SIT Graduate Institute/SIT Study Abroad **SIT Digital Collections**

Independent Study Project (ISP) Collection

SIT Study Abroad

Spring 2006

Teaching with Systematic Phonemic Awareness: The Effects of Group Learning and Oral Instruction at the Operation Restoration Christian School

Laura Nichols SIT Study Abroad

Follow this and additional works at: https://digitalcollections.sit.edu/isp_collection



Part of the Curriculum and Instruction Commons

Recommended Citation

Nichols, Laura, "Teaching with Systematic Phonemic Awareness: The Effects of Group Learning and Oral Instruction at the Operation Restoration Christian School" (2006). Independent Study Project (ISP) Collection. 379. https://digitalcollections.sit.edu/isp_collection/379

This Unpublished Paper is brought to you for free and open access by the SIT Study Abroad at SIT Digital Collections. It has been accepted for inclusion in Independent Study Project (ISP) Collection by an authorized administrator of SIT Digital Collections. For more information, please contact digitalcollections@sit.edu.

Teaching with Systematic Phonemic Awareness

The Effects of Group Learning and Oral Instruction at the Operation Restoration

Christian School

Laura Nichols
Trench Town, Jamaica
Academic Director: Shirley Campbell
SIT Jamaica: Gender and Development, Spring 2006

Table of Contents

Acknowledgements3
Abstract4
List of terms5
Introduction
Literature Review8
Methodology
Participants 12
Procedure 13
Measures 29
Results31
Observations 31
Test results 53
Analysis55
Conclusions/Recommendations
References
Appendix61

Contents: short vowel sounds worksheet, long vowel sounds worksheet, and vowel sounds review worksheet.

Acknowledgements

First and foremost I would like to thank the Operation Restoration Christian School for providing me with an opportunity to work with the students, staff, and other members of the Trench Town community. Your support and openness helped make this experience amazing and allowed me to learn and grow as a person. I would especially like to thank Debbie Folkes for introducing me to the school, the opportunity, and members of the community. I feel nothing but love for Rema, and the people in the community that taught me more about life, struggle, resilience and hope than I could learn anywhere else. I would also like to specifically thank the students of the Operation Restoration Christian School. You guys are an amazing group of young people and I had so much fun, dancing, drumming, laughing, and hanging out with you guys for the last 7 weeks. A special thanks goes out to the students of "level 4," your hard work, incredible ability, and sense of humor made my first teaching experience one that I will never forget.

I would also like to take this opportunity to thank my friends Catie, Rachel and Malia for helping throughout this ISP period. Making flashcards, worksheets and lessons never would have been the same without your help and artistic contribution (Rachel). And most importantly, you let me talk about Operation Restoration as much as I wanted, despite how annoying I'm sure it became.

Last (but not least) I would like to thank Shirley Campbell, my academic director. Without your help and support throughout this entire semester I would have never had the confidence or ability to conduct this study and do such a damn good job. Love,

Laura

Abstract

The current study was conducted to investigate the effects of oral instruction and teaching with systematic phonemic awareness at the Operation Restoration Christian School of Trench Town, Jamaica. To do this, the researcher taught a class of five low level readers, using teaching methodology provided by the Sadlier Phonics Teacher's Manual and outside literature concerning phonemic awareness and the alphabetic principle. For a five week, with a total of 15 days, student progress was monitored using daily observational notes and through a comparison of test results conducted at the beginning and the end of the research period. In this period of time, students were able to show drastic improvements in reading skills and their ability to learn. While many social obstacles that are prevalent in the marginalized community of Trench Town make learning difficult, the use of educational and behavioral intervention can alleviate the problems presented.

List of Terms

- alphabetic principle a concept that explains how each written letter represents an orally produced sound(s). For example, the letter a produces a short sound, like in "apple," and a long sound, like in "day."
- 2. *phonemic awareness* an ability to recognize abstract segments of speech that signal meaningful differences in words. For example, the difference between the words "beg" and "bag" being the middle sound, with one having an /e/ sound and one having an /a/ sound.
- 3. *onset* the initial sound of words. For example, the onset of the word "bike" is /b/.
- 4. *rime* the ending sound of a word in the form of letter combinations. For example, "-at" is the rime in the words "sat," "fat," and "cat."
- 5. blending a skill used in reading in which the sounds or phonemes of a word are meshed together to create a whole word. For example, when reading the word "bag," one can break it down into /b//a//g/, then "blend" the three separate sounds to create "bag."
- 6. *oral instruction* For the purposes of this study, oral instruction will be defined as facilitated verbal instruction between the teacher and the students. With this, students are working as a group with the educator to learn.

Clarification: when a letter in this study appears like this /b/, for example, it signifies the audible sound that the letter produces. In this case it is /b/ as in the "b" sound in "bug."

Introduction

Trench Town, Jamaica is an area in Kingston that is considered to be one of the most marginalized communities in the country. When I first entered Trench Town, I immediately recognized a difference from the rest of downtown Kingston. The streets were filled with men and women simply "hanging out," due to chronic unemployment. Children can be seen playing in the streets at all times of the day, for many children do not attend school because their family cannot afford to send them. Areas where there is no housing are desolate, and filled with uncollected garbage. Buildings are scarce, and if present are abandoned and nearly crumbling. Gang violence from warring communities is open and blatant, with no one being spared from hearing and seeing gun shots. Even children are able to describe murders in detail that they have seen in their own yards, and sometimes in their own homes. Despite this desperate image, the people of Trench Town are ignored, left to deal with their state of poverty and given little options from the surrounding Kingston community to make a change.

In an effort to mobilize the Trench Town community, an organization called Operation Restoration was founded in one of the poorest regions of the community. The program initially began as a youth out reach program, providing homework help after school for young people in the surrounding community. However, it was soon discovered that many children in the area were not attending school and could not read. Soon after beginning as a small homework help program, Operation Restoration founded the Operation Restoration Christian School, which provided young people in the area with a setting where they could gain access to an education, learn trades and skills valuable for employment, and most importantly learn to read (Interview, 3/30/06).

The Operation Restoration program was founded in 1988 by Lorna Stanley in Tampa Bay, Florida. In 1994, Ms. Stanley, a journalist who spent most of her life living in Jamaica, moved the organization to Rema, Trench Town, an area of Kingston that she believed needed attention and positive community development (ORCS website). For two years, Operation Restoration was used as an after school homework helper program for young people in the areas surrounding Rema. Through the after school program, Ms. Stanley soon discovered that many young people in Trench Town were not able to read and many of them were not attending school. In 1996, Operation Restoration was converted into a remedial school for young people ages 12-20 in Trench Town and other surrounding communities (Interview, 3/30/06).

The main goal of the Operation Restoration Christian School (ORCS) is to provide students with hope and teach them to read. The acting principle of the school, Debbie Folkes, believes that once students can read, they can learn the skills necessary to pass high school entry exams and reintegrate into government based high schools. Through this, young people in the Trench Town community will learn the basic skills necessary to become employed, alleviating crime rates and poverty levels (Interview, 3/30/06).

The school is divided into three levels based solely on reading ability. Level I, the largest class of 23 students, is for young people with no reading or writing skills. Level II, the second largest class of about 16, is for students with very basic reading and writing skills. Level III, which currently houses about 13 students, is for the students with the highest reading and writing abilities. The students in the Level III class read and write at around a fourth grade level (Conversation, 3/20/06).

Operation Restoration is a privately run organization and receives no government funding. The school is funded through individual contributions, and grants from faith based organizations, Environmental Foundation of Jamaica, and the Integrity Fund of Atlanta, GA (ORCS website; Interview 3/30/06). The cost of each student's attendance is J\$4000. This fee is covered by the Integrity Fund, but students are responsible for the cost of their lunch, which amounts to a daily fee of J\$80. Teacher's and administrator's salaries are covered by the Environmental Foundation of Jamaica.

In the past, ORCS has shown many signs of success. Each year an average of 10-15 students graduate from ORCS and begin to attend local high schools (Interview, 3/30/06). Since the school has been participating in the Grade Six Achievement Test, they have had an 80% success rate. Over the past 10 years, ORCS has had more than 800 students enrolled, with about a 6:1 male to female ratio (OR website). Ms. Folkes feels that the overwhelming male population is due to more men and boys being involved in crime and being "on the streets." The population of students increases each year, and Debbie believes this is due to the success rate of the young people who have attended the school in the past.

Literature Review

The main goal of the ORCS is to get students reading and into high school. Because of this, it is important to examine the methods used to teach reading and writing skills. The teachers of ORCS are instructed to use the phonics method to teach reading to the young adults attending school. The school has access to many teaching manuals that use the phonics method. One manual that is often used by teachers is the Sadlier Phonics Reading series (Conversation, 3/30/06).

The Sadlier Phonics Reading manual concentrates on the use of phonemes and specifically phonemic awareness in reading instruction. Phonemes are abstract segments of speech that signal meaningful differences in words. These segments are made up of specific letters that make specific sounds; this connection is called alphabetic principal. Students who understand phonemes and the alphabetic principal can then break down words into segments of sound, allowing them to sound out words they do not know and to gain reading fluency (Foorman et al. 2003). For example, when examining the word bag, a student must be able to recognize that bag can be broken down into three separate sounds: b - a - g. A student must also be able to recognize subtle differences in similar words, such as the difference between bag and sag (the /b/ sound vs. the /s/ sound), bag and big (the /a/ sound vs. the /i/ sound) and bag and bat (the /g/ sound vs. the /t/ sound). If a child or young adult can recognize these differences, they are much more likely to recognize phonemes, break down phonemic segments in words, blend segments into words and rapidly identify letters and their corresponding sounds (Foorman et al. 2003). With these skills, students are much more likely to excel in reading and writing.

