a new literacy curriculum, I found the writing lessons, especially the ones in the first three units, to be above my students' development with writing. The writing lessons consisted of composing a response to the texts read during reading lessons earlier in the day, which is a valuable skill, however my students did not understand the basics of how to write and where to begin which lead to more copying of my modeled writing, rather than independent writing. As writing lessons progressed, there was an increase in students feeling the need to be able to spell words right and frustration that came when encouraged to write their own thoughts. With no lessons in the curriculum on how to write unknown words or using the

word wall, I knew I had to create and add in new lessons if I wanted students to be able to write independently. I found *Kinder Writing (2017)*, by Tara West, a practitioner-developed, standards-based curriculum, to supplement our district writing curriculum. This resource provided a framework for emergent writers to develop into beginning writers by building on using pictures, emerging phonemic awareness for labeling pictures, and gradually moving on to writing sentences. *Kinder Writing* gives a scope in sequence that includes modeling how to write and what good writers do. The kindergarten team that I work with agreed that students needed more lessons on how to write in order to form their own responses and opinions when responding to a text.

My goal as a kindergarten teacher is to grow independent writers who are not afraid to spell big words and use what they have learned in regards to letter sound knowledge to write about what is important to them. In the end, I want to be the best writing teacher I can be in order for my students to meet their learning goals and become independent writers. By investigating the use of modeled invented spelling, as a means of showing productive struggle, I want to identify the ways my students' writing behaviors change during writing lessons and in their own writing. Finding this information will give evidence to how student writing improves, give light to specific behaviors that are being picked up, and help myself and others improve their current teaching writing practices.

### **Review of Related Literature**

In this literature review there are four main components that helped guide my research: invented spelling, phonemic awareness and the alphabetic principle, interactive writing, and scaffolding and the gradual release of responsibility. The

research done previously on these topics gave me a better understanding of the knowledge base around my research questions.

### **Invented Spelling**

Invented spelling, sometimes known as inventive spelling or developmental spelling, is when young children use phonetic knowledge to spell as well as they can based on their orthographic development. Looking at students' invented spelling gives information about what students know and what students need to learn (Bear, Invernizzi, Templeton, & Johnston, 2019; Ouellette & Snychal, 2008). The developmental progression of writing increases in phonological and orthographic efficiency over time. The more experience children gain in writing what they know, the stronger the letter sound relationship becomes (Ouellette & Snychal, 2008). Invented spelling shows correlation with beginning to read (Ouellette & Snychal, 2008; Ouellette, Senechal, Pagan, & Lever, 2011). Invented writing helps children understand the principles of writing, invites children to think about language structure and to find methods that illustrate the relationship between letters and sounds (Awramiuk, 2014). It is important to note that teachers must hold students accountable for what they have been taught; letter sounds and features that have been taught and mastered are expected to show up in writing. Things students have not been taught should be politely ignored (Bear, Invernizzi, Templeton, & Johnston, 2019; Schrodtt, FitzPatrick, & Elleman, 2020).

Charles Read (1971, 1975) laid the groundwork by studying young children's early spelling development. He observed that young children who are learning to write invent their spelling by using what they know about letter names, letter sounds, and print conventions to create approximations of words for words that are not known how to

spell. Read referred to this as invented spelling and concluded that invented spellings express young children's current understandings of their knowledge of the place and articulation of speech sounds (Read, 1971; Read 1975).

Ouellette and Snchal (2008) studied whether invented spelling plays a role in learning to read. Students in the invented spelling group were on track with their reading development and used invented spelling to spell as well as they could, then received developmentally appropriate feedback to enhance their invented spelling (Ouellette & Snchal, 2008). Ouellette, Senechal, Pagan, and Lever (2011) investigated whether guided invented spelling would open a pathway into reading in kindergarten students who were at risk. The children in this study had poor phoneme awareness which put them at risk and struggling to pick up on reading skills. The children in the invented spelling group had an instructor who held a picture and said the word, stretched out the word (with no pauses between phonemes) and then said the word once more. Students repeated the word together, out loud, then they were instructed to write the word (Ouellette, Senechal, Pagan, & Lever, 2011). In both studies, after each spelling effort, students were promptly given individualized feedback in which students were praised for their effort and their invented spelling was compared with the instructor generated invented spelling. It was found that students who are developing typically and students who are struggling to pick up on reading learned to read and write more words than the children in comparison groups and gained greater phoneme awareness (Ouellette & Snchal, 2008; Ouellette, Senechal, Pagan, & Lever, 2011). Kindergarten classrooms have students at varying degrees of literacy development which signifies that using

invented spelling with appropriate feedback will increase students at varying levels with learning how to read and write.

Albuquerque and Alves Martins (2019) found that with scaffolding and appropriate feedback on invented spelling, kindergarten students were able to analyze phonological and orthographic structures of words. This knowledge helps develop their future reading and writing skills, as tested in first and third grade, when paired with regular classroom instruction in continuing grades (Albuquerque & Alves Martins, 2019). Practicing invented spelling in kindergarten enhances student reading and writing skills in coming grades.

### **Phonemic Awareness and Alphabetic Principle**

Phonemic awareness is the auditory process of understanding how to identify and manipulate the smallest units of sounds, known as phonemes. Analyzing students' invented spelling points educators to a child's level of phonemic awareness by looking at the letters that a child uses to spell (Sipe, 2001). The way in which children choose to spell words gives light to their conceptualization of written language and how that relates to spoken language (Awramiuk, 2014). Invented spelling also shows a child's development of the alphabetic principle. As children learn to read and begin to work with higher level spelling patterns, they learn the relationship between a grapheme and a phoneme, use morphological knowledge, and begin to recognize the semantic relationship between words and their spelling regularities (Awramiuk, 2014).

