

# Notes on the following Action Research by Carol Gallagher

Carol Gallagher attended George Fox University in 2002 – 2003 to obtain a Masters Degree in education. The object of her action research topic was to determine “if teaching Zoo-phonics, an explicit and systematic multi-modal phonics program, helped to increase letter/sound recognition in kindergartners.”

Carol was not able to attend a workshop due to time constraints, so basically gave herself a crash course in the Zoo-phonics Language Arts Program. She had 6 weeks (60 school days) to prove whether Zoo-phonics was effective in teaching the sounds of the alphabet and other phonemic awareness skills.

Although Carol did not use the program as designed (learned as she went along...see her comments through her research), her students (primarily ESL students and other at-risk populations) made amazing progress in spite of constraints. She was only with her students for a short period each day (in comparison with a regular teacher who would be using Zoo-phonics strategies for phonemic awareness and phonics throughout the day).

Quick notes on her findings (see tables):

- Even though she didn't reach her 75% benchmark for each child, every child except one showed an increase in letter/sound recognition
- 80% were below benchmark in the beginning of research (January), with 33% severely below benchmark.
- In March, only 11% were below benchmark
- 17 out of 26 students met benchmark, as opposed to 5 out of 26 in January
- A significant increase in letter/sound recognition was found among the ELL students, many increasing as much as 70%
- Even though she didn't reach her 75% benchmark for each child, every child except one showed an increase in letter/sound recognition
- Her statistics show that only non-ELL students reached *above* benchmark; ELL students had an average growth over 50% in 60 days and were very close to benchmark

Ms. Gallagher's anecdotal reports are intriguing as well. She corrects her own instruction, setting goals for herself as well as her students. She admits that with more understanding of the materials and methodology, her students' progress would have been greater.

# Zoo-phonics:

Can It Help To  
Increase Letter/Sound  
Recognition?

An Action Research Project

By

Carol Gallagher

George Fox University  
Masters of Arts in Teaching  
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## **Abstract**

This action research project was conducted to determine if teaching Zoo-phonics, an explicit and systematic multi-modal phonics program, helped to increase letter/sound recognition in kindergartners. Although there is an ongoing debate over phonics versus whole language when it comes to teaching children literacy, I felt that students, especially English language learners could benefit from learning their letter sounds using an approach that utilizes visual, auditory, and kinesthetic methods. Through teaching strategies based on Zoo-phonics, and collecting data via interviews, observations, and anecdotal notes over a six-week period, I determined that it was possible for such a program to help increase letter/sound recognition and at the same time accelerate the time it took to meet benchmark in this area of concept about print.

# Section One

## Introduction

When I was placed in a kindergarten classroom for my student teaching I had to suddenly focus on an age group I was unfamiliar with. I became very curious as to what it exactly is kindergartners learn. I knew that students did not magically appear in first grade knowing all their letters and numbers, and that somewhere in the past they were provided a foundation of the concept of letters and numbers. My interest in this area led to a research project based on letter/sound recognition in kindergartners. I knew that not all students who leave kindergarten have complete letter/sound recognition but I felt that there might be some students who enter first grade who could have higher recognition than they do. After all, letter recognition and that letter's corresponding sound is a necessary part of becoming literate and a prerequisite skill in learning to read. These graphemes represent important information for kindergartners and knowledge of the letters name and sound is the single best predictor of success in first-grade reading (McCarrier, 2000) (Ehri, 1984).

In talking to my cooperating teacher I asked her about President Bush's "No Child Left Behind" campaign. Although, along with many others, she didn't feel that phonics in and of itself is a panacea, she did feel there was a need and benefit for some phonics instruction. Children require explicit, systematic instruction in how the sounds of our language are represented by letters (Chenoweth, 2002). After thinking about what she said and doing a little research I decided that I would do an action research project based not only letter/sound recognition but recognition taught through a specific phonics program.

I first became interested in the topic of letter/sound recognition in kindergartners when my nephew was told he was in the lower percentile of his kindergarten class when, at the end of the year, he did not know all of the letters or their sounds. I then wondered, who was to blame, the teacher, his mother, or was he just not developmentally ready. Since letter/sound knowledge is the best single predictor of beginning reading achievement, I felt some phonics instruction should be a part of the curriculum of every kindergarten student. Students who fall behind in letter recognition at an early age have the potential to slip further behind overtime, therefore, targeting students at an early age would have the greatest effect (Juel, Griffith, & Gough 1986). I also felt that every student has a right to a good education and to gain a solid foundation in the early years of public school. Too many children slip through the cracks, especially those that are LD or ELL students when it comes to reading and writing. According to researchers at Florida State University, this could be greatly alleviated through a phonics-based teaching (Stephenson & Reynolds 1998).

I wondered then, if we could provide tools to better ensure a solid education foundation in kindergarten and first grade, wouldn't these students be that much better off in the long run. Even though there is a public debate over phonics versus whole language, I read many articles where evidence points towards phonics as being a catalyst for students reading and spelling (Stephenson & Reynolds 1998) (Hoerl 1997). This type of information is hard to ignore. Then, there is the issue of the use of systematic phonics programs. There continues to be a huge market for them even when some argue they do not work. I have been in schools that use such programs and there seems to be a consensus that there is success when they are used. Research also showed that these types of programs helped increase letter and sound recognition significantly for ELL and LD students (Schneider, Ennemoser, Roth, Kuspert 1999) (Araujo 2002). I was curious to test this issue for myself. I chose to use the Zoo-phonics program due to

the fact it is a complete language arts program that uses a whole-brain, kinesthetic, visual, and auditory approach.

My goal was to answer the question, “Does teaching Zoo-phonics to kindergarten students help to increase letter/sound recognition?” I aimed to answer this question through teaching Zoo-phonics strategies. In my findings, I looked closely at the results for ELL students. Research has shown that ELL students had great success when involved with an explicit and systematic phonics program that utilizes kinesthetics such as Zoo-phonics. However, based on the amount of time I had to work on the project in the classroom, I didn’t expect to see a large improvement with *all* students. I kept in mind that some of the students would already know all the letters by sight and sound. The students I felt that could benefit the most were those who were struggling with letter/sound recognition due to socioeconomic or cultural reasons. In other words, those students who typically came from homes that had fewer books or where English was spoken as a second language, if at all. I did expect to see a marked improvement in those students who needed assistance with phonemic awareness. How much, I wasn’t sure in the beginning. I aimed for 75% of my students meeting benchmark in letter/sound recognition by the end of the research project. In the beginning, only 20% of the students met the benchmark for this area of concept about print. The other issue I needed to keep in mind is that I would have to give myself a crash course in Zoo-phonics. I questioned if I would be able to master the entire language arts program in such a short period of time to benefit the students. I chose to focus on just the letter sounds and names, tying in reading, singing, and writing when possible.

As mentioned, I worked with the students who were had the greatest need of learning their letters by sight and sound. They were kindergarten students from an elementary school in the greater Portland metropolitan area. I focused my study on the morning session. The student body was mixed culturally and most came from a lower socioeconomic background, many came

from homes where English is not the primary language spoken. Over 50% of my students were English language learners.

During the language arts period, I focused on teaching sessions of the systematic phonics program Zoo-Phonics. It was a playful and unique approach to phonics with built-in strategies to lock letter shapes and sounds into memory through body movements, visual and auditory techniques. As stated previously the aim was to increase letter/sound recognition. The sessions were conducted anywhere from three to five times a week. I did a pre-assessment the end of January that gave me a gage of where the children were in their letter/sound recognition. I started teaching the Zoo-Phonics the second week I was in the classroom. I continued to teach the strategies for six weeks. Throughout this time I used interviews, visual observations, and anecdotal notes to help assess student learning and growth with the aim of helping to build that all important educational foundation with which a school career is build upon.



## Section Two

### Literature Review

When I started to research the subject of letter recognition taught through Zoo-phonics I soon discovered that my scope was going to be broadened. I couldn't talk about Zoo-phonics (a systematic and explicit phonics program) without talking about phonemic awareness, learning and the brain, ELL students, and the debate over phonics vs. whole language. I discovered that Zoo-phonics met The National Reading Panel's requirements for phonics instruction and that there has been much success in classrooms where Zoo-phonics is used. I felt confident that I chose a worthwhile Action Research project and sought to show why in this literature review.

When, in 1998 Congress reacted to the fact that at least one-third of students in America “do not read well enough to become fully functioning members of a sophisticated technological society”, (Chenoweth, 2002) that was, hopefully, the beginning of a nationwide change in the literature programs of our schools system. In the ongoing debate over *Phonics vs. Whole Language* and the “No Child Left Behind” campaign by President Bush, it was interesting to note that in the year 2000, in response to the Congressional mandate, The National Reading Panel concluded that enough research existed to begin to determine what ingredients were needed for good reading instruction in the school system. One part of this program, according to The National Reading Panel, was systematic, explicit instruction in phonics, especially for students in kindergarten and first grade, or for children who were experiencing stumbling blocks in reading. (Chenoweth, 2002).

For kindergartners gaining letter recognition is paramount. Those kindergarten students who still struggle with letter-sound association at the end of the year, are at high risk of a life

time struggle to decode written words. However, if given basic strategies to decode written words, then students who encounter strange words will have an effective way of attacking them (Stephenson, F. & Reynolds A. 1998). Kindergarten students need to have good systematic, explicit phonics instruction that is part of a well balanced literature program that includes growth potential in phonemic awareness and letter recognition. This instruction should be as relevant and exciting as possible to engage the interest and attention of each student using whole brain activities, kinesthetics, visual and auditory learning styles allowing for Multiple Intelligence. (Felzer 1998) Additionally, phonics instruction aids the children in understanding the relationships between the letters (graphemes) of *written* language and the phonemes or individual sounds of the *spoken* language and teaches them to use the relationship between the phonemes and graphemes to read and write. In short, phonics instruction helps the students learn the alphabetic system.

Field-tested programs such as Zoo-phonics were found to be highly effective with students of all abilities, especially those who are English language learners or learning disabled. (Araujo 2002). Besides teaching letter-sound association, Zoo-phonics was a comprehensive language arts program that included using techniques such as shared readings, rhymes, computer games, and writing. It was a playful and unique approach to phonics with built-in strategies to lock letter shapes and sounds into memory through body movements, visual and auditory techniques.

Zoo-phonics was first conceived in the classroom of Georgene Bradshaw who began to successfully use a kinesthetic approach tied to phonics to teach her special education students reading and spelling. She found that certain children in her class needed curriculum adjustments to meet their needs. The adjustments she made became the “essences” of Zoo-phonics.

