Comparison of developmentally oriented kindergartens and academically oriented kindergartens

Lori Ann Weyer
Rowan College of New Jersey

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

Part of the Elementary Education and Teaching Commons

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

Recommended Citation
https://rdw.rowan.edu/etd/2305

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.
COMPARISON OF DEVELOPMENTALLY ORIENTED KINDERGARTENS AND ACADEMICALLY ORIENTED KINDERGARTENS

by
Lori Ann Weyer

A THESIS

Submitted in partial fulfillment of the requirements for the Master's Degree in Elementary School Teaching in the Graduate Division of Rowan College of New Jersey 1995

Approved by

Date Approved May, 1995
The purpose of this study was to investigate if students enrolled in a kindergarten with a curriculum stressing academic skills perform better or worse on standardized tests than students in a developmentally oriented program by the end of first grade.

A survey was developed to establish if a kindergarten curriculum was developmentally oriented or academically oriented. This survey was sent to schools in Gloucester and Morris Counties in New Jersey. Mean Iowa basic skills tests were then used to determine if academically oriented kindergarten curriculums score significantly higher than developmentally oriented curriculums by the end of kindergarten. Also, the mean Iowa basic skills tests were used to determine if by the end of first grade those students who were products of an academic kindergarten curriculum score significantly higher than those first grade students who were exposed to a developmentally appropriate kindergarten curriculum.

There was no significant differences in academic achievement between those students who were products of an academic kindergarten curriculum and those students who were exposed to a developmentally appropriate kindergarten curriculum.
MINI ABSTRACT

Weyer, Lori A.  Comparison of Developmentally Oriented Kindergartens and Academically Oriented Kindergartens, 1995, Thesis Advisor: Dr. Louis Molinari, Elementary Education.

The purpose of this study was to investigate if students enrolled in a kindergarten with a curriculum stressing academic skills perform better or worse on standardized tests than students in a developmentally oriented kindergarten program by the end of first grade.

There was no significant differences in academic achievement between those students who were products of an academic kindergarten curriculum and those that were products of a developmentally appropriate kindergarten curriculum.
ACKNOWLEDGEMENTS

The writer owes a debt of gratitude to the persons who contributed to the success of this study. The following are deserving of special thanks:

Dr. Louis Molinari, the thesis advisor, for his time and patience while completing this study.

The principals and teachers in Gloucester County and Morris County who responded to my letters which made this project complete.

My husband Mark for his encouragement and support while completing this study.

Finally, my two boys, Eric and Kevin who gave me some time to work on this study in the afternoon.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>ACKNOWLEDGEMENTS</th>
<th>vi</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>vii</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>I. SIGNIFICANCE OF THE STUDY</td>
<td>1</td>
</tr>
<tr>
<td>The Problem</td>
<td>5</td>
</tr>
<tr>
<td>Statement of the Hypotheses</td>
<td>5</td>
</tr>
<tr>
<td>Method of Study</td>
<td>6</td>
</tr>
<tr>
<td>Limitations</td>
<td>7</td>
</tr>
<tr>
<td>Overview</td>
<td>7</td>
</tr>
<tr>
<td>End Notes</td>
<td>8</td>
</tr>
<tr>
<td>II. REVIEW OF RELATED LITERATURE</td>
<td>11</td>
</tr>
<tr>
<td>End Notes</td>
<td>23</td>
</tr>
<tr>
<td>III. DESIGN OF THE STUDY</td>
<td>26</td>
</tr>
<tr>
<td>Introduction</td>
<td>26</td>
</tr>
<tr>
<td>Description of the Population and Sample</td>
<td>26</td>
</tr>
<tr>
<td>Procedure</td>
<td>28</td>
</tr>
<tr>
<td>Summary</td>
<td>37</td>
</tr>
<tr>
<td>IV. ANALYSIS OF THE DATA</td>
<td>38</td>
</tr>
<tr>
<td>Introduction</td>
<td>38</td>
</tr>
<tr>
<td>The Data</td>
<td>39</td>
</tr>
<tr>
<td>Summary of the Findings</td>
<td>43</td>
</tr>
</tbody>
</table>
V. CONCLUSIONS AND RECOMMENDATIONS ............................................... 45
   Introduction ............................................................................................................. 45
   Summary of the Method of Investigation ............................................................... 46
   Summary of Findings and Conclusions ................................................................. 47
   Recommendations for Further Study ..................................................................... 49

APPENDIX ................................................................................................................. 51
   A. Listing of Schools in Gloucester County and Morris County .................. 52
   B. Survey Sent to Schools ....................................................................................... 56

BIOGRAPHICAL DATA .............................................................................................. 60
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-1. Student Population of Schools Used in Study</td>
<td>27</td>
</tr>
<tr>
<td>3-2. Comparison of Academic and Developmentally Oriented Curriculums</td>
<td>28</td>
</tr>
<tr>
<td>4-1. Results of Survey Given to Kindergarten Teachers</td>
<td>39</td>
</tr>
<tr>
<td>4-2. Teaching Experience of Teachers Used in Study</td>
<td>40</td>
</tr>
<tr>
<td>4-3. First Grade Mean Iowa Scores (1993-94)</td>
<td>41</td>
</tr>
<tr>
<td>4-4. Kindergarten Mean Iowa Scores (1992-93)</td>
<td>42</td>
</tr>
</tbody>
</table>
Chapter One

SIGNIFICANCE OF THE STUDY

Kindergarten in the United States today is attended by 95% of the eligible children. The curriculums vary greatly for the many students who attend. Many school districts have a half day program although full day programs are increasing. Some programs are geared toward the actual children in attendance and are called "developmentally appropriate" programs. Others are constructed toward an ideal image and are deemed "academic" in nature. Recent changes in kindergarten have gone toward making kindergarten more academic. There is concern among educators about pressuring young children by a reliance on workbooks and other paper and pencil activities (Christian and Bell, 1991). These types of academic activities lessen time for experiential learning and create frustration among many students. Doris Fromberg states "what is emerging in the kindergarten field is a variety of paradigms for kindergarten programming, which grow out of significantly different views of what is developmentally appropriate, how learning takes
place, and what teaching is worthwhile." Some children who engage in age-appropriate behavior, are often labeled as emotionally disturbed and referred to the child study team (Fromberg, 1989). These students could work better in a curriculum that is more developmentally appropriate rather than making the child fit the curriculum.

An effective type of kindergarten curriculum must relate to the needs and capabilities of the students who attend them. Research reveals that the social, emotional, and intellectual development of young children has not changed over the years (Moyer, Egertson, Isenberg, 1987). Only the variety and intensity of early experiences have changed. Research by Belsky (1986) indicates a growing concern that children who have been in day care since infancy are showing insecurity in attachment relationships and greater social maladjustment in kindergarten.