A common writing tool found in classrooms is an alphabet chart. The chart has the alphabet in order with a picture that has the beginning sound of the corresponding letter. This tool can be used to explicitly teach how to spell tricky words by modeling

how to use the keyword picture as a reminder of the sound that letter makes while spelling (FitzPatrick & Elleman, 2020). Using the alphabet chart assists students with linking what they know about letters with what they hear when they speak a word, then write the word (Lombardino et. al., 1997).

### **Interactive Writing**

Interactive writing is a group experience, in which the teacher and students work together to write a message (Duke, 2017). Before beginning to write, the teacher and the students plan together to create a message with a meaning constructed from a shared experience, a reading of a book, or an authentic experience that connects to children's personal experiences and oral language development (Williams, 2017). The pen is shared between the teacher and the students (Williams, 2009; Williams, 2017). Then the students use what they know about spelling and letter formation as the teacher scaffolds their attempts by supplying letters, sounds, and other items of knowledge students may not know as they write the message (Duke, 2017; Sipe, 2001; Williams, 2017). All students should be involved in writing and reading the message agreed upon. The teacher checks the length and complexity of the agreed upon writing for high-frequency words, words students will need to problem solve, and the classes' ability to read the message fluently (Williams, 2017). This helps the teacher determine which reading and writing strategies will be focused on as the message is constructed together as a class.

There are many goals that can be achieved utilizing interactive writing as a form of writing instruction for primary age students. Using interactive writing models ways in which students can use reading and writing strategies. It can supply direct and explicit

phonics instruction by giving opportunities for students to hear sounds in words and therefore connect those sounds to letters (Craig, 2006; Swartz, Klein, & Shook, 2001; Williams, 2017). This can help children understand the decoding and encoding process when composing a text which is scaffolded with participation throughout the entire practice (Sipe, 2001; Swartz, Klein, & Shook, 2001). As students and the teacher are creating a message the writing process is demonstrated through the planning and the actual writing connects students to how written text works. This makes clear to children the concepts of print and the links between reading, writing, listening, and speaking (Sipe, 2001).

### **Scaffolding and Gradual Release of Responsibility**

In order to teach some of our youngest writers the skills needed to write narratives, opinion, and informational pieces, scaffolding the writing process and utilizing the gradual release of responsibility assists with being able to write independently. Pearson (1985) developed the gradual release of responsibility model of instruction which asserts that students and teachers needed varying levels of responsibility when conceptualizing comprehension skills. The premise behind the gradual release of responsibility is that responsibility moves on a continuum in which the teacher models and uses think alouds to show how to complete a task. As students gain more understanding the teacher provides guided practice which utilizes scaffolds and tangible feedback as students assist with completing the task (Pearson, 1985; Webb, Massey, Goggans, & Flajole, 2019). The ultimate goal is for students to be able to do the task independently after previously being supported by the teacher. The gradual release of responsibility and scaffolding work hand-in-hand starting with

accessing prior knowledge as an invitation into learning. When a teacher understands where a student is at, academically, the teacher can then design the proper scaffolds to support student learning (Webb, Massey, Goggans, & Flajole, 2019). Utilizing the gradual release of responsibility and scaffolding has been applied to more than comprehension skills. Teachers have widely used these two methods when teaching areas other than text comprehension, such as in writing and decoding instruction.

Teaching children to write using invented spelling employs the use of the gradual release of responsibility. Several researchers agree that the best way to teach young students how to write and what writers do is through modeling (VanNess, Murnen, & Bertelsen, 2013; Schrod, FitzPatrick, & Elleman, 2020). Before students begin writing, a teacher models a mini lesson, which gives direct instruction on a specific writing skill or strategy (Schrod, FitzPatrick, & Elleman, 2020). During that mini lesson, there is also a guided practice component in which students get the opportunity to try on their own, using their white board, share the pen for interactive writing, or try out the specific strategy as a teacher models using student voices to guide the writing (Webb, Massey, Goggans, & Flajole, 2019; Schrod, FitzPatrick, & Elleman, 2020). After the mini lesson, students go off to write on their own using the knowledge they just gained from the mini lesson. While students are writing, a teacher circulates the room helping students who need help and conferring with certain students in order to help their writing grow. Conferring with students is an opportunity for teachers to monitor ongoing writing and provide individualized feedback (Webb, Massey, Goggans, & Flajole, 2019). Using the gradual release of responsibility helps teachers understand the ongoing needs of the students, while providing a framework for scaffolding how good writers write.

In sum, it is important to give students the opportunity to practice invented spelling in order to increase their motivation to write, knowledge of phonemic awareness and spelling. As students are engaged in invented spelling, it is important for all students, no matter where they may be in their writing journey, to have developmentally appropriate feedback that supports their growing knowledge of spelling. Using interactive writing and mini lessons are strategies that use the gradual release of responsibility and scaffolding in order to help students become more sophisticated in the strategies and skills they are learning.

After completing a comprehensive literature review, I have learned that modeling the productive struggle of invented spelling may be an effective strategy to increase a child's level of phonemic awareness and their growing development of writing.