Explicit, systematic programs such as Zoo-phonics tended to have the largest impact on reading achievement when taught in the early years. According to The National Reading Panel,

children who were taught phonics using a systematic and explicit program, were better readers and spellers and their comprehension was higher than students who were not taught through this type of phonics instruction, (Armbruster & Osborn 2001). A two-year study done with first and second graders in California's Unified School District compared whole language to phonics instruction. At the end of the study, students who were taught by a systematic and explicit phonics program scored more than a year above grade level in word and passage recognition and vocabulary and scored four years above grade level in the ability to sound out and pronounce new words (Cunningham 1990). Additionally, a ten-year study at Yale University concluded that without the ability to sound out words, the brain is stumped. When our brain hears a word, it processes one sound at a time. It also processes reading and the written word the same way, one letter at a time. Therefore decoding skills are the key to learning from written material (McBride-Chang 1999). Zoo-phonics taught decoding skills.

Reading is a "physical" activity. In fact, the Latin words *legere* and *lectio*, which translates into "to read", has a kinesthetic meaning. "When *legere* and *lectio* are used without further explanation, they mean an activity that, like chant and writing, requires the participation of the whole body and the whole mind". (Armstrong 1987 p. 46) This was vastly different from most forms of reading instruction, which are based only on the two senses of seeing, and hearing. In addition, the task of learning letter-sound associations is not an easy one for young children. Research conducted through the University of California, Davis, concluded that children who were taught with integrated mnemonics learned more letter-sound and letter-picture associations than those who did not use integrated pictures (Ehri, Deffner, & Wilce 1984).

It is so important to provide a solid phonemic foundation to students. Due to its complexity, the "physical" activity of reading holds many potential difficulties for the emergent reader. Reading problems can be caused by a number of interrelated factors. When one problem arises, it can quickly lead to another problem and then to a third. This domino effect is known as

“reciprocal causation”. (Vaughn, Bos, & Schumm 1997) For example, when children come from a home where they are not read to, they usually are far behind on their letter recognition when entering kindergarten. This could lead to additional problems such as frustrations with decoding, causing lack of motivation to read, which can lead to a limited vocabulary and lack of fluency.

An explicit and systematic phonics program such as Zoo-phonics takes something very abstract, reading, and through music, stories, puppets, games, and turns it into something more concrete. Through animal friends that make up the shapes of each lowercase letter and whose name begins with the letter, (Allie Alligator “a”) children learn the letter sounds and names. Zoo-phonics helps to lock in letter shapes, names, and sounds into memory through body movements called “signals”. For example, for Allie Alligator, children use their stretched-out arms and give a clap to represent the alligator’s snapping jaws as they say “Allie Alligator, a, a, a”. Children are learning through three modalities, visual, auditory, and kinesthetics. Physical activity helps to focus a student’s attention and aid in memory by encoding the material throughout the body’s neuro-musculature system (Campbell, L., Campbell, B., & Dickinson 1999). Research shows that when the body moves the brain remembers. In fact, Lev Vygotsky suggested that language development requires mostly interaction (Milburn 2000). Zoo-phonics utilizes physical motions that promote using a multi-sensory approach which is highly effective in students ability to gain new information (Felzer 1998).

Although phonics is not a panacea, it can be a strong part of a balanced literacy program. My research has shown me that when a phonics program is explicit and systematic, as Zoo-phonics is, it can be the gateway for many children when it comes to reading and writing. I felt my aim of increasing letter recognition through teaching Zoo-phonics was attainable. It allowed me to utilize best practices and Multiple Intelligence in my kindergarten classroom when I taught my objective. Through my research and reading, my educational inquiry has expanded and there

were changes in my pedagogical theology. I hoped to continue this quest of growth throughout my Action Research Project.

## Section Three

### Data Collection and Analysis Plan

#### **Statement of Purpose:**

When it comes to building a strong educational foundation, kindergartners gaining letter/sound recognition is paramount. Kindergarten students who struggle with letter/sound association at the end of the year, are at high risk of a lifetime struggle to decode written words. Using a phonics program that is explicit and systematic, such as Zoo-phonics, can be the gateway for many children when it comes to reading and writing.

Students in Kindergarten need to have good systematic, explicit phonics instruction that is part of a well balanced literature program that includes growth potential in phonemic awareness and letter recognition. This instruction should be as relevant and exciting as possible to engage the interest and attention of each student using whole brain activities, kinesthetics, visual and auditory learning styles allowing for Multiple Intelligence.

Zoo-phonics seemed to be just that. It took something very abstract, reading, and through music, stories, puppets, games, turned it into something more concrete and easier to understand for young children. Therefore, through Zoo-phonics, the students learned through three modalities, visual, auditory, and kinesthetics which are three of the Multiple Intelligences that children learn through. Although a phonics program such as Zoo-phonics is not a panacea, my research showed it could be a strong part of a balanced literacy program that helped to increase letter/sound recognition in kindergarten students.

### **Description of Participants:**

I worked with a group of kindergarten students from an elementary school in the Portland Metropolitan area. The student body was diverse and most come from a lower socioeconomic background. Many came from homes where English was not the primary language spoken. The class had a total of 26 students (11 boys and 15 girls), 17 of which were ELL students therefore, fifty-two percent of my students were English Language Learners. Five different languages were spoken in my classroom.

Only five students met the benchmark for letter/sound recognition prior to my research. The students in my class had varying ranges of cognitive abilities for two reasons. First, at that age (five to six), cognitive growth does not happen for every student at the same rate. Therefore, some of my students' abilities were more advanced than others were. Secondly, some of the children did not come from a home environment rich in literature. Many had not been read to on a consistent basis. I had students who could recognize most letters and sounds and had several other students who could only identify three or fewer. My challenge was to reach them all. In addition, I saw several different learning styles in the classroom. Some of my students were communicators and were very linguistically oriented, while others were logical or artistic. Many enjoyed learning through kinesthetics. Some students seemed eager to learn the Zoo-phonics signals while others did not want to participate.

### **Method of Data Collection:**

I collected data in several different ways. First at the beginning and end of the research project I conducted an interview with each student to assess which letter/sounds he or she knew. The student was asked to either say the name of the letter and give the sound that letter makes or name a word that begins with the letter. This assessment tool can be found in the Appendix and

is marked Appendix “A”. I used the information from the pre-assessment to gauge where each student was as far as meeting the benchmark. This data collection tool was used to determine which students were candidates for more intense instruction trying to increase the percentage of students who met benchmark. Please see this data collection tool marked Appendix “B” which can be found in the Appendix.

Additionally, I took daily anecdotal notes as I observed the students during Zoo-phonics activities. Not only did I list which activity was done during the day, but I also kept notes on individual students, their success rates, and interest levels. The tool I used to keep track of the daily activities can be found in the Appendix and is marked Appendix “C”. To keep track of the activities and which students participated in each one, I used a checklist where I listed the type of research or activity and the date. At a glance, I was able to see which students were in need of further instruction. This tool is marked Appendix “D” and can be found in the Appendix section.

Finally, I kept a weekly journal of my research, describing how the activities went, which ones were used, which ones seemed to work best and for whom, things I discovered, what I would do differently next time, and goals for next week. This data collection tool is marked Appendix “E” and can be found at the end of this section. Since I was not able to assess every student’s progress every week with an interview, such as the one in Appendix “A”, the anecdotal notes and journal entries helped to give me a picture of where my successes and failures were happening.

My goal was to expose the students to Zoo-phonics at least once during the day. This was done through activities such as spelling words using the Zoo-phonics signals and sounds, using the Zoo-phonics flash cards in whole and small group settings, giving letter sounds and having the students determine which letter makes that sound, Zoo-phonics bingo, watching the Zoo-phonics tape, spelling the student’s name using the signals, and working with students one on one.



The setting was always in the classroom but at times it was whole group and at other times I would pull a few students aside and have them go through the alphabet with me away from the distractions of other students. I found that some students preferred to go through the alphabet when they were not around others. Although I did not do as many activities in a day as I had hoped, there was not a day that went by where I did not use Zoo-phonics to try to increase letter/sound recognition in my students.

### **Method of Analysis:**

During my research period I conducted interviews with, made observations of, and kept notes on the students. At the end of each week I assembled this information, looked at what was accomplished during the week, reflected on my teaching strategies, made adjustments, and set goal for the next week. I began to target certain students who knew ten or fewer letter sounds, ensuring they received additional instruction during the week.

Additionally, I used the data I had collected as a gauge for future teaching. From this data, I made records of what strategies worked well and which students enjoyed certain activities. As a visual representation of my data, I made some graphs. These helped me to visually see what kind of progress I was making toward my goal of having more students meet benchmark in letter/sound recognition after 60 days of daily Zoo-phonics instruction. It gave me a chance reflect on what I learned and make appropriate changes that would best benefit the students and start to answer the question, *“Does teaching Zoo-phonics to kindergartners help increase letter/sound recognition?”*

### Procedures and Timeline:

Start Date	What will happen?	How long? How often?	Who will be involved?
<p><b>Pre-Assessment:</b> January 14- January 16, 2003</p> <p>Letter/Sound Recognition.</p>	<p>1) I will call students one at a time to a back table where I will assess them for letter/sound recognition.</p>	<p>1) The assessing will take place over a two day period.</p> <p>2) Each student will spend approximately 5-7 minutes with me while I interview them.</p>	<p>All 26 students and myself.</p>
<p><b>Week One:</b> January 20- January 24, 2003</p> <p>Learning letter/ sounds using Zoo-phonics.</p>	<p>1) Spell words using Zoo-phonics 2) Work in small groups, one on one, and whole class going through alphabet. 3) Spell students names using Zoo-phonics.</p>	<p>1) Spell words everyday using Zoo-phonics signals. 2) Time to go through entire alphabet is approximately 7 minutes. This activity will be done twice. 3) Other activities will vary in time length.</p>	<p>All students and myself. Some students will work with me individually or in small groups. Students who know few of their letter sounds will be targeted for extra activities.</p>
<p><b>Week Two:</b> January 27- January 31, 2003</p> <p>Learning letter/ sounds using Zoo-phonics.</p>	<p>1) Play Zoo-phonics bingo. 2) Watch Zoo-phonics Video. 3) Spell words using Zoo-phonics signals. 4) Go through alphabet as whole group. 5) Go through alphabet with individual students.</p>	<p>1) Each game takes approximately 7 minutes. Play three games. 2) Watch video at least once. It is a 7 minute video. 3) Spell words every day using signals. 4) Expose students to the Zoo-phonics alphabet three times this week.</p>	<p>Students who knew fewer letter sounds and myself. All students and myself. All students and myself. All students either with the whole group and/or one on one with myself.</p>
<p><b>Week Three:</b> February 3- February 7, 2003</p> <p>Learning letter/ sounds using Zoo-phonics.</p>	<p>1) Spell words using Zoo-phonics alphabet. 2) Student will write letter on board after I give letter sound. 3) Go through alphabet with whole group.</p>	<p>1) Spell words everyday using Zoo-phonics signals. 2) Do this activity four times this week. Goal is to get through entire alphabet each time. 3) Do activity at least once which will take 3 minutes.</p>	<p>All student and myself. I will lead this activity and student will either be involved with whole group and/or a small group for this activity. All students and myself.</p>