Research has shown that phonological awareness is the most important aspect of learning to read. In fact, 74% of the variance in reading ability is due to phonological awareness (McGuinness et al. 1995). In a study conducted by Foorman et al. (2003), researchers tested the effects of different reading instruction methods on 114 kindergarten classrooms in low income areas of the United States. Some of the classrooms participating in the study used alphabetic instruction without phonemic awareness, while other classrooms used a method combining the use of basic alphabetic instruction and systematic phonemic awareness. Results showed that in classrooms where systematic

and explicit phonemic awareness was used, students did significantly better (p < .05) (Foorman et. al 2003).

Systematic phonemic awareness instruction methods can be found in the Sadlier Phonics Series. In this series, teachers are instructed to use activities that help children to understand: 1.) Spoken sentences are made up of words that can be broken down by separate syllables and finally into separate sounds; 2.) Rhyming words; 3.) How to orally break down words into separate sounds, and have the ability to delete sounds and replace them with other sounds to make new words; 4.) The difference between initial, medial and final sounds in words; and 5.) How to break words into syllables (Sadlier Phonics Teacher's Edition 2001). To do this, teachers are asked to concentrate on several specific areas of instruction.

First, it is important that teachers train students in alphabetic knowledge. Before beginning to read, it is necessary for students to be able to rapidly recognize letters and the sound(s) that letters make. With this, students can begin to piece together phonemes and the sounds of letter combinations. Next, it is important for teachers to use explicit and systematic phonics instruction. This means that students must be overtly instructed on the different sounds that specific letters make, such as the difference between short /a/ sounds and long /a/ sounds like in *apple* and *awkward*, respectively. On top of recognizing sounds, students must be instructed to recognize sight words, or words that frequently appear in sentences such as *the*, *of*, *it*, and *where*. Another strategy to teach For each of these factors, Sadlier recommends the use of flash cards, or small sheets of paper with letters (or words) written on them, that students are shown and asked to orally produce the sound of the corresponding letter or word (Sadlier Phonics Teacher's Edition

2001). Phonemic awareness is mainly auditory, therefore instruction should concentrate on oral production of sounds and words (Foorman et al. 2003). Also, teachers are encouraged to use lessons that promote conversation and discussion. There is a direct relationship between language competence and literacy development, which begins with oral language and spoken vocabulary (Sadlier Phonics Teacher's Edition 2001).

Once students have mastered the oral production of letters, sounds and words, they can more easily transition into writing and comprehension. To work on student's writing skills, Sadlier recommends instruction in spelling and writing. Poorly developed spelling is shown to have an extremely negative effect on children's writing, reading fluency and vocabulary development (Adams, Treiman & Pressley 1996). Because of this, Saldlier places emphasis on spelling instruction, learning the spelling and meanings of prefixes, suffixes and word roots, learning about spelling patterns and weekly spelling tests. Students should also be encouraged to write. By placing the sounds of sentences they form on paper, young people are better able to understand the connections of sounds to letters, letters to words and words to sentences, resulting in a more conceptual understanding of reading (Sadlier Phonics Teacher's Edition 2001).

Finally, teachers should emphasize reading comprehension. When learning to read, it is important to understand how to decode words and sounds and understand the words they are decoding. To do this, teachers must discuss the context of what has been read with students through the use of questions or general conversation (Sadlier Phonics Teacher's Edition 2001).

Through the combination of oral instruction, phonemic/alphabetic recognition, spelling instruction, encouraging writing, and emphasizing reading comprehension

teachers can make significant progress in teaching beginning readers the skills necessary to read. Knowing sounds also allows for students to gain a better understanding of the relationship between spoken words or sounds and written language. In observations of ORCS, many of these methods can be seen in daily use. However, important factors such as oral instruction and breaking down words into phonemes are not seen in the classroom.

The present study wishes to examine the effects of incorporating systematic phonemic awareness, as described above, and oral instruction on a group of low level readers at the Operation Restoration Christian School. Students were selected from the lowest level class of ORCS and placed in a separate, isolated classroom environment. In this classroom, I implemented lessons designed based on teaching methods described in the Sadlier Phonics Teacher's Manual and outside literature on the topic. With these changes in their learning environment, students will show improvement in areas of phonemic awareness, allowing them to improve their reading and writing skills and develop strategies to maximize their progress.

Methodology

Participants

Five students from the Operation Restoration Christian School level I classroom were chosen by the level I teacher and by the acting principle of the school to participate in the current study. Students were chosen by their ability, and five of the lowest level readers in level I were chosen. Of the five students, three of them identify as male and two identify as female, and the students are between the ages of 12 and 16 years old. All

students were aware of the purposes of the study and the significance of their participation.

Procedure

To better understand teaching with phonics methods in an Operation Restoration Christian School classroom, I chose to use a participatory or action research method. To do this, I was given the opportunity to teach a class of five students at the Operation Restoration Christian School for a five week period, which included an eight day spring break. The main purpose of me teaching this class was to design and try different lesson plans with these five students and to test if the methods I use are of benefit to the students' immediate learning, and their ability to learn in the future. By merging my research with active participation in the community, I hoped to empower the students to continue to use strategies they learn in class and to provide the school with activities that will be of use to other students and other classes in the future.

To plan these activities and lessons I based instruction on activities found in teacher's manuals and reading materials available at the ORCS, in addition to lessons and activities I designed based on literature concerning phonemic awareness and teaching using phonemes. In this section, I will describe each activity used, how it was implemented in the classroom and why it is significant to the students' learning and progression. The lessons and activities that took place throughout the five week period will be broken down into categories based on the area they concentrate on and will be labeled as follows: 1.) *Phonemic awareness and alphabetic principle*; 2.) *Spelling*; 3.) Blending of phonemes and blending of onset and rime (titled *Blending*); 4.) *Sentence structure*; and 5.) Reading comprehension and reading (titled *Reading*). Finally, I created

a morning routine which reviews the skills necessary to complete tasks in the five categories described above. This activity will be described in a final section entitled *Daily morning activity*.

Phonemic awareness and alphabetic principle. Before beginning on advanced work in phonemic awareness and the alphabetic principle, it is important to ensure that each student can recognize all the letters of the alphabet. While many students may be able to recite the alphabet in order (a, b, c, d, e, f, g, etc.), it does not necessarily mean that these same students can recognize each letter when presented at random or in a word. To review this and work on the students' alphabetic principle, I created each student in the class a set of flashcards that review the letter shapes and letter sounds of the alphabet. Each card was created using a blank index card, but could also be created by using any small sized sheet of paper, with a letter clearly printed on one side (such as "A a," "B b," "C c," etc.) and example words containing the letter sound(s) that are created by the letter shape displayed on the front of the card. For example, for the letter "a," I provided two example words, one for a short vowel sound, such as "apple," and one for a long vowel sound, such as "play." For each example word, I provided a pictorial representation of the word, in order to provide an example of the sound for students who could not read the words. Finally, when writing the example words, I left a blank in the place of the letter that the card represents. For example, for the "g" card, I provided two example words and two pictures as follows: 1.) A picture of a "giraffe," followed by the word printed *__iraffe*; and 2.) a picture of a "gift," followed by the word printed *__ift*. The blanks were provided to allow each student to fill in the appropriate letter, and to learn that the

letter represented on the front of the card makes the sound of the picture(s) provided. When students first received the card, they were given time to work with a partner to fill in the appropriate letters in the appropriate blank. These cards were reviewed daily, either in groups of two or as an entire class. If broken into groups, I would travel from group to group, observing and listening to the students practicing together. If reviewing as an entire class, I would simply hold up the card at the front of the room, and ask a student to raise her or his hand and give me one example of a sound that letter can make and a word with that sound. Most often, students would correctly provide the sound and provide the word that was given on the back of the card as an example, but students also created their own examples. This activity reviewed the skills of alphabet recognition, alphabetic principle, and phonemic awareness.

Once students had mastered the sounds and shapes of the alphabet, I created several lessons to emphasize vowels and vowel sounds. This unit began with the entire class creating a vowel poster to be hung in the room. To make this poster, we first discussed which letters of the alphabet are vowels (a, e, i, o, and u), how each word requires a vowel sound and how "y" can also be used as a vowel. Once this was discussed, we wrote each vowel on the top of the poster, allowing each student to come up and contribute to the poster by writing one of the letters we had discussed. Next, we discussed that vowels, like many letters of the alphabet, have multiple sounds and that these sounds are either "long vowel sounds" (like the /a/ sound in "axe") or "short vowel sounds" (like the /a/ sound in "April"). Once students understood the difference, we discussed examples for each of the five main vowels, providing two example words (one short and one long) for each letter. Finally, we discussed that "y" is often used in place

of a more traditional vowel sound, like in the word "fly," or often accompanies a vowel sound, such as in the word "day." The final product of the "vowel sounds" poster resembled this example:

Vowel Sounds

Aa Ee Ii Oo Uu Yy

	Short	Long
A	<u>A</u> pple	<u>A</u> pril
E	J <u>e</u> t	F <u>ee</u> t
I	<u>I</u> gloo	K <u>i</u> te
0	C <u>o</u> w	B <u>o</u> at
U	С <u>и</u> р	Bl <u>u</u> e

Y Day Fly Bunny

After reviewing short and long vowel sounds, I designed four separate worksheets, each done on separate days, to review vowel sounds. The four worksheets completed were *short vowel sounds*, *long vowel sounds*, and *vowel sounds - a review of short and long vowel sounds*, assigned in that order (see Appendix). On each of these worksheets, students completed exercises that emphasized phonemic awareness and the various vowel sounds, recognizing words with the different vowel sounds, placing words with various vowel sounds into context and using words with the vowel sounds in full sentences (Sadlier Phonics Teacher's Manual). In the first section of each worksheet, there was a series of words with the vowel sounds missing and students were required to

fill in the blank with the appropriate vowel sound. Students would decipher the sound by hearing the word read out lout. For example, for the short vowel sounds worksheet, the word "flag" would appear as "fl_g," and would then be read by the teacher as "flag." Students would then fill in the blank with the appropriate letter, which in the case of this example is "a." The second section of each worksheet contained pictures with the appropriate word that is represented by the picture directly below it. For example, a picture of a "dog" would appear above "d_g," and students would be required to fill in the letter they felt represented the vowel sound necessary to complete the word represented by the picture. In these two sections, students are working on their ability to distinguish different vowel sounds and their phonemic awareness of vowel sounds in words.

