

Rowan University

Rowan Digital Works

Theses and Dissertations

6-23-2005

An investigation of the increase in phonemic awareness in kindergarten students who were exposed to word sort activities

Karen S. Münch
Rowan University

Follow this and additional works at: <https://rdw.rowan.edu/etd>

 Part of the Pre-Elementary, Early Childhood, Kindergarten Teacher Education Commons

Let us know how access to this document benefits you -
share your thoughts on our feedback form.

Recommended Citation

Münch, Karen S., "An investigation of the increase in phonemic awareness in kindergarten students who were exposed to word sort activities" (2005). *Theses and Dissertations*. 1053.
<https://rdw.rowan.edu/etd/1053>

This Thesis is brought to you for free and open access by Rowan Digital Works. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Rowan Digital Works. For more information, please contact LibraryTheses@rowan.edu.

**AN INVESTIGATION OF THE INCREASE IN PHONEMIC
AWARENESS IN KINDERGARTEN STUDENTS WHO
WERE EXPOSED TO WORD SORT ACTIVITIES**

by
Karen S. Münch.

A Thesis

**Submitted in partial fulfillment of the requirements of the
Master of Science in Teaching Degree
of
The Graduate School
at
Rowan University
June 23, 2005**

Approved

Advisor

Date Approved

6/23/05

ABSTRACT

Karen S. Münch

AN INVESTIGATION OF THE INCREASE IN PHONEMIC AWARENESS IN
KINDERGARTEN STUDENTS WHO WERE EXPOSED TO WORD SORT ACTIVITIES
2004/2005

Dr. Randall Robinson
Master of Science in Teaching

The purpose of this study was to determine if word sort activities would help improve the phonemic awareness of kindergarten students. The experimental and control groups consisted of students ranging in a variety of reading abilities. The experimental group received phonics instruction through the use of word sorting activities. The control group had no guidelines for phonics instruction. Any phonics lesson taught in the classroom were done according to the classroom instructors own plans and ideas. Pre-test and post-test scores showed that students that were exposed to word sort activities scored significantly higher on sound recognition tests than other students. Issues concerning phonics instruction in the classroom are discussed.

ACKNOWLEDGEMENTS

This thesis would not be possible without the guidance and support of my thesis advisor, Dr. Randall Robinson. I truly appreciate his dedication in molding me in to the educator that I am today. His wisdom and passion for education has made me want to be better than great. Added thanks to Dr. Rena Alpert, my cooperating teacher, who is the most amazing kindergarten teacher I have ever met. Without her, this study would never have happened considering the energy and unpredictability of kindergarten children.

I also thank five of the most wonderful women I have ever met, Christy, Inez, Erika, Karen, and Theresa. I am so thankful to have gone through the Master's program with all of them. Each have shown me qualities that I can only hope to develop as I continue to grow (remember, I am the baby of the group)! They have all become true friends and I cherish all the long days and nights we spent studying, teaching, and supporting one another.

And finally, I want to thank my family and friends for their unrelenting support. I would not be where I am today if it were not for their unconditional love. To my mother and father, the two most genuine people in the world, for believing in me when I had ceased to believe in myself. I carry their love and strength with me throughout each day.

Table of Contents

	Page
Acknowledgements.....	iii
Table of Contents.....	iv
List of Tables.....	vi
Chapter 1 Scope of Study.....	1
Introduction.....	1
Statement of the Research Problem.....	2
Statement of Hypothesis.....	2
Limitations of the Study.....	3
Definitions of terms.....	3
Chapter 2 Review of Related Literature.....	5
Introduction.....	5
Phonemic Awareness.....	5
Word Sorts.....	7
Chapter 3 Procedure and Design of the Study.....	11
Introduction.....	11
Sample and Subjects.....	11
Procedure.....	12
Description of the Instrument.....	13
Chapter 4 Data Analysis.....	14

Introduction.....	14
Results.....	14
Chapter 5 Summary, Conclusions, and Recommendations.....	17
Introduction.....	17
Summary of the Research Problem.....	17
Summary of the Hypothesis.....	18
Summary of the Procedure.....	18
Summary of the Findings.....	19
Conclusions.....	19
Implications and Recommendations.....	19
References.....	20
Appendix A.....	22
Appendix B.....	24
Appendix C.....	26