Date	What will happen?	How long? How often?	Who will be involved?
<p><b>Week Four:</b> February 10- February 14, 2003</p> <p>Learning letter/ sounds using Zoo-phonics.</p> <p>Four day week</p>	<ol style="list-style-type: none"> <li>1) Students will spell words using Zoo- phonic signals.</li> <li>2) Will go through alphabet using Zoo- phonic signals.</li> <li>3) Student will come to board and write letter after I give letter sound and signal.</li> </ol>	<ol style="list-style-type: none"> <li>1) Students will spell words using Zoo- phonics everyday. This will be a four day week.</li> <li>2) This will be done at least once as a whole group activity.</li> <li>3) This will be done at least once during the week.</li> </ol>	<p>All students and myself.</p> <p>All students and myself.</p> <p>I will call up each student once. 26 students, 26 letters.</p>
<p><b>Week Five:</b> February 17- February 21, 2003</p> <p>Learning letter/ sounds using Zoo-phonics.</p> <p>Four day week</p>	<ol style="list-style-type: none"> <li>1) Students will spell words using Zoo- phonic signals.</li> <li>2) Students will go through alphabet using Zoo- phonic signals.</li> <li>3) Student will come to board and write letter after I give letter sound and signal.</li> </ol>	<ol style="list-style-type: none"> <li>1) Students will spell words using Zoo- phonics everyday. This will be a four day week.</li> <li>2) This activity will be done every day this week (four).</li> <li>3) This activity will be done once this week.</li> </ol>	<p>All students and myself.</p> <p>Entire class, small groups of boy, small groups of girls, and small group of boys and girls and myself.</p> <p>This will be a whole group activity including myself.</p>
<p><b>Week Six:</b> February 24- February 28, 2003</p> <p>Learning letter/ sounds using Zoo-phonics.</p> <p>Final week of data collection.</p>	<ol style="list-style-type: none"> <li>1) Students will spell words using Zoo- phonic signals.</li> <li>2) Students will go through alphabet using Zoo- phonic signals.</li> <li>3) Students will give letter sound after I write letter on the board.</li> </ol>	<ol style="list-style-type: none"> <li>1) Students will spell words using Zoo- phonics everyday.</li> <li>2) This activity will be done every day this week.</li> <li>3) This activity will be done twice this week.</li> </ol>	<p>All students and myself</p> <p>I will lead the students who will participate in either a whole class and/or a small group setting.</p> <p>I will lead this as a whole group activity where each student will participate.</p>
<p><b>Post-Assessment:</b> March 3- March 7, 2003</p> <p>Letter/Sound Recognition.</p>	<ol style="list-style-type: none"> <li>1) I will call students one at a time to a back table where I will assess them for letter/sound recognition.</li> </ol>	<ol style="list-style-type: none"> <li>1) The assessing will take place over a five day period.</li> <li>2) Each student will spend approximately 5-7 minutes with me while I interview them.</li> </ol>	<p>All 26 students and myself.</p>

## Section Four

### Results

#### **Overview of Analysis:**

It was exciting when I began to analysis my data. As the weeks went on, it was clear there was an increase in letter/sound recognition but I didn't realize to what extent until I began to compile my data. My goal was to have 75% of the students at benchmark for letter/sound recognition at the end of 60 days. I did not reach that goal; however, I am very pleased with the fact that 65% of my students, many of them ELL, met this benchmark by the completion of the study.

It was evident after compiling my data from the pre-assessment that most students were not at benchmark for their letter/sound recognition. Although many of these students could name the letter, coming up with the letter sound proved to be more difficult. Out of the 17 ELL students, only two met benchmark. Analyzing my data guided me towards the students who were well below benchmark. In January, eight of my ELL students were able to name three sounds or less. That is almost 1/3 of my students who only know less than 7% of their letter sounds. These are the students I chose to target for extra instruction. Likewise, anecdotal notes told me students who knew most of their letter sounds already would least benefit from this type of instruction.

It was also apparent that almost every student knew some of the less common letters such as X, Q, and Z. It was the more common letter sounds of C, N, and H that many students did not know. This told me to benefit the students; I needed to concentrate on certain letters.

Additionally, observations quickly led me to believe that some students did not enjoy going through the Zoo-phonics alphabet in front of others. This guess was correct. Once I targeted

those students to work in small groups or one on one they were more engaged and less restrictive in movements.

I was pleased when I was able to design a lesson plan in my work sample that took into account data scores for a certain letter sound. This is just one way that my research has helped to formulate my practice. Journal entries helped me to realize that the students were more engaged in the activities when they were somewhat different, so keeping a variety was important.

Anecdotal notes and spreadsheets reminded me to stay organized and helped me focus on certain activities the students were more engaged in.

Analyzing the data gave me hard numbers to go by and it provided me with hunches to help mold my teaching strategies. However, it also made me realize how many additional strategies I should have incorporated into the curriculum. My journal entries reflect what I should have done differently, which I used as a guide for future lessons. I had a strong hunch that several students made significant gains in letter/sound recognition but I did not know how many until all my data was compiled and analyzed.

### **Analysis and Synthesis of Data:**

As mentioned in the overview, I did not meet my goal of having 75% of the students meet benchmark when it came to letter/sound recognition but during the 60 day period where I taught language arts using Zoo-phonics strategies, every student, except one, showed an increase in their letter/sound recognition.(Tables 4-5, 4-9) I noticed early on that although many students could name a letter they couldn't necessarily say what sound the letter made. Also discovered was the fact many students could name obscure letters such as X, Q, and Z, but were unable to come up with the sounds for letters seen more often such as C, H, and N. This told me that I would have to include several different strategies to increase phonemic awareness and letter/sound recognition into the curriculum.

In addition, data analysis showed early on that 80% of my students were below the benchmark in letter/sound recognition with 33% of these students being critically below benchmark in January. Subsequently in March, only 3 or 11% of the students were well below benchmark. (Tables 4-1, 4-2, 4-8, 4-10) Further analysis showed that at the end of the research period 17 out of 26 students met benchmark as opposed to 5 out of 26 prior to the research beginning. A significant increase in letter/sound recognition was found among the ELL students. In the 60 day research period, some ELL students increased the percentage of letter/sounds known by 70%. (Table 4-7) Although statistics show that at the end of the study only non-ELL students had a letter/sound average above benchmark, ELL students had an average that grew over 50% in 60 days and were very close to meeting benchmark. (Tables 4-3, 4-4, 4-6)

Reflecting on anecdotal notes after the first week, I noticed that some students became more engaged in the Zoo-phonics activities when they were working in small groups or by themselves. From that point on I made it a point to pull those students away from the whole group to work on letter/sound recognition using Zoo-phonics. Likewise, observation led me to notice a few students who were above benchmark who thought Zoo-phonics was “boring”. I, therefore, did not attempt to engage these students as often. In addition, analysis led me to the conclusion that the students responded more favorably when there were several different activities to choose from in a week. This was just one way I was lead to change my teaching strategies during the research period.

Of course, I now look back and feel I did not have enough data collected. Much of the data that was collected throughout the weeks was done in the form of anecdotal notes and daily records. These can be found at the end of section three and are marked Appendix C and Appendix E. These notes were invaluable. Through writing and re-reading them I made adjustments in my teaching habits, almost daily. Finally, through the analyzing of my data I was

able to make the determination if “teaching Zoo-phonics to kindergartners helps to increase letter/sound recognition.”

### **Conclusions:**

Once the post-assessment was conducted in mid March, it was clear that many of the students made great strides in their letter/sound recognition within the last 60 days. If the rate of learning stayed constant with what it was prior to the beginning of my action research project, then, four months later in May, 2003, 40% of the students would have met the benchmark in letter/sound recognition. However, during the two months I was teaching Zoo-phonics I was able to increase the percentage to 65%.

That was an increase in meeting benchmark and learning additional letter sounds over 1 ½ times quicker than teaching without these same strategies. If the “Increase of Letter Sounds Line Graph” (Table 4-5) had statistics that went until May, 2003, based on daily exposure to Zoo-phonics, (as was the case in February and March) it would be fair to speculate that the only students who would not meet the benchmark would be students #12, #23, and #26.

Data compiled on the “Letter/Sound Improvement Assessment” sheet (Table 4-9) shows every student but one had an increase in letter/sound recognition over the 60 day period. It is hard to say whether each of these students would have improved if I had not been there teaching using Zoo-phonics. However, it is clear that a large majority of students met the benchmark within a relatively short time. ELL students increased by the greatest percentages. (Table 4-9, 4-10)

What the statistics did show was hard data that there was a sizable increase in students meeting benchmark when it came to knowing the letter sounds. Whether Zoo-phonics played a role in this I won't know until I conduct the same type of research using a control group. But it

is clear that more students met benchmark in letter/sound recognition after my research than they did when I started.

To follow are a number of graphs, charts, and tables of relevant data showing increased letter/sound recognition and students who met benchmark after the 60 day period of teaching with Zoo-phonics strategies.