The third section of the worksheets required students to read a sentence with one word missing, and are asked to fill in the blank with either a short vowel sound, long vowel sound or y vowel sound, as directed. Each sentence is followed by three options of words that have varying vowel sounds, and that do not necessarily fit in the blank. A sentence from this section would appear as follows:

If students were asked to choose the word that fits best with a long vowel sound, they would choose "bite." If students were asked to choose the word that fits best with the short vowel sound, they would choose "chunk." This section of the worksheets helps students to practice recognizing different vowel sounds in words and also using different vowel sounds in context.

Finally, students are directed to write three sentences on the back of their worksheets using a word they learned from the worksheet. In these exercises, I help them create sentences orally, and then to write them individually. This final section helps students to place words with certain vowel sounds into context and practice sentence structure and writing skills. After each worksheet is completed, the entire class goes over the answers as a group and each student shares one sentence they composed on the back of their worksheet. This identical format and procedure was used for each worksheet given to the students.

To work on phonemic awareness, I usually played one of three games that allow for students to practice placing appropriate sounds into words. The first game is a game similar to "pictionary," or a game in which a leader draws a picture on a board, in this case the class blackboard, and other members in the game must decipher what the person has drawn on the board. For the phonemic awareness game, I would draw a picture on the board, such as a pot, a flower, a cup, etc. and then write the word that best describes the drawing with missing letter(s). For example, if I were to draw a picture of a cooking pot, I would write the word "pot" as follows: $p_{__t}t$. Students would then say what the object was, and would then raise their hand to explain which letter they felt fit best in the blank. In the case of the example above, students would pick the letter "o." When writing the words, it is important to vary which letter is missing; either the beginning, middle, or end sounds, so that students can practice their awareness of phonemes in different sections of different words.

The second game, which we played as a class almost daily, was a game similar to the one described above, but with no pictures. In this game, I would simply write a

desired word on the board with one or more letters missing and say the word orally to the class. From the oral pronunciation, students would choose what letter they felt belonged in the blank. If the word "plane" was written on the board as __lane, students would then replace the blank with "p" after I had said the word out loud. This game was used most often because it is important for students to understand the connection between orally produced sounds and written language.

Once students had advanced their skills, I had students play a more advanced game that works on phonemic awareness. This final game required the class to be split into two teams, depending on the day and how many students were there, or to play as individuals, if their were few people attending school that day. To start the game, we would first discuss a certain sound, such as p/p, as a group. Then, I would direct one team (either a group or an individual) to give me an example of a word that contains that sound in the beginning, middle, or end of the word. For example, if we were discussing p/p, I would call on one team and ask them to give me a word with p in the middle of the word, such as "puppy." The team, or individual, would then have time to think and come up with an answer, but if students did not know the answer, I would simply call on the other team or another individual for an answer. If the team or individual is able to produce a correct example, I then ask them to write the word they have come up with. This way, they not only orally produce the sound, but practice how to make the sounds they produce into words. If students were able to develop a correct example, their team or the individual would received one point. At the end, points are calculated and one team or student is labeled the winner.

One skill that is very important to enhancing phonemic awareness is the ability to recognize rhyming words (Sadlier Phonics Teacher's Manual). To help students to progress in this skill, I discussed the concept of rhyming and rhyming words early in the research period. In this discussion, I explained to students what a rhyming word is, two words that have identical ending sounds, and that if words rhyme it is likely that they will be spelled similarly, if not the same. For example, early in the research period we discussed the words "bank" and "tank." After discussing these two rhyming words, we came up with other rhyming examples as a class, by asking each individual student to think of an example and then writing these examples on the board. Finally, as a group we wrote a rhyming story using the examples we had talked about and written on the board. Students orally produced sentences, and I in turn wrote them on the board. Together we read the newly formed story, or "rap" as we called it in class. Also, I emphasized rhyming words each week by having four or five spelling words per week rhyme, as will be discussed in the *Spelling* section.

Students also learned about rhyming words through reading and listening to Dr. Seuss books, which were available through the school. Dr. Seuss books are often helpful because they contain rhyming words and nonsense words that help to emphasize phonemic principles. One afternoon, we read *Green Eggs and Ham* and pointed out rhyming words that appeared throughout the story.

Finally, students with advancing phonemic awareness and alphabetic principle must also know the sounds of frequently appearing two or three letter combinations.

These two letter combinations are two alphabetic letters that create one sound, like *th*, *sh*, *ed*, *ing*, *ch*, and *qu*. To learn these sounds, I first reviewed the concept of frequently

appearing letter combinations, and familiarized the students with the combinations we were to review. Next, I instructed each student in making a "letter combinations cheat sheet," which contained the letter combinations listed above, and example words for each sound. Each student received a small piece of paper and had access to markers. Along the left margin, students vertically printed each letter combination. Then, next to each combination, the student wrote an example word. For example, for /th/, students wrote the words "this" and "the." Example words were created and discussed as a group. Two example words were written for each sound combination. The final product resembled a paper similar to this:

Sounds	Examples
th	This, the
sh	Shop, she
ed	Called, lasted
ing	Walking, going
ch	Church, chop
qu	Quick, quiet

For fun, students were given time to decorate their cheat sheet with markers and crayons.

Spelling. To work on spelling skills, I took the advice of the Sadlier Phonics

Teacher's Manual and assigned weekly spelling tests. The words for these weekly

spelling tests were reviewed and accumulated throughout the week in my class's

"morning routine," which will be described in detail later in the Methods section. Each

morning, students were presented with five new spelling words and were taught how to break the word down into phonemes, how to spell the word and what the word means. Monday through Wednesday I would assign five new words and on Thursday would review all 15 before having a quiz. To teach the students spelling, I would emphasize the use of alphabetic principle and phonemic awareness to allow students to sound out spelling words. When giving actual quizzes, I would say each word, use it in a sentence and then break the word down by phonemes orally. For example, if the word being tested was "walk," I would first simply say the word, then would state a sentence such as "Today I went on a walk to Crossroads Market," and then would finally say the word very slowly, in separate and distinctive sounds: \(\lambda \lambda / \lambda /

Blending. Each day, we would review how to phonologically break down words. If a new word was learned through reading a story, through a group discussion or through a student's composition, we would always break down the word on the chalk board. A word broken into phonemes simply divides the word into separate sounds that are represented by letters, like in the word "dog," there is $\frac{d}{o} \frac{d}{o} \frac{d}{g}$. When a word is broken down in this fashion, the sounds must be "blended" together in order to orally form the complete word. By breaking down each new word, students were also able to work on their skills in blending phonemes, a key aspect in learning to read. To emphasize this

skill, I also played games similar to the phonemic awareness games described above. One game we often played involved learning similar sounding words or rhyming words such as sit, fit, bit, and kit, and learning to blend these words using separate phonemes. Each word or group of words would be written down in two separate forms: 1.) As the word would regularly appear, such as "sit;" and 2.) As the word appears broken down by individual sounds, like /s//i//t/. To help students understand the concept of blending, I would orally recite each separate sound, "/s/, /i/, /t/," then would create a visual representation of blending by gradually underlining the word on board as I said the separate sounds (Sadlier Phonics Teacher's Manual). Ideally, students would see that I was simply meshing the separate sounds together as I underlined the word visually on the board. When blending words on their own, I would ask students to also use this underlining method.

Once students have more advanced blending skills, it is possible to move on to blending onset and rime. For this, I used an activity designed by Wanzek and Haager (2003) in which students learn frequently appearing rimes and use flashcards to practice blending these rimes with different onsets. The flashcards used were created by writing rimes on blank index cards. The rimes used were –at, -it, -op, -low, -ake, and –ank, but other word endings are also possible. Each student received at set of word endings, or one card with each of the endings listed above, along with small pieces of paper with a consonant (alphabetic letter that is not a vowel) or a commonly appearing letter grouping such as sh, th, ch, or qu. Students would then use the two separate stacks of cards to make onset and rime combinations and practice blending. If a student was using the "-at' card, she or he would then place various letters provided in front of the card, like /s/-at,

forming the word "sat." Students were asked to do this with partners, or as a class. In partners, students would review with each other, with one student leading and the other student participating, and then switching. The leading student was used to present the rime cards, and then place an onset card in front of the rime card. Together, the students would blend the words the leader formed. As a class, I would direct students to use certain rime cards, for example "-it." Once students had successfully found the proper ending card, we would review the end sound as a class, asking each student to individually read the rime card, then reciting it several times as a class. Then I asked: "which letter would you use to make "fit?" Students would then be required to find their /f/ card and raise their hand once they had completed the assignment. We would then review the answer as a class. This same procedure was used for each onset and rime combination.

