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THE EFFECTS OF PERFORMANCE BASED ACTIVITIES ON THE  
ACHIEVEMENT OF THE THEME ASSESSMENT FOR  
BEGINNING SOUNDS IN KINDERGARTEN

by  
Renee Kruse

A Thesis

Submitted in partial fulfillment of the requirements of the  
Masters of Science in Teaching Degree  
of  
The Graduate School  
at  
Rowan University  
June 28, 2000

Approved by

M.S.T. Advisor

Date Approved

June 28, 2000

## **ABSTRACT**

Renee L. Kruse, The Effects of Sorting Performance Based Activities on the Achievement of Theme Assessment III for Beginning Sounds in Kindergarten, 2000, Dr. Randall S. Robinson, Master of Science in Teaching, Rowan University.

The purpose of this study was to determine if students who receive performance based activities would perform better on activities that required the identification of beginning sounds than those who were taught using traditional teaching methods.

The sample in this study consisted of 89 students from a public kindergarten in southern New Jersey. The experimental group consisted of 45 students who received the sorting performance based activities. The control group consisted of 44 students who were exposed to more worksheets and verbal identification of beginning sounds than performance based activities.

A pretest and posttest was used to determine if sorting performance based activities improved the scores on the Theme Assessment III for beginning sounds. In order to determine the amount of learning that occurred in each group, the raw pretest and posttest scores were calculated and the mean was derived for each group. The results were analyzed using an analysis of variance. A probability level of 0.05 was applied.

There was no significant difference between the experimental group who received three weeks of performance based activities and the control group which received limited sorting performance based activities. The results of this study did not support the hypothesis.

## **MINI-ABSTRACT**

Renee L. Kruse, *The Effects of Sorting Performance Based Activities on the Achievement of Theme Assessment III for Beginning Sounds in Kindergarten*, 2000, Dr. Randall S. Robinson, Master of Science in Teaching, Rowan University.

The researcher was concerned that the excessive use of worksheets and rote activities may affect the children's ability to learn beginning sounds. Although worksheets may not actually hinder the learning process, the researcher was interested in implementing a teaching method that would actively engage the students. This study investigated whether the use of sorting performance based activities would have a stronger effect on the students' ability to identify beginning sounds due to the interaction with manipulatives and to the fun and exciting nature of the activities.

The results of this study found that the kindergarten students who received the sorting performance based activities did not score significantly higher on the beginning sounds portion of the Theme Unit Assessment III than the kindergarten students who did not receive the sorting performance based activities.

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## Chapter 1

### SCOPE OF THE STUDY

#### **Introduction**

Many teaching practices assume that conceptual knowledge can be acquired from situations in which it is learned and used. Methods of instructive education assume a separation between what a child knows and how the child applies that knowledge (Brown, Collins, Duguid, 1989). This approach to teaching is diminishing, as more and more educators recognize that learning occurs through daily experiences within the environment and through the active behavior of the student (Tyler, 1951). The use of Whole Language instruction and performance based activities are being implemented throughout the nation's schools. Graves, Goodman and Wilde (1992), and Calkins (1994) reported that learning is most effective when the students are able to construct meaningful representations of knowledge. According to Wittrock (1990, 1991), the learner has the ability to actively develop explanations and understandings by establishing relationships between the concepts, knowledge, and actual experiences (Lambert & McCombs, 1998).

The use of performance based activities in addition to instructional conversation help students develop a clearer understanding of specific concepts. Butts, Hoffman, and Anderson concluded that the success of students resulted from the combined use of manipulatives, instructional experiences plus adequate time to clarify and confirm what the students were learning (Phye, 1997).

### **Statement of the Problem**

This researcher was concerned that the excessive use of worksheets and rote activities may affect the children's ability to learn beginning sounds. Although, worksheets may not actually hinder the learning process, the researcher was interested in implementing a teaching method that would actively engage the students. The researcher questioned whether the use of performance based activities would have a stronger effect on the students' ability to identify beginning sounds due to the fun and exciting nature of the activities.