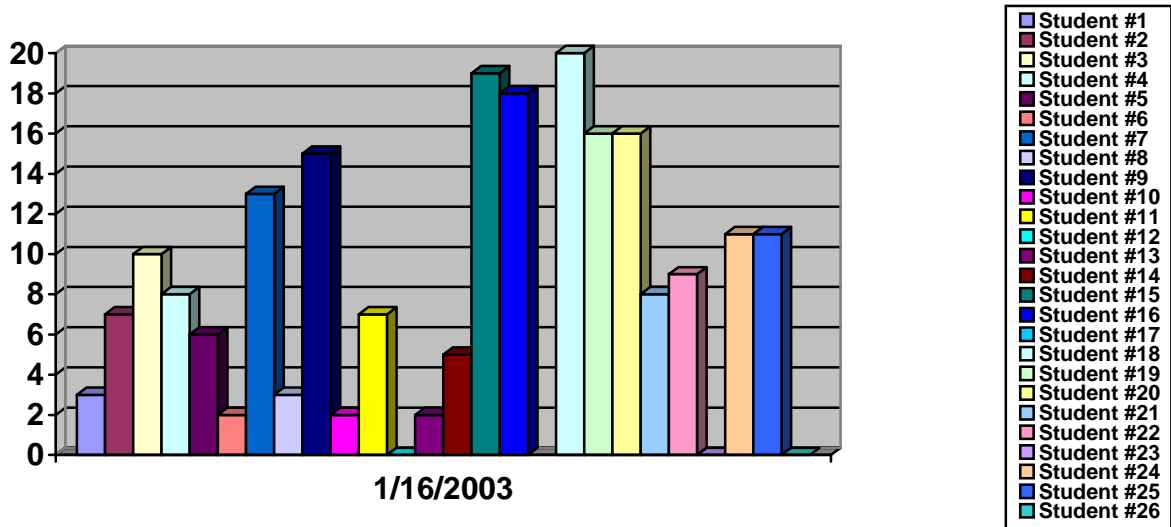


# Letter Sound Recognition

## Benchmark Graphs

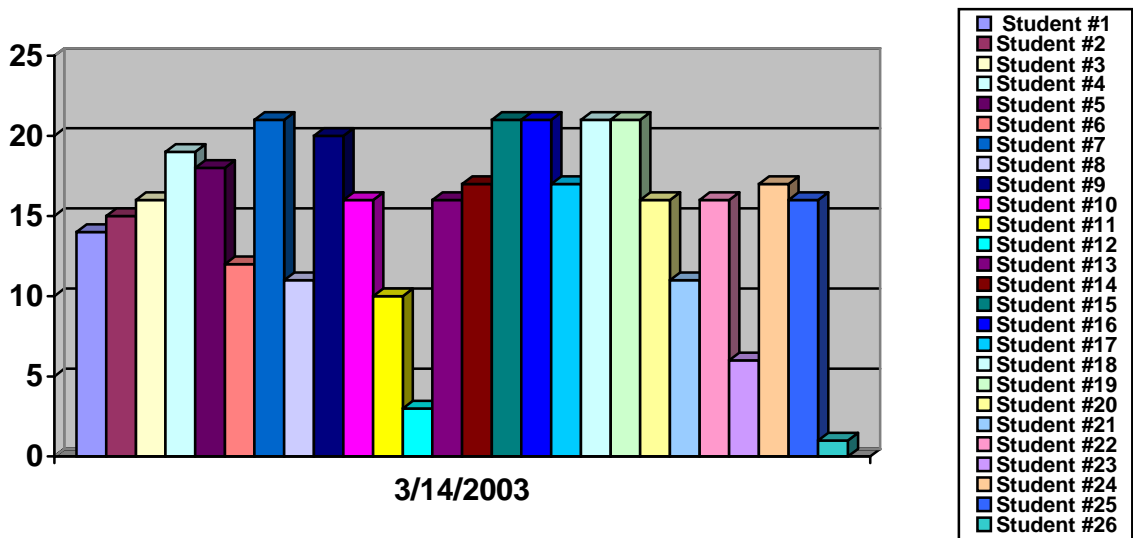
(21 letter sound possible. Benchmark = 16 sounds)

Table 4-1



- Graph shows number of letter sounds each student knew after the **pre**-assessment.
- Knowing **16 letter sounds met benchmark.**
- Only five students met benchmark, nine students were critically below it.

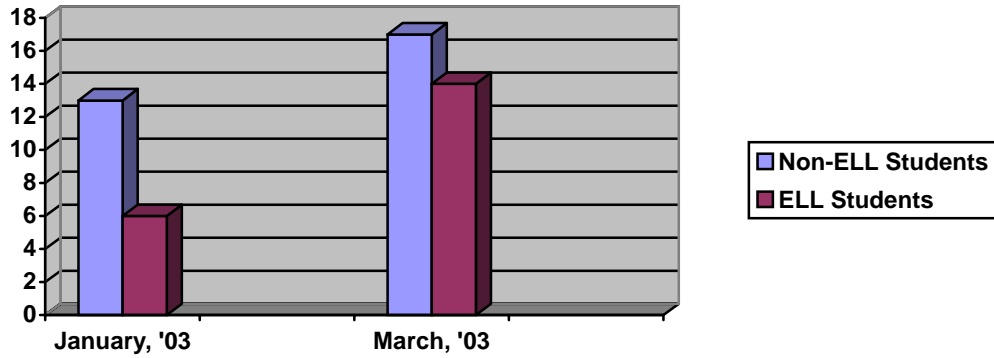
Table 4-2



- Graph shows number of letter sounds each student knew after the **post**-assessment.
- Knowing **16 letter sounds met benchmark.**
- 17 students met benchmark. 2 other students were within 2 points of benchmark.
- Only three students were well below the benchmark.

**Letter/Sound Recognition Averages**  
(21 letter/sounds possible)

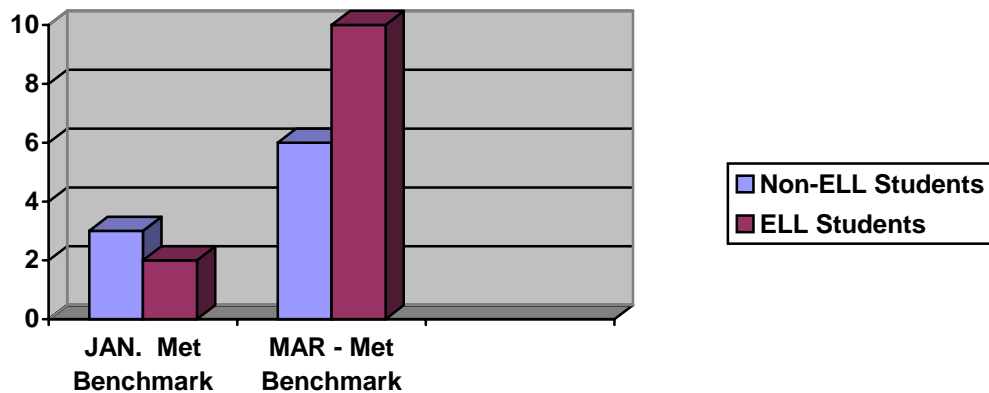
Table 4-3



(21 letter/sounds possible, 16 meets benchmark which is 80%)

This graph shows ELL and non-ELL student averages for letter/sound recognition prior to and after a 60 day period. For example, ELL students knew an average of six letter sounds when assessed in January 2003. When re-assessed in March 2003 that average increased by 50% and rose to 14 letter sounds. Although only non-ELL students had an ending average that met benchmark, ELL students had an average that grew over 50% and one that is *close* to meeting benchmark. Meeting benchmark would mean knowing 16 letter sounds.

Table 4-4

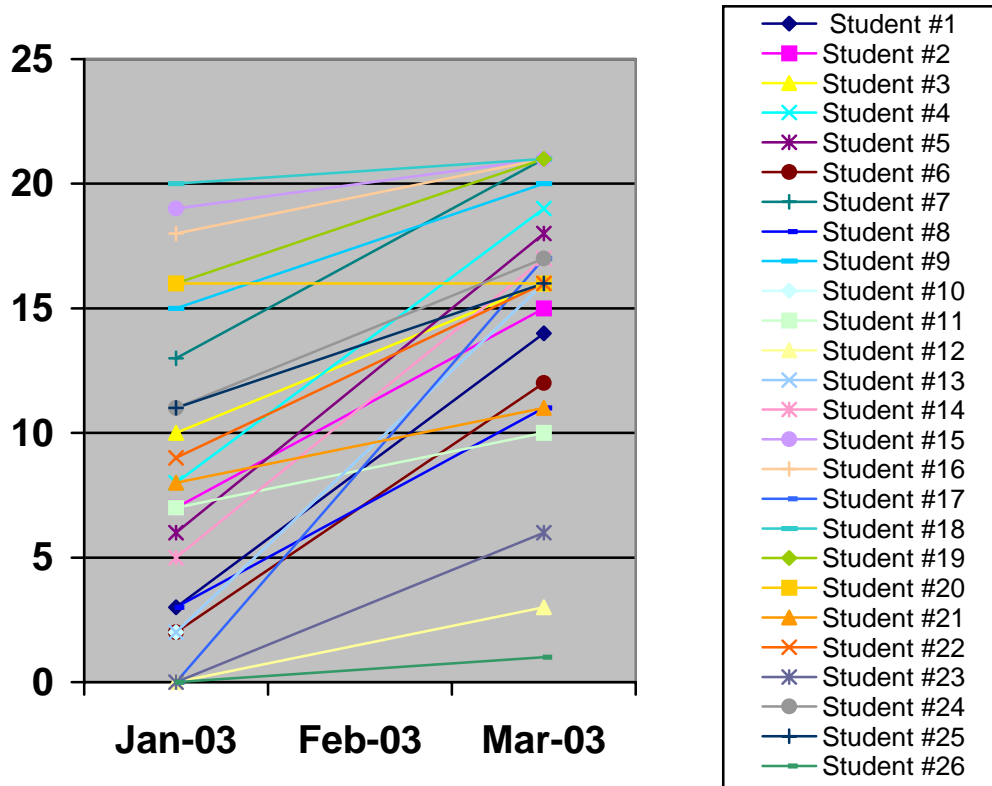


(7 non-ELL students and 18 ELL students in class)

Graph shows total number of ELL and non-ELL students who met the benchmark for letter/sound recognition prior to and after teaching with Zoo-phonics for a 60 day period.

## Increase of Letter Sounds Line Graph

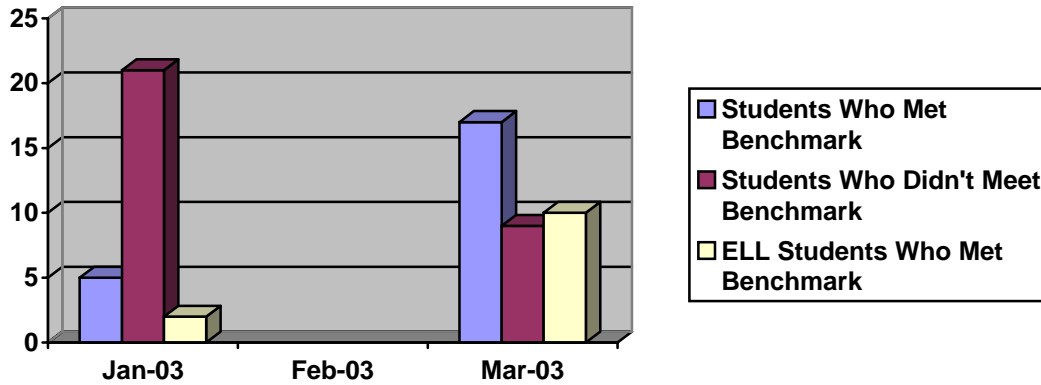
Table 4-5



- Graph shows increase in letter sound recognition for each student during a 60 day period where Zoo-phonics strategies were used. For example, Student #5 went from knowing 6 letter sounds in January to 18 in March.
- Only one student, #20, did not show any increase. All other students increased and several who did not meet benchmark in January met it in March.
- Two student were within 2 points of meeting benchmark which is 16 letter sounds.