### **Methods**

The purpose of this study was to investigate the use of modeled invented spelling during interactive writing lessons with my kindergarten students. As students are beginning to write and get their thoughts down on paper, I wanted to be able to model productive struggle when writing words they do not know how to spell. My hopes were that students would feel confident in writing the sounds they hear and grow in their independence when writing unknown words. In guiding my research on invented spelling, I have used the following questions:

- What effects does modeling invented spelling lessons have on kindergarteners' writing?
- How does modeling invented spelling in a developmentally appropriate way work in the classroom?

## **Setting and Participants**

This action research study took place February 2021 through March 2021 at a rural elementary school in the upper midwest. The school serves 405 students in kindergarten through fifth grade. The average student-to-teacher ratio is 16:1 with 21% of students qualifying for free or reduced lunch and 13% minority students. All 16 students in my kindergarten classroom were included in this study. Two out of the 16 students receive academic support through Title I services in addition to literacy instruction provided in my classroom.

The data collected for this study was taken from the writer's workshop block. Writer's workshop is an instructional practice that is student-centered and focuses on students having time to write independently on topics of their choosing and going through the writing process. However, students engaged in phonemic awareness activities during our literacy block that supported their growth throughout this study. Daily, students participated in 20 minutes of whole group phonemic awareness instruction utilizing *Heggerty Phonemic Awareness Curriculum: Kindergarten (2005)*. Students also practiced their phonemic awareness skills and guided writing during small group instruction. The literacy block instruction helped support the growth that occurred during writer's workshop.

## **Data Sources**

Qualitative data was collected during each of my interactive writing lessons and writing mini lessons. Observational notes and student quotes were recorded in a daily journal during and after writer's workshop was finished. The observational notes described student quotes and tallied the number of students I saw using the strategies

taught to assist with invented spelling. I audio recorded four lessons: one writing mini lesson and three interactive writing lessons. I was listening for the specific scaffolding strategies I was using, and student discussions and participation. In addition, I took conferencing notes daily on the writing conference schedule to note strengths and growth areas with the students I worked with that day. Student writing samples were collected in order to be analyzed for writing skills, such as how students used invented spelling and the ways they were understanding how letters and sounds connect.

### **Procedures**

Over the course of this study I taught 16 lessons (Table 1), to all my kindergarten students on being storytellers. By the end of the unit, the goal for students was to be able to use a combination of drawing and writing in order to narrate a single event or several loosely linked events. Each lesson lasted about 10-12 minutes, with 15 minutes of independent writing time after the writing lesson. During the writing lessons, students were taught a specific skill or strategy through modeled writing or interactive writing. While modeling writing, I showed students how to use the word wall for sight words and how to stretch out the sounds in words. In order to gain a better understanding of the specific scaffolding strategies I was using with students and to listen to different ways students were grappling with the information learned during a mini lesson, I audio recorded four writing lessons, one per week. After a writing lesson, students were invited to work on their own writing independently while I completed writing conferences with students and helped those who needed it. As I was conferencing with students, I took conferencing notes on specific writing strategies students were working on as well

as what was going well in their writing. In the table it is noted the lessons that I made (Teacher Made) and the lessons pulled from Kinder Writing (Tara West).

**Table 1**

*Timeline of Writing Lessons*

	Instructional Goals
Lesson 1	Powerful Punctuation - Interactive Writing - Audio Recorded The difference between a period, question mark, and exclamation point (Tara West)
Lesson 2	Using the Alphabet Chart How to find sounds you hear but do not know which letter makes that sound (Tara West)
Lesson 3	Tap Out the Story Using your fingers to tap out how many words are in your story (Tara West)
Lesson 4	Stretching Out Words How to say words slow to hear all the sounds and writing the sounds you hear as you stretch the word out (Teacher Made)
Lesson 5	Responding to a prompt Students share their prediction from a writing prompt to make a class book (Teacher Made)
Lesson 6	5 W's of a Story When stuck, think of these five words - who, what, when, where, and why - to include all the details needed in your story. (Tara West)
Lesson 7	Adding On - Audio Recorded Going back to old writing pieces and making writing more clear (Tara West)
Lesson 8	Responding to Prompt Students used a sentence starter and finished a sentence based on their opinion (Teacher Made)
Lesson 9	Responding to Prompt Students used a sentence starter and finished a sentence based on their opinion (Teacher Made)

Lesson 10	Finishing Digraphs - H Brothers Review of ch and th, new learning of sh. Using digraphs when you hear them in a word for your story (Teacher Made)
Lesson 11	Beginning, Middle, and End Three-finger retell to remember the parts of your story (Tara West)
Lesson 12	Interactive Writing - Audio Recorded Writing sentences, using the word wall, stretching out sounds of unknown words (Tara West)
Lesson 13	Using the Word Wall When writing a sight word, use the word wall to help you spell it (Tara West)
Lesson 14	Words Need Vowels Review of vowels and their sounds. Practice writing words and listening for vowels. (Teacher Made)
Lesson 15	Interactive Writing - Audio Recorded Writing sentences, using the word wall, stretching out sounds of unknown words (Tara West)
Lesson 16	Writing Partners Working with a partner to share writing, make suggestions to one another, and receive feedback (Tara West)

### **Findings and Discussion**

During this study, I investigated how modeling invented spelling shaped the writing skills students exhibited during independent writing and examined my teaching to better understand the scaffolding I was using to help students become more independent writers. I read through or listened to all of the data sources and looked for patterns that answered my research questions. I found three main themes through my analysis of the data collected: 1) development of phonemic awareness; 2) independence; and 3) scaffolding supports.