Young children need experiences that are meaningful to them in a developmentally appropriate environment. Current research has indicated a trend toward a more academic kindergarten curriculum. In a Colorado school district there are a prescribed number of minutes spent on reading readiness and math and expectations for specific learning as reported by Smith and Shepard (1988). Also, Freeman and Hatch (1989) found that Ohio’s kindergarten programs were increasing skills and academics. Lawler and Vance (1988) found the Florida kindergarten curriculum in which students had to meet 200 objectives during the school year. In Virginia, kindergarten teachers say their students are learning what their first graders used to learn (Freeman, 1990).
Research has found that educators do not believe academic kindergartens are best for children (Hatch and Freeman, 1988). The NAEYC (National Association for the Education of Young Children) reports that teacher-directed instructional strategies, worksheets and workbooks, and assigned seat work are inappropriate kindergarten practices. As results from studies about the pressure to do academic tasks come in it appears in the short term these academic demands are harmless. But the long term consequences from studies have suggested children are turned off to school by second grade. Also, the NAEYC has reported younger children in kindergarten may have trouble with a single curriculum or teaching method. Another risk associated with the curriculum provided in the academic setting is that children feel incompetent because the academic skill introduced may be too difficult for them. Their self-esteem suffers greatly and students consider themselves not as smart.

Direct instruction and academic proponents believe young children can learn academic skills if it is organized into steps in which children can understand. Thus, Direct Instruction at its best encourages teachers to believe in the potential of a child. Schweinhart (1987) reports that Carl Bereiter believes kindergarten programs ought to be academic. "Carl Bereiter, a designer of the Direct Instruction program studied in the High/Scope Curriculum, believes that the program's objectives for preschool children can and ought to be academic, and not pre academic" (Schweinhart, 1987). This study showed the concentration on academic skills may increase achievement but social skills are sacrificed.
Fromberg (1989) reports that anthropologists Erickson and Mohatt describe two teachers who have two different methods of teaching. One teacher (Teacher I) who accommodated to children's learning styles is more developmentally oriented. The other teacher (Teacher II) who expected the students to do his directives was more academically oriented. The students in both classrooms spent the same amount of time in a particular subject. It was reported that the students in Teacher I's class learned just as much or more than in Teacher II's class supporting the idea that accommodating children's needs can be beneficial not only socially but academically.

Kindergarten programs seem to reflect parent concern for increased academic achievement. As Knudsen-Lindauer and Harris (1989) report parents ask, "When will my child learn to count to a hundred?" "Why hasn't my child learned to write the alphabet?" Also, parents perceive that an academic curriculum will make their child smarter. Many schools now include formal reading programs with textbook and workbooks (Freeman and Hatch, 1989). Many educators have been concerned with this emphasis on academic skills. Karweit (1988) reports Elkind provides a discussion on the "hurried child" and the possible psychological damage of too much pressure. In a study of children's age at the time of kindergarten entrance, Bryant, Clifford, and Pelsner (1991) concluded that children who are not developmentally ready to begin academic skills may face life time disadvantages.
The Problem

The problem that will be investigated in this study can be stated: Do students enrolled in a kindergarten with a curriculum stressing academic skills perform better or worse on standardized tests than students in a developmentally oriented program by the end of first grade? Many parents and some educators believe that kindergartens stressing academics produces more learning; therefore, higher test scores. Does this benefit extend beyond kindergarten, or do students from a developmentally oriented program "catch up" and do better once they complete first grade? Studies have indicated that students not developmentally ready who are exposed to academic programs may never do well academically. This statement is important and can be used to convince parents and educators that academics without regard to developmentally appropriate activities can be dangerous. Some studies indicate that children exposed to a developmentally appropriate curriculum may not seem to achieve high academic test scores at first but have a higher potential for greater achievement later.

Statement of the Hypotheses

In order to facilitate this investigation the following hypotheses were generated:

1) There will be no significant differences in academic achievement between those first grade students who were products
of an academic kindergarten curriculum and those first grade students who were exposed to a developmentally appropriate kindergarten curriculum.

2) There will be no significant differences in standardized test scores at the end of the kindergarten experience between those students who were exposed to an academic curriculum and those students who were exposed to a developmentally appropriate curriculum.

Method of study

The subjects in this study were from schools in Gloucester County and Morris County in New Jersey. A survey was sent to the principals of each school to give to a kindergarten teacher to provide information about their kindergarten curriculums. Four kindergarten curriculums academically oriented and four kindergarten curriculums that were developmentally appropriate were found from the surveys answered. Subjects from an academic curriculum in kindergarten had their standardized test scores compared with subjects from a developmentally appropriate kindergarten curriculum. Next, the subjects who were products of an academic kindergarten curriculum had their standardized test scores at the end of first grade compared with subjects from a developmentally appropriate kindergarten curriculum at the end of first grade. All standardized tests compared were the same type of standardized test in kindergarten and in first grade.
Limitations

1. The sampling was limited to only two counties in the state of New Jersey.
2. Only four kindergarten curriculums academically oriented and four kindergarten curriculums developmentally oriented were studied.

Overview

This chapter has attempted to show the need for and purpose of this study. Chapter two will present a review of the research of the effectiveness of developmental kindergartens. Chapter three will show the design of the study. Chapter four will give the results of the study. A summary of the findings and conclusions will be located in chapter five.
End Notes


Chapter Two

REVIEW OF RELATED LITERATURE

In the 1840's Friedrich Froebel's concern for quality education for young children resulted in the founding of the Kindergarten. Froebel realized children need careful nurturing. Since that time kindergarten has become a part of the education system, but proponents have had a difficult time continuing the nurturing emphasis. Today's kindergarten is quite different from when it first started out.

The curriculum in kindergarten is more academic and is no longer considered the first school experience for many children. Today most kindergarten programs emphasize academic work (63 percent) as reported by Karweit (1988). Karweit reports several possible reasons. One reason is the students are older. The school entrance age has changed. Previously, most kindergarten students had to be five by December or January. Now in 30 states they must be five by October or September. Another factor is voluntary parent holdbacks. As the kindergarten curriculum becomes more academic, parents hold back their children to give them more time to be ready.
The curriculum of today's kindergarten focuses on specific skills to be learned, accompanied by pressures on children to succeed. "The Association of Childhood Education International recognizes the importance of kindergarten education and supports high quality kindergarten programs that provide developmentally appropriate experiences for children" as reported by Bernard Spodek (1988).

Developmentally appropriate activities endorsed by ACEI, are defined in a position statement of the National Association for the Education of Young Children (1986). Such programs are promoted by administrators and implemented by teachers who understand and apply child development research to classroom practice by:

1. Providing for the education of the whole child including physical, social/emotional and intellectual development.
2. Organizing instruction around each child's developmental needs, interests and learning styles.
3. Emphasizing the processes of learning rather than focusing on finished products.
4. Recognizing that each child follows a unique pattern of development and that kindergarten children learn best through first hand experiences with people and materials.
5. Affirming the importance of play to children's total development." (National Association for the Education of Young Children (1986).