Sentence structure. To work on sentence structure, my main approach was simply encouraging students to form sentences on their own, both in oral and written form.

Activities used in class to emphasize this skill were: 1.) group sentence writing; 2.) group story writing; 3.) individual sentence writing; and 4.) group discussions. In group sentence writing activities, students are provided with a series of words printed on index cards. In the word packets, there are words that can be used to form simple sentences. Students are broken into groups and given a set of cards. Students are then given time to form a full sentence with the cards provided. In one packet, for example, students were provided with the words: I, Laura, she, he, the, a, is, was, and, going, shop, to, walked,

and *with*. With these words, students were expected to form a sentence similar to these examples:

I was going to the shop and walked with Laura.

Or

I walked to the shop.

Before beginning the activity, I reviewed each word, how to break it down into phonemes and the definition. As students worked in their groups, I walked from group to group ensuring that students were on the correct path to forming a full sentence.

For group story writing activities, I lead the class in creating short stories on the chalkboard. First, we discussed what the story was going to be about by deciding on a very basic subject as a group. For example, students created stories about a dog, a day at school, walking to get bread, and KFC. Once a subject was agreed upon, students were instructed to each provide a sentence, one after another, eventually creating a five sentence story. If the first student were to say "On my walk to school I saw a dog..." the next student is expected to create a sentence that is about a dog and continues the story. A completed story may resemble the following series of sentences:

On my walk to school I saw a dog.

The dog was very fat.

The dog started to walk with me to school.

I named the dog Shtipit.

Now I see the dog everyday.

Students were instructed to give their example sentences orally and I in turn wrote them on the board. After completing the story, students took turns reading the sentences created.

A more advanced skill in sentence structure is individual sentence writing. For these activities, I often asked students to simply use a spelling word, or a word that was reviewed in class in a sentence. This instruction occurred daily. For example, the class learned the word "tank," and was asked to place it into a sentence. Students are expected to produce a sentence similar to: "I went to the water tank." In these activities, I asked students, first, to tell me their sentence orally. Then I worked through writing each word with each student who needed assistance. In working through each sentence, I helped the students to sound out each word by guiding them with the alphabetic principle and blending. Also, students are instructed once weekly to draw a picture and write three sentences about what they have drawn. Finally, every Monday, students were required to write 3 sentences about their weekend. In these activities, I asked students, first, to tell me their sentence orally. Then I worked through writing each word with each student who needed assistance. In working through each sentence, I helped the students to sound out each word by guiding them with the alphabetic principle and blending.

Finally, students built skills in sentence structure by having formal discussions and structured conversations during class. After reading any book in class, I asked students to tell me one thing about the book that they remember, allowing them to form a sentence and work on their language skills. By repeating these activities throughout the weak, I continually worked on the student's oral and written sentence abilities.

Reading. Although most students in the class did not progress to reading individually, I incorporated several activities to work on their reading skills. Each day, I tried to find time to read one story book aloud to the class, but did not always get to complete this task due to time constraints. After reading a story, we would always discuss the context of the story as a class to work on the students' reading comprehension skills. Then, students were instructed to write one sentence about their favorite part of the story or a part that they remember, forcing them to concentrate on the context of the story while reinforcing sentence structure.

To work on individual reading skills, I tried to provide students with one on one attention either during breaks or after school. Because only one student in the class progressed to reading completely on her own, it was difficult to complete activities like this during class. One afternoon, I invited several friends to come to class to work one on one with the students on their reading skills. However, completing tasks like this requires outside help. When working with any student on reading skills, I found it best to be patient and to encourage them to practice. When reading with a student, I would help them to sound out each word using the alphabetic principle, phonemic awareness and blending. If necessary, we would go through letter by letter to complete a story. To ensure that the one student in the class who developed reading skills did not lose these skills, I allowed her to read stories, or parts of stories, out loud to the class once or twice a week.

Daily morning activity. When learning to read, it is important to review basic skills and basic principles. To do this, I designed a daily activity that would review the

five main concepts of the current study's reading program: phonemic awareness and alphabetic principle, spelling, blending, sentence structure and reading. The activity created, or the "morning routine," was done first thing in the morning, everyday. The morning routine included: 1.) writing the date; 2.) writing the five words of the day on the board; 3.) breaking down each word into phonemes and/or into onset and rime; 4.) blending each word once it was broken down; 5.) composing one sentence for each of the five words; and 6.) reading the sentences created.

At the start of the day, I would choose a "leader of the day" who would be responsible for writing on the board. The leader would begin by writing the date at the top of the chalk board, such as April 20, 20006. Next, I would instruct the entire class through spelling the five spelling words of the day. To do this, we would sound out each word as a group and the class leader would in turn write the words on the board. After each word was written on the board, I would direct the class in breaking each word into phonemic sounds or into onset and rime combination, depending on the word. If there were rhyming words in the daily words, these words would be written as onset and rime, such as "b-ank" and "t-ank." Otherwise, words would be written on the board as follows: if the word is "shop" it would be written as $\frac{sh}{o}$. Again, the leader of the day would write these examples as the class developed them as a group. Once each word was broken down, the entire class would review blending the sounds and reading the words. Finally, students were instructed to orally compose sentences using the spelling words. To do this, I would call on an individual student and ask them to provide a sentence using a word from the board. A sentence was created for each word and written on the board

by the leader of the day. Once each sentence was complete, I would call on a student who had not composed the sentence to read it aloud to the class.

Measures

Findings were assessed based on observations in classroom activities, documented student progress through evaluation of the work produced by each student throughout the 15 day period, and a comparison of beginning and final results on the *Comprehensive Test of Phonological Processing* (Foorman et. al 2003). Observational notes were taken daily and recorded in a journal. Notes were taken on activities completed, student reactions, student behavior, student progress and any other events that occurred during the day that were relevant to the current study.

The Comprehensive Test of Phonological Processing was administered at two separate points throughout the research period, once on the second day of class and once on the final day of class. This was done to test each student's ability in phonological processes before the start of the research period and then after the completion of the five week reading program. When first administering the test, I was forced to adapt the test by making changes and dropping certain sections due to the level of the participants of this study. The original test contains seven separate sections that test phonological awareness and a section that requires the student being tested to recite letter sounds of letters shown on flashcards. For the purposes of this study, only four of the original sections were used:

1. Blending onset and rime. In this section students were shown 15 words broken down by onset and rime. The first five words are practice,

and the following ten are real test questions. An example of this is: *m*-ouse.

- 2. Blending phonemes. In this section students were shown 15 words broken into separate phonemes. Again, the first five were practice and the following ten were actual test questions. An example from this section is: $\frac{d}{o} \frac{g}{g}$.
- 3. First sound comparison. In this section, students were required to distinguish beginning sounds in words. Students were provided with one example word, followed by three options, which were also words. The example word would establish the beginning sound, and then students would choose the same sound from the three options provided. An exercise from this section would appear as follows;

sorry

start back rewind

The correct answer in this case would be "start." There were 15 total exercises in this section, five practice and ten real.

4. *Sound categorization*. Here, students were required to recognize rhyming words in a group. Students were given a set of four words, three of which were rhyming words. Students were then required to point out the non-rhyming word. For example:

mop hop cow shop

In this case students would choose the word "cow." Again, there were five practice exercises and ten real exercises, making a total of 15.

A final section of the exam required students to read flashcards and recognize letter sounds. For this section, students were shown each of the letters of the alphabet on blank index cards in no particular order. On each card, the letter would appear in both capital form and lower case form, such as "A a." On the first examination day, students were simply tested on their ability to recognize the letters of alphabet, for none of them were familiar with letter sounds. On the final testing day, students were tested on letter recognition and letter sounds. For example, if a student was shown a card with "B b," they were required to say that the letter was "b" and that the sound it made was /b/. All aspects of the test were administered individually.

Scores for the exam were compiled based on the number correct out of forty, for the first four sections. For the alphabetic principle section, students were assessed on their ability to recognize the alphabet, with a number correct out of 26. On the second test date, students were also assessed on the number of correct letter sounds out of 26. Scores were added and simply compared to monitor progress.

Results

Project results were compiled using observational notes and the results of the two testing periods. For the privacy of the students, pseudonyms were given to each child. The names used in this paper are Sally, Tyrone, Mark, Tula and Peter. The progress and test results of each student are discussed below.

Observations

Detailed notes were kept in order to help properly assess the progress of each student. Observations were broken down into the following categories: 1.) *Phonemic*

awareness and alphabetic principle; 2.) Spelling; 3.) Blending of phonemes and blending of onset and rime (titled *Blending*); 4.) Sentence structure; 5.) Difficulty with the use of English in the school and the use of traditional Jamaican Patwa in the home (titled *Language difficulties*); 6.) Disruptive behavior; 7.) Student's reactions to lesson plans and planned activities (titled *Student responses*) and 8.) The use of memorization and guessing and the tendency to rely simply on context (titled *Bad habits*). The first four categories (1–4) were used to monitor the progress of students in several of the main objectives for teaching in phonemic awareness in a classroom setting. The latter four categories (5-8) were used to observe the difficulties in the classroom and other obstacles found during research. A final category of observation was used to record my difficulties and personal issues from a teacher's standpoint. When implementing a research design in a classroom setting, it is important to also consider the reactions and progress from the perspective of the educator. This final section is titled *Challenges in teaching*.