The purpose of this study was to determine if students who received sorting performance based activities would perform better on activities that required the identification of beginning sounds than those who were taught using traditional teaching methods.

### **Statement of the Hypothesis**

The hypothesis tested in this study stated that kindergarten students who receive sorting performance based activities will score significantly higher on the beginning sounds portion of the Theme Unit Assessment III than kindergarten students who did not receive the sorting performance based activities.

### **Limitations of the Study**

There were some limitations that may have influenced the results of the study.

- 1) The Theme Unit Assessment III was not administered to the students on the same day, but over a span of a couple of days, thus some of the children may have been exposed to more/less beginning sound activities.

- 2) The Theme Unit Assessment was either administered on a one-to-one basis (proctor to student) or to the whole class at one time. These administering differences may have affected the students' ability to concentrate.
- 3) Parents may engage their children in sorting performance based activities outside of the classroom, which makes it difficult to control the amount of time spent on the sorting activities. These extra activities may give the child an advantage to scoring better on the test than those who did not receive the extra practice. Furthermore, the students in the control group may receive the sorting performance based activities, which would be a misrepresentation of the control group.
- 4) Both the pretest and the posttest was administered within a three week period of time. The results of the study may have differed if the treatment period was longer and implemented in the beginning of the year when children were first taught the letters and sounds of the alphabet.
- 5) The control group experienced some performance-based activities due to the nature of a kindergarten classroom.
- 6) Pretest sensitization may enable students to perform better than usual on the post test.

### **Definition of Terms**

The researcher has defined specific meanings to the following terms:

Performance based activities - Performance based activities are defined as those activities that enable the learner to use manipulatives and games to identify beginning sounds.

Sorting - Sorting is defined as the process in which the students physically place those objects and pictures that belong in the correct beginning sound container.

Theme Unit Assessment III - The Theme Unit Assessment III are defined as an end of the unit test that incorporates comprehension, math, and phonemic awareness skills. For the purposes of this study, the section on the identification of beginning sounds will be used for the pretest and the posttest.

Chapter II  
REVIEW OF LITERATURE

**Introduction**

The researcher examined the possible effects of implementing sorting, performance based activities on the students' ability to identify beginning sounds. The study tested whether students who received the performance based activities scored significantly higher on the Theme Assessment III for beginning sounds than those students who did not receive the sorting, performance based activities.

Chapter II is a review of literature that examines research findings on the psychology of learning and the developmental characteristics of kindergarten children, the history of teaching methods, the issues of phonemic awareness, and the role of performance based activities in the classroom.

**Psychology of Learning**

In order to implement the most effective teaching strategies for students, one must understand the process of learning. Behaviorists such as B.F. Skinner, Pavlov, and Thorndike believe that students are conditioned into giving a particular response. Hence, knowledge could be programmed into students and the correct response could be retrieved through stimulation. Thorndike discovered that the probability of a response depends on its effect on the environment, also known as the Law of Effect. Thus, animals

will respond to situations which provide them with the most satisfaction in return (Chance, 1999)

The work of Thorndike laid the foundation for B.F. Skinner who claimed that children do not learn by doing, but through the use of positive reinforcers that control behavior. Experiences within the environment alone will not cause a child to learn.

For Skinner, the application of his methods to education is simple and direct. Teaching is simply the arrangement and contingencies of reinforcement under which students learn. Although students will learn in their natural environments, it is the responsibility of the teacher to expedite learning and to assure the acquisition of behavior which might not otherwise be learned (Milhollan and Forisha, 1972).

In comparison to the behaviorists' approach, cognitive psychologist, Jean Piaget, researched the developmental stages of children and the ability to learn at the various stages. Adaptation and organization are central themes in Piaget's philosophy. Adaptation consists of two processes: assimilation and accommodation. During assimilation, a child applies an old schema to new objects. If the object does not fit into the child's existing concept, the child may have to modify his/her concept or form a new concept (the process of accommodation). The process of organization entails the ability to order processes into regular systems, either physical or psychological (Bornstein and Lamb 1999).