#### **Growing Phonemic Awareness**

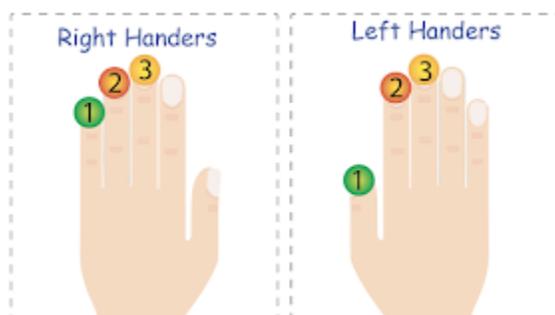
During this study, students' phonemic awareness grew as they were using invented spelling. When students were independently writing, they were encouraged to write the sounds they heard when writing unknown words. I taught students three writing strategies to assist them in using invented spelling when writing.

### ***Finger Spelling***

In writing lessons and in small groups, I explicitly modeled how to sound out consonant, vowel, consonant (CVC) words using the opposite hand that you write with to segment the sound you hear with your finger and then write that sound, while adding another finger for each sound that you hear. It is called finger spelling and was recommended by a learning disability teacher who teaches at my school (Figure 1)

### **Figure 1**

*Fingers used to finger spell utilizing the opposite hand that you write with (Jailani, 2020)*



### ***Using Hands to Stretch Out the Sounds in Words***

For writing larger words, I explicitly modeled how you can put your fingers from both hands together, say the word you want to write slowly and exaggerate the sounds in order to isolate the specific sounds you hear and then write the word (Figure 2).

### **Figure 2**

*Hand motions for sounding out large words*



While students were independently writing, anyone could walk around the room and see many students employing the use of finger spelling and using their hands to stretch out the sounds in their words. Independent writing time is generally quiet in order for students to concentrate, however, you could hear students saying the sounds slowly and isolating specific sounds repeatedly so that students could encode the specific sounds in the words that they were writing. Once a week, I tallied the number of students I saw finger spelling and/or using their hands to stretch out the sounds in a word. When I tallied students, each student was counted once for using one of the strategies. I also used the entire block of independent writing instruction to see who was using the strategies taught for hearing the sounds in words. As seen in Table 2, as time went on, the number of students using both strategies increased.

**Table 2**

*Finger spelling and using hands to sound out words during independent writing*

	Finger Spelling	Using Hands
Lesson 3	9	5
Lesson 9	11	8
Lesson 14	15	12

## Alphabet Chart

Another tool students used when writing was an alphabet chart. An alphabet chart has the alphabet in alphabetical order. Each letter has an uppercase and lowercase shown, as well as a picture that corresponds to the sound that the letter makes. Figure 3 shows the alphabet chart that the students in my class use.

**Figure 3**

*Alphabet chart used by my students*



Practice using the alphabet chart was modeled over four different consecutive lessons (lessons 2-5) in order to show students how to find the sounds they have not learned. I modeled how to isolate the beginning sound of the picture for each letter and compare it to the sound I was looking for in a particular word. When the sound matched, I would write down the letter.

Once students knew how to use the alphabet chart, it became a staple tool that was available when students were writing independently. During lesson 5, I recorded two conversations I had with Misty and Cal (pseudonyms), helping them use their alphabet chart to figure out unknown sounds. Figures 4 and 5 show their final writings after using the alphabet chart to figure out unknown sounds.

Conversation with Misty:

Misty: Can you help me write *herself*?

Me: Yes, let's use your ABC chart to help us. What sounds do you have?

Misty: I hear h, r, and s. I am stuck on /a/.

Me: Sounds like a vowel sound. Let's check the vowels and see if we can figure it out. Remember the vowels are at the end of your alphabet chart.

Misty: Okay. (scans vowels at the bottom and starts with a) Apple. /a/, /a/, /a/

(uses hand motion to stretch out to the next sound) /h/ /r/ /s/ /aaaaa/. It's a!

Figure 4

Misty's writing sample



Conversation with Cal:

Cal: Mrs. Ruble can you help me write *helpful*?

Me: Of course. I see you already have your ABC chart ready in case we get stuck. Get your hands ready to stretch out the sounds.

Cal uses his hand to say the sounds slowly writing down the letters h, a, l, and p. When he gets to /f/ he becomes stuck.

Me: Let's check the ABC chart to see which letter makes that sound. Do you have any guesses or should we start at A?

Cal: Start at A.

During this time, Cal isolates the beginning sound of each picture in order to figure out the /f/ sound. When he gets to /f/ and says the sound I prompt

Me: /f/ like fish. Is that the sound you are looking for in /h/ /e/ /l/ /p/ /f/ ... /u/ /l/?

Cal: /f/ fish, /h/ /e/ /l/ /p/ /ffffff/ /l/. Yes!