Phonemic Awareness and alphabetic principle. The majority of each school day consisted of activities that helped to improve the students' phonemic awareness and knowledge of the alphabetic principle. These activities included simply reviewing letter sounds, completing worksheets, breaking down words for spelling or reading, and playing games concentrated in phonemic awareness (see Methods section). For these activities, students are expected to be able to orally recite the sound(s) of each alphabetic letter, recognize where a letter belongs in a word, break down words into separate letter sounds, identify and orally recite frequent letter groupings into sounds (such as /th/; /ing/;

and /ed/), and be able to add and drop appropriate letter sounds from words (Foorman et al. 2003; Sadlier Phonics Teachers Manual 2001).

Upon entering the study the five students in the class had little to no phonemic awareness and did not understand the alphabetic principle. If a set of flashcards were used to test the student's ability to recognize letters of the alphabet and their sounds, many of the students were not able to complete the task correctly. Often, students had memorized the order of the alphabet, but could not recognize all 26 letters if they were presented out of order or at random.

Each day time was spent working on alphabet recognition. After several days, one student, Sally, could recognize each letter using flash cards or in words found on the board and in books. Three of the other students, Peter, Tyrone, and Tula began to improve in the first seven days, but an eight day spring break had a very negative effect on their progress. Prior to the break, these three students were all performing at similar levels and were able to recognize about 85% of the alphabet (or 22 out of 26 letters). Students often had trouble with the same letters, including "h", "g", "j", and "q," but were not consistent with their performance. The fifth student in the class, Mark, had a much harder time progressing in alphabet recognition. Mark has apparent emotional issues, and was not willing to trust or respect the researcher. He was also absent three of the first seven days of research. Because of this, Mark was developing at a much slower rate, only recognizing about 60-70% of the alphabet. After the break, I continued to practice this, but found that two of the five students were able to quickly regain their skills. Sally had absolutely no trouble and was still reciting 100% of the alphabet. Mark and Peter were continually absent, both before the break and immediately following the

break, and therefore their skills fell much further behind the other three students in the class.

One of the most important skills in learning to read is understanding the alphabetic principle. If students are able to rapidly identify and orally produce the sounds of alphabetic letters, they increase their ability to sound out individual words and therefore to read (Foorman et al. 2003). When the study began, none of the five students were able to identify the sounds of all 26 letters, and most students knew only half. For Sally, she was able to learn this skill quickly, and excelled in both identifying letter sounds and sounding out full words. In one instance, Sally was sounding out the word "sugar" and pronounced it /s/-ugar (with the s producing a sound like in "slip"), not /sh/-ugar, demonstrating that she understands the concept of alphabetic principle, which would justify her pronouncing the word incorrectly. I explained to her that in this case, the "s" makes a /sh/ (as in ship) sound, to pronounce "sugar." She quickly understood, and has not had trouble with the word since that instance. Her ability to sound out words individually, like /s/-/u/-/g/-/a/-/r/, and recognize the word happened very quickly. Before the spring break, Sally was the only student able to complete this task.

The other four students progressed at very different speeds than Sally. Tyrone, for example, has gained a much clearer understanding of alphabetic principle. At the start of the fifteen day period, Tyrone was not able to break down words into separate phonemes, nor recite the sounds of individual letters on flash cards or in words. He knew many of the sounds, but not consistently. Like Sally, he rapidly increased his ability to recognize the sounds of different letters on flash cards, but was not able to break apart words into separate sounds as quickly. Until the seventh or eighth day of the study,

Tyrone still struggled with phonemic awareness and the alphabetic principle. By the second full week of the program, Tyrone was able to break down words and identify most sounds of the alphabet, but still had trouble with the multiple vowel sounds, the letter "h", and combination letter sounds such as /ing/and /th/. Tyrone had trouble progressing due to his tendency to act up in class, be easily distracted, and rely on memorization and other bad habits he had used in the past, as will be discussed later in the report. However, Tyrone is often driven to stay after school for help. On six separate afternoons, Tyrone stayed after school to work on his ability to recognize letter sounds, this extra help allowed him to progress much faster.

Tula had severe trouble with the alphabetic principle. At the start of the program, she was at one of the lower levels of the five students. In general, Tula has an extremely hard time understanding that spoken language and orally produced sounds can be represented by letters, and vise versa. Without the ability to grasp that concept, it is extremely hard for a student to progress in the alphabetic principle. Often, if you ask Tula to recite the sound of a letter, she guesses without any clear thought process (a problem that will be discussed later in the report). For example, if asked what letter makes the sound /g/ (as in "gift") she might randomly guess "c", but when asked what sound a "c" makes, she can properly recite back /c/. Over the time of observation, Tula has continued to display this misunderstanding of the concept, but is slowly getting better. The problem usually occurs with similar letters such as "g", "q", and "h." Tula's main problem is her inability to retain information. Due to her level, Tula often received outside attention, either during lunch or after school, and would continually review letter sounds, but could not absorb the information. For example, one morning it was Tula's

turn to read a sentence from the board and she was not able to remember a word that was reviewed four or five times before. Tula and I would read through the sentence, each time breaking down the individual words into sounds, working on blending each sound into words, and then reading the full sentence. Together Tula and I went through the sentence five times, and each time Tula would not complete the same words. Each of the five times, I emphasized the word she was having trouble with, repeating the sound break down and the full blended word several times, but Tula was still unable to remember the information that was just covered.

Both Mark and Peter are difficult to report on due to attendance issues. By the end of the program, Peter had increased his knowledge in the alphabetic principle, and more specifically his knowledge of short versus long vowel sounds. When completing a vowel sound review sheet (see methods section), Peter was able to participate and provide accurate answers for each question. On days when he does attend, Peter does very well and is eager to learn. Mark, while he attended more days than Peter, has had similar trouble making any progress. Mark's problems were mainly due to behavioral issues. When both Mark and Peter are in class they show tremendous potential.

Due to the level of the students entering the research program, it was hard to develop skills of phonemic awareness. In order to properly understand where sounds belong in words, how to drop and add sounds, how rhyming words work and how to identify a missing sound in a word, students must know the alphabetic principle. However, this concept is extremely important for learning to read and therefore the activities were altered to fit each student. For Sally, completing tasks that concentrate on phonemic awareness was not difficult. For the other four students in the class, I would

simply provide them with the sound that was missing, and ask them what letter made that sound. If the exercise was playing phonemic awareness games on the board (see Methods section), I would write the word on the board, for example pl__ne, and then read the entire word out loud, like "plane," then separate the word into sounds, like /p/l/a/n/e/, and finally, simply emphasize the sound that the students were to fill in, like /a/, and ask the students, "which letter makes the sound /a/?" In these exercises, Sally would not need this kind of guidance, because of this I asked her to write her answers down, or to whisper the answer into my ear, in order to give the other students a chance. Often, it would take the other four students much longer to get the answer.

Most answers were provided by Tyrone, who was progressing in the alphabetic principle, but was not able to sound out the full word on his own, like Sally. Tyrone also began to create his own tricks to help remember certain letter sounds. For example, when completing short vowel sound activities, Tyrone created a trick to remember the sound of short "u." When asked which letter made the sound /u/ (such as the "u" sound in "cup"), Tyrone would repeat to himself: "/u/, up, u!" By creating tricks like this, Tyrone showed that he was beginning to understand that sounds are represented by letters and that these sounds are found in different words in different places, or the concept of phonemic awareness.

Tula had trouble with these exercises, would often become visibly frustrated, place her head on the desk and not participate. Peter and Mark had more trouble with these activities due to their absences from class. In order to ensure the participation of each student, I would not let one student dominate the answering. However, if students know the answer they are very excited and anxious to display their knowledge, so

allowing them to whisper the answer was very effective. In the case of activities where the entire group participated, it was important to call on specific students each time for an answer. When given positive reinforcement, Tula became much more encouraged and would then try to answer more phonemic awareness exercises.

When completing phonics worksheets (see Methods section and Appendix), students did very well. Again, for orally produced sounds and words, such as the activity described above, many students required for each exercise to be broken down slowly. However, Sally was able to complete each phonics worksheet without additional help, including reading the directions aloud to the entire class. In sections where pictures are provided and words are provided, students do much better. For example, if a picture of a dog is provided with the letters " d_g " beside it, students are much more likely to come up with the correct answer: "o" or lo/l, than if the teacher were to say orally "dog" and provide the letters " l_g ". It was difficult because students had trouble understanding the connection between orally produced sounds and written representations.

Another important aspect of phonemic awareness is knowledge of rhyming words. If students are able to recognize words that rhyme, they are then able to understand that certain letter combinations make letter sounds. For example, if students learn that "right" is spelled *r-ight*, then they will more easily learn to spell words such as "tight," "sight," and "light." The five students in this research program did very well with the concept of rhyming words. Both in activities of reading rhyming words, such as Dr. Seuss books and naming rhyming words as a group (see Methods section). Rhyming was also used regularly in daily spelling words. In one instance, Tyrone was spelling the words, "bank" and "tank", which were explained as rhyming words. Although he spelled

them wrong, he spelled them both the same: "bakans" and "takans," displaying that he understood the concept, but was still learning proper alphabetic principle.