## Students Who Met Benchmarks

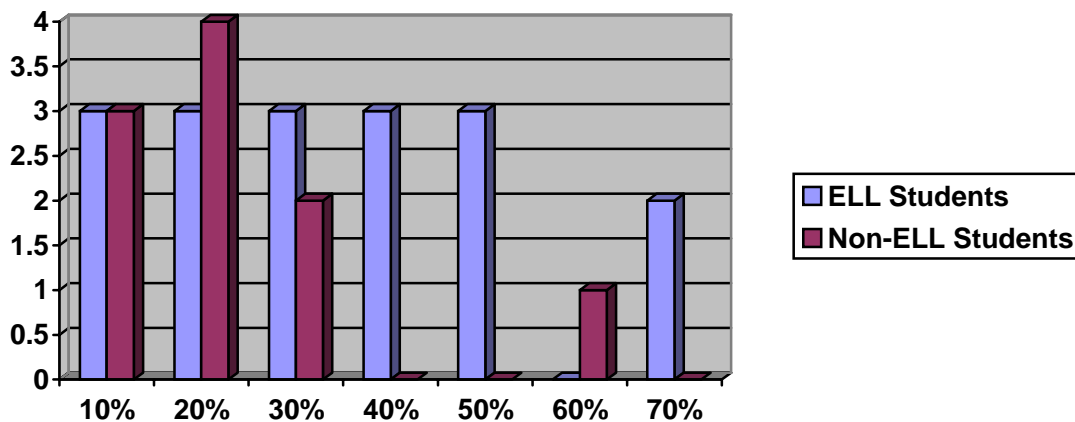
**Table 4-6**



- Assessment prior to and after teaching letter/sound recognition through Zoo-phonics for 60 days.
- Graph shows number of students who met the benchmark of 80% (or knowing 16 letter sounds) in January of 2003 and again in March of 2003. Class of 26 students.
- Graph indicates an increase of 33% for ELL letter/sound recognition. Class had a total of 17 ELL students.

## Percentage Increase

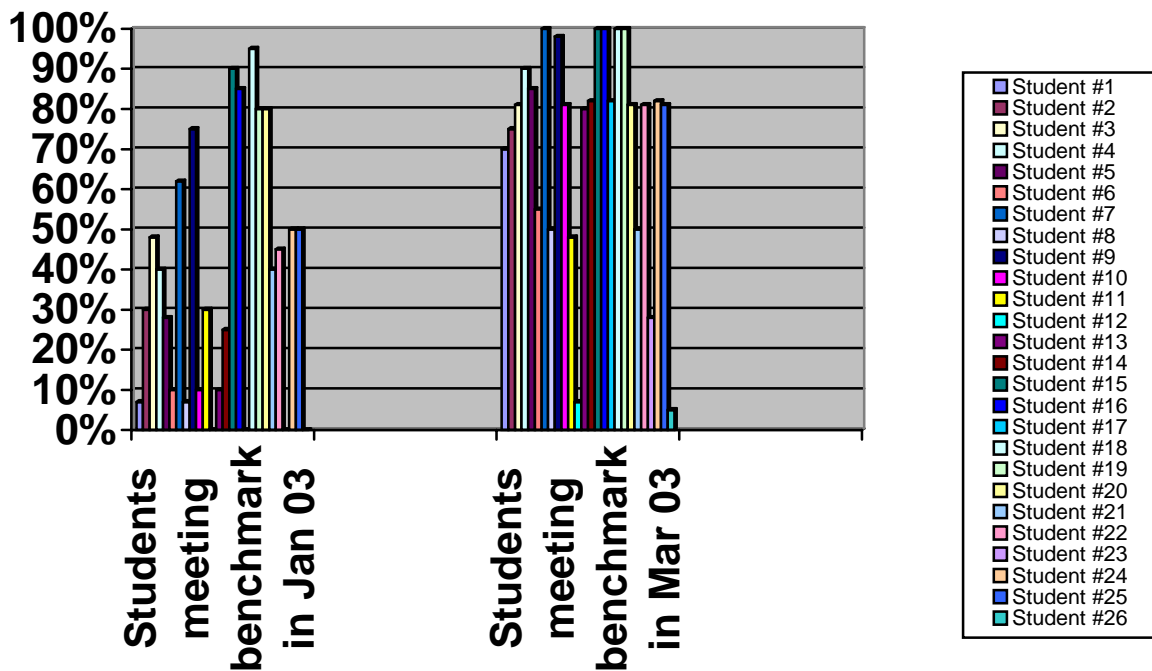
**Table 4-7**



- Graph shows number of students who increased letter/sound recognition by percentages.
- Total number of students in class (26). Total number of ELL students (17)
- While most non-ELL students increased somewhere between 10% - 30%, ELL students increased their letter/sound recognition from 10% to 70%.
- It should be noted that most non-ELL students had fewer letter sounds to learn, therefore decreasing the percentage span at which an increase could take place.

## Students Meeting Benchmark (80%)

Table 4-8



- When action research started in January only 20% of students met the benchmark for letter/sound recognition which was 80%.
- When action research ended in March (60 days later) 65% of the students met the benchmark for letter/sound recognition.
- That was an increase of 45%. 17 out of 26 students met benchmark.

## Letter/Sound Improvement Assessment

**Table 4-9**

<b>Student #</b>	<b>Pre-Assessment Date: 1-16-03</b>	<b>% of letter sounds known</b>	<b>Meets Benchmark</b>	<b>Post Assessment Date: 3-14-03</b>	<b>% of letter sounds known</b>	<b>Meets Benchmark</b>	<b>Improvement</b>
Student #1	3	7%	N	14	70%	N	Y
Student #2	7	30%	N	15	75%	N	Y
Student #3	10	48%	N	16	80%	Y	Y
Student #4	8	40%	N	19	90%	Y	Y
Student #5	6	28%	N	18	85%	Y	Y
Student #6	2	10%	N	12	55%	N	Y
Student #7	13	62%	N	21	100%	Y	Y
Student #8	3	7%	N	11	50%	N	Y
Student #9	15	75%	N	20	98%	Y	Y
Student #10	2	10%	N	16	80%	Y	Y
Student #11	7	30%	N	10	48%	N	Y
Student #12	0	0%	N	3	7%	N	Y
Student #13	2	10%	N	16	80%	Y	Y
Student #14	5	25%	N	17	82%	Y	Y
Student #15	19	90%	Y	21	100%	Y	Y
Student #16	18	85%	Y	21	100%	Y	Y
Student #17	Not here	for	assessment	17	82%	Y	N/A
Student #18	20	95%	Y	21	100%	Y	Y
Student #19	16	80%	Y	21	100%	Y	Y
Student #20	16	80%	Y	16	80%	Y	N
Student #21	8	40%	N	11	50%	N	Y
Student #22	9	45%	N	16	80%	Y	Y
Student #23	0	0%	N	6	28%	N	Y
Student #24	11	50%	N	17	82%	Y	Y
Student #25	11	50%	N	16	80%	Y	Y
Student #26	0	0%	N	1	5%	N	Y
	21 Letter/ Sounds possible	16 sounds = 80%	80% Meets Benchmark	21 Letter/ Sounds possible	16 sounds = 80%	80% Meets Benchmark	Improved from pre-assessment

Blue indicates ELL student

Red indicates meets benchmark

Green indicates improvement over 60 day period

## Letter/Sound Data Collection Statistics

**Table 4-10**

Type of Statistic	Pre-Assessment letter/sound score. 21 possible	Percentage of letter/sounds known	Post-Assessment letter/sound score 21 possible	Percentage of letter/sounds known	Increased by what percentage	Met benchmark	Number of letter/sounds still needed to meet benchmark
<b>Name:</b>	Date: 1/16/03	Date: 1/16/03	Date: 3/14/03	Date: 3/14/03			
Student #1	3	7%	14	70%	63%	N	2
Student #2	7	30%	15	75%	45%	N	1
Student #3	10	48%	16	80%	32%	Y	0
Student #4	8	40%	19	90%	50%	Y	0
Student #5	6	28%	18	85%	57%	Y	0
Student #6	2	10%	12	55%	45%	N	4
Student #7	13	62%	21	100%	38%	Y	0
Student #8	3	7%	11	50%	43%	N	5
Student #9	15	75%	20	98%	23%	Y	0
Student #10	2	10%	16	80%	70%	Y	0
Student #11	7	30%	10	48%	18%	N	6
Student #12	0	0%	3	7%	7%	N	13
Student #13	2	10%	16	80%	70%	Y	0
Student #14	5	25%	17	82%	57%	Y	0
Student #15	19	90%	21	100%	10%	Y	0
Student #16	18	85%	21	100%	15%	Y	0
Student #17	Not available	for assessment	17	82%	-	Y	0
Student #18	20	95%	21	100%	5%	Y	0
Student #19	16	80%	21	100%	20%	Y	0
Student #20	16	80%	16	80%	0%	Y	0
Student #21	8	40%	11	50%	10%	N	5
Student #22	9	45%	16	80%	35%	Y	0
Student #23	0	0%	6	28%	28%	N	10
Student #24	11	50%	17	82%	32%	Y	0
Student #25	11	50%	16	80%	30%	Y	0
Student #26	0	0%	1	5%	5%	N	15

Benchmark

=

**80%**

Benchmark

=

**80%**

**Blue** = ELL students

**Red** = Met benchmark of 80% (16 letter sounds)

**Green** = Students expected to meet benchmark by year end

- 20% of students met benchmark on 1/16/03
- 65% of students met benchmark on 3/14/03
- Anticipated % of students who will meet benchmark at year end = 90%

## Section Five

### Discussion and Conclusion

#### **Implications:**

Currently there is a big debate on whether to teach language arts using phonics. I think the general consensus is that a literacy program must contain both phonics and a whole language approach. There are teachers, however, (like my cooperating teacher) who are solely whole language proponents and don't see a need for phonics to be a part of the curriculum. I feel that through this research I can show otherwise.