### Figure 5

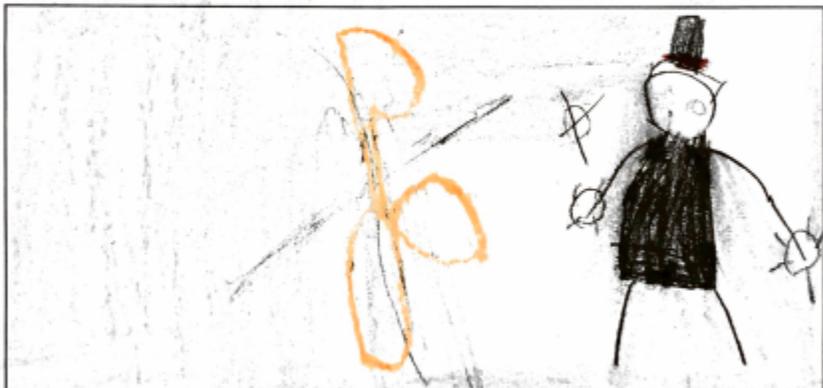
*Cal's writing sample*

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**Meet President** \_\_\_\_\_

write your name \_\_\_\_\_



draw yourself \_\_\_\_\_

Our president is great because H A P ?

HALPFL  
helpful.

Students throughout this action research project continually used the strategies mentioned in order to help them identify the sounds they heard in words and then encode those sounds into their writing. Modeling invented spelling utilizing finger spelling, hands to stretch a word out, and practicing letter sounds with the assistance of the alphabet chart supported my student's growing phonemic awareness and in turn created more strategic writers who applied the strategies learned. While students are not spelling every word right, they are using their knowledge of letters and sounds to write the best they can, while being held accountable for what they already know.

### **Developing Independence**

Gaining independence while writing is a large part of what is being developed in kindergarten. My goal as an educator is to provide students with the tools they need in order to feel confident in their ability to be authors and illustrators. At the beginning of this cycle of action research, I scheduled two writing conferences per day and left time at the beginning and end of the writing block for students who needed support getting started and for road blocks students encountered. I found that if I did not make time to support students who needed assistance, there was less productive writing time and more time needed to manage classroom behaviors. As students developed in their ability to write independently, I could add on one more writing conference and spend less time supporting students who needed help writing words.

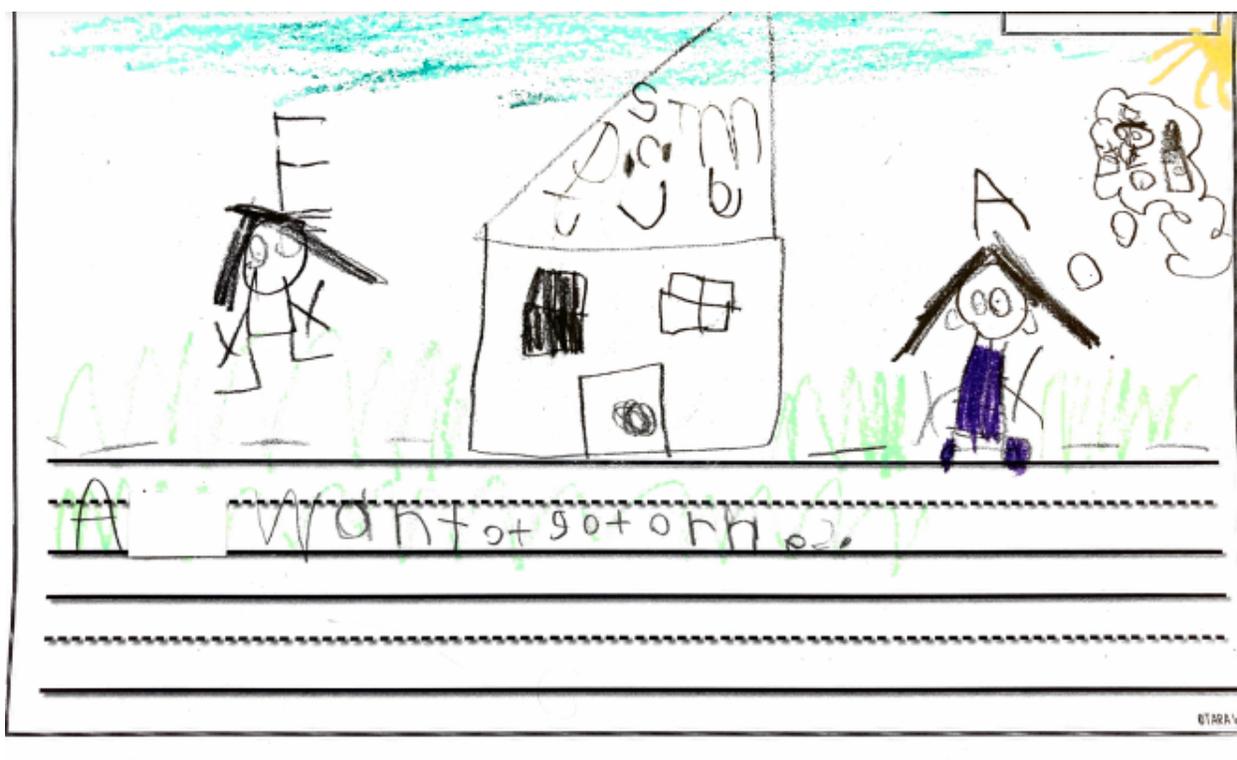
One of my favorite moments of independent writing was when I had a writing conference with Judd. Judd is a student I typically worked with daily during independent writing because he needed extra support when stretching out the sounds in his words.

He was the third person on my conference schedule. As I walked over to his table to begin his writing conference, I could hear the excitement in his voice as he said:

Judd: You will never believe this Mrs. Ruble! I wrote this story all by myself today! At that moment I was so proud. It showed me that the time spent allowing kids to use what they know in order to write as well as they can helps build independence and confidence when writing. Figure 6 shows Judd's writing.