List of tables

Table	Page
1: Control Group Pre-test and Post-test Scores.....	15
2: Experimental Group Pre-test and Post-test Scores.....	16

Chapter 1

Scope of the Study

Introduction

Since the *No Child Left Behind Act* was passed, there has been an urgency to have all students become literate by the end of third grade (U.S. Department of Education). Educators must find a way to have their students read fluently while comprehending. To obtain this goal, teachers must start children with beginning phonics instruction. Children need to learn phonics in order to improve their reading ability. Therefore, it is very important for children to begin to understand phonics from the start of their school careers (International Reading Association).

With all the different strategies there are for phonics instruction, it is difficult to know which methods work better than others. It is also difficult to determine which methods are more appropriate for the different grade levels. Teachers could waste months trying different methods of phonics instruction before finding a strategy that reaches the children. By the time the right strategy is found, the children are already behind in reaching the goal of the *No Child Left Behind Act*. Hence, it is very important for an educator to choose the most suitable method for teaching phonics for his or her particular classroom (International Reading Association). The U.S. Department of Education believes that phonics instruction is one of the five essential parts of reading. "Children need to be taught the sounds individual printed letters and groups of letters make. Knowing the relationships between letters and sounds helps children to recognize familiar words accurately and automatically, and 'decode' new words" (U.S. Department of Education, 6).

For effective use of phonics in reading instruction, phonics must be integrated into the curriculum after careful research. Then, for the programs to be used effectively, both teachers and parents must be educated in the proper instruction of phonics (International Reading Association).

Statement of the Research Problem

Not only are there are many different ways to teach phonics, but there are also many important aspects of phonics that need to be taught to beginning readers. The problem is that many educators are not teaching phonics due to time constraints in the classroom. Teachers have many subjects to teach in a limited amount of time. Some teachers are also unable to teach phonics while attempting to meet state standards. Phonics seems to get pushed in to the corner until there is time to address it. When it is addressed, many educators do not know what strategies to use to successfully educate their students in phonemic awareness (Tompkins, 2004).

A word sort allows an educator to choose on what phonetic skill to focus while continuing to use the same educational strategy. If the educator realizes that many of the children understand the sound of a particular letter, then he/she can focus on other letters that need more emphasis. A word sort can allow teachers to adjust to the needs of their students. Educators can teach spelling patterns, root words, rhyming words, and syllables through the use of word sorts (Tompkins, 2004).

Statement of Hypothesis

It was hypothesized that kindergarten students who experienced word sorting lessons would score significantly higher on sound recognition tests than kindergarten students who did not experience word sorting lessons.

Limitations of the study

This study had some limitations. One limitation of the study was the time constraint. The study was only able to be conducted from March to May. Due to the time constraint, the children of the experimental group were not exposed to all the letters on the sound recognition test.

Another limitation was that the study only took place in one school. Within the school, two classes participated in the study. The researcher only had command over one class. The researcher did not teach both groups and could not monitor what the teacher of the control group was teaching to the children.

Although both classes were mixed in ability level, they were not exactly the same. The sound recognition test reflected any phonics taught or not taught by their instructor. Therefore, it is unclear whether or not the children could have scored better on the test had they used word sorting for all of the letters.

Also, because the classes were not identical in ability, it was difficult to determine if one class scored higher than the other based on the treatment.

Definitions of terms

The following terms were defined for clarification of this study:

Phonemic Awareness: the ability to hear and identify individual sounds, or phonemes, in spoken words (U.S. Department of Education)

Phonics: a way of teaching reading and spelling based on learning the phonetic sounds of letters and syllables (Tompkins, 2004)

Sound Recognition Test: a way to assess what letter sounds children know. The test is a list of the alphabet on paper and as someone points to each letter, the child says the sound that the letter makes

Word Sort: a method of teaching phonics through categorizing words by different patterns (Tompkins, 2004)

Chapter 2

Review of related literature

Introduction

There has been an urgency to have all students become literate by the end of third grade (U.S. Department of Education). According to Gail Tompkins (2004), word sorts can aid children in learning phonological aspects of words such as letter sounds, rhyme, and syllables. Therefore, a study was conducted to determine if kindergarten students who experienced word sorting lessons would score significantly higher on sound recognition tests than kindergarten students who did not experience word sorting lessons.