According to Piaget, children progress through four major stages of intellectual development: Sensorimotor (birth to 2 years), Preoperational (2 to 7 years), Concrete-operational (7 to 11 years), and Formal-operational (11 years onward). Piaget believed that although everyone moves through these stages in the same order, different people

may advance at different rates. How quickly one progresses depends on maturation, physical experiences, social interactions, the adaptation of accommodation and assimilation (Bornstein and Lamb, 1999).

During the sensorimotor stage, the infants behavior is mostly motor and the intellectual processes develop through physical interactions with the environment. Objects must be seen, touched or heard, in order for the infant to know that they exist. The preoperational stage is the period when language and conceptual abilities broaden. Children can partake in symbolic representational ability. They can identify pictures that represent known objects. Pretend play also occurs enabling the children to practice symbolic schemes. Children are egocentric, believing that everyone else holds the same viewpoint as them. During the third stage or the Concrete-operational stage, children can think in a logical manner. The level of thought processes expands incorporating ordering, grouping, and mathematics. It is in the formal-operational stage that children have the ability to understand abstract and hypothetical concepts. During this stage children can develop strategies and use logic in order to devise solutions (Bornstein and Lamb, 1999).

### **Preoperational Stage**

Educators support Piaget's theory because there are certain tasks that children are not developmentally capable of doing. Kindergarten children are bordering between concrete and abstract experiences. Five and six year olds are not ready to learn concepts from pencil and paper and rote tasks. They need to use manipulatives in order to notice differences (Church, 1999). An article published in *Newsweek* (1989) stated, "Studies

show that the most effective way to teach young kids is to capitalize on their natural inclination to learn through play.” This statement explains why many children are able to retrieve information from a previous performance based activity and apply it to a current situation (Church, 1999).

A growing number of public and private school educators believe that children between the ages of 5 and 8 have to be taught differently from older children. Professionals in the field of education and psychology recognize that children in kindergarten through second grade learn best through active, performance based activities like games and play (Kantrowitz and Wingert, 1989). David Reilly, a professor from the University of North Carolina wrote:

Instead of viewing learning as the passive receiving of information presented by the teacher, learning is viewed as an active process that must occur within the learner and that can be influenced by the learner (Reilly, 1989).

In kindergarten, performance based activities help the child develop abstract thinking and processing skills (Church, 1999). Because children develop at different rates, schools must account for these differences. According to John Warren, a teacher consultant, educators should stress the need for teaching, “developmentally appropriate practice” - a curriculum based on what psychologists and scientists know about how young children learn (Kantrowitz and Wingert, 1989).

## **History of Teaching Methods**

The question, “What is considered “good” teaching practices?” is an ongoing debate among educators. Over the years there have been various trends in education with the sole purpose of finding a method that enables the child to learn effectively.

The idea of implementing performance-based activities in the classroom are not new, but are becoming more prevalent, as signs of “good” teaching practices (Kantrowitz and Wingert, 1989). During the 1920’s John Dewey and the movement of progressivism identified that curricula should emphasize learning by doing. Progressive education focused on the child as the learner rather than on the subject, emphasized activities and experiences rather than rote learning, lesson recitation, and textbook dominance (Ornstein and Hunkins, 1998).

Open education in the 1970’s, based on a British system, used a similar approach to progressivism. It allowed the children to develop at their own pace within a highly structured classroom. However, open education was mistakenly perceived as “tearing down the walls” and allowing the students to do whatever they wanted. As a result, educators felt that strict and more rigid teaching practices were needed (Kantrowitz and Wingert, 1989).

During the 1980’s, many schools adopted the “back to basics” approach to education. The movement implemented “Socratic” teaching strategies that were intended for high school aged children and imposed the practices on children in the elementary schools. A strong emphasis was placed on tests, homework, and discipline. The classroom was highly structured. Children were not permitted to roam around the classroom, but were to remain behind their desks. The teacher was the only facilitator and



there was little exchange between the student and the teacher (Kantrowitz and Wingert, 1989).