At the conclusion of my research, there seemed to be a logical relationship between teaching letter sounds using the Zoo-phonics program and student improvement (or meeting benchmark) in letter/sound recognition. Therefore, I could summarize that teaching letter sounds using a phonics program, such as Zoo-phonics, does in fact increase letter/sound recognition in kindergartners. I could go as far as to say that if using Zoo-phonics increased letter/sound recognition in this group of students, logic will tell me that using Zoo-phonics in future classrooms will yield the same results. Not only could using an explicit and systematic phonics program such as Zoo-phonics help to increase letter/sound recognition in the students I teach, but it should also produce similar results when used by other educators.

Further, with data showing that all but one of the students who increased their letter/sound recognition by 50% or more were ELL students, I feel this research project has helped to validity the fact that ELL students do learn their letter sounds quicker when taught through a phonics program that utilizes three modalities such as visual, auditory, and kinesthetics.



## **What I learned:**

It is impossible to conduct an action research project such as this one and not grow and learn as a teacher. First and foremost, I discovered that setting up and conducting a research project not only takes time and patience but also it takes a dedication to children as well. During this project I had to continually assess the students so that *they* were able to benefit from it at the maximum level. This meant making a conscience effort to include Zoo-phonics into my curriculum and individualize it, even though some students thought it was “boring”. I found that the students who improved the most, and did not think it was boring, were the children who spoke English as a second language. As previously mentioned, my data shows that out of all the students who increased their letter/sound recognition by more than 50%, only one was a native English speaker.

To add to this, the ELL students were the ones that used the Zoo-phonics strategies and signals more often than the non-English speaking students. In fact, one Ell student used the Zoo-phonics signals every time she attempted to spelled or whenever I assessed her for letter/sound recognition. Therefore, I learned that teaching letter/sound recognition using strategies such as the ones found in Zoo-phonics can greatly benefit the ELL students.

In conducting this action research I have seen the validity and necessity of executing projects, such as this one, in this future to guide my pedagogical practice. In light of this, I question whether state assessment test can really gage student learning. State test results are just a snapshot of where a student might need further guidance in his or her school career. However, if I as a teacher can continually assess my student’s needs by conducting action reassert projects such as this one, not only will my students benefit but I will grow as a teacher because the results of such a project can help to steer me in the right direction when helping my students meet benchmark and learn in general.

**What I would do differently next time:**

One of the most frustrating but exciting parts in conducting an action research project is looking back and reflecting on what should have or could have been done differently. As I look back, there a few things I feel I should have done during this research project that I didn't do. But likewise, I also look at some missed opportunities as an avenue to institute such an action research project in the future, next time bringing in and ensuring the missing parts are incorporated. For example, next time I would expose the students to Zoo-phonics more often. I had great plans to set up stations where each student would be independently involved with several activities involving Zoo-phonics. This did not materialize and I feel my students somewhat suffered because of it.

In addition, I would utilize the visual aspect of this program more that I did. It is one thing for the students to know that a certain signal goes with a certain sound but it is another to connect the sound to the written letter. I don't feel I did as good as job as I should have when it came to bringing in the visual part of this multi-modal teaching strategy. Had I done so, I honestly feel that five or six additional students would have met benchmark.

Finally, I truly feel I should have targeted letters that the majority of the students had difficulty with and focused on these daily. There were several letters that students got confused such as "d" and "b", "p" and "q" and the sound for "y" and "w". Next time I would stress these letters daily to help ensure that the students not only understood the sound a particular letter makes but what that letter looks like as well.

**New questions I have as a result of this project:**

The biggest question that still looms in my head is; did using Zoo-phonics *really* help to increase letter recognition. It is a fact that kindergarten, first and second graders excel in learning the last part of the year. Were the results at the end of my action research project just

the product of student's normal learning curve? Would the 17 students, who reached benchmark after 60 days of Zoo-phonics, have reached it anyway as a result of the "year-end growth phenomenon? This is a question I will never know the answer to. I believe not as many students would have reached benchmark if I had not taught Zoo-phonics.

In conclusion, it is hard to ignore the fact so many of my students made great gains in the 60 days I taught Zoo-phonics. I will, in the future, continue to bring in some form of explicit and systematic phonics into my curriculum (such as Zoo-phonics) to aid in letter/sound recognition. I will not solely rely on such a program to be the catalyst for my literacy program but rather it will be a partner with whole language strategies with the aim of getting each student to meet benchmark and improve their literacy skills.

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Appendix "A"

Letter/Sound Pre & Post  
Assessment Tool

Name: \_\_\_\_\_

Letter Sound	Pre-Assessment Date:	Post Assessment Date:
f		
k		
p		
w		
z		
b		
h		
j		
c		
y		
l		
q		
m		
d		
n		
s		
x		
g		
r		
v		
t		

Notes \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Appendix “B”

Letter/Sound Improvement  
Data Collection Tool

<b>Student #</b>	Pre-Assessment Date: 1-16-03	%	Meets Benchmark	Post Assessment Date: 3-14-03	%	Meets Benchmark	Improvement
Student #1							
Student #2							
Student #3							
Student #4							
Student #5							
Student #6							
Student #7							
Student #8							
Student #9							
Student #10							
Student #11							
Student #12							
Student #13							
Student #14							
Student #15							
Student #16							
Student #17							
Student #18							
Student #19							
Student #20							
Student #21							
Student #22							
Student #23							
Student #24							
Student #25							
Student #26							
	21 Letter/ Sounds possible	16 sounds = 80%	80% Meets Benchmark	21 Letter/ Sounds possible	16 sounds = 80%	80% Meets Benchmark	Improved from pre- assessment

Blue indicates ELL student

Red indicates meets benchmark

Green indicates improvement over 60 day period

Appendix “C”

**Zoo-phonics Weekly Data Collection Notes**

January 21 – 23

<b>Monday 20<sup>th</sup>:</b>	No school, Martin Luther King Day
<b>Tuesday 21<sup>st</sup>:</b>	-Used Zoo-phonics when spelling words for students. -Worked w/ students in sm. Groups and 1/1. Did alphabet two times. #23 very reserved in am grp. However, she was very animated in pm grp w/ two students. Smiled and laughed. Attempted all signals. #14 too was more animated in sm grp setting. Laughed & smiled.
<b>Wednesday 22<sup>nd</sup>:</b>	-Worked with one small group after class. Went through alphabet twice and spelled each student’s name. Student #25 was not engaged at all. Kept looking away, would not do signals, kept going to big books. #11 asked me to start over when he couldn’t start with us. Tried all signals. -Need to start other ways of bringing in Zoo-phonics.
<b>Thursday 23<sup>rd</sup>:</b>	-Used Zoo-phonics to spell words. -Did Zoo-phonics as a whole class instruction once -Worked with a few students one on one and did some small group.
<b>Friday 24<sup>th</sup>:</b>	No school, Teacher planning day. Worked on lesson plans for WS and full time student teaching. <b>BUT</b> talked about working with just the lower half of the students or those that are below benchmark. Feels it might be beyond those who have letter recognition and most of their letter/sound. Decided to collect only data from morning class.

Notes:

Not all students are engaged. I need to think of other ways to bring in Zoo-phonics such as bingo. Using the Zoo-phonics letter board works well when spelling words with students. I must remember to use the flash Zoo-phonics letter cards when going through the alphabet with the class or small groups.

January 27 – 31

<b>Monday 27<sup>th</sup>:</b>	-Spelled words with Zoophonics
<b>Tuesday 28<sup>th</sup>:</b>	-Spelled words with Zoo-phonics -Worked with students one on one
<b>Wednesday 29<sup>th</sup>:</b>	-Spelled words using Zoo-phonics -Played Zoo-phonics bingo -Did whole group alphabet
<b>Thursday 30<sup>th</sup>:</b>	-Spelled words for students using Zoo-phonics
<b>Friday 31<sup>st</sup>:</b>	-Watched Zoo-phonics video.

Notes:

Not as organized this week. Had two assemblies that cut into time and CT was out ½ day so was helping sub to run class. Looking at my week, there are three days where I only integrated Zoo-phonics into the curriculum once. This is not enough. I need to work with small groups more often. However, that brings up management issues.



February 3 – 7

<b>Monday 3<sup>rd</sup>:</b>	<ul style="list-style-type: none"><li>- Worked in whole group setting giving sounds of letters and having students come up to board and write letter.</li><li>- Spelled words using Zoo-phonics.</li></ul>
<b>Tuesday 4<sup>th</sup>:</b>	<ul style="list-style-type: none"><li>- Worked in small groups, giving sound of letter and having student's name the letter.</li><li>- Spelled words using Zoo-phonics.</li></ul>
<b>Wednesday 5<sup>th</sup>:</b>	<ul style="list-style-type: none"><li>-Spelled words using Zoo-phonics.</li><li>-Worked in whole group setting giving sounds and having students come up and write letter, involving everyone. (seemed to really like this)</li></ul>
<b>Thursday 6<sup>th</sup>:</b>	<ul style="list-style-type: none"><li>-Went through Zoo-phonetic alphabet</li><li>-Worked in whole group giving letter sounds and having students come and write letter on the board.</li><li>-Spelled words using Zoo-phonics.</li></ul>
<b>Friday 7<sup>th</sup>:</b>	<ul style="list-style-type: none"><li>-Spelled words with Zoo-phonics.</li></ul>

Notes: I started teaching solo this week. Found out rather quickly that I must consciously include Zoo-phonics in my daily planning. It's too hard to do off the cuff. The students seem to be quite engaged during the activity where I'll say a sound and do the signal and a student will write the letter on the board. I will try to include this activity often.

February 10- 14

<b>Monday 10<sup>th</sup>:</b>	-Spelled words with Zoo-phonics -Gave sounds and had students write letter on board (whole grp)
<b>Tuesday 11<sup>th</sup>:</b>	-Spelled words with Zoo-phonics
<b>Wednesday 12<sup>th</sup>:</b>	-Spelled words with Zoo-phonics -Went through Zoo-phonics alphabet with whole group.
<b>Thursday 13<sup>th</sup>:</b>	-Spelled words with Zoo-phonics
<b>Friday 14<sup>th</sup>:</b>	-No school this day.

Notes: Was extremely ill all week so I did not get the amount of instruction in as I had planned. However, I'm noticing some students are getting better at their morning spelling and letter recognition, especially the ELL students. This is exciting. But I won't know until I assess them again.