It seems that a kindergarten curriculum that includes these five points by the NAEYC would be a developmentally appropriate kindergarten.
In determining an appropriate course for today's kindergarten programs, it is important to distinguish between the purposes and nature of the programs. Many of the earliest kindergartens served the purpose of aiding the acculturation of children of newly arrived immigrants (Moyer, Egertson, and Isenberg, 1987). Later, easing the child's transition between the home and the more formal aspects of the elementary school became the major purpose. Societal changes are now influencing kindergartens to acquire somewhat different purposes. The transition purpose continues to be important for some children, but for the majority kindergarten is not their first group experience outside the home. Many people in and out of education continue to view the kindergarten as the initial group experience for children when it is not (Moyer, Egertson, and Isenberg, 1987). It seems Moyer, Egertson and Isenberg are telling why kindergarten may be stressing more academics. If this is not a first experience for the children, parents and some educators expect more from the kindergarten curriculum. Educators are concerned about the content and methods in the majority of kindergarten programs.

Judy (1984) reported in an article entitled “Here we Come, Ready or Not:” argued that the academic push in kindergarten is causing difficulty for children, teachers, and administrators. Judy (1984) noted that the educators want to develop a child of superior capabilities while the realities of children's development must also be considered. Therefore, programs must include a young child's learning abilities otherwise damage rather than success will result. It seems that Judy believes academics are becoming most important
and it does not matter if the child is ready to learn more academically.

Webster (1984) stated that the challenge for today's kindergarten teacher is to support the kindergarten child's intellectual growth as part of the child's total self. She further advocated that kindergarten teachers should care enough to say: "I teach the child, not the subject." Webster and Judy agreed that academics are only part of what children should learn in a curriculum. The whole child must also be considered.

Belgrad (1984) argued that "a return to principles of child development is necessary in kindergarten education." She advocated that kindergarten teachers must reemphasize the importance of child development theories. Also, children will learn only when past learning, stage of development, nature of the material, and individual differences are considered in the learning process. The controversy over the kindergarten curriculum led the Southern Association on Children Under Six (SACUS, 1984) to issue a position statement in May, 1984. SACUS criticized trends to incorporate the academic, skill-oriented curriculum at the kindergarten level. It seems that Belgrad and the SACUS agree that the academic push in kindergarten is not beneficial to the child.

The academic demands of kindergarten are considerably higher today than they were 20 years ago. Shepard and Smith (1988) interviewed 40 kindergarten teachers in a middle-class school district. Teachers made recurring references to day-to-day pressures to raise children's expectations. A substantial group of teachers had established kindergarten goals beyond the district
guidelines because the first grade teachers required such outcomes. These high kindergarten requirements expected of all students were associated with a large number of children repeating kindergarten. It seems Shepard and Smith found academic skills, forced on children who were not ready, were harmful. The teachers felt pressure to introduce skills that the students were not ready to handle.

Current national concerns about kindergarten focus on the developmental appropriateness of what is being taught and how it is being taught. Bryant, Clifford, and Peisner (1991) designed a study to document the extent of developmentally appropriate practices in kindergartens in North Carolina. Also, they questioned teachers on their beliefs about developmental practices. Observations of 103 classrooms were conducted. In this study developmental appropriateness scores indicated a generally high level of knowledge and belief in developmental practices, higher teacher scores on this measure predicted better classroom quality. The primary observational measure of the quality of the classroom environments was the kindergarten version of the Early Childhood Environment rating scale (ERERS). In this study there were relatively few developmentally appropriate kindergarten classrooms. Although, those that were found were throughout the state in varying sizes. The Bryant, Clifford, and Peisner study shows there is a trend toward making kindergarten curriculums more academic even though the developmentally appropriate classrooms predicted better classroom quality. There were only a few developmentally appropriate classrooms in North Carolina.
Knudsen-Lindauer and Harris (1989) did a study which asked two questions:

1. What skills and abilities do teachers, mothers and fathers believe children would possess prior to entering kindergarten?

2. Which skills and developmental areas do mothers, fathers, and teachers think should be emphasized in the kindergarten curriculum.

Mann-Whitney U tests indicated that teachers rated social skills significantly higher than mothers. Also, these tests revealed mothers and fathers ranked counting, reading and writing significantly higher than did teachers. Knudsen-Lindauer and Harris concluded a variety of methods may be used to educate parents about expectations and practices involving the education of pre-kindergarten and kindergarten children. Certainly methods such as parent handbooks, workshops and parent-teacher conferences can produce continuity between the home and school environment. It seems that Knudsen-Lindauer and Harris reveal teachers think a developmentally appropriate curriculum includes social skills. These social skills are more important to the children than academic skills. Also, it seems parents want more academics stressed even though it may not be appropriate for the children. Here parents and teachers conflict with each other.

A developmentally based program called MECCA (Make Every Child Capable of Achieving) provides teaching that depends on children’s needs (Karweit, 1988). “Additional classroom instruction is provided based on student’s learning profiles.” The additional activities are based on an analysis of the learning activities in
which student's are having difficulty. This includes breaking down the activity into its auditory, visual, gross motor, and fine motor components. The evaluation of MECCA assigned students randomly to treatment and control groups. An effect size of .88 was found favoring MECCA on the Metropolitan Readiness test. It seems to me Karweit shows the importance of using the right median to teach a child. A developmentally appropriate curriculum should include activities that use visual, auditory, gross and fine more components to teach students.

Another comparison between students randomly assigned to MECCA and a multidisciplinary taught comparison group showed similar results. In the comparison group, the children were taught by an LD teacher and three other specialists. Karweit (1988) reports the replication of effects under the multidisciplinary comparison is significant because it suggests that the benefits of MECCA come from more than its use of special teachers. It suggests that the curriculum, materials, and approach are important factors in MECCA's effectiveness. Screening, diagnoses, and task analysis of learning activities direct the time and resources within a school in a positive way.

Another important issue comes from the differences between the academic and developmental classroom organizations. Fromberg (1989) reports that anthropologists Erickson and Mohatt describe two teachers, one (I) who accommodated to children's learning styles and paces and the other (II) who expected them to accommodate to his directives. Teacher II created sharp boundaries between work and play. Work was the area of teacher control. In
contrast, Teacher I did not separate work and play as sharply. Teacher I adapted to the children's mood as a way to guide them when new activities would take place. Nevertheless, children in both classrooms spent the same amount of time engaged in subject matter. “In Teacher I’s classroom, children were seated in table grouping whereas in Teacher II’s classroom they were seated individually in rows and spent more time in whole-group instruction” (Fromberg 1989). It was reported that the students in Teacher I’s class learned just as much or more than in Teacher II’s class. It seems that Fromberg supports the view that developmentally organized classrooms by teachers can increase the student learning.