Today, educators recognize the importance of incorporating activities and lessons that are developmentally appropriate to children based on age and ability. Evidence gathered from research in child development shows that even groups like the Council for Basic Education, for years a major supporter of traditional teaching methods, have revised their thinking. The Council stated, "The idea of putting small children in front of workbooks and asking them to sit at their desks all day is a nightmare vision." Most education and early-child experts believe that young children learn better if the teaching methods meet the students needs (Kantrowitz and Wingert, 1989).

Even professors at the college level are encountering problems where the students are not actively engaged in the learning process. There is too much lecturing and not enough active learning. Eleanor Duckworth quoted Dawkins in her article, "The Having of Wonderful Ideas" (Harvard Educational Review, 1972):

Most of us are so busy "covering the material" that we miss the chance to "uncover it" with our students. We simple need to give students more time to dig beneath the surface, to grapple with the subject matter, and to make their own sense out of things. If we do, chances are they will be more likely to retain and use what we do give them (Meyers and Jones, 1993).

### **Phonemic Awareness**

Determining the role of phonics in the reading instruction program is an on going issue. Many of the questions still remain unanswered. The question, "What strategies for teaching phonics are the most effective?" is a recurring question among educators (Morrow, Tracey, and Diane H., 1997).

Advocates of whole language believe that phonics should be taught based on the children's experiences in reading and writing. Worksheets and flashcards are considered inappropriate teaching tools. The children acquire the skills naturally from activities in which the class is engaged. Others who are supporters of phonics, feel that the use of whole language is not systematic; there is a chance that the children will not have the opportunity to learn what is necessary to become a successful reader. Last, there is the "middle-of-the-road" which combines a whole language and a phonics approach to reading. The combined approach uses both explicit instruction and contextual experiences (Morrow, Tracey, and Diane H, 1997).

One study examined the phonics instruction across different grades in 76 classrooms. The results showed that teachers used more contextual experiences to engage their students at the preschool level. Preschool teachers used more child involvement through verbal interaction and performance based activities. Furthermore, they focused on making learning fun and used activities that directly related to the students' lives. The researchers found that the high percentage of spontaneous, contextual activities used to teach phonics in the preschool classroom dramatically decreased as children entered kindergarten and the primary grades. Finally, the phonics instruction was described as either explicit or contextual, with very few accounts of a combined approach (Morrow, Tracey, and Diane H., 1997).

In conclusion, the literature indicates that a strong background in letter-sound relationships is necessary in order to read. However, more research is needed on the

effects of explicit, contextual, and combined instructional approaches to teaching phonics (Morrow, Tracey, Diane H., 1997).

### **Performance Based Activities**

Although there is little research on the use of performance based activities and use of manipulatives as an instructive tool for phonemic awareness, a 1982 study examined the use of instructional games to reinforce sight vocabulary words. The study concluded that children who were active participants in the games learned more than those students who received only worksheets for reinforcement. The findings were contributed to the children's ability to use their motor skills and to play and learn rather than use rote activities. These conclusions further supported Humphrey's research (1967), where fourth graders using active games scored significantly higher than a group using paper and pencil exercises to improve reading skills (Dickerson, 1982). A more recent action research project (1995) also supported how various activities such as language play; word play; saying and listening to rhymes, and singing songs increased phonemic awareness and assisted in the reading process (Reiner, 1998).

Studies in math and science have also revealed the benefits of incorporating performance based activities in the classroom. A study found that or "hands-on" activities were favored by students because the activities were interesting and pertained to their daily lives and experiences. There was proof in the literature that these types of activities can promote conceptual change when discussion and analysis are combined as part of the

lesson (Weaver, 1998). This study indicated that the results may be applicable and transferable to other subjects such as phonics, language, reading, and social studies.