February 17-21, 2003

<b>Monday 17<sup>th</sup>:</b>	No school – President’s Day
<b>Tuesday 18<sup>th</sup>:</b>	-Spelled words using Zoo-phonics -Worked with a small group of students going through the entire Zoo-phonics alphabet.
<b>Wednesday 19<sup>th</sup>:</b>	-Spelled words using Zoo-phonics -Worked with a small group going through the alphabet. -Gave sounds and had students write letter on board (whole group)
<b>Thursday 20<sup>th</sup>:</b>	-Went through Zoo-phonics as a whole group. -Used zoo-phonics when helping students spell words.
<b>Friday 21<sup>st</sup>:</b>	-Used Zoo-phonics when helping students spell words. -Went through the zoo-phonics alphabet in two small groups, one with girls and one with boys.

Notes:

Another four day week. I’m in the middle of teaching my work sample and I’m finding it harder to find time to devote to my AR instead of my WS. I guess that is all in the process of learning to teach. The ability to weave so much into an already overloaded curriculum is an art, one I haven’t developed. It’s hard to believe I only have one week left to gather data. I detect an increase in letter sound recognition from most of the students yet I feel I could have done so much more such as run the video during choosing which I have yet to do.

February 24 – 28, 2003

<b>Monday 24<sup>th</sup>:</b>	-Spelled words using Zoo-phonics -Worked with small groups going through entire alphabet
<b>Tuesday 25<sup>th</sup>:</b>	-Spelled words using zoo-phonics
<b>Wednesday 26<sup>th</sup>:</b>	-Spelled words using Zoo-phonics -Went through entire alphabet with whole group -wrote letter on board and asked for letter sound (had a much more difficult time doing this than giving the sound and having them say the letter)
<b>Thursday 27<sup>th</sup>:</b>	- Did whole class zoo-phonics - Gave letter and asked for sound with whole group.
<b>Friday 28<sup>th</sup>:</b>	- Data collection ends.

Notes:

If I only had four more weeks...I'm very excited to see how far along the students have come, especially the ELL students. I will start assessing next week. Once again I felt bogged down by my work sample but I know as a teacher I will have to do it all! I discovered a new way to assess the students while incorporating Zoo-phonics. I name a letter and they give the sound. I believe it is a better way to teach them rather than having me give the sounds. It makes them think a bit more. I'm sorry I did not have more time to try this strategy.

Appendix “D”

Letter/Sound Data Collection Statistics

Type of Research							
Name:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
Student #1							
Student #2							
Student #3							
Student #4							
Student #5							
Student #6							
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Student #26							

Notes:

## Appendix "E"

### Weekly Review & Analysis

**Week of January 13 - 17, 2003**

#### **Research Update:**

I spent two days this week assessing my students. I assessed them on recognition of the 21 consonants and their sounds. It was very eye opening. One thing I learned was that I should take the students outside of the classroom where there are fewer distractions. I noticed that when other children were near us, the child I was assessing would no longer try or risk take. I certainly feel that my results would have been somewhat different had I removed most distractions. I will make note of this for any prior assessing where I need the student's full attention.

I have also started to take notes of my observations when I have the class involved in Zoo-phonics. I have noticed a few students say, "Not again!" when it is presented to them. I need to figure out why these few do not enjoy the activity. Is it way beyond them? Is it too difficult? In addition, a few of my ELL students don't make a great attempt at verbalizing the letter sound or trying the signal when we perform as a whole group. I wonder if it is because they don't feel comfortable in front of others, or do they not know the signals for each letter.

I have also been using a Zoo-phonics alphabet chart and signals every time I help a student spell a word. I need to use the big alphabet cards when we do the whole group activities. I feel they need to hear, feel, and see the letters as often as possible.

#### **Data Collection Reviews and Analysis:**

##### **What I discovered- (review)**

When comparing my assessments of consonant letter/sound recognition with an assessment done by my CT for letter identification of all upper and lower case letters, I saw an interesting trend. Many of the students are able to recognize their letters but few are able to tell me what sound they make. Since a large part of phonemic awareness is an understanding that each individual letter has it's own sound, I can see that many of my students have yet to develop this awareness. I hope to change this through my action research project.

I also found something else very interesting. Many of the students were able to tell me the sounds of less frequently used letters such as X, Q, and Z but were unable to come up with sounds for more high frequency sounds such as C, N and H. Many of the students were not even able say the sound of letters in their own names. I did have one ELL student whom utilized her Zoo-phonics skills throughout the entire assessment. I was thrilled! I hope to see the tool of using the Zoo-phonics signals more often with all of my students.

I do have three students, all ELL, who were unable to come up with any letter sounds and five other students who were only able to name up to three sounds. These are the students I really

want to concentrate on. These are the students who begin to slip through the cracks as early as Kindergarten. If I can help these students to recognize more letters and to teach them to use their Zoo-phonics skills, I will have then hopefully give them a tool to assist them in their future.

I also discovered during observation that not every child is engaged by the Zoo-phonics. I will need to research this to find out why. Perhaps some of the ELL students don't feel comfortable performing in front of others or they might not be making connections to the animal letters and their corresponding signals.

### **What I should do differently next time- (analysis)**

Next time I would certainly take the students to a quiet location with few distractions. Many students seemed to be bothered by the fact a fellow student was within hearing range and could hear their answer given. They were also able to see their fellow classmates playing during choice time and that in and of itself is distracting.

Additionally, when asking the students what sound a certain letter made, I learned that it made a difference in how I asked the questions. For example, with my ELL students I discovered late in the assessing process that I was having better success with understanding if I said, "What does the "Q" say?" rather than "What sound does the "Q" make?". It is all semantics but I now realize how important semantics are when speaking with ELL students. For what ever reason, when I asked them what a letter "said", I received an answer, even if it was wrong, opposed to getting no answer because the student did not understand what I meant when I asked him/her what "sound" a letter makes. I wonder why this is so with ELL students? Is this the verbiage they learn in an ESL class? Or, perhaps when teaching our youth, Americans are the only ones to ask what sound a letter makes instead of what it says. At any rate, I learned that I might want to have two or three different ways of stating something when assessing my ELL students and to be prepared for that.

### **Goals For Next Week:**

My goals for next week will be to start working with small groups during their choice period. I will go through the alphabet with them slowly. This will give me a better idea of how many signals each individual child has learned so far and which students I might need to work with one on one.

In a whole group activity, I would also like to go over the name for each "letter animal" and explain why we do each signal. It has been a while since they have heard this and some of the newcomers have never heard the reason why we use each signal. In addition, I feel this will help my ELL students to make additional connections while trying to process their new language.

I think I will also do another form of assessment. I will say the sound of a letter along with the Zoo-phonetic signal and the student will write down the letter. This will be one quick way I can gauge individual learning during any given week through writing. Additionally, I will spot check students during the day by showing them a letter and having them give me the Zoo-phonics signal for that letter and the corresponding sound.

## **Week of January 21-23, 2003**

### **Action Research Update:**

This was a short week, only three days of school in Portland Public. I have recorded and logged all of the scores from my pre-assessment. This has given me a better idea of where the class stands as a whole. In teaching the students Zoo-phonics, I have discovered some who are more willing to try the signals working in large groups, some that prefer working with only two or three other students of choice, and some that will only try the signals when I work with them one on one. I know it would be easier and less time consuming to be able to teach to the whole class at once, however, I also know the benefits to being able to teach to each child's need.

Through several discussions, my CT and I have decided that I will just collect data on the morning kindergarten children. Through her advice, I will concentrate on the students who are below and well below benchmark. For the students whose letter/sound recognition scores were high, doing Zoo-phonics becomes boring and monotonous. For these students, my goal will be to help them achieve the few letter/sounds they do not know. In most instances, these students missed letters such as "f" and "t" or "b, d, p, and q" which is common.

### **Data Collection Reviews and Analysis:**

#### **What I discovered – (review)**

I made a couple of interesting discoveries this week. The first was with one of my ELL students who is extremely shy and low functioning. When I would instruct Zoo-phonics through whole-class participation, this student would barely attempt to do the signals, let alone say the sounds. However, when she was put in a small group setting with two girls she was playing with, she became animated, smiled, tried all the signals and I could even hear her letter sounds. This was very exciting to for me. I discovered what setting this student's feels most comfortable in, which will help my teaching her Zoo-phonics in the future. This was also the case with another ELL student. Once he was out of the large group setting, he tried more of the signals and attempted most of the letter sounds. On the other hand, I still have a couple of students, who are not engaged at all, even if I work with them one on one. I must continue to try different teaching methods until I find one that fits for each student.

In talking with my CT, I have also discovered that the Zoo-phonics might be boring or monotonous to a few of the students whose letter/sound recognition is high. In fact, one of my higher performing students will always make the comment, "Not again" after I announce we are doing Zoo-phonics. I now know why. Having 18 out of his 21 consonant sounds he does not find the exercise stimulating. Therefore, I will now revise my teaching of Zoo-phonics to the students who do not need the daily instruction. Instead, I will work with just the few letter sounds that these students are missing to help elevate their score to 21 sounds out of 21.



### **What I should do differently next time – (Analysis)**

When Thursday, the last school day of the week arrived, I soon realized that I had not given much thought to how I should approach a short week. Up to now, I was trying to fit in my Zoo-phonics teaching whenever I saw an opportunity. Because of the short school week and not having a formal plan of action, I think I lost some valuable teaching time. In the future I will need to carefully plan out the week taking such things as, music, buddy time, and days off into consideration. In addition, I need to make sure I allow time for myself to take notes and keep an updated anecdotal record during school time while thoughts are still fresh in my head. I found that when my notes were sloppy or unclear, I had a more difficult time reflecting on the situation.

After reviewing the data collected in my pre-assessment, I have decided to concentrate on only those students who are below benchmark. There are several students who know the majority of their letter sounds, therefore, I will not continue teaching Zoo-phonics to the entire class on a daily basis. I will, instead work in small groups or with students one on one. Several of my students could name fewer than ten sounds while others demonstrate knowledge of only three or less letter sounds. In fact, over 50% of my students could name no more than ten.

I have also done a lot of the signals without using the visual “letter cards” that show the shape of the letter. I must NOT continue this. This program is designed to incorporate auditory, kinesthetic, AND visual modes. I feel strongly that the children must also see what the letter looks like so that they can identify it on paper, out of context, and out of the usual order. By leaving out the “letter cards” I am leaving out all of my visual learners.

### **Goals For Next Week:**

Due to the short week, I did not have a chance to meet all of my goals from the previous week. I will, once again, try to do a quick assessment of random students who are below benchmark by saying a letter sound and having them write down the letter.