### Figure 6

#### *Judd's Writing*



Judd labeled the two characters in his story with the beginning letters of their names. His sentence reads, “Alice wants to go to our house” written “als want ot go to or heus.” I observed Judd using his hands to stretch the sounds out for the words *Alice*, *our*, and *house*. Continued modeling of using my hands to stretch out the sounds in

challenging words during writing lessons allowed Judd to feel proud and independently write a story using invented spelling about his friends.

From the beginning to the end of this action research cycle, you can see changes in student writing independence. I will be highlighting three students by looking at one writing sample from the previous writing unit taught and looking at one writing sample from the end of the storytelling unit that was taught. Figure 7 displays Florence's writing. Figure 8 shows Anna's writing. Figure 9 exhibits Winston's writing.

### Figure 7 Florence

*Beginning of January writing*



*End of February writing*

At the beginning of January, Florence was writing random strings of letters independently in order to tell her story. There does not appear to be any sound correspondence or concept of word. Looking at Florence's writing from the end of February, she has developed a greater concept of word and is using her knowledge of letter sounds to independently write "I see the fox. I love the foxes." written as *I see the fox. I luv fox zix*. Florence was able to independently use finger spelling and her hands to stretch out the sounds in unknown words in order to write using invented spelling.

**Figure 8 Anna***Beginning of January writing*

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



I am outside, with my  and

I ME OUT Sid with me

ang

End of February Writing



I am at my farm

AND grad. we WOC to the

doors.

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In January, Anna was writing one sentence by sounding out the words she did not know independently, using the word wall to write sight words, and writing about the people in her family with names she knows how to write. Anna's writing for February reads "I am at my grandma and grandpas. We walk to the couch." This writing piece shows a more sophisticated story using two sentences while entering new characters, grandma and grandpa, with challenging spelling. Anna experimented with writing *walk* and *couch* independently using her own invented writing. The words *am* and *my* are written correctly.

**Figure 9** *Winston*

*Beginning of January Writing*



## End of February Writing



Winston's writing in January consists of a story about his elf, Jovie. I assisted Winston with writing *alf* and *Jov* by working with him to say the sounds slow and writing what he heard. At this point, Winston was working on labeling. By the end of February, Winston has the sentence "I go to the store, Target." written as *I go to the s sts trggi*. Winston started the sentence independently with the sight words *I*, *go*, *to*, and *the*. He also wrote *s sts* independently for *store*. I helped Winston write *trggi* for the word *Target* by modeling how to say the word slow and stretch it out using my hands. At the end of

the story telling unit Winston could use the word wall independently and begin to invent spelling for words he did not know. He did still need some assistance with writing independently.

The growth found in student writing demonstrates the power of being able to use invented spelling to write stories independently. Each student used the phonemic awareness strategies taught at the beginning of the storytelling unit. From Figures 6, 7, 8, and 9, it is apparent that growth occurred over action research cycle.

### **Direct Scaffolding Support**

For this study, I audio recorded four writing lessons in order to collect data on the ways students were responding to direct modeling of invented spelling. I chose one shared writing lesson in which I modeled how to use invented spelling by using finger spelling and stretching out the sounds with my hands. The other three lessons were interactive writing, which happens when students and the teacher share the pen in order to create a writing piece together. Lesson 1 was an interactive writing lesson that focused on punctuation (Figure 10). Lesson 7 was a shared writing lesson that I modeled how to add on to a story I had previously written (Figure 11). Lesson 12 (Figure 12) and 15 (Figure 13) were interactive writing lessons that modeled invented spelling, using the word wall, and writing complete sentences. During each of the audio recordings you can hear me using direct modeling by stretching the sounds out in any word that is not a sight word. The modeling focused on how to sound out a word by using my hands to stretch the sounds in the word or by using finger spelling. As I was sounding out the words, students were also sounding out the words with me and identifying the letter that matched each sound. For shared writing, I would write the

letter students identified. For interactive writing, the student who had the pen would write the sound they had identified when the word was stretched out sound by sound.

Table 3 shows how many times I explicitly modeled using invented spelling.

**Table 3**

*Times Direct Modeling was Used for Invented Spelling*

Lesson Number	Teacher Modeled Finger Spelling	Teacher Modeled stretching sounds in words
Lesson 1	2	2
Lesson 7	1	3
Lesson 12	3	3
Lesson 15	0	3