The use of performance based activities not only enables the students to be active learners, but also encourages cooperative learning. Studies have found that social development is directly correlated with academic progress (Bornstein and Lamb, 1999). When children work on a project together they also learn from each other. Prior to the current movement in the United States, schools in Japan have been recognized for establishing a positive learning environment. Starting in kindergarten, children learn to work in teams, with the more advanced students helping the slower children (Kantrowitz and Wingert, 1989). Over 60 studies (Johnson & Johnson, 1989; Johnson, Johnson, and Maruyama, 1983) have found that the most successful method of instruction for encouraging positive interaction between regular education and special education students is cooperative learning. Children learn to disagree, to predict, to take turns, and to solve problems together in a cooperative learning setting. These are necessary life skills that cannot be learned through the traditional teaching practices of lectures and pencil and paper assignments (Kantrowitz and Wingert, 1989).

## Chapter III

### METHODS

#### **Introduction**

The researcher examined the experimental effects of incorporating performance based activities in a classroom versus limited to no performance-based activities in a classroom. The study tested whether the kindergarten children who received performance based activities on the identification of beginning sounds performed higher on the Theme Unit Assessment III than the kindergarten students who did not receive performance based activities. The researcher encountered some problems during the study. First, the implementation of performance based activities occurred over a short, 3 week period. Second, the study may have had different results if the study began at the beginning of kindergarten rather than the second half of the school year. Last, several of the children were able to successfully identify the beginning sounds prior to the treatment.

Chapter III describes the sample, describes the procedures used to conduct the study and explains the instruments used for this study.

#### **Sample**

The sample of this study were the children who attended half day sessions at a public kindergarten in a suburban school district in southern New Jersey. It is a middle-

class and upper middle class community with a mixture of blue- and white collar workers. The sample was composed of 85 kindergarten children between five and six years old.

The experimental group consisted of 43 students from the AM and PM classrooms who received the sorting performance based activities. There were 22 girls and 21 boys. 37 were Caucasian, five were African American (3 girls and 2 boys), and one boy was Asian. One child attended the Readiness Center for preschool handicapped children before entering kindergarten. None of the children received in-class support. However, eight children went to the resource room, five had speech therapy and two had English as a Second Language (ESL). The experimental group was taught by a teacher who incorporated more performance based activities into the lessons for identifying beginning sounds.

The control group consisted of 42 students from the other AM and PM kindergarten classroom. There were 19 girls and 23 boys. Thirty-eight of the children were Caucasian, three were African American, and one was Mexican. Five children attended the Readiness Center before entering kindergarten. None of the children had in-class support or went to the resource room. Although, six children had speech therapy and one child had English as a Second Language (ESL). The teacher from the control group used more worksheets and verbal identification of beginning sounds than performance based activities in her lessons.

### **Research Procedures**

A conference was held between the researcher and the principal at the Early Childhood center to address the purpose of the research. A letter was drafted to describe the study and to confirm the verbal agreement made by the principal and the researcher to conduct the study. (see appendix A)

A pretest and posttest was used to determine if performance based activities improved the scores on the Theme Unit Assessment III for beginning sounds. Both the pretest and posttest contained two parts. The assessment consisted of a total of twelve multiple choice questions. In the first section, students identified the beginning letter/sound of each picture in the left margin. In the second section, the students identified another picture that began the same as the picture in the left margin. Each item on the assessment contained different beginning sounds. (see appendix B)

The researcher administered the Theme Unit Assessment III to the experimental and the control group in March 2000. Due to the number of students, absences and the limited amount of time with half day sessions, the test was not given on the same day. The information from the pretest was used to evaluate the students' initial ability to recognize beginning sounds in picture words.

On April 1, 2000, three weeks of sorting performance based activities were incorporated into fifteen 10 minute lessons on beginning sounds. The activities required the students to sort objects by placing them in the appropriate letter container according to their beginning sounds. The teacher identified the objects first. The selected objects represented beginning sounds from the entire alphabet. In addition, for one week children played games that enabled them to sort the pictures and identify the correct beginning

sounds During the three week period, the control group received limited to no performance based activities in the classroom.

The posttest was administered to both groups after the three week treatment period to determine if there was a significant difference in the students' performance on the Theme Assessment III. The results for each student and for the two groups as a whole were sorted and compared.