Phonemic Awareness

In the article, "Phonemic Awareness: An Important Early Step in Learning to Read," Roger Sesenbaugh states that Stanovich defines "phonological awareness as the ability to deal explicitly and segmentally with sound units smaller than the syllable." He says there is debate about the definition and how to actually measure one's phonological awareness (Sesenbaugh, 1). "Research clearly shows that a child's level of phonemic awareness at the beginning of first grade is an excellent predictor of that child's success as a reader" (Wisconsin Literacy Education and Reading Network Source, 2). Sesenbaugh describes a study that "found that children with high phonemic awareness outperformed those with low phonemic awareness on all literacy measures" (Sesenbaugh, 3).

In the article, "Phonics: The Right Way and The Wrong Way," Tracy Sherwood states that phonics rules are overwhelming for a student. "The most troubling aspect of

this method is the inability to teach the smooth blending of sounds" (Sherwood ,1). She continues on to say that children tend to learn only first sounds and memorize sight words (Sherwood, 1).

In the article, "Research on the prevention of reading problems: Are kindergarten and first grade teachers listening?" the objective of the authors', Bursuck, Curran, Munk, and Nelson, was to study teacher attitudes and knowledge of beginning reading practices that could prevent reading problems for children who were at risk for reading failure. To conduct their study, the researchers compiled a list of all kindergarten and first grade teachers in Northern Illinois. From the list, they then chose a stratified random sample based on location. They felt that this type of sample allowed views from suburban, urban, and rural areas. Fifteen hundred teachers were selected, half from kindergarten classrooms and half from first grade classrooms. Within each group, two hundred and fifty teachers represented one of the three locations. The researchers mailed fifteen hundred surveys to the teachers. The instrumentation used was the *Teacher Attitudes of Early Reading and Spelling* survey. The survey is based on a six point scale with one being strongly disagree and six being strongly agree. The researchers did add eleven questions to the survey based on additional early literacy issues and teacher knowledge of important reading problem prevention strategies. Of the surveys mailed out, 549 responded, which was a return rate of thirty-seven percent.

After the surveys were thoroughly examined, the researchers found that kindergarten and first grade teachers tend to favor explicit reading strategies over implicit strategies for potential at-risk readers. Bursuck, Curran, Munk, and Nelson define explicit reading education as phonemic awareness and phonics instruction and implicit reading

education as whole language instruction. The researchers were encouraged that most teachers recognized that many reading problems could be prevented if intervention occurred early, but there was concern with the amount of educators who did not believe they could identify at-risk students early enough. The researchers determined that educators are listening and taking in strategies that can help at-risk readers, but teachers are still unsure of which students to recognize as being at-risk. Bursuck, Curran, Munk, and Nelson suggested that the reason for this could stem from lack of training in the school system. The researchers also felt that future studies need to be done through careful classroom observations to see first hand what exactly does take place during reading lessons in the classroom (Bursuck, et al., 2002).

Word Sorts

According to Gail Tompkins (2004), word sorts can aid children in learning phonological aspects of words such as letter sounds, rhyme, and syllables. There are various ways of using word sorts. Educators can adapt word sorts to whatever skill they are teaching to their students. By using the word sort strategy in the classroom, students learn new skills while maintaining a routine that will enable students to spend more time learning content instead of process.

Laurice Joseph (2002) conducted a study to analyze the effectiveness of using word sorts in strengthening word recognition and spelling of mentally retarded students. The researcher used a baseline design to assess changes in the participants' word recognition and spelling. The researcher determined that all the students increased their performance level relative to their individual baseline and that the results are consistent with other studies of word sorts. The study was strictly based on working with special

education students. Laurice Joseph's research is a start to analyzing the effectiveness of using word sorts.