Fromberg shows developmentally oriented teachers regularly provide children with choices from among learning activities that use interaction among students. Thus, a student who may be seen as disruptive in an academic setting can be viewed as capable in a developmental setting. Children in a developmental setting have more of a sense of personal control and take more responsibility for their behavior.

The length of the kindergarten day has been an important issue. Kindergarten actually began as a full-day program. The kindergarten day was made half-day after WWII. There was a shortage of teachers and a rise in the amount of children entering school (Oelerich, 1979). By the early 1960’s, about 90% of all kindergartens were half-day programs. By 1985, 67% of the programs were still half-day. Now it seems there is a growing number of kindergartens switching to full-day. The need for child
care and increased academic demands for students seems to be why the length of a kindergarten day is changing.

Johnson (1974) reported on the effects of a longer kindergarten day. This study suggests that extension of a regular kindergarten program by the addition of enrichment activities may increase children's readiness and achievements, but these effects are not large or consistent.

Winter and Klein (1970) carried out two studies in which students were selected on the basis of a pretest score to receive further instruction in an additional 90 minute program. Students were randomly assigned to treatments from these groups. One study selected disadvantaged students. The other study selected advantaged students. Two tests were given: the Metropolitan Readiness Test at the end of kindergarten, and the Stanford Achievement Test at the end of kindergarten and at the end of first grade. The disadvantaged students showed positive and significant effects of the program on the Metropolitan at the end of kindergarten but not on the Stanford at the end of kindergarten or at the end of first grade.

The advantaged group had significant pretest differences favoring the experimental group, as measured on the Peabody Picture Vocabulary Test. "Adjusting for these pretest differences by analysis of covariance, the authors found no significant differences of the Metropolitan or Stanford Tests at the end of kindergarten but significant differences favoring the full-day treatment group at the end of first grade" (Winter and Klein, 1970).
It seems that Johnson, Winter, and Klein see no positive significant effects on teaching more academics in an elongated day for most students. If there were positive effects they didn't last or follow through to other grades. There have been numerous other studies showing the same results.

Since kindergarten attendance is almost universal, the first grade curriculum often assumes that the children know specific skills. Yet since kindergarten attendance is not mandatory these skills should not be expected to be mastered. This lack of matching between attendance requirements and curriculum expectations creates a need for special classes for students who are not ready for first grade (Karweit, 1988). "While children are resilient and often can conform to academic demands, educators and policy makers need to consider the developmentally appropriate kindergarten can subsume many of the expected accomplishments of the academic scope and exceed that scope" (Karweit, 1988).

Teachers who use developmentally appropriate practice have several beliefs which are supported by research. First they believe that young children learn by doing (Elkind, 1989). They know that traditional methods of teaching such as lecturing or demonstrating are not the best ways for teaching young children. Many researchers have found children must experiment to find out about their surroundings (Kami, 1990).

When observing programs using developmentally appropriate practices one can see differences between those types of programs and those programs that are more traditional. "In developmentally appropriate practices the learner is viewed as having developing
abilities while in a traditional program the learner is viewed as having measurable abilities" (Elkind, 1989). The teacher in a developmentally appropriate curriculum tries to make the curriculum fit the child. Learning is viewed as a creative activity while in a academic program learning is dictated by acquiring a set of skills (Elkind, 1989). An academic classroom teacher gives children information while one using developmentally appropriate practice lets children build their own knowledge. Traditional classrooms tend to be teacher directed while a classroom where developmentally appropriate practice is being used will allow children to make many choices (Greenberg, 1990). It seems Elkind and Greenberg agree a developmentally appropriate curriculum lets the child build on what he or she knows.

Teachers who use developmentally appropriate practice believe play is important for the child (Chenfeld, 1991; Nourot and Hoorn, 1991). Play allows the child to grow naturally. The "physical, social, emotional, and cognitive needs are being taken care of by playing" (Hendrick, 1988). These teachers use child directed and teacher supported play. This means the students make alot of decisions about what and how to play. Teachers provide materials to encourage play by guiding activities, asking questions, and help students develop problem solving skills during play. Chenfeld, Nourot, Hoorn and Hendrick are researchers who believe play is an important learning tool and should be included in a developmentally appropriate curriculum.

Discipline in developmentally appropriate classrooms is usually in the form of guidance. Methods of discipline such as
physical punishment or embarrassment are not used (Hildebrand, 1990). Because of the appropriateness of the curriculum major discipline problems are small. When problems do occur, the curriculum is checked to see how it can be changed to fit that particular child. Much is done in the way of preventing problems before they occur. The emphasis on students disciplining themselves is very often seen in developmentally appropriate classrooms while a academic classroom uses more teacher-control techniques (Greenberg, 1990).

One important point found in reviewing literature is that there is a difference among academic stressed curriculums and developmentally stressed curriculums. For example, when drills and worksheets are used to teach concepts such as color, shapes, letters and numbers students may be successful at recall (Greenberg, 1989). But, when there is a different situation, sometimes it is hard for them to apply the concepts they have learned by recall. It seems Greenberg sees a developmentally appropriate curriculum applying skills learned for more depth of knowledge. NAEYC supports the view that a developmentally appropriate curriculum builds on children's knowledge. "When children are given many different experiences in a variety of setting (sorting different shapes and colors of blocks, easel painting, cooking, block building, listening to stories, helping count the children in class, etc.), they are more likely to transfer their knowledge to new situations" (NAEYC, 1991).


Chapter Three

DESIGN OF THE STUDY

Introduction

This chapter will discuss the design of the study, whose purpose is to determine if an academic curriculum in kindergarten will result in higher standardized test scores by the time students complete first grade. The discussion will be presented in the following manner. The sample population will be described. The survey developed to establish which kindergarten curriculum approach is used (developmental or academic) by each school evaluated will be explained. Finally, the methodology used to interpret the results will be discussed.

Description of the population and sample

The schools chosen at first to participate in this study were from Gloucester County, New Jersey. A letter was sent to the principal of each school asking for standardized test scores for the kindergartens and first grades in their school. Also, the principal
was asked to give a survey to a kindergarten teacher to fill out. Thirty-six schools in Gloucester County were randomly sent surveys. A listing of these schools is provided in Appendix A. It was desired that enough responses be returned to permit the comparison of four academically oriented kindergarten curriculums with four developmentally oriented kindergarten curriculums. When it became evident that not enough schools give the same types of standardized tests in kindergarten and first grade as necessary to complete this study, twenty-seven additional schools in Morris County were sent surveys. A listing of these schools is also provided in Appendix A. The survey responses returned with results for Iowa basic skills test scores in kindergarten and first grade were then selected for use in this study. The student population of these kindergartens and first grades are listed below in table 3-1. The letters A, B, C, D, J, K, L, M shown on the table represent the names of the schools to provide anonymity.