Spelling. To monitor the students' spelling skills, the class was given five daily spelling words and then a test on every fourth day, making each spelling test 15 words (see Methods section). In the case of Peter and Mark, students were never present for spelling tests, and rarely present for daily spelling words, and therefore their progress has not been monitored. Sally, Tyrone and Tula were present for all spelling tests, reviews and daily word exercises and all showed significant progress. In Sally's case, she was quickly able to understand that if words could be broken down into sounds, she could break them down to spell them. Because of this, she did not need the step-by-step assistance provided for Tyrone and Tula, as explained in the Methods section of this paper.

Four days into the program, on the first spelling test, Sally was able to sound out nearly every word on her own, receiving a 13/15. Sally had trouble with the words "talking" and "walking," but was able to fix them with assistance from the teacher. In both words, Sally simply switched the beginning two letters (*t* and *a*; and *w* and *a*) to produce "atlking" and "awlking." This is something that Sally regularly does and could be a possible sign of dyslexia. Sally also shows signs of this when writing numbers, for example writing the number fourteen as "41" and fifteen as "51." In another instance, Sally was spelling the word "tall" out loud and recited "a-t-l-l." In every instance where Sally switches letters, she is unaware of her mistake, and will even read the word correctly that she has written incorrectly. In general, Sally improved drastically in her

spelling skills once she learned to sound out words using alphabetic principle. When looking in Sally's notebook of spelling exercises she completed before entering the program, she was receiving an average of five or eight out of 20. Now, Sally is receiving 14 or 15 out of 15 consistently.

Tyrone also began to show improvement in his spelling skills. Prior to entering the program, Tyrone was also receiving similar scores to Sally on spelling exercises, but is now earning better and better scores each time. For each spelling test, Tyrone had me assist him in breaking down each word into separate sounds, but answers were never given. By the third test, Tyrone was able to accurately produce each word if they were broken down for him, and was able to break them down on his own about 50% of the time. On the third spelling test, Tyrone received a 15/15, but was not able to read most of the words. This shows that Tyrone was beginning to grasp the alphabetic principle, and could therefore produce the letter if a sound was given to him, but could not blend these sounds to read full words.

Of the three students regularly attending class, Tula showed the least progress in spelling skills. The main reason for this is Tula's tendency to rely on memorization, which will be discussed in the *Bad habits* section. However, like Tyrone and Sally, Tula is beginning to understand how to relate sounds produced to letters and has improved her scores each week. Before entering the program, Tula was receiving an average of two or three correct out of 15. Now Tula is able to earn an average of eight or ten correct out of 15. In many cases, Tula also looked for help from other students. In these cases, I noted her dependency on others, but did not discipline her. It is important for students to learn from each other and assistance, as long as it is not answer giving, and help like this will

help Tula in the long term. Tula also had problems with spelling due to her trouble with retention of new information learned.

Blending. In order to read, students must first understand the alphabetic principle, be aware of phonemes within words and then be able to blend these sounds into full words. The action of blending phonemes into words is called blending. Also, a key aspect of blending is being able to recognize words that have similar endings, or rime. This action is called blending onset and rime. For example, when learning the words "glow" and "slow" a student must understand that the difference between these two words is the onset, or in this case the first letter (like *g-low* and *s-low*). To work on this skill, students were often given spelling words that had identical rime and changing onset. Also, students were instructed to break down every word provided, either in daily spelling words, or when reading sentences or words as a group, into separate sounds and blend the sounds together to create a full word (see Methods section).

Sally was able to understand this concept very quickly. Each morning, students go over spelling words, and learn to break words down by letter and sound (see Methods). After three or four days of this activity, Sally had learned to blend sounds when they are provided by the teacher. For example, if the word is "glow," I would say the word like "/g/-/l/-/o/-/w/," and then Sally would say: "glow! glow miss!" Once she had mastered that skill, and learned the sound of each letter in the alphabet, Sally was able to break down words on her own, recite the sounds she had broken the word into and then blend the sounds together to create a full word. When working on blending onset and rime, Sally was the first student in the class to gain an understanding and progressed

very quickly. Within ten days of beginning the research period, Sally was able to read entire books with some help. At the end of the fifteen days, she is reading through entire children's books, and often the Bible without guidance.

Tyrone began to understand the concept of blending in the last four days of the program. For Tyrone, progress was slowed due to lack of knowledge in the alphabetic principle, however, once he obtained that knowledge he quickly learned to break down words. Once the words were broken down, Tyrone was not able to blend them together. If words are broken down for him and recited orally, Tyrone is still not able to blend the sounds. On several occasions, I would spend time working on Tyrone's ability to blend onset and rime after school. Tyrone enjoyed staying after school and was enthusiastic about receiving one-on-one attention. On each of these occasions, Tyrone and I would stand together at the board and write words that shared endings, for example: sat, fat, mat, rat, cat or mop, shop, pop, etc. (see methods section). In the beginning of the research period, Tyrone was not able to understand the blending of sounds, even if I provided him with the sounds. For example, if I would say the word "mop" like /m/-/op/, he would simply continually repeat /m/-/op/, just as I had said it. I would then explain that all he must do is say the two sounds faster and "squished together," but he could not understand the concept. By the middle of the program, Tyrone was able to say some whole words once given to him by me, as described above. At the end of the fifteen day period, Tyrone is able to blend three letter onset and rime combinations, some four letter onset and rime combinations and can often blend words broken down by phonemes. He is able to do all of this without my help, but is inconsistent.

For Tula, Peter and Mark, blending words and blending onset and rime has not developed. Tula struggled with the alphabetic principle and was not able to break down many words on her own. However, at the end of the program Tula is able to recite a small number of words if I orally and visually break them down. Many of these words are words that the class frequently reviewed or are common words such as the, was, is, for, etc. Tula has a tendency to rely on memory, which is why she is only able to sound out words that appear frequently in her learning. On the final two days of the research period, Tula was beginning to sound out three letter onset and rime combinations on her own. However, her accuracy is inconsistent. Peter and Mark were not able to excel in this skill due to lack of knowledge in the alphabetic principle, attendance issues and behavioral issues.

Sentence structure. Each day the students worked on their oral and written sentence structure (see Methods section). When beginning research, students would have trouble forming coherent sentences, even orally, when asked to do so. However, students are able to develop clear sentences in conversational speech. Also, none of the five students were able to write a clear sentence without guidance from a teacher letter by letter.

In the case of all five students, their ability to read and to sound out words was proportional to their ability to form a sentence. Sally, the student who was most successful in both of these tasks consistently provided sentences that were clear, coherent and more complex than the other four students. Four days into the research period, Sally was showing progress in her ability to orally form sentences, which were then written on

the board (see Methods section). As Sally learned to sound out words in her reading, she also learned that she can write sentences using the same skill. By the end of the program, Sally was able to write complete sentences without assistance.

In the cases of Tyrone, Tula, Peter and Mark, written sentence structure was a difficult concept to understand. For example, when students were working on writing their own sentences, I would first ask them to say what they wanted to write and once they had formed a complete oral sentence, I helped them to write it (see Methods section). Tula has trouble with sentence structure, and specifically has trouble understanding the connection between spoken language and written sentences. If asked to say a sentence, Tula would often provide simple, but complete oral sentences. However, when she would attempt to write these sentences, she did not write what she had said. For example, in one activity students were playing the word "shop" into a sentence. Tula said orally, "I want to go to the shop," but wrote "I am go a shop," showing that she could not connect her spoken sentence to words written on paper. At the end of the program, Tula is still not able to write a complete sentence without assistance from me on each word.

Tyrone made progress in sentence structure, but is still inconsistent with his ability to write a complete sentence on his own. Peter and Mark are both hard to report on, due to absences and behavioral issues, respectively. All five students improved their ability to form a sentence orally, changing from inconsistent ability to form complete sentences with example words to all five students orally producing complete sentences with varying complexity.

Language difficulties. One major problem observed in research was the difficult transition from Patwa, or traditional Jamaican dialect, to English. These problems were found in students' ability to form sentences, both written and oral, and their ability to pronounce certain letters. For sentence structure, this task is difficult due to most students speaking strictly Patwa in the home and in conversations with each other and other members of the Operation Restoration School community. Because of this, students have a very hard time speaking for extended period of times in English, and therefore have extreme trouble learning to read and write English sentences. Also, one characteristic of Patwa is dropping the letter "h" from the pronunciation of words. For example, when pronouncing the word "hat," students will clearly say "at." It was very difficult to teach students the phonemic sound that h produces and even more difficult to teach them to sound out or break down words that contain /h/. Also, traditional Patwa does not contain the letter combination /th/, but instead replaces the sound with /d/. If the sentence "I want to go with them," were said in Patwa, it would be pronounced "Mi want to go wit dem." By the end of the program, students were beginning to recognize /h/ in written words, especially Sally who had no trouble, but were still having difficulty with the concept of /th/. This disconnect between spoken language in the students' lives and the language they are attempting to learn to read and write created many problems in their ability to progress and succeed.

Disruptive behavior. Throughout the research period, I spent a significant amount of class time disciplining students and keeping the classroom under control. Class was interrupted an average of once every 10 minutes by disruptive behavior from one student,

two students, or almost the entire class all at once. Disruptive behavior can be defined as any action committed by a student that causes the teacher to stop instruction of the class to reengage the disruptive student(s). The actions that most often caused interruptions were: 1.) Violent actions against another student including hitting, poking, stabbing (most often with pencil), pushing, tripping and choking, at least twice a week actions would cause large fights between two or three students in the class; 2.) Verbally harassing and/or threatening other student(s) in the class, which often escaladed into physical violence; 3.) Wandering around the classroom during instruction; 4.) Wandering outside of the classroom during instruction; 5.) Refusal to complete assignments; and 6.)