### **Description of Instruments**

In order to determine the amount of learning that occurred in each group, the raw pretest and posttest scores were calculated and the mean was derived for each group. The results were then analyzed using the analysis of variance. First, the analysis was performed to determine if the experimental group and the control group were the same based on the results from the pretest. Second, the analysis of variance was used to determine whether there were any significant differences between the experimental group who received three weeks of performance based activities and the control group which received limited to no sorting performance based activities. A probability level of 0.05 was applied for the calculation of the critical region.



## Chapter IV

### Analysis of Findings

#### **Introduction**

The purpose of the study was to determine if students who received sorting performance based activities would perform better on activities that required the identification of beginning sounds than those who were taught using traditional teaching methods.

Chapter IV states the results of the study from the pretest and the posttest for the experimental group and the control group. Four operations were applied in order to thoroughly analyze the data. The first calculation was the mean score analysis followed by the standard deviation for the raw scores. Next, the analysis of variance was used to determine if the experimental and control groups were the same upon completion of the pretest and to determine whether or not the scores were statistically significant after the treatment.

#### **Tabulation of Raw Scores**

The raw scores obtained from the Theme Unit Assessment III was organized and grades were calculated based on the number of correct responses. Both pretest and posttest contained 12 questions. The experimental group consisted of 43 students from a

kindergarten classroom which utilized sorting performance based activities into the curriculum. Table 1 displays the raw scores from the pretest and the posttest for the experimental group. The mean for the pretest was 10.05 and the standard deviation was 2.65. The mean for the posttest was 10.74 and the standard deviation was 2.15.

table 1

Theme Unit Assessment III Test Results (Experimental Group)

<u>Number</u>	<u>Raw Scores</u>		<u>Number</u>	<u>Raw Scores</u>	
	<u>Pre</u>	<u>Post</u>		<u>Pre</u>	<u>Post</u>
1	12	12	23	5	5
2	12	12	24	11	11
3	12	12	25	11	12
4	12	12	26	9	11
5	8	12	27	12	11
6	5	11	28	10	10
7	8	10	29	12	12
8	12	12	30	9	6
9	8	12	31	11	12
10	12	12	32	11	12
11	9	12	33	9	9
12	12	12	34	4	4
13	12	12	35	3	7
14	12	12	36	9	7
15	11	12	37	12	12
16	12	12	38	12	12
17	12	12	39	12	12
18	12	12	40	12	11
19	12	12	41	6	9
20	12	12	42	10	8
21	12	12	43	9	8
22	4	12			
			Mean	10.05	10.74
			Standard Deviation	2.65	2.15

The control group consisted of 42 kindergarten students who did not receive the sorting performance based activities as part of their curriculum. Table 2 displays the raw

scores from the pretest and the posttest for the control group. The mean for the pretest was 11.31 and the standard deviation was 1.57. The mean for the posttest was 11.36 and the standard deviation was 1.25.

table 2

Theme Unit Assessment III Test Results (Control Group)

<u>Raw Test Scores</u>			<u>Raw Test Scores</u>		
<u>Number</u>	<u>Pre</u>	<u>Post</u>	<u>Number</u>	<u>Pre</u>	<u>Post</u>
1	11	9	22	12	11
2	12	12	23	12	12
3	12	12	24	12	12
4	10	9	25	12	11
5	12	12	26	3	8
6	12	12	27	10	12
7	11	10	28	12	12
8	12	12	29	12	12
9	12	12	30	10	12
10	12	12	31	12	12
11	9	9	32	12	12
12	12	12	33	11	10
13	11	11	34	12	12
14	12	12	35	9	11
15	12	12	36	12	12
16	12	12	37	12	12
17	12	12	38	12	12
18	12	12	39	12	12
19	12	12	40	12	12
20	10	7	41	11	11
21	12	12	42	11	12
Mean			11.31	11.36	
Standard Deviation			1.57	1.25	