The objective of the author was to study the effectiveness of word boxes and word sort in strengthening word recognition and spelling of mentally retarded students. Three students with mild mental retardation participated in the study. The students attended an urban school in Ohio. The students were selected by observation of reading and spelling consonant-vowel-consonant patterned words and samples of work. The study took place in the classroom and the researcher worked with the participants individually. The dependent variable was defined as the number of correctly read or spelled words out of twenty word identification and twenty spelling probes. Each set contained ten words which contained one of the five short vowel sounds. All of the words contained the consonant-vowel-consonant pattern; therefore the researcher assumed that the words were about equal in level of difficulty (Joseph, 2002).

The researcher used a baseline design to assess changes in the participants' word recognition and spelling. During the baseline conditions, word identification and spelling sets were randomly selected from twenty groups. Only one spelling and word identification were directed each day. During forty minute interventions, one spelling set and one word identification set were chosen. Students used magnetic boards divided into segments to practice the word box method for ten words. The instructor said a word slowly, and then along with the student, placed a letter of the word in each section of the rectangle according to its sound. For example, if the word was *car*, the student would sound out the letter *c* and place the letter in the first box. Then the student would sound out the *a* and place the letter in the next box and the same action would take place for the

r. The instructor then had the student write the word on the board (Joseph, 2002).

After word boxes, the instructor had the student complete a word sort. The same words that were used for the word boxes were used for the activity. Three category words consisting of one of the short vowel sounds were put in front of the student. The teacher said the sound on each card, and then had the students repeat the sound. The student was then given ten word cards to place in the appropriate sound category. The student had an opportunity to sort the cards and could self correct after one verbal prompt. The spelling and word identification sets were given every four to five days consecutively starting after the intervention period (Joseph, 2002).

In another word sorting study, Mary Jo Fresch (2000) concluded that word sorts are useful if differences in reading levels are taken into account. This study had fifth graders create their own word sort categories. The students were evaluated based on the Qualitative Inventory of Word Knowledge (QIWK). The inventory was used to determine each student's instructional and developmental level. Fresch determined that further research was needed to establish how word sorts could be used to expand the children's developmental levels.

Not all word sort activities are the same. According to the Wisconsin Literacy Education and Reading Network Source, "kindergarten children might sort pictures for beginning sounds." As children progress in grade level, the activities may become more challenging. For example, first grade children may sort words by rhyming pattern and second graders may word sort based on specific parts of words (Wisconsin Literacy Education and Reading Network Source, 1).

In the article, "Questions teachers ask about spelling," Shane Templeton and

Darrell Morris discuss the instructional method of word sorting. They state that word sort activities "emphasized the importance of comparing those words that fit into a particular category with those that don't" (109). They suggest using word sorts in game or notebook form to vary the way the strategy is used in the classroom (109).

Chapter 3

Procedure and Design of the Study

Introduction

There has been an urgency to have all students become literate by the end of third grade (U.S. Department of Education). According to Gail Tompkins (2004), word sorts can aid children in learning phonological aspects of words such as letter sounds, rhyme, and syllables. Therefore, a study was conducted to determine if kindergarten students who experienced word sorting lessons would score significantly higher on sound recognition tests than kindergarten students who did not experience word sorting lessons.

Sample and Subjects

The study consisted of two classes of kindergarten students all at the beginning stage of literacy. At the beginning stage, the students learn how to make letter-sound associations in order to become fluent readers. Two classes participated in the study. The children were similar in social class and learning ability.

The experimental group had twenty-one students. There were eleven males and ten females. The children were mixed in socio-economic status and race. The experimental group was made of children with varying reading abilities from beginning to advanced.

The class that was the control group had eighteen students. The children were mixed in socio-economic status and race. The group of children consisted of students with varying reading abilities from beginning to advanced. The control group was under the instruction of a regular education teacher. Any phonics instruction that took place in

the classroom was done as the teacher chose to do so.

Procedure

A letter of consent was sent home to each guardian of the experimental group children seeking permission for their children to participate in the study (see appendix A). The principal and cooperating instructor were also asked for permission to conduct the study in the classroom.