<table>
<thead>
<tr>
<th>School</th>
<th>No. of Kindergarten Students</th>
<th>No. of 1st Grade Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>22</td>
<td>21</td>
</tr>
<tr>
<td>B</td>
<td>116</td>
<td>113</td>
</tr>
<tr>
<td>C</td>
<td>76</td>
<td>96</td>
</tr>
<tr>
<td>D</td>
<td>52</td>
<td>57</td>
</tr>
<tr>
<td>J</td>
<td>77</td>
<td>56</td>
</tr>
<tr>
<td>K</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>L</td>
<td>61</td>
<td>69</td>
</tr>
<tr>
<td>M</td>
<td>21</td>
<td>31</td>
</tr>
</tbody>
</table>
Procedure

A survey was developed to determine if a kindergarten curriculum was developmentally oriented or academically oriented. A copy of the survey is provided in Appendix B. The survey questions are based on the definitions and comparisons of developmental and academic approaches extracted from the research (see Table 3-2 below) as presented in Chapter 2.

<table>
<thead>
<tr>
<th>Developmental</th>
<th>Academic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Provides first hand experiences with materials</td>
<td>6. Stresses academic development</td>
</tr>
<tr>
<td>2. Stresses the importance of play to the children’s' total development</td>
<td>7. Focuses on specific skills to be learned</td>
</tr>
<tr>
<td>3. Stresses social development</td>
<td>8. Worksheets and workbooks are used to teach concepts and telling is stressed</td>
</tr>
<tr>
<td>4. Stresses asking and discussing in the classroom</td>
<td>9. Assigned seat work is used to reinforce classroom teaching</td>
</tr>
<tr>
<td>5. Organizes instruction around child’s needs, interests, and learning styles</td>
<td>10. Tends more towards full-day classes</td>
</tr>
</tbody>
</table>
The questions and the scoring used to evaluate the responses are as follows:

**Question 1:**

“Your kindergarten curriculum suggests that children should be engaged in a unit dealing with the four seasons. **Rate** the following activities from most important to least important for an effective classroom experience (4 being most important and 1 being least important).

A. ___ Teacher presents a group of pictures and asks children to pick out pictures that represent different seasons.

B. ___ The teacher tells the children about the differences among the four seasons.

C. ___ Students are asked to color a prepared worksheet which graphically identifies the four seasons.

D. ___ The teacher asks the children to describe the differences they see among pictures depicting the four seasons.”
Two of these activities are developmentally oriented. For example, Teacher presents a group of pictures and asks children to pick out pictures that represent different seasons. Two activities were academically oriented. For example, The teacher tells the children about the differences among the four seasons. The activities using asking and discussing objectives were indicative of a developmentally oriented kindergarten (Table 3-2, number 4). The activities having the teacher tell the students are indicative of an academically oriented kindergarten (Table 3-2, number 3). Scoring was done in the following manner: Five points were given for each of the two questions answered developmentally (A and D). Zero points were given for each of the two questions answered academically (B and C).

**Question 2:**

"Rate the following activities from most important to least important when attempting to effectively teach mathematics to kindergarten children (4 being most important and 1 being least important).

A. Present activities which encourage children to use manipulatives.

B. Present activities in which the teacher explains mathematics.
C. Present activities which encourage children to use simple worksheets.

D. Present activities which encourage children to discuss mathematics.

Two of these activities are developmentally oriented. For example, present activities which encourage children to use manipulatives. Two activities were academically oriented. For example, present activities in which the teacher explains mathematics. The activities using manipulatives and encouraging children to discuss are indicative of a developmentally oriented kindergarten (Table 3-2, number 1). The activities using worksheets and teacher explanations were indicative of a academic kindergarten (Table 3-2, number 3). Scoring was done in the following manner: Five points were given for each of the two questions answered developmentally (A and D). Zero points were given for each of the two questions answered academically (B and C).

Question 3:

“A significant part of the kindergarten experience should be devoted to teaching children to read.”

Question 3 stresses academic development in reading (Table 3-2, number 1). Scoring was done in the following manner: 10 points for
strongly disagree, 6.6 point for disagree, 3.3 point for agree, and zero point for strongly agree.

**Question 4:**

"A significant part of the kindergarten experience should help children to develop social skills."

Question 4 stresses social development as an important part of the developmentally oriented kindergarten curriculum (Table 3-2, number 3). Scoring was done in the following manner: 10 points for strongly agree, 6.6 points for agree, 3.3 points for disagree, and 0 points for strongly disagree.

**Question 5:**

"A significant part of the kindergarten experience should be devoted to organized play activities."

Question 5 stresses the importance of play in the child’s development indicative of a developmentally oriented kindergarten curriculum (Table 3-2, number 2). Scoring was done in the following manner: 10 points for strongly agree, 6.6 points for agree, 3.3 points for disagree, and 0 points for strongly disagree.
Question 6:

"A significant part of the kindergarten experience should be devoted to free play."

Question 6 stresses the importance of play in the child's development indicative of a developmentally oriented kindergarten curriculum (Table 3-2, number 2). Scoring was done in the following manner: 10 points for strongly agree, 6.6 points for agree, 3.3 points for disagree, and 0 points for strongly disagree.

Question 7:

"A significant part of the kindergarten experience should be devoted to developing skills in reading, writing, and counting."

Question 7 focuses on developing specific skills to be learned which is indicative of an academically oriented kindergarten curriculum (Table 3-2, number 7). Scoring was done in the following manner: 10 points for strongly disagree, 6.6 points for disagree, 3.3 points for agree, and 0 points for strongly disagree.

Question 8:

"A significant part of the kindergarten experience should be devoted to developing basic academic background."
Question 8 stresses academic development in the kindergarten curriculum (Table 3-2, number 6). Scoring was done in the following manner: 10 points for strongly disagree, 6.6 points for disagree, 3.3 points for agree, and 0 points for strongly agree.

**Question 9:**

"Play activities should be used as an integral part of the kindergarten experience."

Question 9 stresses the importance of play to the children's total development which is indicative of a developmentally oriented kindergarten curriculum (Table 3-2, number 2). Scoring was done in the following manner: 10 points for strongly agree, 6.6 points for agree, 3.3 points for disagree, and 0 points for strongly disagree.

**Question 10:**

"Social situations in the classroom should/could be used as an important teaching/learning experiences for kindergarten children."

Question 10 stresses the importance of social development in a kindergarten curriculum which is indicative of a developmentally oriented kindergarten curriculum (Table 3-2, number 3). Scoring was done in the following manner: 10 points for strongly agree, 6.6
points for agree, 3.3 points for disagree, and 0 points for strongly disagree.

**Question 11:**

"Assigned seat work should be used in teaching academics as a significant part of the kindergarten experience."