Becoming distracted by puzzles, games, books and other objects in the room. Each student in the class was responsible for disrupting class on several occasions, and some students several times a day.

For students who most often caused disruptions, there was a direct negative impact on their learning. For example, Sally, prior to entering this study was extremely disruptive. For the first two weeks of the program, Sally concentrated on what she was learning, did her best to ignore the other students in the class if they were disruptive and therefore progressed extremely fast. However, towards the end of the program, Sally began to display many of her old habits, including picking fights with other students, wandering around the classroom and wandering outside of the classroom. Almost immediately, a drop was seen in her progress and ability.

In the cases of Tyrone and Mark, disruptive behavior continually causes problems in their ability to learn. For Tyrone, he was easily distracted and therefore hard to keep on track. He also could not follow directions, and had to be told what to do nearly five

times, even if it was a simple task of taking out his notebook. Mark's behavior consistently interfered with his ability to progress and learn new material. When he was in school, I had to continually retrieve Mark from outside, as he would frequently wander around the school. When asked to return, Mark would often ignore me and continue to do as he pleased. If in the classroom, Mark often refused to complete assignments. Mark also had issues with starting fights with other students. On each day that Mark was there, I recorded a large increase in verbal and physical fights in the classroom. Because of all these issues, I became very frustrated with Mark and sent him to the office on many occasions, which stopped him from doing many of the tasks that the other students worked through, and therefore stunted his progress.

In each case of disruptive behavior, I would waste class time to fix the problem, get the disruptive student back on track, and finally get the rest of the class on track. Spending so much time disciplining really took away from the amount the children could have learned in this period, including the children that were rarely disruptive. Many times, students would say: "Leave 'm miss, teach da ones dat wan a learn." While the teacher tried to do this as much as possible, it is also important to recognize the significance of this behavior, because it does affect the learning of all students in the class, and especially the students with chronic disruptive tendencies. In almost all instances, the behavior can be interpreted as a lack of self control. An ideal example of this lack of self control displayed by the students was an incident that occurred between Tyrone and Sally. Tyrone, on his way back to his seat after wandering out of class, bumped Sally's desk, causing her to make a mistake in her notebook, which immediately lead to her yelling: "Gwan likkle bwoy!" and hitting him forcefully on the back. Right

away I saw the problem, asked Sally to calm down and explained to Tyrone that there was no need to hit her back, and it was now his job to be the bigger person and end the conflict. Tyrone looked at me and agreed, saying "Yes, miss, I'll be the bigger person." I thanked him, turned back to the board and then almost immediately saw Tyrone pick up his notebook and strike Sally across the face. Although the matter had been discussed, and a solution had been agreed upon, Tyrone still did not have the control to just accept the current situation and move on. Also, Sally showed no signs of self control, hitting Tyrone and screaming for simply bumping her desk was a drastic reaction for the situation. Interactions such as the one described are seen nearly five to ten times a day.

Student responses. In this section, I will discuss which exercises or types of exercises worked well for the students. While all of the exercises can be beneficial to students of their level, students responded differently to different teaching methods. First, the daily morning routine was always well received. Students liked the idea of being a "leader" in class and always enjoyed participating as a group in this activity (see Methods section). However, with other activities that were strictly oral instruction, students did not always react well. This was mainly due to how easily they were distracted without a visual aid at their seat (although there was one on the board). If students were given assignments off of the board and asked to copy them, many students would not complete the assignment without constant reminders from me to beginning copying the work. Students did best when a visual aid was provided, such as worksheets, flashcards, posters, or 'cheat sheets' (see Methods section). By providing the assignment, I was able to combine oral instruction needed to help them learn the sounds of letters and

phonics, but also helped center their attention on the activity being done. Also, time was saved by not having the students copy assignments off of the board. Finally, students found reviewing work very beneficial and often expressed verbally that they wished to review answers of worksheets and other assignments completed. By reviewing the answers as a group, students were able to learn from each other and teach one another the correct way to complete an assignment. Students felt a sense of leadership and increased sense of self esteem by being able to help one another.

Bad Habits. One of the first things I observed was the students' tendency to rely on tricks and memory to obtain answers to assignments. The use of tricks, however, was stunting their ability to learn and progress, but students were completely unaware of their dependency on these habits. The habits or tricks most frequently used were the use of random guessing, the tendency to rely on memorization, and the tendency to guess words in reading based on pictures and/or the context of the sentence.

At the beginning of the program, all five students continually guessed completely random answers when asked to answer a question. For example, if I asked them to attempt to sound out a word such as "sat," often the student would simply look at me, and say a frequently appearing word such as "was" or "is." After a student had guessed, I would ask the student to look at the word and try again, at that point the student would recognize that they know the letter sounds and can decipher the word through phonemes and blending. To try and stop this, I tried to emphasize obtaining answers by thinking, and not guessing. The first student to stop guessing was Sally, who discovered that once she did begin to think through her answers and try, that she was completely capable and

therefore learned that once she learned to sound out one word, she could sound out most words. Because Sally stopped guessing, and applied the knowledge she had in every instance, she progressed further than the other students. The other four students began to guess less frequently towards the end of the program, but still used this habit to try and avoid answering questions. In the past, if students recited an incorrect answer (guess or no guess), they were simply asked to sit down, and another student was asked to try. By guessing with absolutely no thought, students were able to appear as if they were attempting to complete the task, but were simply avoiding learning the answer (Observations of class at ORCS). By the end of the program all five students were making a conscious effort to make an attempt at achieving answers in class, but were still guessing randomly whenever they became frustrated.

The use of memorization was another strategy used frequently by the students. Although it was important for them to remember concepts and to internalize sounds and words, memorization did not allow for students to understand the concepts being taught in class. Memorization was most often used in spelling exercises. For example, on the first spelling test, Tula spelled more than half of the words correctly, but placed the words in wrong places, meaning if the teacher asked for "class" she would put "plane" (see Appendix). While, "plane" was a spelling word, it was not the word that was said for that space, and while she had spelled the word correctly, it was only because she had memorized how to spell words from the list, but did not understand how the word sounded. After completing the test, I explained to Tula that while this is excellent that she had learned to spell the words, she needs to connect written words to sounds. I then asked if she had memorized the words, and she admitted that she had. After that week,

Tula did not continue to rely so heavily on memorization and improved her spelling skills. Also, when students were given letter sound flashcards (see Methods section), all of the students memorized the word examples placed on the back within two days of receiving the cards. However, even having the words memorized, they did not understand the connection or significance of the words and their relationship to the letter on the front of the card. If students were shown a card and asked what sound that letter made, they would often just recite the word(s) on the back of the card. For example if the "C" card were shown, students would often say "car and ice" rather than /c/. After more practice, students began to understand the significance of the words and the sounds that they displayed.

Challenges in Teaching. For the purposes of this section, I will be reporting from a more personal perspective, conveying emotions and frustrations that I felt as a teacher in a different culture and a setting that I was not used to. When entering the research period, I was completely aware that I was challenging the students to work in a fashion that they were not used to, with more group work and oral instruction, but I was not aware how much I was going to be challenging myself. Although the class was small, only five students, with and average of three or four attending daily, the discipline necessary to run class was much harder to deal with than I had expected.

With such a small atmosphere, I expected students to be less distracted, less likely to fight and more likely to be driven to learn. However, because the class was so small, disruptive behavior was obvious when it happened and even more distracting than it would have been in a large class. Also, if students left the room, I went to look for them,

which for some students, especially Mark, became an ongoing game in which students would leave and wait for me to come find them and ask them to return to class. Often, students would look directly at me and keep walking in the opposite direction, which was something I was not used to. At points, I reached levels of frustration that I had never been to and my patience then became easily lost. On many occasions I resorted to yelling, and even grabbing a student's shirt with force, both of which were actions I would have never done prior to entering this study. It felt to me as if the aggression was necessary for students to respond, whenever simply asked to do something in a respectful and reasonable tone, I was ignored, so I felt I was naturally driven to react in the hostile aggressive manor that many students treat each other with.

A more frustrating aspect of the prevalence of disruptive behavior was the amount of time I wasted each day in class. Each day I would arrive with detailed plans, but often could only complete half of the activities I had planned due to disciplinary actions taking up the majority of the school day. If I had not needed to stop class so often, students could have made much more progress, both with their reading skills and their skills of simply being in a classroom environment. After spending time in class with five students from the school, I have learned that many of these students do not handle classroom atmosphere very well, and often do not have the self control to stay on track and ignore the disruptive actions of others. Because of this, each time I disciplined a student, I tried to explain that they are in control of their own behavior and that there is never a need to hit someone if they hit you first, etc. Students always claimed to understand me and agreed that they could ignore their peers in these situations, but none of the five students improved in this area. From a teacher's perspective, it seems as if teaching the students

self control and ways to manage their anger and aggression is equally important to teaching them literary skills.