I will start working in small groups or one on one, cutting down on a daily whole group Zoo-phonics lesson. In addition, I want to start incorporating alphabet bingo using the zoo-phonics signals and letters with those who are well below benchmark.

Perhaps another goal to work on will be concentrating on getting those below benchmark to spell their name Zoo-phonically. Many of these students were unable to recognize letters in their own names.

Lastly, I must determine for a few of the students who do still not engage, what it will take to get them excited and interested in Zoo-phonics.

## **Week of January 27 – 31, 2003**

### **Action Research Update:**

I'm continuing to teach Zoo-phonics in the classroom. This week, it was in smaller increments than I wanted. I have targeted students that I feel will benefit from seeing Zoo-phonics every day. Most of my data collecting this week was from anecdotal notes. I have started teaching solo and have found that I now have less time to devote to teaching letter recognition through Zoo-phonics, therefore, I will need to make a conscious effort to show it in my daily planning. The kids seem to use their Zoo-phonics skills more and more.

### **Data Collection Reviews and Analysis:**

#### **What I discovered – (review)**

The kids seem to use their Zoo-phonics skills quite often. More and more of them are taking risks in answering for me. Looking over the week, I was able to incorporate several different ways of practicing the Zoo-phonics letters. This is good. The children seem to respond more favorably when they know it is a slightly different activity. They all liked the bingo. I, however, let the game drag on too long. I need to keep this in mind.

On the down side, I found that when I teach, not just aid in the classroom, I have much less time to focus on teaching Zoo-phonics. I have been teaching ½ day this week. What will it be like when I teach full time next week?

#### **What I should do differently next time – (Analysis)**

Next week I must try and include prescribed Zoo-phonics activities in my daily planning. I found that I need such organization to help keep me focused. In addition, I need to create a spreadsheet that will tell me which letters each child has trouble with. I will then be able to hone in on which letters they need to focus on.

I need to use Zoo-phonics more when spelling words on the board when we are in whole group. Shorten the time it takes to play Zoo-phonics bingo.

#### **Goals For Next Week:**

Stay organized! Write in specific activities for specific children at specific times. Keep the variety.

## **Week of February 3-7, 2003**

### **Action Research Update:**

I quickly realized, during my first solo week of teaching that I found less and less time to devote to teaching Zoo-phonics. Knowing this, I have decided that during choosing time, I will ask most students to participate in at least one Zoo-phonics activity. I will provide up to three different activities that I would like to see the students engaged in. They will be simple or fun and take only a few minutes of each choosing period. I will need to put together a chart listing names and the letters each child needs to work on, which will make it a more individualized learning experience.

I discovered that the class really enjoyed participating in the guided writing. This is one activity I can do in small groups as well. I need to focus on organization and starting to target students that could really benefit from these activities. I have discovered that there are certain letters that the class as a whole needs to learn. "W" is one of them.

Still have not started my re-writes. I will focus on that once I have completed my lesson plans. It will be exciting when I start putting my data together.

### **Data Collection Reviews and Analysis:**

#### **What I discovered – (review)**

One of the main things I discovered was the positive response I get to the guided writing. Every child appears to be engaged and for many their hands are up every time. I was so excited to see this response. Even the student's who do not particularly like the Zoo-phonics video, were active participants. The only down side is that as a whole group activity, it does not allow for more than one answer pre child. They all moaned when I told them there were no second turns. In light of this, I will try this as a small group activity too. It is also a GREAT time filler and since they are so engaged, the management issue is not as strong.

Of course I discovered that organization is the key to everything but that it takes lots of time and organization to be organized, but no matter how prepared I am, there seems to be something I did not think of.

#### **What I should do differently next time – (Analysis)**

What I learned is organization is everything with class. I did not set aside enough time to devote to Zoo-phonics this week, as I would have liked. It was my first week solo teaching and an interesting week on top of that. What I will do differently next time is to have prescribed activities at different locations around the room. The goal is for the students to be exposed to Zoo-phonics every day in one form or another. One of the activities will be watching and joining in on the Zoo-phonics videotape. Here, children will go through the entire alphabet twice with prompting from the video. This will be a station I will need to check often and perhaps monitor

quite closely, for two reasons. First, I want to ensure that the students watching the video are participating. Secondly, the video will need to be rewound two or three times. Students should not be handling this equipment without supervision. I will also have a table set up with Zoo-phonics dot-to-dot letters for those students who need to learn specific letters. The last station will have students playing Zoo-phonics bingo. This station is where I can enlist the aid of my students who know all their letters and sounds. These students can be the “letter callers” while the other students engage in a fun game of bingo.

I feel that due to lack of organization I lost some valuable data collecting time. I would also continue with the guided writing. The students were all engaged and each one raised his or her hand at almost every turn. However, to allow each child multiple turns at writing, I would use this as a small group project. As a whole class project, each child only gets to write one letter. If they are willing to write more, I want to afford them that chance. I feel it is a confidence booster and allows the children a chance to take risks. In addition, I will make a chart that tells me exactly what letters each child did not know during the assessment. This way I can somewhat personalize each student's learning.

### **Goals for Next Week:**

Organization again. I need to set up the stations and produce my spreadsheet telling me which letters each child needs to work on. I will also try to remember to incorporate spelling with Zoo-phonics as I teach my work sample on nursery rhymes. I hope to do more shared and guided writing too.

## **Week of February 10-13**

### **Research Update:**

I have very little to report on this week. I quickly learned that while teaching and concentrating on my work sample, my AR has suffered. In addition, I was very ill this week and it was Valentines week so my CT had several Valentines projects she wanted the kids to complete during choosing which is when I had planned on forming my stations.

### **Data Collection Reviews and Analysis:**

#### **What I discovered – (review)**

What I have learned is that not every week will go exactly as planned. Due to illness and a holiday week, I got very little accomplished this week. It does appear, however, that my students are taking more risks in calling out a letter name when I give the sound and they are getting the letters correct. I hope this is from all the work we have been doing in the previous weeks with Zoo-phonics. I also see more students using the Zoo-phonics signals when working with letters. This is encouraging.

#### **What I should do differently next time – (Analysis)**

Since I did not set up my stations as planned this week I don't have much to analyze.

#### **Goals for Next Week:**

Try to set up my stations.

February 17 – 21, 2003

### **Research Update:**

This was another short week. There was not school Monday. I did not meet my goals of setting up stations. I am finding that the teaching of my work sample has demanded more of my time than I anticipated, therefore, leaving less time to devote to my action research project. When I look back at the week, however, I accomplished more than originally thought. I was finally able to fit in a time where I could work with specific students in small groups. I targeted those who knew 10 or fewer of their letter sounds.

I continue to keep a daily log on my Zoo-phonics activities as well as keep a weekly summary of my data collection that includes a review and analysis.

### **Data Collection Reviews and Analysis:**

#### **What I discovered – (review)**

First, I discovered that I fit in Zoo-phonics more this week than originally thought. I was finally able to work in small groups, targeting students who I feel will benefit the most by being exposed to Zoo-phonics. These are students who know 50% or less of their letter sounds. Secondly, I quickly realized that working with a small group that consists of all boys was not the best idea. It was an **active** seven minutes.

Each day I am surprised by the growth the students seem to be making. There are, however, still a couple of students who are not making much progress at all. One of these students is a Hispanic student. He counted to 13 on his own this week and I was so pleased, but he does not even know the letter name or sounds of letters in his name. He did, however, attempt more of the Zoo-phonics signals when working in the small group, than he does in the whole group setting. On the other hand, I have a Ukrainian student who is in both my morning and afternoon session. She is age appropriate for first grade but attends a full day of kindergarten instead. When I first came to Woodmere she knew none of her letter sounds. She is now able to tell me several letter names and their sounds. This is very exciting and I will be eager to assess her at the end of my research.

Additionally, the students respond positively when I give letters sounds and they are asked to come up to the board and write the letter. This is one activity I should attempt doing with small groups so each student will be able to come up to the board more times.

I continue to discover the time shortage each day. I have found it difficult to devote additional and quality time to my action research project while I have been teaching solo and teaching my work sample. I certainly see how busy a teacher's day truly is.

### **What I should do differently next time – (Analysis)**

Next week when I work in small groups, I want to try making them heterogeneous groups. The “all boys” group was quite active. Although it was nice to see such enthusiasm. There were a couple of students who were giving the answers so loudly they were answering over all the others. Perhaps if I had a mixture of boys and girls it would tone the volume down some. I would also include a few additional students who are just over the 50% mark in letter/sound recognition.

I would really like to work with the small groups while giving the letter sounds and having them write the sounds down. Or perhaps I could do it as a whole group activity, while I call out a letter sound and everyone writes it down. This way, each student has an opportunity to write every letter.

I will try and play the Zoo-phonics tape during choosing which is one idea I have not implemented yet and one I feel could have great benefits. I realize that my data collecting time is running short.

### **Goals for Next Week:**

Continue to work with small groups and get the students involved in writing the letters more often. Perhaps try using the clay as a whole group activity calling out letters and having them make that letter while I say the letter sound and words that start with the letter.

Additionally, I will bring the television into the room so I can play the Zoo-phonics tape during choosing time. I could do bingo as a whole group activity too. These ideas would be ways to break up the “learning day” while allowing the students to learn and incorporate multiple intelligences in the process.

**February 24 - 27, 2003**

**Research Update:**

This was my final week of data collection. Just as I tested my students on letter recognition at the beginning of the action research project, I will again test them at the end. This I will do Monday so I can begin to put my data together.

It was another busy week with solo teaching and teaching of my work sample so, once again, I was not able to put as much time and energy into data collection as I had anticipated. However, I am excited to test my students this final time. I have seen what I believe to be a marked improvement in letter recognition in all students.

**Data Collection Reviews and Analysis:**

**What I discovered – (review)**

Towards the middle of the week I tried a different strategy when working with my students. In past weeks, there were times when I would give a letter sound and I asked the students to name the letter. This week I gave the letter name and asked them to say the letter sound. What I found was that my students had a more difficult time coming up with the letter sound than they did they letter name.

It also appears that many of my students have made great strides in their letter/sound recognition. It will be interesting to test them next week and begin compiling my data to see if I am correct.

**What I should do differently next time – (Analysis)**

Although my data collection ends this week, if I had another week or two to collect data, I would concentrate more on giving letter names and having the students come up with the letter sound rather than the other way around as I had been doing in previous weeks. I found that the students had a more difficult time coming up with the letter sound and I now wish I had started this activity a few weeks ago. I feel this would have benefited them more. It was something I did not think of doing until recently.

**Goals for Next Week:**

Start compiling data and re-write my literature review.



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