Question 11 focuses on assigned seat work to reinforce classroom teaching which is indicative of an academically oriented kindergarten curriculum (Table 3-2, number 9). Scoring was done in the following manner: 10 points for strongly disagree, 6.6 points for disagree, 3.3 points for agree, and 0 points for strongly disagree.

**Question 12:**

"A full day kindergarten should be the mandate for all kindergartens."

Question 12 reflects that academically oriented kindergarten curriculums tend to have full day classes (Table 3-2, number 10). Scoring was done in the following manner: 10 points for strongly disagree, 6.6 points for disagree, 3.3 points for agree, and 0 points for strongly agree.
Questions 13, 14, & 15:

"13. A significant part of the kindergarten experience should be devoted to modifying your curriculum to the needs of the students."

"14. A significant part of the kindergarten experience should be devoted to modifying your curriculum to the interests of the students."

"15. A significant part of the kindergarten experience should be devoted to organizing instruction around each child's learning style."

Questions 13, 14, and 15 focus on organizing instruction around children's needs, interests, and learning styles. This reflects a developmentally oriented curriculum (Table 3-2, number 5). Scoring was done in the following manner: 10 points for strongly agree, 6.6 points for agree, 3.3 points for disagree, and 0 points for strongly disagree.

A completely developmentally appropriate program would have scored 150 points and a completely academically oriented program would have receive 0 points. A kindergarten was chosen developmentally oriented if it scored above 75 points. A
kindergarten was chosen academically oriented if it scored below 75 points.

Mean Iowa basic skills test scores at the end of kindergarten for subjects who came from developmentally appropriate curriculums were then compared to test scores from academically emphasized curriculums to establish the validity of the study's hypothesis. This comparison was then repeated for mean Iowa test scores at the end of first grade. An independent t-test for two-sample populations assuming equal variances was used to evaluate the statistical significance of the data, and conclusions were drawn.

Summary

This chapter described the setting, population and procedure for this study. Four developmentally oriented kindergartens and four academically oriented kindergartens were found from Gloucester and Morris Counties in New Jersey.

A survey was developed to establish if a kindergarten curriculum was developmentally oriented or academically oriented. Mean Iowa basic skills tests were then used to determine if academically oriented kindergarten curriculums score significantly higher than developmentally oriented curriculums by the end of kindergarten. Also, the mean Iowa basic skills tests were used to determine if by the end of first grade those students who were products of an academic kindergarten curriculum score significantly higher than those first grade students who were exposed to a developmentally appropriate kindergarten curriculum.
Chapter Four

ANALYSIS OF THE DATA

Introduction

The purpose of this study was to determine if students enrolled in a kindergarten with a curriculum stressing academic skills perform better or worse on standardized tests than students in a developmentally oriented program by the end of kindergarten and first grade. The hypotheses stated:

1) There will be no significant differences in academic achievement between those first grade students who were products of an academic curriculum and those first grade students who were exposed to a developmentally appropriate curriculum.

2) There will be no significant differences in standardized test scores at the end of the kindergarten experience between those students who were exposed to an academic curriculum and those students who were exposed to a developmentally appropriate curriculum.

From the letters sent to principals in Gloucester and Morris Counties in New Jersey, four kindergarten curriculums academically oriented and four kindergarten curriculums developmentally oriented were randomly selected from the surveys answered. The surveys used for this study had mean Iowa basic skills test scores for
kindergarten (1992-93), and first grade (1993-94). The mean Iowa scores for first grade subjects products of a developmentally oriented kindergarten curriculum and academically oriented kindergarten curriculum were compared by using an Independent t-test. Also, the mean Iowa scores for kindergarten subjects from a developmentally oriented kindergarten curriculum and an academic curriculum were compared by using an Independent t-test.

The Data

Table 4-1 shows the results of the survey given to 8 kindergarten teachers. If the kindergarten teacher scored above 75 points (as discussed in chapter 3), the kindergarten was determined to be developmentally oriented. If the kindergarten teacher scored below 75 points, the kindergarten was determined to be academically oriented. The letters A, B, C, D, and J, K, L, M represent the names of the teachers as to provide anonymity.

<table>
<thead>
<tr>
<th>Developmentally Oriented Kindergartens</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher A</td>
<td>99.3</td>
</tr>
<tr>
<td>Teacher B</td>
<td>101.2</td>
</tr>
<tr>
<td>Teacher C</td>
<td>119.6</td>
</tr>
<tr>
<td>Teacher D</td>
<td>106.2</td>
</tr>
</tbody>
</table>

Table Continues
Academically Oriented Kindergartens

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>74.5</td>
</tr>
<tr>
<td>K</td>
<td>71.2</td>
</tr>
<tr>
<td>L</td>
<td>72.8</td>
</tr>
<tr>
<td>M</td>
<td>57.1</td>
</tr>
</tbody>
</table>

Table 4-2 shows the teaching experience and kindergarten experience for the developmentally oriented kindergarten curriculums and the academically oriented kindergarten curriculums. The developmentally oriented kindergarten curriculums had teachers with more experience than the academically oriented kindergarten curriculums.

### TABLE 4-2
Teaching Experience of Teachers Used in Study

<table>
<thead>
<tr>
<th>Developmentally Oriented Kindergartens</th>
<th>Teacher</th>
<th>Teaching Experience</th>
<th>Kindergarten Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>27</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>18</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>25</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>16</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>21.5</td>
<td>12.7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Academically Oriented Kindergartens</th>
<th>Teacher</th>
<th>Teaching Experience</th>
<th>Kindergarten Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>18</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>7.7</td>
<td>4.5</td>
<td></td>
</tr>
</tbody>
</table>
Table 4-3 shows the mean Iowa test scores for 1st grade subjects in schools that were products of a developmentally oriented kindergarten or an academically oriented kindergarten. The letters A, B, C, D, and J, K, L, M represent the names of the schools. These school letter names correspond to the kindergarten teacher teaching in that particular school (Table 4-1 names).

**TABLE 4-3**  
First Grade Mean Iowa Scores (1993-94)

<table>
<thead>
<tr>
<th>Products of Developmentally Oriented Kindergarten Curriculum</th>
<th>Teacher</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>64</td>
</tr>
<tr>
<td>Mean Score</td>
<td></td>
<td>72.25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Products of Academically Oriented Kindergarten Curriculum</th>
<th>Teacher</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>J</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>K</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>L</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>59</td>
</tr>
<tr>
<td>Mean Score</td>
<td></td>
<td>69.75</td>
</tr>
</tbody>
</table>

The mean of the Iowa test scores for 1st grade subjects that were products of a developmentally oriented kindergarten showed a slight increase over the 1st grade subjects that were products of an
academically oriented curriculum. An Independent t-test was used to determine significance. An Independent t-ratio of 0.2460 was found using the Independent t-test formula. Using a .05 probability and a degree of freedom of 6, the Table of Values indicates an Independent t-ratio would be significant at the 2.447 level or higher for a two-tailed test. The Independent t-ratio of 0.2460 calculated for these scores can not be considered significant at the .05 level of confidence. It can be concluded that the slight increase in the mean score is not enough to be considered significant.