During the month of February, after permission was received to conduct the study, the researcher conducted a pre-test with each student (see appendix B). Then, word sort activities were introduced to the experimental group. The researcher showed the class how to use word sort activities. This allowed the students to get familiar with the concept and process. In March, the children began doing one word sort a week with prompting from the instructor. On the first day of each week, the researcher gave every child a paper with three letters at the top (see appendix C). They discussed the sounds that the letters made and repeated each letter's sound about ten times. Next, the researcher gave each child words that began with one of the three letters on the chart (see appendix C). The children were told to sound out each word and listen to the initial consonant sound. Then they had to glue each word into the column that had the same first letter sound.

The following four days the children received a chart with the same three letters on the top but different words. Each day the papers were collected and checked for accuracy. The students did word sorts for eight weeks. A post-test was conducted for each child in the experimental group. The score was then compared to the pre-test score.

The control group was under the instruction of a regular classroom teacher. A pre-

test was conducted by the researcher of each student in February. The classroom instructor of the control group had the option of teaching phonics through any instructional method he/she felt was appropriate with the exception of word sort activities. In April, the students were post-tested by the researcher. The pre-test and post-test scores were compared. The pre-test and post-test scores of the experimental group were analyzed then compared to the control group's pre-test and post-test scores. The results of this study were determined by pre-testing and post testing the subjects.

Description of the Instrument

The two assessments were identical in form and content. The researcher tested each child the same way in both the pre-test and post-test. The researcher pointed to a letter on the instrument and asked the child what sound that letter made. If the child got the answer correct, then the researcher checked the box next to the letter. If the child answered incorrectly, then the researcher moved on to the next letter, leaving the box blank (see appendix B).

Chapter 4

Data Analysis

Introduction

There has been an urgency to have all students become literate by the end of third grade (U.S. Department of Education). A study was conducted to determine if kindergarten students who experienced word sorting lessons would score significantly higher on sound recognition tests than kindergarten students who did not experience word sorting lessons. According to Gail Tompkins (2004), word sorts can aid children in learning phonological aspects of words such as letter sounds, rhyme, and syllables.

Results

At the end of this study, the researcher found that the experimental group scored significantly higher on the phonics test than the control group. During pre-testing, the control group had a mean score of 79.5. Four students knew all the sounds of the twenty-six letters correctly. The experimental group had a mean score of 78.43. Eight students knew all the sounds of the twenty-six letters correctly. One student in the experimental group did not know any of the letter sounds.

During post-testing, the control group had a mean score of 89.55. Nine students knew all the sounds of the twenty-six letters correctly. The experimental group had a mean score of 94.10. Fourteen students knew all the sounds. A t-test showed that statistically the difference is significant with the control group having a score of 0.000386 and the experimental group having a score of 0.000582.

During pre-testing, the control group had a mean score of 79.5. Four students

knew all the sounds of the twenty-six letters correctly. During post-testing, the control group had a mean score of 89.55. Nine of the twenty students knew all the sounds of the twenty-six letters correctly (see table 1).

table 1

Control Group Pre-test and Post-test Scores

Name	Pre-test	Post-test
N	92	96
M	65	100
J	92	100
C	100	100
A	96	100
N1	73	96
J1	58	58
K	69	88
R	31	38
M1	100	100
K1	88	96
D	96	100
N2	65	81
D1	88	96
K2	100	100
S	42	73
D2	81	100
K3	85	92
A1	69	77
A2	100	100
Average	79.5	89.55
t-test	0.000386	

The experimental group had a mean score of 78.43. Eight students knew all the sounds of the twenty-six letters correctly. One student in the experimental group could not say any of the correct sounds when the researcher pointed to a specific letter. During

post-testing, the experimental group had a mean score of 94.10. Fourteen of the twenty-one students knew all the sounds (see table 2).

table 2

Experimental Group Pre-test and Post-test Scores

Name	Pre test	Post test
D	100	100
R	100	100
M	100	100
M1	88	96
Z	96	100
D1	38	81
M2	100	100
J	77	88
K	77	96
C	100	100
M3	69	100
R1	100	100
M4	100	100
J1	100	100
R2	38	100
T	69	100
T1	73	92
J2	38	85
M5	0	38
W	96	100
B	88	100
Average	78.43	94.10
t-test	0.000582	

Based on the t-test results, the researcher determined that the pre-test and post-test scores were significant. Therefore, the researcher accepted the hypothesis.