**Figure 10**

*Lesson 1 - Powerful Punctuation Interactive Writing*

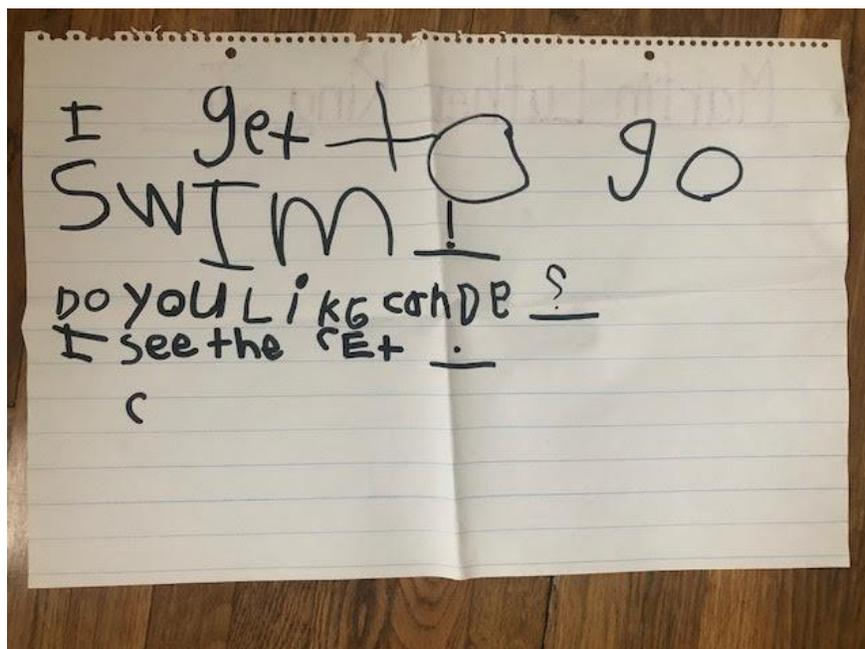


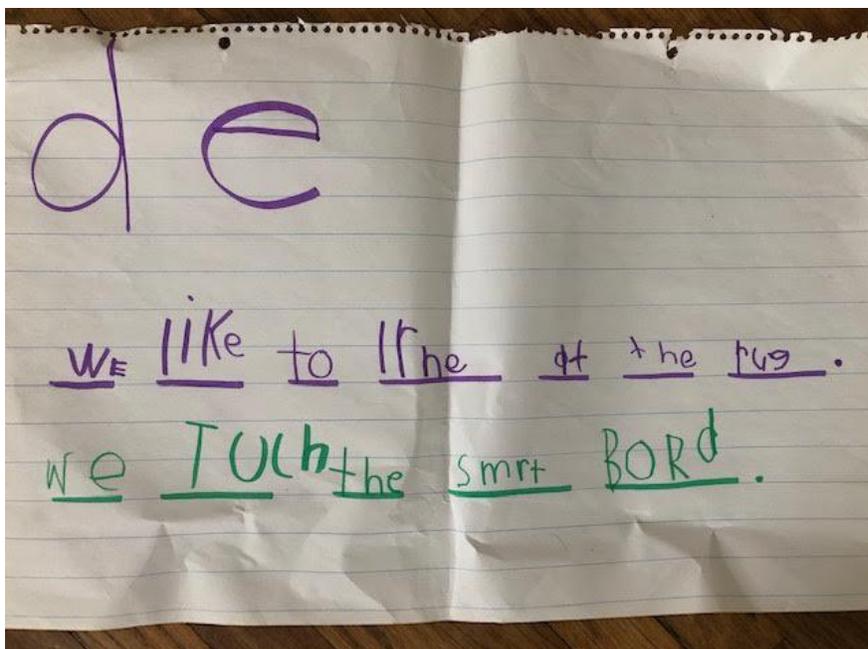
Figure 11

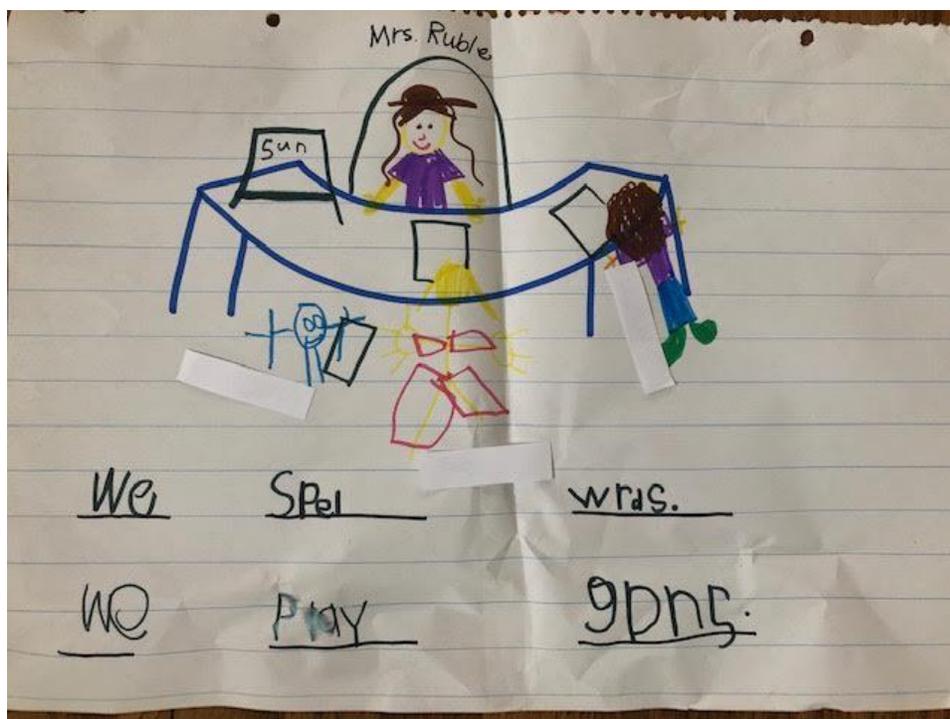
Lesson 7 - Adding on Detail - Shared Writing



Figure 12

Lesson 12 - Interactive Writing



**Figure 13***Lesson 15 - Interactive Writing***Zoom in on Lesson 12**

For this interactive writing lesson, students voted on the shared experience of being in our classroom. One student shared that she liked to learn at the rug and the class agreed, so the sentence “We like to learn at the rug” was created. Another student shared that he liked to touch the smartboard, which students do when we play games. The class agreed on the second sentence “We touch the Smart Board.” To get us started I drew the lines for each of the words in the sentences. I used two different colors so students could see which sentence they were writing in. For the sight words *we*, *like*, *to* and *the* the students were directed to look at our word wall when spelling.