Table 4-4 shows the mean Iowa test scores for kindergarten subjects in schools that were developmentally oriented or academically oriented. The letters A, B, C, and J, K, L represent the names of the schools. These school letter names correspond to the kindergarten teacher teaching in that particular school (Table 4-1 names).

**TABLE 4-4**
Kindergarten Mean Iowa Scores (1992-93)

<table>
<thead>
<tr>
<th>Products of Developmentally Oriented Kindergarten Curriculum</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher A</td>
<td>45</td>
</tr>
<tr>
<td>B</td>
<td>84</td>
</tr>
<tr>
<td>C</td>
<td>70</td>
</tr>
<tr>
<td>D</td>
<td>77</td>
</tr>
<tr>
<td>Mean Score</td>
<td>69</td>
</tr>
</tbody>
</table>

Table Continues
The mean of the Iowa test scores for the kindergarten subjects in a developmentally oriented curriculum showed a slight increase over the subjects in an academically oriented curriculum. An Independent t-test was used to determine significance. An Independent t-ratio of 0.7658 was found using the Independent t-test formula. Using a .05 probability and a degree of freedom of 6, the Table of Values indicates an Independent t-ratio would be significant at the 2.447 level or higher for a two-tailed test. The Independent t-ratio of 0.7658 calculated for these scores can not be considered significant at the .05 level of confidence. It can be concluded that the slight increase in the mean score is not enough to be considered significant.

Summary of the Findings

The results for the two hypotheses are as follows:

Hypothesis 1 is accepted. There was no significant differences in academic achievement between those first grade students who were products of an academic curriculum and those
first grade students who were exposed to a developmentally appropriate curriculum.

Hypothesis 2 is accepted. There was no significant differences in standardized test scores at the end of the kindergarten experience between those students who were exposed to an academic curriculum and those students who were exposed to a developmentally appropriate curriculum.
Chapter Five

CONCLUSIONS AND RECOMMENDATIONS

Introduction

In the 1840's Friedrich Froebel's concern for quality education for young children resulted in the founding of the kindergarten. Since that time it has become part of the education system. Today's kindergarten is quite different from when it first started out. The curriculums vary greatly for the many students who attend. Some programs are geared toward the actual children in attendance and are called "developmentally appropriate" programs. Others are constructed toward an ideal image and are deemed "academic" in nature. Recent changes in kindergarten have gone toward making kindergarten more academic. These types of academic activities lessen time for experiential learning and create frustration among many students. Research has shown students work better in a curriculum that is more developmentally appropriate rather than making the child fit the curriculum. Studies have indicated that students not developmentally ready who are exposed to academic programs may never do well academically. Many parents and some
educators believe that kindergartens stressing academics produce more learning; therefore, higher test scores. This study was designed to determine if kindergartens stressing academics produce higher standardized test scores than developmentally appropriate programs at the end of kindergarten. Also, this study was designed to see if students products of an academic kindergarten curriculum do better or worse on standardized tests than students products of a developmentally appropriate kindergarten curriculum by the end of first grade.

**Summary of the Method of Investigation**

A survey was developed to establish if a kindergarten curriculum was developmentally oriented or academically oriented. A letter was sent to the principals of schools in Gloucester and Morris Counties in New Jersey asking for standardized test scores for the kindergartens and first grades in their school. Also, the principals were asked to give a survey to a kindergarten teacher to fill out. Four developmentally oriented kindergartens and four academically oriented kindergartens were found from the surveys answered. Mean Iowa basic skills tests were then used to determine if academically oriented kindergarten curriculums scored significantly higher than developmentally oriented kindergarten curriculums by the end of kindergarten. Also, the mean Iowa basic skills tests were used to determine if by the end of first grade those students who were products of an academic kindergarten curriculum scored significantly higher than those first grade
students who were exposed to a developmentally appropriate kindergarten curriculum.

Summary of Findings and Conclusions

Hypothesis 1 stated: There will be no significant differences in academic achievement between those first grade students who were products of an academic kindergarten curriculum and those first grade students who were exposed to a developmentally appropriate kindergarten curriculum.

It was found there was no significant difference in Iowa test scores between those first grade students who were products of an academic kindergarten curriculum and those first grade students who were exposed to a developmentally appropriate kindergarten curriculum.

Hypothesis 2 stated: There will be no significant difference in standardized test scores at the end of the kindergarten experience between those students who were exposed to an academic curriculum and those students who were exposed to a developmentally appropriate curriculum.

It was found there was no significant differences in Iowa test scores at the end of the kindergarten experience between those students who were exposed to an academic curriculum and those students who were exposed to a developmentally appropriate curriculum.

The following conclusions can be drawn:
1. No significant differences in Iowa test scores were found between developmentally and academically oriented kindergarten curriculums. However, it was noted that if the outlying scores were deleted from the survey results, the difference in test score means between developmentally and academically oriented curriculums increased in favor of the developmentally oriented curriculums.

2. By the end of first grade, there were no significant differences between students who were products of an academic kindergarten curriculum and developmentally oriented kindergarten curriculum. This result tends to indicate that students can be effective on the Iowa even if they were products of a developmentally oriented kindergarten curriculum. Again, it was noted that if the outlying scores were deleted from the survey results, the difference in test score means between developmentally and academically oriented curriculums increased in favor of the developmentally oriented curriculums.

3. From the surveys scored, the teachers' years of teaching experience and kindergarten experience seemed to have an effect on whether the kindergarten curriculum was developmentally oriented or academically oriented. The more teaching experience a teacher had the greater the chance for that particular kindergarten to be developmentally oriented.
This seems to indicate a teacher with more experience takes into account the developmental needs of a particular child.

The conclusions of this study must be subjected to the following limitations:

1. The school sample size was small. Four kindergarten curriculums academically oriented and four kindergarten curriculums developmentally oriented were used in this study.

2. The sampling was limited to two counties (Gloucester and Morris) in New Jersey.

3. The Iowa basic skills test was the test used to compare developmentally oriented programs and academically oriented programs. There are several other basic skills tests used in Gloucester and Morris counties.

Recommendations for Further Study

Based on the findings, analysis of the data, and the conclusions of this study, the following recommendations are made:

1. Due to the limited number of schools in this study, any similar study should be conducted with a larger population.
2. The Iowa basic skills test scores were used to compare developmentally oriented kindergartens and academically oriented kindergartens. It would be worthwhile to attempt to compare kindergarten curriculums using other standardized tests.