Test Results

The comparative results of the *Comprehensive Test of Phonological Processing* showed that all five students improved from the reading program. Below is a chart displaying the comparative results of each student for each section of the exam. Results are provided based on the number each student received correct out of the number possible for all six components:

Sally	Before	After
Alphabet recognition	23/26	26/26
Alphabet sound recognition	0/26	26/26
Blending onset and rime	3/10	10/10
Blending phonemes	5/10	10/10
First sound comparison	8/10	10/10
Sound categorization	10/10	10/10

Tyrone	Before	After
Alphabet recognition	21/26	26/26
Alphabet sound recognition	0/26	26/26
Blending onset and rime	2/10	10/10
Blending phonemes	2/10	10/10

First sound comparison	9/10	10/10
Sound categorization	10/10	10/10

Peter	Before	After
Alphabet recognition	17/26	26/26
Alphabet sound recognition	0/26	26/26
Blending onset and rime	1/10	8/10
Blending phonemes	3/10	8/10
First sound comparison	10/10	10/10
Sound categorization	10/10	10/10

Mark	Before	After
Alphabet recognition	14/26	25/26
Alphabet sound recognition	0/26	18/26
Blending onset and rime	0/10	10/10
Blending phonemes	0/10	10/10
First sound comparison	10/10	10/10
Sound categorization	9/10	10/10

Tula	Before	After
Alphabet recognition	18/26	26/26
Alphabet sound recognition	0/26	18/26

Blending onset and rime	0/10	10/10
Blending phonemes	0/10	9/10
First sound comparison	7/10	10/10
Sound categorization	6/10	10/10

Analysis

With the new teaching methods implemented in my class, students were all able to improve and learn skills that will allow them to learn and progress in the future. However, throughout this research period I have seen that even with resilience, persistence and different teaching methods, students at the Operation Restoration Christian School, and students in the surrounding Trench Town community, have many obstacles that hinder their learning. In this particular study, I saw three particular problems that severely affected the learning of my five students: 1.) the prevalence of community violence; 2.) the transition of Patwa to traditional English; and 3.) undiagnosed and therefore untreated learning disabilities.

Gang violence is a large problem for the Trench Town community and has a severe effect on the development of Trench Town's youth. With the prevalence and power of community violence, Trench Town has developed a violent and hostile culture. Children are extremely violent towards each other, constantly hitting, and physically abusing one another. Also, students are verbally abusive, which often leads to more physical violence. Acting principle Debbie Folkes claims that this violence is a part of the community, and often comes from children's homes, or even from physical and

verbal abuse of the children (Interview 3/20/06). Research has shown that such extreme violence in a child's community can have a direct effect on the behavior of the child, especially the behavior of children in school. A study conducted by Schwartz and Gorman (2003) found that disruptive behavior in the classroom was linked to the pervasiveness of community violence. More specifically, high frequencies of community violence were seen to effect children's mood states, causing them to be angry and irritable. This problem in turn has an effect on children's self control and self discipline, which Schwartz and Gorman (2003) define as "self regulation." Lack of self regulation is seen to affect a student's ability to adaptively modulate emotions, attention and behavior despite external changes. Evidence of this could be seen daily in my classroom.

Prior to beginning this study, I had not considered the significant issue of Patwa being spoken in the home, and English being taught in the schools. People in Trench Town, and many other areas of Jamaica, speak almost strictly Patwa, which has different sentence structure, spelling, and pronunciation than traditional English, despite its similarities. With this in mind, it is ridiculous to assume that children can transition fluently and easily into reading and writing traditional English. While I am in support of maintaining Patwa as an important aspect of Jamaican culture, schools must find a way to more easily foster a transition from Patwa to English in a classroom environment.

Finally, in the observations of my five students throughout the five week period, I was easily able to pick out signs of learning difficulties. For example, Sally often switched letters, wrote things backwards, and read words incorrectly because she appeared to be switching the order of the letters in her head, all of which are clear signs of dyslexia (Jong & Leij 2003). Tula also had severe trouble retaining information and

understanding concepts of the alphabetic principle and phonemic awareness, which can be characteristics of a child who has reading disabilities (Wanzek & Haager 2003). Also, many students show signs of ADHD, or Attention Deficit and Hyperactivity Disorder, for they have an extremely hard time concentrating in class. To help these students progress and learn, it is important to teach them with direct intervention for these issues, not ignore the possibility of them being there.

Conclusions/Recommendations

After five weeks, or a total of 15 full school days, of oral instruction and teaching with systematic phonemic awareness all five students showed significant progress. Through my observations, gradual progress can be seen in each student, and in the case of Sally, very rapid progress. By using a systematic, or more structured and planned method of teaching phonics, students were better able to harness their skills and direct their knowledge towards learning to read. These positive results can also be seen in the quantitative results of the before and after testing. In the case of all five students, drastic improvement was seen from one exam to another. By the end of the program, all five students completed 90 - 100% of the test correctly, which is a drastic improvement from none of the five students performing that well on the first testing day. Also, students showed an increase in self esteem and belief in their ability. This could be seen when students were able to work together, help each other to learn, and receive positive reinforcement for making significant progress in such a short amount of time. However, while students were able to make drastic improvements, many important changes can be made to improve the present study.

First, students did much better when they were provided with visual aids. When oral instruction was combined with a visual representation for each student, for example their own worksheet, students were much more engaged and interested in the material. With this, I would recommend that anyone continuing the present study create a "work book," or packet of work sheets and visual exercises to accompany the oral instruction. Having a work book for each student will engage the students more in the material, and allow for the researcher to more easily monitor progress. Also, in teaching students that are learning to read it is possible for the young people to work and develop and very different paces. With a work book, students could progress on an individual basis without causing problems for the teacher or researcher.

It is also important to consider the issues I found in research that are creating obstacles for student learning at the Operation Restoration Christian School. Patwa was shown to be a huge barrier for student progress. If students are speaking a different language in their home environment, with little exposure to traditional English, they are likely to have severe trouble learning to read and write in a language outside of the language they are comfortable with. Because of this, it would be beneficial to develop a curriculum for Jamaican schools that systematically teaches students to transition from Patwa to English. On top of educational interventions, it is important for schools like Operation Restoration to intervene with behavioral issues that interfere with student learning. To do this, I suggest using a counseling approach that teaches students better practices of self regulation and behavioral management. If students can learn to be more in control of themselves, they can gain a better control of their learning and therefore show more significant improvement. Finally, many students who have trouble reading

during adolescence are likely to have learning difficulties in reading. If these problems are ignored, students with these problems will continue to struggle with reading skills and will become less and less likely to progress.

The use of oral instruction and an emphasis on alphabetic principle and phonemic awareness was shown to increase student ability and student confidence in learning.

However, many social obstacles cause severe problems in the education process. If lessons and methods similar to the activities described in this study are used, with more interventions in student behavior and language skills, young people at the Operation Restoration Christian School will develop the skills necessary to become literate and gain access to a high school education and other opportunities that are positive for their development.

References

- Adams, M.J., Treiman, R., & Pressley, M. (1996) Reading, Writing and Literacy. *Handbook of Child Psychology*, Vol. 4.
- de Jong, Peter F. & van der Leij, Aryan (2003). Developmental Changes in the Manifestation of Phonological Deficit in Dyslexic Children Learn to Read a Regular Orthography. *Journal of Educational Psychology*, Vol. 95, 22-40.
- Foorman, Barbara R., Chen, Dung-Tsa, Carlson, Coleen, Moats, Louisa, Francis, David J. & Fletcher, Jack M. (2003). The necessity of the alphabetic principle to phonemic awareness instruction. Reading and writing: An Interdisciplinary Journal, Vol. 16, 289-324.
- Fowler, Dorothy (1998). Balanced Reading Instruction in Practice: Through whole-part-whole instruction, young learners discover the joy of reading. *Educational Leadership*, March edition, 11-12.
- McGuinness, Diane, McGuinness, Carmen & Donohue, John (1995). Phonological Training and the Alphabet Principle: Evidence for reciprocal causality. *Reading Research Quarterly*, Vol. 30, 830-852.
- Morrow, Lesley M. (2001). *Sadlier Phonics Teacher's Manual: Level A*. Sadlier-Oxford; United States of America.
- Porgorzelski, Simone & Kevin Wheldall (2004). The Importance of Phonological Processing Skills for Older Low-Progress Readers. *Educational Psychology in Practice*, Vol. 21, 1-22.
- Schwartz, David & Gorman, Andrea H. (2003). Community Violence Exposure and Children's Academic Functioning. *Journal of Educational Psychology*, Vol. 95, 163-173.
- Wanzek, Jeanne & Haager, Diane (2003). Teaching Word Recognition with Blending and Analogizing: Two Strategies Are Better Than One. *Teaching Exceptional Children*, Vol. 36, 32-38.

Short Vowel Sounds

After hearing the word, fill in the blank with the vowel sound you think fits best.

Fill in the blank with the vowel sound you think fits best.



1. fl__g

2

d___g



dr m

food

Which two short vowel sounds are missing?

Fill in the blank with a word that has a short vowel sound.

1. This morning I saw a _____ frog in my yard.

green little slow

2. I got some _____ at the market.

shoes soap apples

3. Last night I fell off my ______.

bed house car

4. I need some bread from the _____.

store shop school

5. The ____ was hot at the beach.

Long Vowel Sounds

After hearing the word, fill in the blank with the vowel sound you think fits best.

Fill in the blank with the vowel sound you think fits best.

2.

2.

3.



Which two long vowel sounds are missing?

Fill in the blank with a word that has a long vowel sound.

1. I took a ____ of Jerome's pattie.

2. My neighbor sprayed me with a _____.

3. Yesterday I went swimming in the ______bath puddle bay

Vowel Sounds → Review

After hearing the word, fill in the blank with the vowel sound you think fits best.

Fill in the blank with the vowel sound you think fits best.



<u>g_</u>at











Circle all the words with short vowel sounds.

- 1. sale
- 2. shop
- 3. jet
- 4. cow
- 5. dig

- 6. glue
- 7. rat
- 8. April
- 9. loop
- 10. peel

- 11. bank
- 12. and
- 13. high
- 14. rose
- 15. up