### Analysis of Data

The analysis of variance was calculated to test the hypothesis to determine if the kindergarten students who received the sorting performance based activities scored significantly higher on the Theme Unit Assessment III than kindergarten students who did

not receive the treatment. The pretest scores from the experimental group and the control group were compared to determine if the groups were initially equal. Eighty-three and one, the degrees of freedom, were applied throughout the calculations. Using the analysis of variance, the value for  $F(1, 83) = 5.787, p \leq 0.018$ . This result indicated that the ability of the groups were different at the time of the pretest administration. The results from the analysis made between the pretest and the posttest scores, across groups was  $F(1, 83) = 3.199, p < 0.077$ . This result did not fall into the critical area for the probability level of 0.05 on the F table. Therefore, the hypothesis was not supported and it was concluded that the kindergarten students did not score significantly higher after receiving the sorting performance based activities.

## Chapter V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### **Introduction**

Many teaching practices assume that conceptual knowledge can be acquired from classroom lectures and reinforced with the completion of practice worksheets. This method of instruction is often misleading, especially when a child is unable to perform or apply what he or she has learned in an experiential situation. As a result, the use of performance based activities are being incorporated into the daily curriculum at several schools across the country. Performance based activities help students develop a clearer understanding of specific concepts.

Chapter V summarizes the study and reviews the statement of the problem, the hypothesis, and the findings. Based on the overview of the study, conclusions were drawn and recommendations were proposed for further research on this topic.

#### **Summary of the Problem**

Due to the excessive use and over reliance on worksheets within the classroom, the researcher was interested in implementing a teaching method that would actively engage the students. This study investigated whether the use of sorting performance based activities would have a stronger effect on the students' ability to identify beginning sounds. The purpose of the study was to determine if students who received sorting

performance based activities would perform better on the Theme Unit Assessment III than those who were taught using traditional teaching methods.

### **Summary of the Hypothesis**

The research hypothesis stated that kindergarten students who receive sorting performance based activities will score significantly higher on the beginning sounds portion of the Theme Unit Assessment III than kindergarten students who did not receive the sorting performance based activities.

### **Summary of the Findings**

The results from the analysis of variance indicated that there was no significant difference between the experimental group which received three weeks of sorting performance based activities and the control group which received limited to no sorting performance based activities. Because the  $F(1,83) = 3.199$ ,  $p < 0.077$  does not fall in the critical region, the hypothesis was rejected.

### **Conclusions**

The hypothesis which stated that kindergarten students who receive sorting performance based activities would score significantly higher on the beginning sounds portion of the Theme Unit Assessment III than kindergarten students who did not receive the sorting performance based activities was not supported by the data. As a result, from

this study the hypothesis was not supported when applied to this sample of kindergarten students.

### **Implications and Recommendations**

The researcher did not find a significant difference between the pretest and posttest scores across groups. The findings in the analysis concluded that the groups were different from the beginning. This may be true because two different teachers were used for the experimental group and the control group. The findings may have been significant if the same teacher was used for both the experimental and the control group. In addition,

Although, there was little related literature on the use of performance based activities in conjunction with phonetic awareness, studies have shown that performance based activities can be an effective teaching method. Individual learning styles should be considered.

Many of the limitations discussed in the beginning of the study might have influenced the results of the study. The study was limited to the kindergarten level based on the level of learning material. In addition, it is difficult to obtain a sample classroom that does not incorporate performance-based activities in some form.

After completing this study, the following recommendations for further research are suggested:

- 1) The study should be initiated at the beginning of the school year when the children are first taught the letters and sounds of the alphabet to ensure that both groups are at the same level.
- 2) A similar study should be conducted with a treatment period longer than 3 weeks.
- 3) The study should be conducted in a variety of classrooms with different

teaching styles to ensure a more representative population.

- 4) The study should include a survey that reflects the students' preference over sorting performance based activities or worksheets.



## Selected Bibliography

Bornstein, M.H., & Lamb, M.E. (1999). Developmental psychology: An advanced textbook. Mahwah, NJ, Lawrence Erlbaum Associates.

Brown, J., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. Educational Researcher, (19), 32-41 .

Chance, P., (1999). Learning and behavior. Pacific Grove, CA, Brooks/Cole Publishing Co.