3. This study chose one kindergarten teacher in each school to answer a survey that determined if the kindergarten curriculums in a school were developmentally oriented or academically oriented. Since the test scores used represented the entire kindergarten population of the school, the survey results could be skewed if this one teacher has a different teaching approach then the remainder of that school's kindergarten teachers. It would be worthwhile to conduct a study requesting that all kindergarten teachers in a school complete a survey.
Appendix A

Listing of Schools
in
Gloucester County and Morris County
### Gloucester County Schools

1. Herma S. Simmons Elementary School  
   Clayton, NJ  
2. Good Intent School  
   Deptford, NJ  
3. Lake Tract School  
   Deptford, NJ  
4. Oak Valley School  
   Wenonah, NJ  
5. Pine Acres School  
   Wenonah, NJ  
6. Shady Lane School  
   Westville, NJ  
7. Jeffrey Clark School  
   Mickleton, NJ  
8. Aura School  
   Glassboro, NJ  
9. Mary F. Janvier School  
   Franklinville, NJ  
10. Greenwich Township School  
    Gibbstown, NJ  
11. Harrison Township Elementary School  
    Mullica Hill, NJ  
12. Logan Elementary School  
    Swedesboro, NJ  
13. Centre City School  
    Mantua, NJ

### Morris County Schools

1. Rockaway Valley School  
   Boonton Township, NJ  
2. Southern Blvd. School  
   Chatham, NJ  
3. Dickerson School  
   Chester, NJ  
4. Lakeview School  
   Denville, NJ  
5. Academy Street School  
   Dover, NJ  
6. Frank J. Smith School  
   East Hanover, NJ  
7. Brooklake School  
   Florham Park, NJ  
8. Mountview Rd. School  
   Morris Plains, NJ  
9. Rose M. Patania School  
   Lincoln Park, NJ  
10. Gillette School  
    Gillette, NJ  
11. Central Ave. School  
    Madison, NJ  
12. Hilltop School  
    Mendham, NJ  
13. Mendham Township Elementary School  
    Brookside, NJ
14. Sewell School
   Sewell, NJ
15. J. Mason Tomlin School
   Mantua, NJ
16. Holly Glen Elementary School
   Williamstown, NJ
17. Radix Elementary School
   Williamstown, NJ
18. Whitehall School
   Williamstown, NJ
19. National Park
   Elementary School
   National Park, NJ
20. Billingsport School
    Paulsboro, NJ
21. Loudenslager School
    Paulsboro, NJ
22. Elwood Kindle School
    Pitman, NJ
23. Memorial School
    Pitman, NJ
24. W.C.K. Walls School
    Pitman, NJ
25. Pitman Elementary School
    Pitman, NJ
26. South Harrison Township
    Elementary School
    Harrisonville, NJ
27. Walter H. Hill School
    Swedesboro, NJ

14. Canfield Ave. School
    Mine Hill, NJ
15. Valley View School
    Montville, NJ
16. Mountain Way School
    Morris Plains, NJ
17. Alfred Vail School
    Morris Plains, NJ
18. Wildwood School
    Mountain Lakes, NJ
19. Netcong
    Elementary School
    Netcong, NJ
20. Eastlake School
    Parsippany, NJ
21. Riverdale
    Public School
    Riverdale, NJ
22. Lincoln School
    Rockaway, NJ
23. Dennis B. O'Brien
    School
    Dover, NJ
24. Jefferson School
    Succasunna, NJ
25. Old Farmers Road School
    Long Valley, NJ
26. Marie V. Duffy School
    Wharton, NJ
28. Wenonah Elementary School  
   Wenonah, NJ  

29. Green-Fields School  
   Woodbury, NJ  

30. Oakview School  
   Woodbury, NJ  

31. Red Bank School  
   Thorofare, NJ  

32. Parkview School  
   Westville, NJ  

33. Evergreen Avenue School  
   Woodbury, NJ  

34. Walnut Street School  
   Woodbury, NJ  

35. West End Memorial School  
   Woodbury, NJ  

36. Woodbury Heights Elementary School  
   Woodbury Heights, NJ
Appendix B

Survey Sent to Schools
Survey

Name of school

Town

Number of years teaching experience

Number of years teaching kindergarten

Please read the following descriptions. At the end of each description, for questions 1 and 2, rate the suggested activities in order of your perceived importance (4 for most important and 1 for least important).

1. Your kindergarten curriculum suggests that children should be engaged in a unit dealing with the four seasons. Rate the following activities from most important to least important for an effective classroom experience (4 being most important and 1 being least important).

A. Teacher presents a group of pictures and asks children to pick out pictures that represent different seasons.

B. The teacher tells the children about the differences among the four seasons.

C. Students are asked to color a prepared worksheet which graphically identifies the four seasons.

D. The teacher asks the children to describe the differences they see among pictures depicting the four seasons.

2. Rate the following activities from most important to least important when attempting to effectively teach mathematics to kindergarten children (4 being most important and 1 being least important).

A. Present activities which encourage children to use manipulatives.

B. Present activities in which the teacher explains mathematics.

C. Present activities which encourage children to use simple worksheets.

D. Present activities which encourage children to discuss mathematics.

For the remaining questions, choose one answer for each question.

3. A significant part of the kindergarten experience should be devoted to teaching children to read.

1 2 3 4
Strongly agree Agree Disagree Strongly disagree

57
4. A significant part of the kindergarten experience should help children to develop social skills.


5. A significant part of the kindergarten experience should be devoted to organized play activities.


6. A significant part of the kindergarten experience should be devoted to free play.


7. A significant part of the kindergarten experience should be devoted to developing skills in reading, writing and counting.


8. A significant part of the kindergarten experience should be devoted to developing basic academic background.


9. Play activities should be used as an integral part of the kindergarten experience.


10. Social situations in the classroom should/could be used as an important teaching/learning experiences for kindergarten children.


11. Assigned seat work should be used in teaching academics as a significant part of the kindergarten experience.


12. A full day kindergarten should be the mandate for all kindergartens.

13. A significant part of the kindergarten experience should be devoted to modifying your curriculum to the needs of the students.

1 Strongly agree 2 Agree 3 Disagree 4 Strongly disagree

14. A significant part of the kindergarten experience should be devoted to modifying your curriculum to the interests of the students.

1 Strongly agree 2 Agree 3 Disagree 4 Strongly disagree

15. A significant part of the kindergarten experience should be devoted to organizing instruction around each child's learning style.

1 Strongly agree 2 Agree 3 Disagree 4 Strongly disagree

Please return to your principal.
BIOGRAPHICAL DATA

Name: Lori Ann Weyer

Birthdate/Place: December 21, 1961
Allentown, PA

High School: Whitehall High School
Whitehall, PA
Graduated 1980

Colleges: Gettysburg College
Gettysburg, PA
Cedar Crest College
Allentown, PA
Graduated Fall 1984

Graduate School: Rowan College of New Jersey
Glassboro, NJ
Graduated 1995

Present Position: Homemaker