Chapter 5

Summary, Conclusions, and Recommendations

Introduction

There has been an urgency to have all students become literate by the end of third grade (U.S. Department of Education). Word sorts can aid children in learning phonological aspects of words such as letter sounds, rhyme, and syllables (Tompkins, 2004). Therefore, a study was conducted to determine if kindergarten students who experienced word sorting lessons would score significantly higher on sound recognition tests than kindergarten students who did not experience word sorting lessons. The study results were put in to tables and compared.

Summary of the Research Problem

Not only are there are many different ways to teach phonics, but there are also many important aspects of phonics that need to be taught to beginning readers. The problem is that many educators are not teaching phonics due to time constraints. Some teachers are also unable to teach phonics while attempting to meet state standards. Phonics gets pushed to the side until there is time to address it. When it is addressed, many educators do not know what strategies to use to successfully educate their students in phonemic awareness (Tompkins, 2004).

A word sort allows a teacher to choose on what phonetic skill to focus while continuing to use the same educational strategy. If the teacher realizes that many of the children understand the sound of a particular letter, then he/she can focus on the letters that need more emphasis or the instructor can work with the individuals who need help.

Summary of the Hypothesis

It was hypothesized that kindergarten students who experienced word sorting lessons would score significantly higher on sound recognition tests than kindergarten students who did not experience word sorting lessons.

Summary of the Procedure

Each child of the experimental group was pre-tested to determine what letter sounds they knew. Then, they were introduced to word sort activities. The researcher showed the class how to use word sort activities. For eight weeks, the researcher conducted word sort activities with the experimental group. Letters were reintroduced, and they discussed the corresponding sounds. The children charted the words under the appropriate letters. A post-test was conducted for each child in the experimental group. The score was then compared to the pre-test score.

The control group was under the instruction of a regular classroom teacher. A pre-test was conducted by the researcher of each student in February. The instructor of the control group had the option of teaching phonics through any instructional method she felt was appropriate with the exception of word sort activities. The researcher post-tested the students of the control group. The pre-test and post-test scores were compared. The test scores of the experimental group were analyzed then compared to the control group's pre-test and post-test scores.

Summary of the Findings

The pre-test and post-test scores of the experimental group and control group show that the experimental group scored significantly higher on phonemic testing. At the conclusion of the study, fourteen children in the experimental group knew the sound/

symbol correlation for all the letters of the alphabet, whereas, only nine of the children in the control group could give each letter its appropriate sound. Based on the t-test results, the researcher determined that the pre-test and post-test scores were significant.

Therefore, the researcher accepted the hypothesis.

Conclusions

The findings of this study have shown that kindergarten students' phonemic awareness can be improved by doing word sort activities. Word sort activities allowed the researcher to determine what sounds were difficult for the whole class, as well as individual students. The children of the experimental group showed significant improvement in sound/symbol recognition. There were more children in the experimental group that knew which sounds went to which letters than the control group.

Implications and Recommendations

The researcher finds that further studies could add to the scope of this study. With a larger allotment of time and with more subjects, the importance of word sort activities may be seen more clearly. It would be beneficial to investigate how word sort activities affect students differently according to their reading levels. Further studies could also show which type of children benefit the most from word sort activities.

The researcher recommends that if this study was to be replicated with kindergarten students, that picture cards be used as opposed to word cards. The researcher found that during the study not all of the children could sound out the words. If picture cards were used, the children could identify the picture and then sound out the corresponding word. This method would be more appropriate for children who are learning how to read.