To transition to a more student led lesson, several students acted as leaders and wrote words for the class to sound out. For the first invented spelling, one student came

up to the board and wrote *learn*, the class and myself used our hands to stretch all the sounds out slowly. While sounds were stretched out, students in the classroom identified which letters matched the sounds. The class came to the conclusion to write *learn* with the letters *lrne* because as you stretch out the word, you hear /l/, /r/, and /n/. The vowel at the end was added because one student pointed out that all words need vowels and he thought it was most likely a silent e. For the words *at* and *rug*, I prompted students to get their fingers ready for finger spelling. I modeled which fingers you should use if you wrote with your right hand and then modeled which fingers you would use if you wrote with your left hand. Then I began to sound out *at* and *rug* by using my fingers to isolate each sound. Students followed along by using their fingers and isolating each sound with me, then they determined which letter matched the sound. Whoever had the pen wrote down the letters the students made and identified to write the word. When we came to the words *smart* and *board*, I modeled how to use your hands and emphasize each phoneme heard in order to write the words. Students followed along and emphasized the sounds as we all stretched out the words and pinpointed the letters that made each sound. The student with the pen stretched out the word with us and wrote the letters agreed upon by the class.

Evidently, when it came time to use invented spelling during shared writing and interactive writing, I always directly modeled the strategy we used as the class followed along. Using the direct scaffolding of finger spelling and stretching out the sounds in a word resulted in students using their knowledge of letter sound relationships to write using invented spelling during modeled writing, guided instruction, and collaborative practice.

### **Limitations**

The way data was collected and organized were two of the limitations in this study. By collecting data through audio recording I anticipated to gain a better understanding of student responses during writing lessons utilizing invented spelling. In reality it was more focused on my teaching and hard to pick out which students were responding. As a result of mainly hearing myself, this particular strategy was not as beneficial as I thought it would be. As a recommendation for the future I would suggest video recording writing lessons to better understand student behaviors and responses during writing lessons focused on invented spelling.

Data was collected through the audio recordings of four writing lessons, daily observational notes, student writing samples, and conference notes. I believe if all lessons were video recorded, along with writing conferences being audio recorded, more specific themes in teacher and student communication could have been investigated. Comparatively, more information could be collected on the ways students write using invented spelling.

### **Implications**

All things considered, this study explored if modeling invented spelling to students had an impact on their writing. Through this study two strategies were used in order to teach students how to hear the sounds in words and one strategy was used to figure out unknown sounds when sounding out words. Three main themes were found: growing phonemic awareness, developing independence, and direct scaffold support.

There were many benefits that came from this study around modeling invented spelling to students. Modeling specific strategies for how to hear the sounds in words

helped students better understand how to write words that they did not know how to spell. If students did not know the sound, they could use an alphabet chart to help determine which letter made that sound. Modeling the productive struggle of how to sound out challenging words gave students the courage to be brave and write what they heard. Students observed myself doing the best I could and writing what I could hear. The students also knew that when invented spelling is used, it might not be correct and that is okay. As students grew in their phonemic awareness skills, their invented spellings became more sophisticated. By modeling how to pull apart a word to hear the sounds and writing the sounds I heard, students were able to do that together as guided practice and independently in their writing. I utilized the gradual release of responsibility throughout this writing unit and students were able to grow in their phonemic awareness and independence using inventive spelling. Invented spelling is part of the process of students becoming more independent writers and gives students the ability to show their knowledge of phonemic awareness.

In the future, I plan to model invented spelling from the beginning of the year by using finger spelling, alphabet charts, and using my hands to stretch out the sounds in the words. Students having more opportunities to see the productive struggle of finding the sounds in words to write what they hear could lead to students beginning to use invented spelling earlier. At the beginning of the year, I plan on setting up the classroom environment with the mindset that students can do hard things and doing your best work does not mean all your writing needs to be spelled correctly. However, holding students accountable for what they do know and modeling invented spelling at their zone of proximal development will assist with students developing more sophisticated invented

spellings. Zone of proximal development is the space between what a learner can do independently and what a learner can do with the assistance of an adult.

I will share these findings with my kindergarten and first grade teammates. My hope would be to encourage them to use their writing lessons as a space to model the productive struggle of how to write challenging words and teach strategies that will assist students in writing invented spelling. Similarly, these findings could be important for kindergarten and first grade teachers when considering methods they will use to help their students become independent writers and how to encourage invented spelling.

In the end, I wanted to know if modeling the productive struggle using invented spelling impacted the way students wrote independently. By audio recording lessons, keeping observational notes, looking at students writing samples, and gathering information from conferencing notes it was found that modeling invented spelling and showing the productive struggle of how to find the sounds in words, leads to students being able to write using invented spelling. Using direct modeling of invented spelling encouraged students to use their alphabet charts, finger spelling, and their hands to stretch out the sounds in challenging words. This contributed to growing phonemic awareness with more sophisticated invented spelling and developed greater independence when writing.

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