Church, E.B., (1999). Scholastic Early Childhood Today, March, 16-18.

Dickerson, D.P., (1982). A study of use of games to reinforce sight vocabulary. The Reading Teacher, (36)1, 46-49.

Kantrowitz, B., & Wingert, P. (1989). How kids learn. Newsweek, 113(16), 50-57.

Lambert, N.M., & McCombs, B.L., (1998). How students learn: Reforming schools through learner centered education. Washington, D.C., American Psychological Association.

Meyers, C., & Jones, T.B. (1993). Promoting Active Learning. San Francisco, CA, Jossey-Bass Publishers.

Milhollan, F., & Forisha, B.E., (1972). From Skinner to Rogers: Contrasting approaches to education. Lincoln, Professional Educators Publications, Inc.

Morrow, L.M.T., & Diane, H. (1997). Strategies used for phonics instruction in early childhood classrooms. Reading Teacher, [online] 50(8), 1-8. Available: <http://www.valenj.org>.

Ornstein, A.C., & Hunkins, F.P., (1998). Curriculum: Foundations, principles, and issues. Needham Heights, MA, Allyn & Bacon.

Phe, G.D., (1997). Handbook of academic learning: Construction of knowledge. New York, Academic Press, Inc.

Reilly, D.H., (1989). A knowledge base for education. Journal of Teacher Education, May/June, 10.

Reiner, K., (1998). Developing a kindergarten phonemic awareness program: An action research project. The Reading Teacher, 52(1), 70-73.

Tyler, R.W., (1949). Basic Principles of Curriculum and Instruction. Chicago, The University of Chicago Press.

**Appendix A**  
**Letter of Approval for Study**

**Renee Kruse**  
**326 McKinley Ave.**  
**Pitman, NJ 08071**

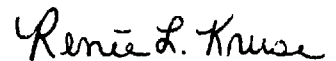
Wendy Crawford, Principal  
Grenloch Terrace Early Childhood Center  
251 Woodbury-Turnersville Rd.  
Sewell, NJ 08080

Dear Wendy Crawford,

This is to confirm our verbal agreement to perform an experimental based research study in the two classrooms at the Grenloch Terrace Early Childhood Center for my thesis. The data collected will be used in strict confidence to protect the privacy of the students. My thesis topic requires the implementation of performance based activities during lessons on the identification of beginning sounds. The AM and PM classrooms of one teacher will receive the treatment, while another AM and PM classrooms will not receive any treatment. I will be comparing the scores from the section on beginning sounds in the Theme Unit Assessment III to determine whether the students who received the performance based activities scored higher after the treatment

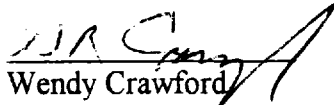
I look forward to my research and want to thank you for all of your support.

Sincerely,



Renee L. Kruse

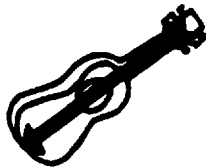
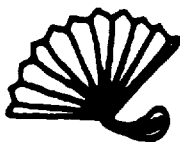
I grant Renee Kruse permission to conduct research for her thesis at the Grenloch Terrace Early Childhood Center.

  
Wendy Crawford

9-18-80  
Date









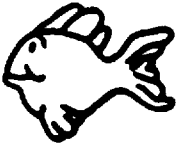















**Appendix B**

**Sample of Theme Unit Assessment III**

Name \_\_\_\_\_  
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○d  
○n  
○w  
○h  
○r  
○b  
○r  
○g  
○t  
○d  
○g  
○p  
○m  
○b  
○n  
○v  
○f  
○

Name

-----

## VITA

Name: Renee L. Kruse

Date and Place of Birth: August 31, 1974  
Camden, New Jersey

Elementary School: W.C.K Walls School  
Pitman, New Jersey

High School: Pitman High School  
Pitman, New Jersey

College: University of New Hampshire  
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Bachelor of Science  
Environmental Science, 1996

Graduate: Rowan University  
Glassboro, New Jersey  
Master of Science in Teaching  
Elementary Education, 2000