References

- Bursuck, W., Curran, M., Munk, D., & Nelson, C. (2002). Research on the prevention of reading problems: Are kindergarten and first grade teachers listening? Preventing School Failure, 47(1), 4-10.
- Fresch, M.J. (2000). Using think-alouds to analyze decision making during spelling word sorts. Reading Online, 4(6), 1-17.
- International Reading Association. (n.d.) *Focus on U.S. Education Policy and No Child Left Behind: IRA Programs and Resources*. Retrieved February 20, 2005, from http://www.reading.org/resources/issues/focus_nclb.html
- Joseph, Laurice. (2002). Facilitating word recognition and spelling using word boxes and word sort phonic procedures. School Psychology Review, 31(1), 1-9.
- Sensenbaugh, R. (1996). *Phonemic Awareness: An Important Early Step in Learning to Read*. Bloomington, IN: ERIC Clearinghouse. (ERIC Document Reproduction Service No. EDO-CS-96-13)
- Sherwood, Tracy. *Phonics: The Right Way & The Wrong Way*. Unpublished manuscript. Retrieved April 2, 2005, from <http://www.cybertown.com/mag2.html>
- Templeton, Shane & Morris, Darrell. (1999). Questions teachers ask about spelling [Electronic version]. Reading Research Quarterly, 43(1), 102-112.
- Tompkins, Gail E. (2004). Fifty literacy strategies step by step. Literacy for the 21st Century, 113-115.
- U.S. Department of Education, Office of the Deputy Secretary, *No Child Left Behind: A Toolkit for Teachers*, Washington, D.C., 2004.

Wisconsin Literacy Education and Reading Network Source. (n.d.). *Phonemic*

Awareness: Why Phonemic Awareness is Important. Retrieved April 10, 2005, from

<http://wilearns.state.wi.us/apps/default.asp?cid=482>

Appendix A

Letter of Consent

Dear Parents and Guardians,

Starting March 1 through May 1, I will be teaching phonics through the use of word sorts as part of my thesis study. Each week the children will be given a new set of sounds that we will review as a class. We will practice different words that fit with each sound. For example, the first sheet may have a "c," "b," and "j" at the top. The children will then be given word cards with words on them such as car, cat, bat, and jar. The children have to place the word card in the appropriate column. On Friday's the children will be given a word sort paper to complete alone. I will keep track of the children's progress strictly for statistical purposes. Their participation in word sorting will have no effect on their grade. Also, their identity will not be known. If you are willing to allow your child to participate in the word sort activities for this study, please fill out and sign the bottom of this form and return it to me by March 1. Thank you.

Sincerely,

Ms. Münch

I give _____ permission to participate in the word sort activities associated with Ms. Münch's Study.

Signature: _____ Date: _____

Appendix B

Pre-test and Post-test

ID Number:

Pre-test		Post-test	
A	a	A	a
G	g	G	g
I	i	I	i
B	b	B	b
J	j	J	j
N	n	N	n
Y	y	Y	y
C	c	C	c
H	h	H	h
R	r	R	r
T	t	T	t
P	p	P	p
D	d	D	d
M	m	M	m
E	e	E	e
K	k	K	k
O	o	O	o
Q	q	Q	q
S	s	S	s
V	v	V	v
L	l	L	l
Z	z	Z	z
U	u	U	u
W	w	W	w
X	x	X	x

Appendix C
Word Sort Activities

V F N

nest

fish

vet

net

find

not

van

frog

Q

D

W

queen

win

dart

quiz

we

do

was

quiet

draw

C

S

Z

Cat

Zebra

Zoo

Car

Cap

See

School

Zero

Sky

J

G

D

dear

gold

great

jag

do

doll

golf

jade

S Z C

cabin

zoo

scat

zebra

cans

so

see

kind

cart

A E U

apple

elephant

umbrella

under

at

and

enter

exit

up

us

J D G

jug

dog

jet

go

get

deep

dig

good

jump

W

V

M



mug

wig

vote

vet

win

mat

wet

mow

S C Z

Stop

Cat

Zoo

Cow

Zebra

Cedar

Sit

Scar

E

U

A

up

at

egg

and

art

end

eat

under

R

P

B

run

bug

pit

pig

ran

red

pet

pin

bet

T

D

Y

toy

dog

you

yo-yo

dig

tie

tab

yak

I O L

ice

low

one

off

let

long

is

lip

K

H

X

kit

hot

help

xylophone

x-ray

keep

hay